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Help and Legal

If There's a Problem

Contact and Legal Information
## Audience Manager Product Documentation

Audience Manager provides industry-leading services for online audience data management. Our product and services give digital advertisers and publishers the tools they need to control and leverage their data assets to help drive sales success.

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⚠️ **Important:** DIL support for Internet Explorer 6, 7, and 8 is deprecated and will be discontinued.
Overview

Information about the history of Adobe Audience Manager, the types of data collected, segmentation, reporting, and more.

Audience Manager helps you bring your audience data assets together, making it easy to collect commercially relevant information about site visitors, create marketable segments, and serve targeted advertising and content to the right audience. Furthermore, Audience Manager offers easy tag deployment and management with robust data collection, control, and protection.

With Audience Manager, you are not tied to a data seller, exchange, or demand-side platform. Additionally, Audience Manager is completely agnostic when it comes to our partners’ data assets. With access to multiple data sources, Audience Manager offers digital publishers the ability to use a wide variety of third-party data as well as our private data co-op. Talk to our Partner Solutions team about help with making smart and accurate decisions about your target audience.

History and Background

Audience Manager started as Demdex in 2008. It was acquired by Adobe Systems in 2011 and subsequently rebranded as Audience Manager.

History

Since 2008, Audience Manager (formerly, Demdex) has been a pioneer in the on-line audience management market. Audience Manager services power dynamic, multi-channel online data strategies. Our platform and services are used by an array of diverse industries from automobiles (AutoTrader), to airlines (American Airlines), and financial services companies (American Express). Audience Management uses enterprise-level technology to provide the scale, reliability, analytics, and performance to help your business succeed online. Audience Management integrates with the Adobe Experience Cloud to help you centralize, manage, and take action on your data assets across a growing number of digitally addressable channels.

Audience Manager and its Data Management Platform (DMP)

Audience Manager helps you manage your data pipeline. Our service is a catalyst that transforms generic users and raw data signals into actual audience segments used for multi-channel marketing efforts. Additionally, Audience Manager provides tools for tag management and audience analytics while simultaneously meeting the privacy and data security needs of clients and consumers.
Types of Data Collected

Audience Manager helps you collect and manage first-party, second-party, and third-party data.

Unlocking customer information assets stored in multiple silos is one of the biggest data challenges faced by companies today. From CRM databases, to registration systems, to ad servers, and so forth, companies require tools that help centralize valuable data and manage customer/audience information as a single strategic data asset. Audience Manager helps you unlock isolated customer information and manage data collection from multiple sources. Collected data can be managed based on data element time-to-live (TTL) values, which helps the publisher control data expiration across all sources. Audience Management is designed to help you manage the following types of data:

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<thead>
<tr>
<th>Data Type</th>
<th>Where Data Comes From</th>
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<tbody>
<tr>
<td>First-party</td>
<td>Customers. Data is collected online (from consumer interactions on your websites) or offline.</td>
</tr>
<tr>
<td>Second-party</td>
<td>Strategic partners and advertisers.</td>
</tr>
<tr>
<td>Third-party</td>
<td>Data providers and/or exchanges. Data can include information such as intent, demography, social/lifestyle, psychographic, and more.</td>
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First-Party Data Collection

First-party data collection is a main Audience Manager feature. This core competency addresses the needs of our customers (publishers or advertisers) who want to use proprietary data as the cornerstone of their marketing programs or for targeting and modeling against other data sources.

Audience Manager works with clients to understand their data strategy and then maps that strategy back to a custom data-collection plan. Our Partner Solutions team works with you to evaluate sites, raw data signals, and other user interactions on your websites. With this information, we’ll help you create a tailored data-collection strategy that captures user-level data signals from various pages in your inventory. Captured data is stored and mapped back to a predefined taxonomy, which can be updated at any time, as your business needs change.

The following example illustrates how potential data elements can be captured from a sample shopping page.
After the raw data is collected, it gets mapped back to customer-defined traits within the Audience Manager platform. Both the taxonomy and data mappings can be adjusted at any time without making changes to the data collection code.

**Second-Party Data Collection**

Second-party data comes from a strategic business partner (it’s not publisher data). This information is collected and managed just like first-party data.

In a second-party-data scenario, advertisers send their own data assets to publishers so they can combine that information with the publisher’s data and then execute a more targeted advertising program. Furthermore, publishers can extend their audience pool by partnering with their advertisers. In most cases, these arrangements involve contractual relationships limited to putting the Audience Manager container tag on the partner site to facilitate data collection and sharing.

An example of second-party-data collection and remarketing could involve an automobile manufacturer collecting data on its car configuration pages and then sharing this information with key partners. In this case, the car manufacturer could serve different ads across an Audience Manager partner site for consumers who configured different types of vehicle options (e.g., color, model, etc.).
Third-Party Data Collection

Third-party data is information collected and shared by vendors outside of Audience Manager. Third-party data can be used to qualify existing data segments (for example, age, household income, and so forth), provide data that is in demand but not otherwise available, or be used in lookalike modeling against a known user base from first-party and second-party data. Audience Manager works with many third-party data providers and will help you understand the type of data these data providers collect so you can make the right strategic deals with each provider.

Note: For a full list of third-party data providers supported by Audience Manager, see the Adobe Exchange Marketplace (https://marketing.adobe.com/resources/content/resources/en/exchange/marketplace/audience.html).

Audience Manager integrates with other data providers based on their available APIs and data sets. Data collection works in real-time, as a user browses your site, or via out-of-band methodologies where IDs are synchronized between partners and data is transferred between servers after a user has left your site. In either case, Audience Manager clients get the benefit of having third-party data synchronized on our platform, which means each client, or domain, does not have to perform its own synchronization. This helps increase reach and reduces server calls from the page.

Match Partners

Many clients choose to work with third-party data-match partners. These entities have relationships with sites that have registration requirements and can process customer data files by matching them (in real-time) based on their registration network.

Custom Segment Generation

Data sources are represented in a client-specific trait taxonomy. Publishers can customize and modify this taxonomy based on their data source and business use cases. Within the Audience Manager interface, publisher team members can browse traits and segments to combine them into new marketing segments.
You can report on historical trait and segment size as segments are created. This helps publisher team members understand potential inventory and lets them adjust segment composition based on reporting data.

💡 **Note:** **Historic segment size reporting shows actual numbers, not estimates.**

Qualification begins after a segment is saved in the Audience Manager interface. Our system uses two methods that help ensure full segment coverage across a publisher’s entire user base:

- **Instant Segment Qualification:** Qualifies users based on real-time data collection processes.
- **Processed Segments:** Back-end processing of users not yet seen again who qualify based on new segment rules criteria.

### Performance Reporting

Audience Manager offers standard reporting interfaces for all data stored on user traits and segments, including segment sizes, segment composition, targeting platform mappings (destinations), and custom reports.

This section contains the following information:

- **Overlap Analysis and Lookalike Modeling**
- **Inventory and Audience Insight**
- **Audience Overlap Against Sites and/or Domains**

#### Overlap Analysis and Lookalike Modeling

In addition to custom segment generation and standard reporting, publishers are interested in understanding data relationships between all of their data elements and segments. Audience Manager can create data overlay reports based on a publisher’s specific needs. Some examples might include:

- Third-party data overlaid against first-party data
- Third-party to third-party overlap for data analysis and scoring (e.g. gender across four providers)
- First-party data relationships
- Segment-to-segment overlap and analysis for additional lookalike modeling

The **Partner Solutions** and **Analytics** teams can work with you to understand your data/reporting needs, create report templates, create custom reports, and schedule delivery of all overlap and lookalike reports.

#### Inventory and Audience Insight

Inventory and audience insight is closely tied to segment generation and overlay reporting. Inventory and audience insight reports help you understand:

- How audiences overlap or trend against individual sites and domains
- Potential ad inventory based on unique users within audience segments

#### Audience Overlap Against Sites and/or Domains

As part of a data-collection strategy, publishers can capture site, domain, and site groupings, etc. in the standard data. This gives publishers full visibility into overlap across sites, by data segment across sites, or overlap of any data combination of trait, segment, site, domain, or site grouping. Data is available in a number of areas depending on the specific use case:

- Standard reporting based on overlap segments generated
- Custom overlay report templates as defined above
• Segment creation wizard available via the user interface

**Ad Server Integration**

Helping you take action on data is a core feature of the Audience Management platform. Our platform lets customers manage a single digital data repository and then leverage that data across all their channels. This can include ad servers, content optimization, creative optimization, video delivery, search, and so forth.

Audience Manager has developed a central interface for managing new targeting destinations that provides multiple integration points (depending on the use case and technical implementation of the external system).

**Destination Publishing**

In Audience Manager, a destination is any third-party system (ad server, DSP, ad network, etc.) that you want to share data with. Destination Builder helps you manage URL, cookie-based, or server-to-server destinations.

As a data management platform, it is important to standardize the data transfer mechanisms so they can be easily configured and managed by our systems. Audience Manager allows publishers to easily set up new targeting partners (destinations) in the interface.

Audience Manager DIL code includes an asynchronous iframe that can be configured to perform ID syncs with third-party vendors, such as demand-side platforms and data providers. By default, no ID syncs are initiated from the iframe. Your Audience Manager consultant can enable them on your request. The purpose of an ID sync is to reconcile unique-visitor identifiers between Audience Manager and third-party vendors you might be working with.

This asynchronous iframe is called from the DIL code or AudienceManagement module in Adobe Analytics, which typically loads at the bottom of the page after your site content is loaded. The asynchronous nature of the iframe allows the rest of the page to load while ID syncs are being made. When enabled, most ID syncs are configured to occur once per unique visitor per 14 days.

**Supported Destination Types**

You can send information to a destination by passing it in through a URL string; by writing to a browser cookie; or through offline, server-to-server data transfers. URL and cookie-based destinations transmit data synchronously, as a user takes action on a page. Server-to-server data transmission is asynchronous and can occur long after a user has left the page. The delivery type you select depends on your business requirements and how a particular data partner wants to, or can, receive data. See Destinations for more information.

For each method, a publisher selects the appropriate data traits/segments to pass to each system. Publishers can pass the same segment to multiple platforms/channels simultaneously.

**Tag Management**

Tag management is a key feature of the Audience Manager platform. Tag management consists of two core components: JavaScript container code and a graphical user interface that helps you manage tags for deployment and data collection on your website.

Enterprise-level tag management is integral to Audience Manager. Furthermore, Audience Manager is tag agnostic. The system lets customers create, schedule, deploy, and manage their own tags. Additionally, the intuitive management interface uses conditional logic that provides flexibility when managing tags across a complex site
environment. Adobe is committed to developing this platform and supporting our clients and partners. We are also working to integrate our platform into the Adobe Experience Cloud. See Tags for more information.

Data Security and Privacy

Data security is an important part of data management. Audience Management has controls and systems designed to improve data security and prevent data leakage.

Data Security

Audience Manager takes data security and privacy very seriously. We work to keep our systems secure and protect your valuable data.

Audience Manager security practices include external and internal audits, activity logging, training, and other procedures designed to help protect our systems and your valuable data. We believe a secure product helps build and maintain the trust customers place in us.

In Audience Manager, we think about security in three main categories:

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<th>Provides Support For</th>
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<tr>
<td>Information security</td>
<td>Enterprise-level authentication, encryption, and data storage practices</td>
</tr>
<tr>
<td>Data leakage/transparency</td>
<td>Deep and actionable insight into on-site activities that constitute or contribute to data leakage</td>
</tr>
<tr>
<td>Process/policy enhancements</td>
<td>Clients, by working with industry best practices for privacy and data security</td>
</tr>
</tbody>
</table>

This topic contains the following information:

• Systems, Training, and Access
• Privacy and Personally Identifiable Information (PII)
• Data Partitioning
• Inbound Server-to-Server (S2S) Transfers
• Protecting Data by Escaping

Systems, Training, and Access

Processes that help keep our system and your data secure.

External Security Validation: Audience Manager tests security on an annual and quarterly basis.

• Yearly: Once a year, Audience Manager undergoes a full penetration test conducted by an independent third-party company. The test is designed to identify security vulnerabilities in the application. The tests include scanning for cross-site scripting, SQL injections, form parameter manipulation, and other application-level vulnerabilities.
• Quarterly: Once each quarter, internal teams check for security vulnerabilities. These tests include network scans for open ports and service vulnerabilities.

Systems Security: To help keep data safe and private, Audience Manager:

• Blocks requests from unauthorized IP addresses.
• Protects data behind firewalls, VPNs, and with Virtual Private Cloud storage.
• Tracks changes in the customer and control-information databases with trigger-based audit logging. These logs track all changes at the database level, including the user ID and IP address from which changes are made.
Security Assets: Audience Manager has a dedicated network operations team that monitors firewalls and intrusion-detection devices. Only key personnel have access to our security technology and data.

Security Training: Internally, our commitment to security extends to developers who work on our product. Adobe provides formal training to developers on how to build secure applications and services.

Secure Access: Audience Manager requires strong passwords to log on to the system. See password requirements.

Privacy and Personally Identifiable Information (PII)
Processes that help keep personal information safe. For additional privacy information, see the Adobe Privacy Center.

PII Data: Audience Manager contractually prohibits customers and data partners from sending PII information into our system. Additionally, the Unique User ID (UUID) does not contain or use PII data as part of the ID-generation algorithm.

IP Addresses: Audience Manager does collect IP addresses. IP addresses are used in data-processing and log-aggregation processes. They are also required for geographic/location look-ups and targeting. Additionally, all IP addresses within retained log files are obfuscated within 90 days.

Data Partitioning
Processes that help protect data owned by individual clients.

Trait Data Partitioning: Your data (traits, IDs, etc.) is partitioned by client. This helps prevent accidental information exposure between different clients. For example, trait data in cookies is partitioned by customer and stored in a client-specific sub-domain. It cannot be read or used accidentally by another Audience Manager client. Furthermore, trait data stored in the Profile Cache Servers (PCS) is also partitioned by customer. This prevents other clients from accidentally using your data in an event call or other request.

Data Partitioning in Reports: Client IDs are part of the identifying key in all reporting tables and report queries are filtered by ID. This helps prevent your data from appearing in the reports of another Audience Manager customer.

Inbound Server-to-Server (S2S) Transfers
Adobe Audience Manager supports two main methods of transferring S2S on-boarded data files to our systems:

Both methods are designed with the security of our customer and partner data in mind while data is in flight between their systems and our system.

SFTP: For the SFTP option, most customers choose to deliver files via the Secure FTP (SFTP) protocol, which uses the Secure Shell (SSH) protocol. This method ensures that files are encrypted while in flight between the customer's systems and Adobe's system. For each customer, we create a jailed drop-box location on our SFTP servers, which is tied to a user account on that system. Only the customer's credentialed and privileged internal system users can access this jailed drop-box location. This jail is never accessible to other customers.

Amazon Web Services S3 via HTTPS: For the S3 delivery option, we recommend that all customers configure their S3 clients to use the HTTPS encryption method for file transfers (this is not the default, so it must be explicitly configured). The HTTPS option is supported both by the s3cmd command line tool as well as the S3 libraries available in every major programming language. With this HTTPS option enabled, customer's data is encrypted while in flight to our systems. For each customer, we create a separate S3 bucket sub-directory that can be accessed only by that customer's credentials and those of our internal system users.

To add PGP encryption to your data files, see File PGP Encryption for Inbound Data Types.
Protecting Data by Escaping

Note that Audience Manager does not escape outgoing data to secure it against possible cross-site scripting (XSS), etc. It is the responsibility of the client to escape incoming data.

Data Privacy

Describes Audience Manager integration and compliance with generally accepted best practices related to consumer privacy and opt-out procedures.

Contents:

- Data Privacy
- Consumer Privacy Protection
- Opt-Out Management
- Collecting IP Addresses

Data Privacy

See the Adobe Privacy Center.

Consumer Privacy Protection

Audience Manager recognizes the implicit pact between consumers and the online brands with which they interact. Both parties benefit from the transparent exchange of anonymous data elements:

• Consumers receive personalized content, discounted product offers, and streamlined user experiences.
• Brands receive vital revenue streams supporting multiple online business models.

In our continuing support of this model, Audience Manager remains committed to providing transparency and control to consumers, and meeting or exceeding the Online Behavioral Advertising (OBA) Self-Regulatory Principles.

Opt-Out Management

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<td>Adobe Experience Cloud</td>
<td>The Your Privacy Choices page provides 1-click features that let you control and opt-out of data collection by the Adobe Experience Cloud (including Audience Manager). Specifically, see the business customer section of the Privacy Choices page.</td>
</tr>
<tr>
<td>Browsers that do not support third-party cookies</td>
<td>See Declared ID Targeting.</td>
</tr>
<tr>
<td>Mobile devices</td>
<td>See the opt-out and privacy settings for:</td>
</tr>
<tr>
<td></td>
<td>• Android devices</td>
</tr>
<tr>
<td></td>
<td>• iOS devices</td>
</tr>
</tbody>
</table>

Collecting IP Addresses

Adobe has enabled processes and offers settings that allow customers to use Audience Manager in compliance with applicable data privacy laws.
The IP address of a visitor to a customer’s website is transmitted to an Adobe Data Processing Center (DPC) where the IP address may be stored. Depending on the network configuration for the visitor, the IP address does not necessarily represent the IP address of the visitor’s computer. For example, the IP address could be the external IP address of a Network Address Translation (NAT) firewall, HTTP proxy, or Internet gateway.

**Replacing the Last Octet of the IP Address:** Adobe has developed a new “privacy by design” setting that can be enabled by Audience Manager Consulting. When this setting is enabled, the last octet (the last portion) of the IP address is immediately hidden when the IP address is collected by Adobe. Audience Manager masks this part of the IP address prior to processing (including before any optional geo-lookup of the IP address). For example:

- **Before:** 123.45.67.89
- **After:** 123.45.67.0

When this feature is enabled, the IP address is made sufficiently anonymous so it is no longer identifiable as personal information. As a result, Adobe Audience Manager can be used in compliance with data privacy laws in countries that do not permit the collection of personal information. Obtaining city-level information will likely be significantly impacted by the obfuscation of the IP address. Obtaining region- and country-level information should only be slightly impacted.

💡 **Note:** Contact your Audience Manager Consulting representative to enable the IP obfuscation feature.

**Geographic Segmentation:** If customers enable the replacement of the last octet of the IP address, the remaining values of the IP address can still be utilized for geo-segmentation and reporting in Audience Manager. If the last octet of the IP address has not been obfuscated, the full IP address is used. Customers can use the Geographic Segmentation feature that allows the customer to map out visitor location by geographic area in either case, but with some slight loss of precision when IP obfuscation is being used. Geographic Segmentation data is granular only to the city level or zip code level, and not to the individual level.
Features

User interface (UI) controls and workflows that let you create and manage important aspects of your Audience Manager account.

Addressable Audiences

An overview of the Addressable Audience feature and use cases.

Contents:

What is an Addressable Audience?
Addressable Audience Interface
Other Addressable Audience Topics

What is an Addressable Audience?

The Addressable Audiences feature shows you the overlap between the audiences you see across all of your properties where Audience Manager collects data and your selected destination. To help you understand this concept, take a look illustration below. The overlap between each circle represents the different types of addressable audiences.
Addressable Audience Interface

The **Addressable Audience** feature turns this abstract concept into quantifiable data. In Audience Manager, this feature displays audience overlap with data visualizations that provide at-a-glance information along with numeric data in tabular form.

**Addressable Audiences** is located in **Manage Data > Destinations**. Click on the name of a server-to-server destination to view your addressable audience data. Note, this feature returns data for server-to-server destinations only and access requires administrator permissions.
Reviewing this data can help you with:

- **Forecasting and planning:** Segment Addressable Audience data gives you more granularity into the segments you are planning to send to a destination for audience targeting and activation.

- **Performance reviews:** The Addressable Audiences feature is also a troubleshooting tool. It lets you review campaign performance, understand campaign reach, and lets you cross-check with targeting/activation partners if you don't see the results you expect.

**Prospecting with Third-Party Data and Implications for Match Rates**
Before purchasing third-party data for audience acquisition, customers can validate the overlap with other data providers. This can help you make an informed decision prior to buying new data. The ID syncs for purchased third-party data rely not only on the overlap of your data but also on third-party providers’ footprints with all other Audience Manager customers. Your Adobe consultant can help you identify additional relevant data sources to optimize prospecting campaigns.

**Mobile Users and Match Rates**

There are gaps when trying to connect Safari or mobile app users where there are no third-party cookies present. That makes it difficult to sync users with some partners because only those Adobe IDs for synced third-party cookies are provided in the media delivery logs.

**Other Addressable Audience Topics**

**Date Ranges in Addressable Audiences and Destinations**

Describes the available date ranges and how data ages out of each interval in the reports for an Addressable Audience or Destination.

**Available Date Ranges and Time Zones**

Reports for your Addressable Audiences and Destinations use the same date range intervals. The date range options include:

- Last 1 Day (This interval runs from Midnight to Midnight of the previous 24-hour period. It is not a real- or current-time metric.)
- Last 7 Days
- Last 14 Days
- Last 30 Days
- Last 60 Days
- Last 90 Days
- Lifetime

All dates and date ranges are set in the UTC time zone. See *Time Zones in Audience Manager*.

**Data in Date Range Intervals**

The Addressable Audience and Destination metrics return a count of unique users for the selected time interval. For example, a visitor is only counted once, even if they come to your site multiple times. The first visit is the unique visit and gets recorded. The subsequent visits are returning visits and are not counted because they’re not unique.

Date ranges contain data for the selected time interval or older. And, the data ages out of each report interval as time passes. For example, let’s assume you see 2 visitors after choosing the Last 30 Days option. In the reports, these visitors:

- *Will be* included in the results returned by the longer time intervals (60-days, 90-days, and Lifetime).
- *Will not be* included in the shorter intervals that precede the Last 30 Day option (Current, 7-days, and 14-days).

And, on day 31, these visitors only show up in the 60-day, 90-day, and Lifetime results. They have aged out of the 30-day interval. Visitors do not age out of the Lifetime interval.

**Addressable Audience Metrics**

Lists and defines metrics provided by Addressable Audiences.
Contents:

Customer-Level Metrics
Segment-Level Match Metrics
Platform-Level Metrics
Avoid Customer and Segment Addressable Audience Comparisons

Customer-Level Metrics

These metrics return data for traits realized when visitors come to your site or when you send inbound data files to Audience Manager. These metrics provide a comprehensive view of audience size for your account.

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Addressable Audience</td>
<td>A count of overlap of devices that have realized either a rule-based trait or an onboarded trait during the look-back window and devices that we have an ID sync with the chosen destination regardless of the time of syncs.</td>
</tr>
<tr>
<td>Customer Total Audience</td>
<td>A count of devices that have realized either a rule-based trait on your properties or an onboarded trait from your offline files during the look-back window.</td>
</tr>
<tr>
<td>Customer Match Rate</td>
<td>Customer Addressable Audience ÷ Customer Total Audience expressed as a %.</td>
</tr>
</tbody>
</table>

Segment-Level Match Metrics

These metrics return data on segment membership. They help provide a more granular and accurate view of the audience size for each of your segments.

💰 Note: The way the look-back window is applied at the segment level is different from that at the customer level. Visitors can come to the site and realize a trait 10 days ago, and they could qualify for a segment since then and dropped out of the segment 2 days ago. When the 7-day look-back is applied, these visitors will be counted at the segment level but not at the customer level.

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Segment Addressable Audience</td>
<td>The number of users who have belonged to the segment during the report look-back period and have an active ID sync on your site.</td>
</tr>
</tbody>
</table>

💡 Tip: When used with the 1-day look-back period, this metric can help you understand the current state of your segments. This is because the **Segment Addressable Audience** metric represents the users who stayed in a segment throughout the previous day. Combine this with the fact that Audience Manager refreshes **Addressable Audiences** daily, combining this metric and lookback period provides the most up-to-date snapshot of your segments.
Metric | Description
--- | ---
**Total Segment Population** | A count of all the devices that were a member of your segment during the report look-back period.

**Segment Match Rate** | Segment Addressable Audience ÷ Total Segment Population expressed as a %.

**Platform-Level Metrics**

This metric return data on activities collected across all Audience Manager customers. They can provide a broader view of the customer’s audience compared with the aggregated Audience Manager customers.

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Audience Manager’s Addressable Audience</strong></td>
<td>A count of all devices that have interacted with all Audience Manager customers at the platform-level during the report look-back period and that could be matched with your chosen destination. This metric is useful because it shows you: • The size of the total addressable audience that Audience Manager can reach. • How big the Audience Manager profile pool is for a targeting platform and the size of their audiences.</td>
</tr>
</tbody>
</table>

**Avoid Customer and Segment Addressable Audience Comparisons**

You shouldn’t compare the **Customer Addressable Audience** and **Segment Addressable Audience** metrics to determine if one is more significant than the other. These are separate, different, and independent metrics. As described in the definitions above, each of these is derived from different data sets. Given this, you should avoid deriving any conclusions if one metric is larger than the other. All you can say when comparing these is that:

- **Customer Addressable Audiences** is based on trait realizations for your own, first-party data. This metric provides a broad, comprehensive view of your integration with a data partner.
- **Segment Addressable Audiences** is based on segment qualifications for your own first-party data and third-party data. This metric provides a granular, more accurate view of your addressable audiences in a targeting platform.

**Causes of Low Match Rates for Addressable Audiences**

Common elements responsible for low Addressable Audience match rates or discrepancies in reported numbers.

<table>
<thead>
<tr>
<th>Cause</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mobile Traffic</strong></td>
<td>Most server-to-server integrations rely on synchronization processes facilitated by third-party cookies. However, mobile environments do not use third-party cookies. As a result, your Addressable Audience numbers may seem low compared to segment size.</td>
</tr>
<tr>
<td><strong>Safari Traffic</strong></td>
<td>Safari blocks third-party cookies. This prevents Audience Manager from synchronizing with the destination.</td>
</tr>
<tr>
<td>Cause</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Tracked Media Impressions</td>
<td>Due to ad server best practices, ID syncs are not made within ad tags. Customers who do a large amount of offsite advertising will not synchronize users to third-party integrations in those environments. Also, a large amount of collected media impression data could reduce addressable audience numbers.</td>
</tr>
</tbody>
</table>

**Troubleshooting with Addressable Audiences**

In addition to surfacing match rates, you can also use Addressable Audiences as a troubleshooting tool.

For example, let’s say you send a segment to a destination and that destination shows low reporting numbers. Checking the Addressable Audience results will show you if this is a technical problem or just a case of low match rates. A low match rate shows your destination isn’t all that great for your selected segments. However, a difference in the total addressable audience numbers between Audience Manager and the destination indicates an integration, synchronization, or other technical problem. In these cases, contact your account manager.

**Administration**

The options under the **Administration** menu let you create Audience Manager users and assign them to groups. You can also view limits (traits, segments, destinations, and AlgoModel).

Enterprise customers using Audience Manager need one data management platform for all of their data, but must be able to control the visibility of the different data elements to specific business units. You can accomplish this using group permissions, also referred to as Role-Based Access Control (RBAC).

Audience Manager uses groups to assign permissions. Permissions are not assigned at the user level. Group permissions are tied to objects (traits, segments, etc.) and to actions you can perform on those objects (edit, view, etc.).

**Create Users**

Create users in Audience Manager and specify user details, login status, and assign users to groups.

1. Click **Administration > User Management > Users**.
2. Click to display the **User Add** page.
3. Under **User Details**, fill in the fields:
   - **Username**: Specify a unique username for Audience Manager.
   - **First Name**: Specify the user’s first name.
   - **Last Name**: Specify the user’s last name.
   - **Email Address**: Specify the user’s email address. Audience Manager does not send regular notification to users. Audience Manager administrators have access to users’ email addresses and can manually email users as needed. For example, if a user forgets his or her password, the email address specified in this field is used to send a temporary password and instructions to reset the password.
   - **Phone Number**: Specify the user’s phone number.
Is Admin: Specify if this user is an Audience Manager administrator. Admin users can manage users (create, edit, etc.) and groups (create, assign permissions, etc.). Non-admin users can control only their own user profiles, including editing their email addresses and resetting their own passwords. For more information, see Edit Your Account Settings.

4. Under Login, select the desired status:

Active: Active users can access Audience Manager and have the permissions granted by group membership.

Deactivated: Deactivated users cannot access Audience Manager and do not have any permissions. If you deactivate users, their user information remains in Audience Manager and you can simple reactivate them, if necessary. If you remove users, you must re-create them if they need to use Audience Manager again in the future.

Expired: A user's password is older than 90 days.

Pending: The user has a temporary password, either as after a password reset or as a brand new account, and they have not yet set a permanent password.

Locked Out: 5 incorrect login attempts will lock out a user.

5. Under Assigned Groups, from the drop-down list, select the desired groups to which you want to assign this user.

For more information about groups and permissions, see Create a Group.

6. Click Save.

Create a Group

A group is a collection of users that share access rights to destination, segment, and trait objects. You can limit groups to single objects only or give them broad access to combinations of different objects.

To create a group:

1. Click Administration > Groups.
2. Click to open the Group Settings page.
3. In Group Details:
   • Name the group.
   • Provide a brief group description.
4. In Group Members, click a user from Add Users options to add them to the group.
5. In Group Permissions, select a trait, segment, or destination from Add Object. This opens a permissions window for your selected object.
6. Select the check box for the permissions you want group members to have.
7. (Optional) Assign Wild Card Permissions to the group.
8. Click Save Group.

Edit Your Account Settings

Non-admin users can edit their own profiles, including changing their email addresses and resetting their passwords. Admin users can create users and add them to groups for permission purposes, as explained in Create Users and Create a Group.
1. In the Audience Manager header, click  

2. Click Account Settings, then click Edit to display the My Account page.

3. In the Email Address field, specify your new email address, if necessary.

   Audience Manager does not send regular notification to users. Audience Manager administrators have access to users' email addresses and can manually email users as needed. For example, if a user forgets his or her password, the email address specified in this field is used to send a temporary password and instructions to reset the password.

4. To reset your password, specify your current password, specify the new password, then confirm the new password.

   See also, Password Requirements, Locked Accounts, and Forgotten Passwords.

5. Click Save.

Understanding Wild Card Permissions

Simplify group rights management with Wild Card Permissions.

Wild Card Permissions give group members automatic access to each data source associated to a segment, destination, or trait. By comparison, regular permissions only lets you assign specific data sources to the one of these objects. And, when you add new data sources, group members don't get access to those new sources. You have to open the group permissions and assign those new data sources to the group. Wild Card Permissions let you avoid this manual data source update process. Groups with Wild Card permissions get access to new data sources without explicit authorization.

Usage Limits

Audience Manager sets a maximum limit on the number of traits, segments, destinations, and algorithmic models that you can create for an account. Limits apply to these items whether created in the user interface or programmatically through API methods. Usage limits help protect Audience Manager from automated processes that may attempt to compromise our APIs or user interface.

Contents:

- Item Limits
- Monitor Usage
- Increase Item Limits

Item Limits

The tables list the current limits by item type. You cannot create new traits, segments, destinations, or Algorithmic Models if you reach a specific limit for one of these items. If do reach a limit, you must delete an older item before you can create a new one.

<table>
<thead>
<tr>
<th>Trait Type</th>
<th>Maximum Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Traits</td>
<td>100,000</td>
</tr>
<tr>
<td>Total Trait Qualifications</td>
<td>100,000. For more information on trait qualification, see the Trait Qualifications Reference.</td>
</tr>
<tr>
<td>Trait Type</td>
<td>Maximum Limit</td>
</tr>
<tr>
<td>------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Algorithmic</td>
<td>50</td>
</tr>
<tr>
<td>Rule Based</td>
<td>100,000</td>
</tr>
<tr>
<td>Onboarded</td>
<td>100,000</td>
</tr>
<tr>
<td>Folder Traits</td>
<td>2,000</td>
</tr>
</tbody>
</table>

**Segment Limits**

<table>
<thead>
<tr>
<th>Segment Type</th>
<th>Maximum Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Segments</td>
<td>20,000</td>
</tr>
</tbody>
</table>

**Destination Limits**

<table>
<thead>
<tr>
<th>Destination Type</th>
<th>Maximum Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Destinations</td>
<td>1,000</td>
</tr>
<tr>
<td>Cookie</td>
<td>1,000</td>
</tr>
<tr>
<td>URL</td>
<td>1,000</td>
</tr>
<tr>
<td>S2S</td>
<td>100</td>
</tr>
</tbody>
</table>

**Algorithmic Model Limits**

<table>
<thead>
<tr>
<th>Segment Type</th>
<th>Maximum Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Algorithmic Models</td>
<td>20</td>
</tr>
<tr>
<td>Algorithmic Models maximum audience size</td>
<td>25,000,000</td>
</tr>
</tbody>
</table>

Note that this limit cannot be increased. You can decrease audience sizes by selecting fewer data sources for the model or by selecting a shorter look-back window.

**Folder Limits**

<table>
<thead>
<tr>
<th>Segment Type</th>
<th>Maximum Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trait Folders</td>
<td>2,000</td>
</tr>
</tbody>
</table>

Your folder structure can be maximum 5 levels deep.
Monitor Usage

You can see usage and limits for your account by going to Administration > Limits. Access requires administrator permissions.

<table>
<thead>
<tr>
<th>Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trait Limits</strong></td>
</tr>
<tr>
<td>Total Traits</td>
</tr>
<tr>
<td>AlgoTraits</td>
</tr>
<tr>
<td>Rule Based</td>
</tr>
<tr>
<td>Onboarded</td>
</tr>
</tbody>
</table>

Increase Item Limits

The default limits listed here should provide enough capacity for your business needs. If your organization consistently reaches these limits, contact your account representative to discuss an increase.

Algorithmic Models

Build and manage the traits or segments used in algorithmic modeling, also referred to as look-alike modeling. Model features are located in Manage Data > Models.

Understanding Algorithmic Models

A review of algorithmic modeling in Audience Manager. Describes how modeling works, benefits, and workflow.

Contents:

- Find New Users with Algorithmic Modeling
- Advantages
- Workflow

Find New Users with Algorithmic Modeling

Algorithmic modeling helps you discover new, unique audiences through automated data analysis. The process starts when you select a trait or segment, a time interval, and first and third-party data sources. Your choices provide the inputs for the algorithmic model. When the analytics process runs, it looks for eligible users based on shared characteristics from the selected population. Upon completion, this data is available in Trait Builder where you can use it to create traits based on accuracy and reach. Additionally, you can build segments that combine algorithmic traits with rules-based traits and add other qualification requirements with Boolean expressions and comparison operators. Algorithmic modeling gives you a dynamic way to extract value from all your available trait data.
Advantages

The major benefits of using Audience Manager modeling include:

- **Data accuracy**: The algorithm runs regularly, which helps keep results current and relevant.
- **Automation**: You don't have to manage a large set of static rules. The algorithm will find audiences for you.
- **Save time and reduce effort**: With our modeling process you don't have to guess at what traits/segments may work or spend time resources on campaigns to discover new audiences. The model can do this for you.
- **Reliability**: Modeling works with server-side discovery and qualification processes that evaluate your own data and selected third-party data that you have access to. This means you don't have to see the visitors on your site to qualify them for a trait.

Workflow

You manage models in Manage Data > Models. At a high level, the workflow process involves the following:

- Select the baseline data you want the algorithm to evaluate. This includes a trait or segment, time range, and data sources (your own data and third-party data you already have access to through Audience Manager).
- Save your model. Once saved, algorithmic evaluation process runs automatically. Note, however, it can take up to 7 days for this process to complete. Audience Manager sends you an email when the algorithm has finished and results are available for trait creation.
- Build algorithmic traits in Trait Builder.
- Combine traits into segments in Segment Builder.
- Create and send segment data to a destination.

Understanding TraitWeight

TraitWeight is a proprietary algorithm designed to discover new traits automatically. It compares trait data from your current traits and segments against all other first and third-party data that you have access to through Audience Manager. Refer to this section for a description of the TraitWeight algorithmic discovery process.
The following steps describe the TraitWeight evaluation process.

**Step 1: Build a Baseline for Trait Comparison**

To build a baseline, TraitWeight measures all the traits associated with an audience for a 30, 60, or 90-day interval. Next, it ranks traits according to their frequency. The frequency count measures commonality. Traits that appear often are said to exhibit high commonality, an important characteristic used to set a weighted score when combined with traits discovered in your selected data sources.

**Step 2: Find the Same Traits in the Data Source**

After it builds a baseline for comparison, the algorithm looks for identical traits in your selected data sources. In this step, TraitWeight performs a frequency count of all discovered traits and compares them to the baseline. However, unlike the baseline, uncommon traits are ranked higher than those that appear more often. Rare traits are said to exhibit a high degree of specificity. TraitWeight assesses combinations of common baseline traits and uncommon (highly specific) data source traits as more influential or desirable than traits common to both data sets. In fact, our model recognizes these large, common traits and does not assign excess priority to data sets with high correlations. Rare traits get higher priority because they are more likely to represent new, unique users than traits with high commonality across the board.

**Step 3: Assign Weight**

In this step, TraitWeight ranks newly discovered traits in order of influence or desirability. The weight scale is a percentage that runs from 0% to 100%. Traits ranked closer to 100% means they’re more like the audience in your baseline population. Also, heavily weighted traits are valuable because they represent new, unique users who may behave similarly to your established, baseline audience. Remember, TraitWeight considers traits with high commonality in the baseline and high specificity in the compared data sources to be more valuable than traits common in each data set.

**Step 4: Display and Work with Results**
Audience Manager displays your weighted model results in **Trait Builder**. When you want to build an algorithmic trait, **Trait Builder** lets you create traits based on the weighted score generated by the algorithm during a data run. You can use these results to build accurate traits, or compromise accuracy for reach to help expand audience size.

**Step 5: Re-evaluate the Significance of a Trait Across Processing Cycles**

Periodically, TraitWeight re-evaluates the importance of a trait based on the size and change in the population of that trait. This happens as the number of users qualified for that trait increases or decreases over time. This behavior is most clearly seen in traits that become very large. For example, suppose the algorithm uses trait A for modeling. As the population of trait A increases, TraitWeight re-evaluates the importance of that trait and may assign a lower score or ignore it. In this case, trait A is too common or large to say anything significant about its population. After TraitWeight reduces the value of Trait A (or ignores it in the model), the population of the algorithmic trait decreases. The list of influential traits reflects the evolution of the baseline population. Use the list of the influential traits to understand why these changes are occurring.

**Update Schedule for Algorithmic Models and Traits**

Creation and update schedules for new or existing algorithmic models and traits.

### Algorithmic Model Creation and Update Schedule

<table>
<thead>
<tr>
<th>Activity Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Create or Clone a Model</strong></td>
<td>For new or cloned algorithmic models, the creation process runs once per day at:</td>
</tr>
<tr>
<td></td>
<td>• 5 PM EST (November - March)</td>
</tr>
<tr>
<td></td>
<td>• 6 PM EDT (March - November)</td>
</tr>
<tr>
<td></td>
<td>Models built or cloned after the creation deadline are processed the following day.</td>
</tr>
<tr>
<td><strong>Update a Model</strong></td>
<td>Under ideal conditions, existing models rerun on weekdays, at 8-day intervals from the creation day. For example, if you create a model (by the deadline) on Monday, it updates the following Tuesday. After the update on Tuesday, the model will update the following Wednesday, and so on. Note, the model update process requires a tremendous amount of computational power. As a result, sometimes it may take longer than 8-days to update a model. A model will rerun if it meets any of the following conditions:</td>
</tr>
<tr>
<td></td>
<td>• Its last run was not successful.</td>
</tr>
<tr>
<td></td>
<td>• It has run successfully before AND it has been at least eight days since its last run AND the model has at least one active trait attached to it.</td>
</tr>
<tr>
<td></td>
<td>• Its last run produced no data AND it has been at least eight days since its last run.</td>
</tr>
</tbody>
</table>

### Algorithmic Trait Creation and Update Schedule

<table>
<thead>
<tr>
<th>Activity Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Create a Trait</strong></td>
<td>The trait creation process runs every day, Monday through Friday. Generally, new algorithmic traits appear in the UI within 48 hours.</td>
</tr>
</tbody>
</table>
### Activity Type | Description
---|---
Update a Trait | Existing traits are updated at 8 day intervals and follow the schedule for model updates.

### Models List View
The list view is a central workspace that helps you to create, review, and manage models.

The Models list page contains features and tools that help you:

- Create new models.
- Manage existing models (edit, pause, delete, or clone).
- Search for models by name.
- Create algorithmic traits using any given model.

### Models Summary View
The summary page displays model details such as name, reach/accuracy, processing history, and traits created from the model. The page also includes settings that let you create and managing models. Click a model name from the summary list to see its details.

The model summary page includes the following sections.

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Information</td>
<td>Includes basic information about the model such as its name and when it last ran.</td>
</tr>
<tr>
<td>Model Reach and Accuracy</td>
<td>Shows accuracy and reach data for the last model run.</td>
</tr>
<tr>
<td>Model Processing History</td>
<td>Displays the processing date and time for the last 10 runs and whether data was generated on those runs.</td>
</tr>
</tbody>
</table>
| Influential Traits | The Influential Traits table:  
- Lists the top 50 influential traits that are best represented in the model's baseline population.  
- Ranks each trait in order of its Relative Weight rank. The Relative Weight sorts newly discovered traits in order of influence or desirability. The weight scale is a percentage that runs from 0% to 100%. Traits ranked closer to 100% means they’re more like the audience in your baseline population. See Understanding TraitWeight.  
- Shows the 30-Day uniques and the total trait population for each trait. |
| Traits Using Model | Shows a list of the algorithmic traits based on the selected model. Click a trait name or trait ID for more information on the trait. Select Create New Trait with Model to go to the algorithmic trait creation process. |
Model Builder

How to create an algorithmic model with Model Builder.

Build a Model

Describes the required and optional steps that let you create an algorithmic model in Model Builder.

Model Builder Section

Model Builder consists of the Basic Information and Configuration sections. To create a model, complete the required fields in these two sections. Save your model to start the algorithm. Audience Manager sends you an automated notification after the first data run completes. After you receive the email, you can go to Trait Builder and create algorithmic traits.

Note:

- The modeling process runs only once if you create a model and do not build any traits with it.
- Build models from data sources that contain a meaningful amount of information. Models with insufficient data will run, but they will not return results.
- Do not create models with other algorithmic traits or segments.
- The automated email notification is sent one time only (after the first data run).

Build a Model

To build a model, go to the Models section and click Add New and follow the steps below:

1. In the Basic Information section
   - Name the model.
   - (Optional) Provide a brief description about the model.
   - Set the status for the model to Active or Inactive. Inactive models will not run and will not produce any data.

2. In the Configuration section:
   - Click Browse All Traits or Browse All Segments to select a trait or segment you want to model against.
   - Choose a 30, 60, or 90-day look-back period. This sets a time range for the model.
   - The Trait Weight algorithm is selected by default.
   - Select a data source from the Available Data list.
   - Click Save when done.

Basic Information for Algorithmic Models

In Model Builder, the Basic Information settings let you create new or edit existing models. To create a new model, provide a name and move on to the Configuration settings. The description field is optional.
### Field | Description
--- | ---
Name | Give your model a short, logical name that describes its function or purpose. Avoid abbreviations, special characters, and accent marks.
Description | A field for additional descriptive information about the model.
Status | Activates or deactivates the model (active by default).

### Configuration

In Model Builder, the **Configuration** section lets you add traits or segments to the model. In this section, select a baseline trait or segment, a look-back period, and data from your first and third-party data sources.

**Prerequisites:** Complete the required fields in the **Basic Information** section first.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
</table>
| Select a Baseline Trait or Segment | Click the trait or segment button to see a list of all your traits or segments. Your selected segment or trait becomes the baseline that the system algorithms use for modeling.  

*Note:* Do not create models with other algorithmic traits or segments. |
| Select Look Back Period | Sets a time range for the model. Based on your selection, the algorithm includes and evaluates data from the previous 30, 60, or 90 days. |
| Select Algorithm | At this time, Model Builder works with our proprietary Trait Weight algorithm only. Audience Manager may add other algorithmic functions in subsequent releases. |
| Select Available Data | Lets you select the first and third-party data sources you want to use in the model. |

### Audience Lab

Create mutually exclusive test segments in Segment Test Groups to compare and measure effectiveness of different destinations. You can set aside a control group and divide your segment into percentages of a whole, in order to test efficacy.

**Audience Lab** uses *Profile Link* to power cross-device testing. This helps ensure a user qualifies for the same test segment and receives the same treatment across devices. The test segments in test groups will inherit the *Profile Merge Rule* the base segment has assigned to it.

The **Audience Lab** default view displays a card for each of the test groups. Click a card to access the **Test Group** view. This view includes the following information:

- **Test Group Information**
- **Test Group Reporting**

You are able to create **up to 10 test groups**, each one with **up to 15 test segments**.
Status

The status of a test group can be draft, pending, active, paused or completed. More information on each of them in the table below:
### Status

<table>
<thead>
<tr>
<th>Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draft</td>
<td>A <em>draft</em> test group is not yet active and can still be edited. It does not yet send data to the mapped destinations.</td>
</tr>
<tr>
<td>Pending</td>
<td>A <em>pending</em> test group is not yet active but cannot be edited anymore. It will become active at the start date you selected in the <strong>Create Test Groups</strong> wizard.</td>
</tr>
<tr>
<td>Active</td>
<td>An <em>active</em> test group means that data is currently being sent to destinations. Press <strong>Pause Test</strong> in the <strong>Test Group</strong> card to suspend sending data to destinations.</td>
</tr>
<tr>
<td>Paused</td>
<td>A <em>paused</em> test group does not currently send data to destinations. Press <strong>Make Active</strong> in the <strong>Test Group</strong> card to resume sending traits.</td>
</tr>
<tr>
<td>Completed</td>
<td>A <em>completed</em> test group has reached the end date you selected in the <strong>Create Test Groups</strong> wizard and has stopped sending reporting data.</td>
</tr>
</tbody>
</table>

### Actions

<table>
<thead>
<tr>
<th>Actions</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edit</td>
<td>Available only for draft test groups. Allows you to resume the <strong>Create New Test Group</strong> wizard.</td>
</tr>
<tr>
<td>Pause</td>
<td>Available for active test groups. Allows you to pause sending the test segments to destinations.</td>
</tr>
<tr>
<td>Make Active</td>
<td>Available for paused test groups. Allows you to resume sending the test segments to destinations.</td>
</tr>
<tr>
<td>View</td>
<td>Available for completed test groups. Allows you to view the reporting information the test has generated.</td>
</tr>
<tr>
<td>Duplicate</td>
<td>Allows you to create a new test group with the same configuration as the one you are duplicating.</td>
</tr>
<tr>
<td>Delete</td>
<td>Allows you to delete a test group. The test segments will be unmapped from the destinations, the baseline segment and conversion traits associated to the test group are fully editable. An alert will prompt you to download the CSV file when you delete a test group to save the reporting if you wish.</td>
</tr>
</tbody>
</table>

### Create Segment Test Groups

This procedure walks you through the process of creating a new test group in **Audience Lab**.

### Prerequisites
• You need to have at least one conversion trait set up. You can set up conversion traits in the Trait Builder, by selecting conversion as the Event Type.
• For companies using Role-Based Access Control: Assign the Audience Lab wildcard permission to User Groups to provide access. This permission allows the user to create and view the results of a test. A user will only be able to use segments from a data source they have "read" and "map to destination" privileges for. The user will only be able to use conversion traits from a data source they have the "read" permission for. A user will only be able to see destinations they have access to as well. So, before adding the Audience Lab wildcard permission to a group, make sure the group has:
  • access to read relevant conversion traits;
  • access to read and map relevant segments for tests;
  • access to relevant destinations.

To create a new Segment Test Group

1. Select Create New Test Group in the Audience Lab dashboard to start the wizard.
2. Basic Info & Choose Segment
   • Fill in a Test Group Name and a Description.
   • Choose the Base Segment either by navigating in the file browser or by typing in the search bar, confirm by pressing Choose Segment.
   • You can save the test group as a draft and resume working on it later.
   • An alert will show up in case the base segment you selected is already used in other test groups. Using the base segment twice may distort the conversion results for both tests.
3. Allocate Test Segments
   • You can create up to 15 test segments and divide the percentage of devices as you wish.
   • You can edit the name of the test segments by clicking on them.
   • The percentages automatically divide evenly to 100% when new test segments are allocated. You can then manually edit the percentages. Click the checkbox after editing the percentages and make sure they add up to 100%, otherwise you will not be able to proceed to the next step.
4. Set a Control Segment
   • Select a control segment if you want to set aside a certain part of the segment to be used as a control group. Control groups allow you to see the impact of the test segments you created compared to a benchmark.
   • You can select a test segment as control segment in the drop-down list, or you can choose None for no control.
   • Click Next when you're done.
5. Select Conversion Traits
   • Add conversion traits by typing in the conversion trait window. This is a mandatory step and you cannot proceed to the next step unless you add at least one conversion trait.
   • You can add up to 5 conversion traits if you wish.
   • An alert will show up in case you select a conversion trait already used for other test groups.
6. **Choose Destinations & Dates**

- Type in the desired destinations in the search field or use the drop-down arrow. **Audience Lab** test segments can be sent to URL, cookie, or server-to-server destinations.
- Drag & drop segments to destinations.
- After dropping a segment in a destination, fill in the **Destination Mapping Value** in the blind.
- You can send the same test segment to multiple destinations and you can add multiple test segments to a single destination.
- Destinations are grayed out if they are not available for a certain test segment based on **Data Export Controls**.
- Users will only see the destinations they have access to based on the **RBAC User Group** they belong to.
- Finally, you are required to select a start date for your test group. This date marks the start of the period in which your test group will be published to destinations. Select **No End Date** for an indefinite comparison of the test segments.

**Note:** Profile Merge Rules with an authenticated profile are only supported in Real-time destinations. If a test segment with a profile merge rule of that configuration is sent to a file-based server-to-server destination, the audiences might not populate.

Click **Next** to review and finalize your test group.

7. **Summary & Finalize**

- Review the information you added in the previous steps and select **Finalize Group**.
- Remember that once you finalize a test group, it can be duplicated or deleted, but not edited.

**Note:**
- You can save the test groups at any point in the creation process and return to the wizard at a later time. The test group status will be **Draft** and the test group will not send any data to destinations until you finalize the segment test group.
- For draft tests, you can go back and edit the test groups by clicking **Edit** in the test group card in the main **Audience Lab** view.

---

**Edit Segment Test Groups**

This procedure describes how to edit a test group. In Audience Lab, you are only able to edit draft test groups. In the Create Segment Test Groups wizard, you can save your test group as a draft and resume working on it later.

1. Navigate to the Audience Lab main view.
2. Search for your draft test groups and select the **Edit** control in the test group card.
3. Resume the **Create Segment Test Groups** wizard and select **Finalize Group** when you’re done.

**Delete Segment Test Groups**

This procedure describes how to delete a test group.

1. Navigate to the Audience Lab main view.
2. Find the test group you want to delete. You can either:
• press the **Delete** control in the test group card, or
• press the test group title in the test group card to go to the *Test Group Information* view and press the **Delete** control in the title bar.

3. For *completed test segments*, an alert will prompt you to download the CSV file to save the reporting if you wish.

**Test Group Information**

This section displays general information on the test group and the test segments it is divided into, the selected conversion traits and mapped destinations. The section also provides controls for duplicating or deleting the test group.

The page displays information on the baseline segment you used for the test group and how the test segments are divided.

The **Test Segments** are populated randomly with users from the baseline segment you used for the test group. The overview shows the percentages of users you allotted to each test segment.

The **Conversion Traits** drive the reporting for the test groups. To designate a trait as a conversion, when creating or editing traits in the Trait Builder, select **Conversion** as **Event Type**.

The **Destinations** card is collapsible. Press the arrows to open or close individual destinations and obtain the following information for test segments, grouped by the destinations these are mapped to:

• the number of devices from the base segment’s total population allocated to each destination.
• mapping key;
• mapping value;
• URL & secure URL for URL destinations.

💡 **Note:** *Remember that you can’t edit test groups after you finalize them, you can only pause, delete or duplicate them.*
Test Group Reporting

The test group reporting section returns information on test group conversions, allowing an easy comparison of test segment efficacy. Numerous filters and dimensions are available for data visualization.

**Audience Lab** returns detailed reporting information for the test segments you created and allows you to save the reporting data as CSV files. You can select between **Aggregate Reporting** and **Trend Reporting**.

**Aggregate Reporting** returns the absolute numbers for your test segments. **Trend Reporting** returns a graph of the trend over a specific period. Four tabs enable you to customize the reports:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population Conversion Rate</td>
<td>Returns the percentage of devices belonging to a particular test segment, which have converted.</td>
</tr>
<tr>
<td>Converters</td>
<td>Returns the number of devices that have exhibited the conversion trait(s) selected in the test groups.</td>
</tr>
<tr>
<td>Total Conversions</td>
<td>Returns the number of conversions generated by the test segments.</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Test Segment Populations</td>
<td>Returns the number of devices belonging to the test segments. Toggle between Total Population or Real-time Population. The difference is explained in the Reporting FAQ.</td>
</tr>
</tbody>
</table>

You can select a specific conversion trait for which to generate the report or you can select all traits combined. You can define a date range for which the information should be returned and export the report as a CSV file.

💡 **Note:**
- Reporting for a test group will populate the day after its start date.
- A conversion is only counted for a device after the start date of a test and after the device has been added to a test segment. If a conversion happens for that device before it is assigned a test group, the conversion will not be counted.

A returned **Aggregate Reporting** chart could look like this:

![Aggregate Reporting Chart](image)

A returned **Trend Reporting** chart could look like the one below. Select Normalized in the check box if you want to ignore the absolute numbers and simply focus on the test segments trends.
Audience Lab Use Cases

Audience Lab enables several use cases by allowing you to use baseline segments for creating test groups. You can divide test groups into several mutually exclusive test segments, map these to different destinations and then determine which of the segments are most effective in driving conversions.

Compare Models in Audience Lab

You can use several different types and sources of models in Audience Manager. Audience Lab offers an easy way to compare your customers’ conversion rates, across your active models.

In this use case, you are comparing different models. You can either use models created via an in-house data warehouse and import them in Audience Manager as Onboarded Traits or you can use the Algorithmic Models feature in Audience Manager.

1. Create two models, either in the Model Builder, or via an outside platform.
2. Create algorithmic traits from the algorithmic model or import your own models as onboarded traits.
3. Create mutually exclusive segments so users in both models don't overlap:
   - Create a Model 1 Segment and a Model 2 Segment.
   - Have the segment rule for Model 1 Segment be model 1 trait AND NOT model 2 trait, and vice-versa for Model 2 Segment.
4. **Create two segment test groups** in Audience Lab, one with **Model 1 Segment** as the baseline, the other with **Model 2 Segment** as the baseline.
   - Keep the variables the same for both test groups: same destinations, creative, conversion traits.
   - Make sure the test segments have similar numbers of users (e.g. 1.6 million and 1.8 million is alright, 1.6 million and 16 million is not).
   - Reserve a control segment in each test segment test group. This way, you can set aside a small part of each segment and not target them explicitly in the test.

5. Examine the results:
   - The **Audience Lab reporting view** will show the number of conversions each model is driving. For conversion based campaigns, the test segment that drives the most conversions will signify the model that is performing best.
   - Because you have control segments, you can also evaluate how the model did against "standard targeting." You are not only just testing one model versus the other, but testing the question of "did this model do better than normal practices?"

**Testing Creatives Across Destinations**

Use Audience Lab to measure the number of conversions a creative is driving across different destinations. This use case also allows you to measure the conversions of the creative against naturally occurring conversions.

1. **Create a Segment Test Group**, selecting the segment you want to test the creative against as the baseline segment.
2. Split the baseline segment into test segments and control segments.
3. Map the test segments to the different destinations you wish to test.
4. The control segment can be withheld and not mapped to any destination. The control segment should not be targeted by the test creative to set a results baseline for naturally occurring conversions.
5. Specify a start date and an end date for the test.
6. Set up the segment and the creative in the destinations.
7. The **Audience Lab reporting view** will show the number of conversions the creative is driving across the destinations.
8. Because you created a control segment, you can also evaluate how the creative did against naturally occurring conversions. You are testing the question: "Did this creative generate a higher conversion rate than normal practices?"

**Audience Marketplace**

Audience Marketplace lets data providers and buyers execute data deals in a self-service manner with minimum effort. It does this by providing specialized features that vary depending on your role as a data buyer or data seller. In fact, you can even be a buyer and a seller at the same time. And, if this couldn’t get any better, Audience Marketplace takes care of contracts, billing, and payments between data providers and sellers.

Talk to your **Audience Manager** sales specialist to get started. They can activate Audience Marketplace for you.

**Note:** User roles control what you can and cannot do in Audience Marketplace.

- Administrators can create data feeds, manage subscribers, and subscribe to data feeds.
- Users can search and view feeds only.
Audience Marketplace for Data Providers

Overview and workflow for data providers who want to sell data from within Audience Manager.

💡 Note: Role-based permissions control access to Audience Marketplace features.

- Administrators can create data feeds, manage subscribers, and subscribe to data feeds.
- Users can search and view feeds only.

My Shared Data: About

My Shared Data is an Audience Marketplace feature for data providers (sellers). As a provider, it lets you bundle traits into data feeds and sell them for a flat fee or CPM rate to buyers from within Audience Manager. When activated, buyers can subscribe to a feed with a few mouse clicks. Furthermore, simple reporting tools track revenue and manage subscribers. Finally, with Audience Marketplace, Adobe takes care of invoice, billing, and fee payments for you. These features let you concentrate on building the effective and profitable data feeds that buyers want.

<table>
<thead>
<tr>
<th>Features include:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• <strong>Search:</strong> A search field helps you find data feeds by name or text descriptions.</td>
</tr>
<tr>
<td>• <strong>Name:</strong> The name of your data feed. You can hide this from buyers with a private, unbranded data feed.</td>
</tr>
<tr>
<td>• <strong>Description:</strong> Tell buyers about the contents of your data feed.</td>
</tr>
<tr>
<td>• <strong>Traits:</strong> The number of traits in each data feed. You can hide this from buyers with a private data feed.</td>
</tr>
<tr>
<td>• <strong>Last 30 Day Uniques:</strong> The number of unique users seen in the last 30 days. You can hide this from buyers with a private data feed.</td>
</tr>
<tr>
<td>• <strong>Last Month’s Total Fees:</strong> The amount subscribed data buyers owe you. The reporting period ends on the 10th of each month. Overdue accounts get flagged with the triangle/exclamation mark icon. You can deactivate a subscriber’s data feed if they misuse your data or if their account is overdue.</td>
</tr>
<tr>
<td>• <strong>Status:</strong> Shows if a feed is active, inactive, private, or public.</td>
</tr>
<tr>
<td>• <strong>Subscribers:</strong> Shows how many buyers are using a data feed. Click the number in this column to see a buyer’s company name, subscriptions, billing, and subscription status.</td>
</tr>
<tr>
<td>• <strong>Requests:</strong> The number of access requests for a data feed.</td>
</tr>
</tbody>
</table>
Private Data Feeds

In My Shared Data, sometimes a feed status is marked as private. This indicates a private data feed. A private data feed lets sellers limit buyer access to their data and even the name of the data feed. Sellers can make feeds private when they're offering special deals, discounts, or when privacy and access control are important. With private data feeds, providers review and approve all buyer access requests. For more information, see Private Data Feeds. To create a public or private data feed, see Create a Public or Private Data Feed.

Create a Public or Private Data Feed

A data feed requires a name, description, data source, and a plan type. Feeds are disabled until you save and activate the feed. Set up public or private data feeds in Audience Marketplace > My Shared Data. Available to data sellers only.

You must have administrator rights to create a public or private data feed.

To create a data feed:

1. Click New Data Feed.
2. Name the data feed.
   Data buyers can search for your feed based on the name.
3. Provide a brief description (255 characters maximum).
   A good description should describe your feed accurately. For example, you could include text for marketing categories, demographics, and geographic coverage (e.g., "US" or "North America). Description text is searchable and helps buyers find or evaluate your feed. A good description is an important part of attracting subscribers to your data feed.
4. Select a data source from the Data Source options.
5. In Plan Types, select the options you want to use and click Add Plan.
   Feeds can contain multiple plans. Plans can contain multiple use cases. For details, see Plan Types for Data Feeds.
6. Click Save to save your data fee without activating it.
7. To save and activate a data feed:
   a) Move the Availability slider to Active.
   b) Click Save.

   Note:
   • Saved and activated data feeds cannot be deleted.
   • Buyers see active feeds only.

Optional: Create a Private Data Feed

In the Settings section, move the slider to:

• Private and Branded: The buyer's Marketplace list shows the seller's name in the provider column and all other data is hidden.
• Private and Unbranded: The buyer's Marketplace list shows the data feed name and description only. The data provider name appears as "Private Seller."

To see what a private feed looks like to buyers, see the buyers section in Private Data Feeds.

Plan Types for Data Feeds

Plan types are essential components in an Audience Marketplace data feed. As a data provider, they let you create multiple use cases and price options for your feeds. Furthermore, it can be a good strategy to create a few plans
for each data feed. This gives buyers different options to choose from when they're looking for data to model or send to a destination.

Create a data feed to select Plan Types.

<table>
<thead>
<tr>
<th>Plan Types and Use Case Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>The <strong>Use Case</strong> settings let sellers control how buyers can use your data.</td>
</tr>
</tbody>
</table>

**Segments and Overlap**

A **Segments and Overlap** use case creates a plan that lets buyers compare trait data in a **trait-to-trait overlap report**. Furthermore, buyers can add your data to segments and make comparisons with the **segment-to-trait** and **segment-to-segment** reports.

Each Data Feed must include at least 1 Segments and Overlap use case. Buyers cannot subscribe to other plans in a Data Feed if the feed does not contain a Segments and Overlap use case, either by itself or in combination with another use case.

Overlap comparisons can help buyers:

- **Extend audience reach**: Low overlap suggest your traits contain users the buyer has not seen before. As a result, buyers may want these traits to add new users to their audience segments.
- **Enhance existing audiences**: High overlap suggests your traits contain users similar to those a buyer already knows about. As a result, buyers may want these traits to help make targeted, incremental improvements to developed audiences.

Price this use case as follows:

- **Unit of Measure**: Flat fee
- **Price**: Free ($0.00)

**Modeling**

A **Modeling** use case creates a plan that lets buyers compare your traits to theirs with **algorithmic modeling**. Buyers look at the model results to find new audiences in your data that share similar conversion attributes to their own.

Price this use case as follows:

- **Unit of Measure**: Flat fee
- **Price**: Discounted or market rate price

**Activation**

An **Activation** use case lets buyers send data to a **destination**. With this use case, buyers cannot compare data with an overlap report or in an algorithmic model. Price this use case as follows:

- **Unit of Measure**: CPM
• Price: CPM market rate

Billing and Price Options

The billing and price options control how buyers pay for your data.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Billing Cycle</td>
<td>Monthly in Arrears is the only option. The billing cycle ends on the 10th day of each month.</td>
</tr>
<tr>
<td>Unit of Measure</td>
<td>Charge data buyers on a CPM rate or flat fee.</td>
</tr>
<tr>
<td></td>
<td>• With CPM pricing, data buyers are required to self-report usage.</td>
</tr>
<tr>
<td></td>
<td>• With flat fee pricing, data buyers do not report usage because they're charged a fixed rate.</td>
</tr>
<tr>
<td>Price</td>
<td>The amount a seller charges the buyer as CPM rate or flat fee price, in dollars.</td>
</tr>
</tbody>
</table>

Plan Notes

In the Additional Notes field, take some time to describe each data plan in a feed. A good, brief description helps buyers understand the content or purpose of each plan in a data feed. Buyers can read data feed and plan descriptions as they search for or evaluate new data sources.

Review, Approve, or Reject Private Feed Requests

Provider workflows for managing private feed requests from buyers.

To review, approve, or reject buyer requests, go to My Shared Data and:

1. Click the name of the private data feed.
2. Click Access Requests to review all the buyers who want access to your data feed.
3. In the Allow Access section of each request box, click the check mark to approve a request or the X to deny access.
4. Confirm or cancel your selected action in the confirmation pop up.

Deactivate a Subscriber's Data Feed

As an Audience Marketplace Data Provider, you can revoke buyer access to a subscribed Data Feed. You may want to remove a buyer from a feed for reasons such as late payment / non-payment of fees or if they use trait data improperly.

To revoke a subscriber:

1. In My Shared Data, find the feed the subscriber is using.

   Note: Data feeds with overdue accounts are flagged with a triangle/exclamation mark icon.

2. In the Subscribers column, click the blue number that counts subscribers for that feed. This opens the subscription details page.
3. Move the Subscription slider to Off.
This opens a confirmation dialog window.

4. In the **Confirmation** pop, click **Yes** to deactivate a subscription or **Cancel** to quit without making subscription changes.

**What Happens After You Deactivate a Subscriber**

Revoking access to a Data Feed sends a notification email to all administrator users in the Data Buyer’s account. The email includes an attachment that lists revoked traits. This list helps subscribers find and remove deactivated traits from their segments and models.

**Billing and Feed Deactivation**

After you remove access to a data feed, subscribers are responsible for fees for previous or current month, depending on when you deactivated the feed.

**Discounts for Data Providers**

In **Audience Marketplace**, discounts let you reduce the published price of a data feed for individual subscribers. You can offer discounts to subscribers who have submitted a subscription request or to subscribers who have requested details about a data feed. Discounts apply to CPM and flat rate feeds. Discounts can be helpful when you want to provide subscription incentives for new customers or to reward customer loyalty.

**Apply Discounts to a Data Feed**

To discount a feed, add a discount amount as a % to the discount field and confirm your changes. Data providers can discount a data feeds in **Audience Marketplace** from either:

- **My Shared Data > Potential Subscribers**
- **My Shared Data > Details Requests**

In these examples, the seller has added 10% discount to the Software Audience data feed.
Review Discounted Feeds

Data providers can see all of their subscribers and discounted feeds in Audience Marketplace > My Shared Data > Current Subscribers.

Understanding the Data Provider Billing Report

Generate an Audience Marketplace billing report to view data feed usage for the previous month for each of your subscribers. You can create a report for the previous month at any time. However, the report is more accurate when you generate it on or after the 10th day of the current month.

Download a Billing Report

To download a report:

1. Go to Audience Marketplace > Receivables.
2. Click Generate Billing Report.
**Report Fields Defined**

A billing report contains the following information.

<table>
<thead>
<tr>
<th>Report Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Provider PID</td>
<td>Your Audience Manager data provider ID.</td>
</tr>
<tr>
<td>Data Provider Name</td>
<td>Your company or organization name.</td>
</tr>
<tr>
<td>Buyer PID</td>
<td>Buyer (subscriber) ID.</td>
</tr>
<tr>
<td>Buyer Name</td>
<td>The buyer's company or organization name.</td>
</tr>
<tr>
<td>Feed ID</td>
<td>The ID of the data feed</td>
</tr>
<tr>
<td>Feed Name</td>
<td>The name of the data feed.</td>
</tr>
<tr>
<td>Plan Use Cases</td>
<td>Use cases let sellers control how buyers use data. Options include:</td>
</tr>
<tr>
<td></td>
<td>• Segments and overlap</td>
</tr>
<tr>
<td></td>
<td>• Modeling</td>
</tr>
<tr>
<td></td>
<td>• Activation</td>
</tr>
<tr>
<td></td>
<td>See <em>Plan Types for Data Feeds</em>.</td>
</tr>
<tr>
<td>Unit of Measure</td>
<td>Indicates CPM or flat fee billing.</td>
</tr>
<tr>
<td>List Price</td>
<td>The subscription fee for each data feed.</td>
</tr>
<tr>
<td>Discounted Price</td>
<td>The subscription fee for a discounted data feed. See <em>Discounts for Data Providers</em>.</td>
</tr>
<tr>
<td>Units</td>
<td>Varies by feed price type:</td>
</tr>
<tr>
<td></td>
<td>• Flat fee data feeds: Returns 1 only.</td>
</tr>
<tr>
<td></td>
<td>• CPM data feeds: Returns the actual usage amount for CPM data feeds. If a subscriber has not provided impression data for a CPM feed, the Units cell is empty and the Flag cell is set to 1.</td>
</tr>
<tr>
<td>Total Cost</td>
<td>The amount Audience Manager bills a buyer.</td>
</tr>
<tr>
<td>Billing Period</td>
<td>In the report, this is the last day of the previous month.</td>
</tr>
<tr>
<td>Entry Date</td>
<td>The date a buyer entered subscription / usage information.</td>
</tr>
<tr>
<td>Subscription Start Date</td>
<td>The date a buyer started their data feed subscription.</td>
</tr>
<tr>
<td>Subscription End Date</td>
<td>The date a buyer ended their data feed subscription.</td>
</tr>
<tr>
<td>Report Field</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
</tr>
</tbody>
</table>
| Flag         | *For CPM feeds only.* Flag options include:  
  • 0: Indicates a subscriber has reported usage information to Audience Manager.  
  • 1: Indicates a subscriber has not reported usage information to Audience Manager. |

**Audience Marketplace for Data Buyers**

Overview and workflow for data buyers who want to purchase third-party data from within **Audience Manager**

💡 **Note:** *Role-based permissions control access to Audience Marketplace features.*

- Administrators can create data feeds, manage subscribers, and subscribe to data feeds.
- Users can search and view feeds only.

**The Marketplace: About**

The Marketplace is an Audience Marketplace feature for data buyers that lists data feeds you can subscribe to. It lists flat rate, CPM, or private data feeds. These feeds are provided by third-party vendors that use Audience Manager to sell data. In the **Marketplace**, reporting tools let you track feed usage and the overlap between your traits and those in a subscribed data feed. Finally, with Audience Marketplace, Adobe takes care of invoices and fee payments (though you do have to self-report usage when subscribed to a CPM feed). These features let you find effective data sources without wasting time looking for a data provider.
The **Marketplace** list contains information that you can sort and search to find the data feed that's right for you. Items in the **Marketplace** buyer's list include:

- **Search**: Find data feeds by name or text description.
- **Name**: Name of the data feed.
- **Description**: Information about the contents of a data feed.
- **Provider**: Name of the data provider.
- **Traits**: The number of traits in a data feed.
- **30 Day Uniques**: The number of unique users seen in the last 30 days.
- **30 Day Overlapped Uniques**: The number of users in your account that overlap with the users in the provider’s account. The % value is calculated as (30-day Overlapped Uniques/Provider’s total 30-day uniques) x 100.
- **Private Feeds**: See [Private Data Feeds](#).
- **Currently Subscribed Plan Count**: The number of subscriptions you have with a data provider.

**Private Data Feeds**

In the **Marketplace** list, sometimes the provider’s name and trait data are marked as private. This indicates a *private data feed*. A private data feed lets sellers limit buyer access to their data. Sellers can make feeds private when they’re offering special deals, discounts, or when privacy and access control are important to them. As a buyer, you have to send a subscription request to the seller if you want access to a private feed. See [Subscribe to a Private Data Feed](#) for details.

**Subscribe to a Public Data Feed**

The **Marketplace** is where data buyers go to research and subscribe to public and private data feeds. Follow these steps to subscribe to a public data feed.

To subscribe to a public data feed:

1. Go to **Audience Marketplace > Marketplace**. Use the search feature or browse through the list to find a data feed.
2. Click the name of the data feed you want to use. This opens the plan details page for the selected feed.
3. Choose a use case from the subscriptions table and:
   - Move the Subscription slider to On.
   - Click Review & Subscribe. This opens the Terms and Conditions window.
4. In the **Terms and Conditions** window:
   - **Important**: Leave the **ID sync** check box checked. This setting helps improve match rates with your data provider.
   - Check the terms and conditions box and click **Accept** to complete the subscription process.
Next Steps

After you subscribe to a data feed:

• Verify the subscription by checking your Traits folder. See Storage for Subscribed Data Feeds.
• Review the billing and payment documentation. See the related links below.

Subscribe to a Private Data Feed

Buyers subscribe to private data feeds and plans in Audience Marketplace > Marketplace.

Tip: Sometimes data providers may offer a discount on a private data feed. You might want to ask about a possible discount when submitting your subscription request.
To subscribe to a private data feed:

1. Click the data feed name in the Marketplace.
2. Click Request Access.
   This opens the request dialog box.
3. In the request dialog box, write the provider a note expressing your interest in their data feed and click Send.
   The seller will review your message and approve or reject your request. While waiting for approval, "Requested" appears in the Marketplace list for that data feed.
   
   - **Request approved**: The status in the Marketplace list changes to "Access Granted" and you'll receive an automated notification. At this point you can subscribe to the feed. See Subscribe to a Public Data Feed for instructions.
   
   - **Request denied**: The "Requested" text is removed from the Marketplace list for the feed. You can try to subscribe again or choose a different feed.

**Unsubscribe from a Data Feed**

Data buyers unsubscribe from data feeds and plans in Audience Marketplace > Marketplace.

To unsubscribe from a data feed:

1. Click the data feed name in the Marketplace.
2. In the Use Case section find the plan you want to use and move the Subscription slider to Off.

**How to Report CPM Usage**

Audience Marketplace data buyers agree to report all ad impressions served using traits contained in the data feed priced on a cost per thousand ad impressions (CPM) basis. CPM usage is due on the 5th day of each calendar month and includes data for previous month. Flat fee subscribers do not need to report usage.

To report CPM usage:

1. Go to Audience Marketplace > Payables.
2. Enter the CPM usage amount in the Usage column and click Submit.
3. Review the usage in the confirmation window and click Yes.

**CPM Reporting Best Practices**

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>How do I Increment Amounts in CPM Reports</td>
<td>For CPM impression totals:</td>
</tr>
<tr>
<td></td>
<td>• Report the total number of ad impressions in units of one.</td>
</tr>
<tr>
<td></td>
<td>• Do not enter the total number of ad impressions in units of a thousand.</td>
</tr>
<tr>
<td></td>
<td>For example, if 1,234,567 ad impressions are allocated to a Data Feed, then report 1,234,567. Do not report this as 1,234.6.</td>
</tr>
<tr>
<td></td>
<td>Traits used to optimize your web or app content (Content Optimization) using tools such as Adobe Target or an Analytics destination do not contribute to the Usage totals for CPM plans. Data providers are typically compensated for Content Optimization using flat fee plans.</td>
</tr>
<tr>
<td></td>
<td>See Billing and Impression Allocation for CPM Data Feeds for more information.</td>
</tr>
</tbody>
</table>
The report system closes after the 10th. If you fail to report CPM usage by the 10th, then you must add that amount to the report for the following month. For example, say you use 1000 impressions in October, miss the October reporting deadline, and use 1000 impressions in November. In this case, you report the October and November total (2000) in December, between 1st and 5th.

**Tip:**

Customers should always try to report CPM usage for the previous month between the 1st and 5th days of the new month.

You can report CPM usage as late as the 10th of the new calendar month, but this is not recommended. Reporting CPM usage by the 5th of each month gives Audience Manager time to check and process the data.

---

**Understanding the Plan Details Page in Audience Marketplace**

When you click the name of a data plan in the **Marketplace**, Audience Manager provides information that can help you make informed choices about subscribing to a data feed.
Refer to the following table for details about different elements of the plan details page.

<table>
<thead>
<tr>
<th>Page Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Plan Information</td>
<td>This includes feed information such as the:</td>
</tr>
<tr>
<td></td>
<td>• Data feed name. For example, as shown above, the name of this feed is “Cross Pixel - Demographics.”</td>
</tr>
<tr>
<td></td>
<td>• The name of the data provider.</td>
</tr>
<tr>
<td></td>
<td>• Feed ID</td>
</tr>
<tr>
<td></td>
<td>• Description</td>
</tr>
<tr>
<td></td>
<td>• Number of traits in the feed.</td>
</tr>
</tbody>
</table>
### Understanding Data Feed Use Cases

As an **Audience Marketplace** data buyer, you can purchase data for overlap, modeling, and activation use cases. Each use case is designed for a specific purpose and limits what you can do with the data. These use case descriptions can help you make the right decision about which type of data plan to buy.

**Make Comparisons with Segments and Overlap Plans**

#### Segments and Overlap

This use case lets you compare your traits with provider traits in a **trait-to-trait overlap report**. Also, you can create or add provider traits to a segment and make additional comparisons with the **segment-to-trait** and **segment-to-segment** reports. Overlap comparisons can help you:

- **Extend audience reach**: Low overlap suggests your traits contain users you have not seen before. You may want these traits to try and reach new users.
- **Enhance existing audiences**: High overlap suggests your traits are similar to those owned by the data provider. You may want these traits to help make targeted, incremental improvements to an already developed audience.

#### Algorithmic Models

This use case lets you evaluate supplier traits against your traits with **algorithmic modeling**. For example, our algorithmic modeling system uses one of your traits as a basis for comparison against a supplier trait. When the model runs, it can show if audiences in supplier traits share similar conversion attributes to your traits.

#### Activation

This use case lets you send data to a **destination**. In **Audience Manager**, a destination is any third-party system (ad server, DSP, DMP, exchange, etc.) that you want to share data with. However, with an **Activation** use case, you cannot run overlap reports or test the data in an algorithmic model.
Data Feed Deactivation: Why It Happens and How to Respond

In Audience Marketplace, Data Providers can revoke access to your subscribed data feeds. Don't be alarmed if this happens to you. We've got you covered. Review this section for processes and procedures related to data feed deactivations.

Contents:

- Common Reasons for Data Feed Deactivation
- Deactivation Email
- Deactivated Trait List
- Remove Deactivated Traits

Common Reasons for Data Feed Deactivation

It may be puzzling or even upsetting if a feed you subscribe to is shut off. However, Data Providers can deactivate a data feed for a variety of reasons. Some common reasons include:

- **Billing**: Data Providers will deactivate a feed if you're consistently late with fee payments or if you fail to pay your fees.
- **Feed Updates**: Data Providers need to deactivate feeds when they update their feed taxonomy or cost structures.
- **Inactive Buyers**: Data Providers reserve the right to deactivate feeds if subscribers show no spending over an extended period of time.
- **Inactive Sellers**: Data Providers who leave Audience Marketplace will deactivate and delete all their data feeds.

💡 **Tip**: Contact your Data Provider directly if you believe a data feed was deactivated by mistake. Your Adobe consultant can help you with contact information or additional support.

Deactivation Email

When a Data Provider deactivates one of your data feeds, Audience Manager sends an email to the users in your company who have Administrator permissions. Sometimes email filters classify this message as spam. As a result, you may miss this important notification. To help you identify the deactivation message, this email contains the following elements:

- **From**: The deactivation email comes from aam-noreply@adobe.com. Pro-tip: Don't reply to this email.
- **Subject line**: Subscription to name of data feed here is Cancelled.
- **Attachments**: The email includes an attachment titled, “list-of-affected-entities-by-feed-revocation.csv.” That's a convoluted way of saying the attachment lists all the traits included in the cancelled feed. As a Data Buyer, you should review this attachment. It will help you find and remove deactivated traits from your segments and algorithmic models.

Deactivated Trait List

The list that accompanies a deactivation email contains the fields as shown below.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Feed ID</td>
<td>ID of the deactivated data feed.</td>
</tr>
<tr>
<td>Data Feed Name</td>
<td>Name of the deactivated data feed.</td>
</tr>
</tbody>
</table>
### Features

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trait SID</td>
<td>Deactivated trait IDs.</td>
</tr>
<tr>
<td>Trait Name</td>
<td>Deactivated trait names.</td>
</tr>
<tr>
<td>Segment SID</td>
<td>ID of the segment that contains deactivated traits.</td>
</tr>
<tr>
<td>Segment Name</td>
<td>Name of the segment that contains deactivated traits.</td>
</tr>
<tr>
<td>Algo Model ID</td>
<td>The ID of the algorithmic model that contain deactivated traits.</td>
</tr>
<tr>
<td>Algo Model Name</td>
<td>The names of algorithmic models that contain deactivated traits.</td>
</tr>
</tbody>
</table>

### Remove Deactivated Traits

As a Data Buyer, you’re responsible for removing the traits in a cancelled feed from all your active/in-use or inactive segments. Removal options include:

- Bulk removal with the REST APIs or the Bulk Management Tools.
- Manually search for affected segments and remove deactivated traits using Segment Builder. See Remove Traits from a Segment.

💡 **Note:** Removing traits from active algorithmic models or destinations affects scale and targeting accuracy. Try to replace revoked traits with new, active traits if possible.

Unsubscribe from the deactivated data feed after you remove all the revoked traits from your account. If this is a temporary deactivation, you can re-subscribe after the Data Provider finishes making their required changes and reactivates the feed. As with most things, good communication with your partners (the Data Provider and Adobe) can help you work through this process.

### Billing and Impression Allocation for CPM Data Feeds

In Audience Marketplace you must manually submit impression amounts each month. Also, if you build segments from data feed traits, impressions must be allocated proportionally according to the qualification rules you apply to those traits in Segment Builder.

Contents:

- Billing Summary
- Assign Impressions Based on Trait Qualification Rules or Type
- Billing Examples

#### Billing Summary

For a CPM data feed, you must submit impression amounts by the 5th day of each calendar month. To do this properly, you must:

- Compile all advertising impressions delivered for each feed in the previous calendar month.
After you report CPM number for the previous calendar month, Adobe will do the following:

• Create an invoice and bill you based on the CPM rate for each subscribed data feed.
• Pay data providers (sellers) fees owed based on your reported CPM use.

⚠️ **Important:** As a buyer, all reported impression totals must be true and accurate. If you fail to report impression totals by the 5th day of each month, you must include totals for the unreported month in the following month.

### Assign Impressions Based on Trait Qualification Rules or Type

The Activation use case lets you use traits in the corresponding Data Feed to create segments in Segment Builder and map those segments to a destination. The Boolean operators AND, OR, and NOT let you set the conditions for trait and segment qualification. For billing purposes, you must allocate impression proportionally for segments that use data feed traits. Proportional distribution depends on the Boolean operators you use to create qualification rules. The following table lists how to properly allocate impressions by Boolean rule or trait type.

<table>
<thead>
<tr>
<th>Rule Qualification Logic or Type</th>
<th>Billing Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AND</strong></td>
<td>Apply 100% of the delivered impression totals to all the provider feeds in a rules-based segment that uses a Boolean AND condition.</td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td>Apply 75% of the delivered impression totals to all of the providers feeds in a rules-based segment that uses a Boolean OR condition.</td>
</tr>
<tr>
<td></td>
<td>Note: Audience Marketplace reports impressions at the Data Feed level, not the trait level. Segments built from traits with a Boolean OR from multiple traits from different feeds, allocate 75% of impressions to each feed in the segment, not each Trait. See the billing examples below.</td>
</tr>
<tr>
<td><strong>NOT</strong></td>
<td>Apply 100% of the delivered impression totals to all the provider feeds in a rules-based segment that uses a Boolean NOT condition.</td>
</tr>
<tr>
<td><strong>Algorithmic segments</strong></td>
<td>Apply 100% of the delivered impression totals to all the provider feeds in an algorithmic segment.</td>
</tr>
</tbody>
</table>

### Billing Examples

These example can help you understand how to allocate impressions when you create segments from traits in a data feed. For simplicity, each example assumes 100 impressions for a one month billing period.

**Case 1: Segments With AND Qualification Rules**

This segment contains 2 traits from separate data providers. Because segment qualification is based on an AND condition, visitors have to realize the traits from both feeds to qualify for the segment.
With an AND condition, you must assign 100% of the impressions received during the month to both data providers. In the **Audience MarketplacePayables** section, you credit each provider with 100 impressions.

This example applies to segments that use Boolean NOT operators or for segments that contain algorithmic traits.

**Case 2: Segments With OR Qualification Rules**

This segment contains 2 traits from separate data providers. Because segment qualification is based on an OR condition, visitors have to realize either Trait 1 or Trait 2 to qualify for the segment.

We cannot tell which trait is responsible for an impression because qualification is based on an OR condition. As a result, in the **Audience MarketplacePayables** section you credit each provider with 75% of the total impressions.
Case 3: Single Segment With Multiple Traits

In this example, we have a single segment that contains 2 traits from separate data providers. Segment qualification in this case is based on an implied Boolean OR condition. The OR is not set explicitly by a menu option selection when you create the segment. Because segment qualification is an implied OR condition, visitors have to realize either Trait 1 or Trait 2 to qualify for the segment.

The bill result in this case is identical to example 2 above. We cannot tell which trait is responsible for an impression because qualification is based on an implied OR condition. As a result, in the Audience MarketplacePayables section you credit each provider with 75% of the total impressions.

Billing and Impression Allocation for Flat Fee Data Feeds

A flat fee data feed bills you a fixed amount each month, regardless of when the subscription starts or how many impressions you use. Fees are not prorated for partial month usage or intervals. As with CPM billing, Adobe will generate an invoice and bill you at the monthly, flat fee rate for your subscribed data feeds.
For example, let’s say you decided to turn on certain traits in a feed in the middle of the month. You will still be billed at the full, monthly rate regardless of when you started the subscription or activated specific traits.

Discounts for Data Buyers

In **Audience Marketplace**, providers can offer buyers a discount on the published price of a CPM or flat rate data feed. However, discount amounts aren’t visible to buyers in the Marketplace feed list. But, you can also ask for a discount when you subscribe to a private data feed or when requesting more information about a particular feed.

**Request a Discount**

<table>
<thead>
<tr>
<th>Buyer Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Subscribers</strong></td>
<td>If you’re already subscribed to a private data feed and want to request a discount:</td>
</tr>
<tr>
<td></td>
<td>1. <em>Unsubscribe</em> from the data feed.</td>
</tr>
<tr>
<td></td>
<td>2. Contact the data provider and request a discounted price.</td>
</tr>
<tr>
<td></td>
<td>3. If the provider gives you a discount, re-subscribe to the feed on the 1\textsuperscript{st} day of the next month.</td>
</tr>
<tr>
<td><strong>New Private Data Feed Subscribers</strong></td>
<td>Ask for a discount in your subscription request. See <a href="#">Subscribe to a Private Data Feed</a>.</td>
</tr>
<tr>
<td><strong>Potential Subscribers</strong></td>
<td>A <em>potential subscriber</em> is a data buyer who has requested access to a private data feed, received seller approval, but has not subscribed to the feed. To request a discount as a potential subscriber:</td>
</tr>
<tr>
<td></td>
<td>1. Go to <strong>Audience Marketplace &gt; Marketplace</strong>.</td>
</tr>
<tr>
<td></td>
<td>2. Click the name of the feed you’ve been approved for.</td>
</tr>
<tr>
<td></td>
<td>3. Click <em>Request More Details</em>. Ask for a discount in your details request to the seller.</td>
</tr>
</tbody>
</table>

**Review Discounted Feeds**

To review your discounted feeds:

1. Go to **Audience Marketplace > Marketplace**.
2. Click the name of a feed you’re already subscribed to.
3. Look at the **Price** and **Your Price** columns in the **Plan Details** table. If the feed is discounted:
   - The original price is marked with a red line.
   - The fee in the **Your Price** column will be lower than the fee in the **Price** column.

In the example, the buyer gets a 10% discount on the **Segments and Overlap** plan in the Software Audience Feed.
Storage for Subscribed Data Feeds

The data (traits) for your Data Feeds appears in their own trait storage folders. Go to Manage Data > Traits and expand the 3rd-Party Data folder to view and work with the traits in your subscribed feeds. Look for the sub-folder named after your Data Provider. Those contain folders named after the individual Data Feed and list traits provided by the feed.
Private Data Feeds

A private data feed is an option that lets providers limit buyer access to their data. Data providers and buyers should review this information before creating and subscribing to private data feeds.

Contents:

Private Data Feeds for Providers

Private Data Feeds for Buyers

Private Data Feeds for Providers

As a provider, your data feeds can be public or private. A private data feed lets you limit buyer access to your data, including the name of the data seller. You may want to create a private data feed to offer special deals, discounts, or when privacy and access control are important. With a private data feed, you get to review and approve buyer requests. After you approve a request, the feed looks just like a public data feed to the buyer. You can view and manage all your feeds in Audience Marketplace > My Shared Data. As shown below, this type of feed is marked "Private" in the status column.
Managing Feed Requests

Clicking the name of a private data feed from **My Shared Data** takes you to a page that contains several tabs. Click a tab to manage your private data feed requests.

The following table defines the role or functions provided by each action tab.

<table>
<thead>
<tr>
<th>Tab</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Subscribers</strong></td>
<td>Lists approved buyers who have subscribed to a private data feed.</td>
</tr>
<tr>
<td><strong>Potential Subscribers</strong></td>
<td>Lists approved buyers who have not subscribed to a private data feed. An approval lets buyers view a data feed as if it were public. This gives them a chance to review and evaluate your feeds before subscribing. You can also offer discounts on data feeds to buyers listed as potential subscribers. Once the buyer subscribes, their profile moves to <strong>Current Subscribers</strong>.</td>
</tr>
<tr>
<td><strong>Access Requests</strong></td>
<td>Lists new subscription requests for a private data feed. Click this tab to review, approve, or reject buyer requests.</td>
</tr>
<tr>
<td></td>
<td>• Approved buyers move to <strong>Potential Subscribers</strong>.</td>
</tr>
<tr>
<td></td>
<td>• Rejected buyers move to <strong>Denied Access</strong>.</td>
</tr>
<tr>
<td><strong>Details Requests</strong></td>
<td>Lists approved buyers who have not yet subscribed to a data feed and have requested more information about your feeds. An approval lets buyers view a data feed as if it were public. This gives them a chance to review and evaluate your feeds before subscribing. You can also offer discounts on data feeds to buyers requesting access. Responding to a details request removes the buyer profile from this tab. If they haven't subscribed, the buyer profile is still in <strong>Potential Subscribers</strong>.</td>
</tr>
</tbody>
</table>
Lists rejected subscription requests for a private data feed.
To re-approve denied buyers, change the **Rejection Status** to **Allow**. This moves the buyer to **Potential Subscribers**.

### Next Steps

The following documentation can help you get started with private data feeds.

- Create a Public or Private Data Feed
- Review, Approve, or Reject Private Feed Requests
- Private Data Feeds for Buyers

### Private Data Feeds for Buyers

As a buyer, private data feeds appear in the **Marketplace** like any other offer. However, in this case, the feed list does not show summary information for traits, unique users, and user overlap. Also, the data seller has an option to show or hide their name in the **Provider** column of the MarketPlace list. After the seller approves your subscription request, all the data in a private feed becomes available to you (it works just like a public feed). The **Marketplace** example below lists the 3 different feed types available to you as a buyer.

<table>
<thead>
<tr>
<th>Tab</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Denied Access</strong></td>
<td>Lists rejected subscription requests for a private data feed.</td>
</tr>
<tr>
<td></td>
<td>To re-approve denied buyers, change the <strong>Rejection Status</strong> to <strong>Allow</strong>.</td>
</tr>
</tbody>
</table>
### Feed Type

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public: The provider's name, trait, and unique data appears in the list.</td>
</tr>
<tr>
<td>Private Without Branding: The provider's name is set to &quot;Private Seller,&quot;</td>
</tr>
<tr>
<td>and you cannot see trait counts, unique data, and trait overlap data.</td>
</tr>
<tr>
<td>Private With Branding: The provider’s name appears in the list but you</td>
</tr>
<tr>
<td>cannot see trait counts, unique data, and trait overlap data.</td>
</tr>
</tbody>
</table>

#### Next Steps

See [Subscribe to a Private Data Feed](#) to request access.

### Customer Data Feeds

Basic information about **Customer Data Feed** (CDF) files and instructions on how to get started. Start here if you're interested in receiving CDF files or just want more information.

**Contents:**

- [File Contents and Purpose](#)
- [Getting Started](#)
- [Next Steps](#)

#### File Contents and Purpose

A CDF file contains the same data that an Audience Manager event call (`/event`) sends to our servers. This includes data like user IDs, trait IDs, segment IDs, and all the other parameters captured by an event call. Internal Audience Manager systems processes event data into a CDF file with content organized into fields that appear in a set order. Audience Manager tries to generate CDF files hourly and stores them in a secure, customer-specific bucket on an Amazon S3 server. We provide these files so you can work with Audience Manager data outside of the limits imposed by our user interface.

⚠️ **Attention:** You should not use CDF files as a proxy to monitor page traffic, reconcile report discrepancies, or for billing, etc.

#### Getting Started

There is no self-service process to start CDF file delivery. Contact your Audience Manager consultant or Customer Care to get started. During implementation, your Audience Manager representative will:

- Set up your Amazon S3 storage bucket.
- Provide read-only S3 authentication credentials to your file storage bucket. You will not be able to see or access directories and files that belong to other customers.

File notifications and CDF files will appear in your S3 bucket when they're ready for download. You're responsible for monitoring and downloading files from your assigned S3 directory. See [Customer Data Feed File Processing Notifications](#).
Next Steps
The following documentation and the Customer Data Feed FAQ can help you become more familiar with this service.

Customer Data Feed Contents Defined
Lists and defines the data elements and arrays in a Customer Data Feed (CDF) file, by order of appearance. Definitions include data types, but this information is not part of a CDF file.

Definitions
A CDF file includes some or all of the fields defined below. For information about internal file organization, see Customer Data Feed File Structure.

<table>
<thead>
<tr>
<th>Field</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Event Time</td>
<td>Timestamp</td>
<td>The time a CDF file was processed by the Data Collection Servers (DCS). The timestamp uses the yyyy-mm-dd hh:mm:ss format and is set in the UTC time zone.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Note</strong>: The Event Time is not:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The time of the page event or the event call itself, although it may be close to those times.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Related to the DCS hour in the file name. See also, Customer Data Feed File Name Times and File Content Times are Different.</td>
</tr>
<tr>
<td>Device</td>
<td>String</td>
<td>This is the Unique User ID (UUID), which is a 38-digit device ID for your site visitor. See also, Index of IDs in Audience Manager.</td>
</tr>
<tr>
<td>Container ID</td>
<td>Numeric</td>
<td>The ID of the container that fires ID syncs.</td>
</tr>
<tr>
<td>Realized Traits</td>
<td>Numeric Array</td>
<td>An array of trait IDs that contains all the traits a visitor realized (qualified for) in the event call.</td>
</tr>
<tr>
<td>Realized Segments</td>
<td>Numeric Array</td>
<td>An array of segment IDs that contains all the segments a visitor realized (qualified for) in the event call.</td>
</tr>
<tr>
<td>Request Parameters</td>
<td>String</td>
<td>A string that captures all the parameters (variables, IDs, key-value pairs, etc.) passed in on the event call. Shortened example:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>shortened example:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>shortened example:</td>
</tr>
<tr>
<td>Referer Data Type</td>
<td>String</td>
<td>The unencoded URL of the referring page (if any).</td>
</tr>
<tr>
<td>IP Data Type</td>
<td>String</td>
<td>The IP address for the visitor captured in the event call.</td>
</tr>
<tr>
<td>Field</td>
<td>Data Type</td>
<td>Description</td>
</tr>
<tr>
<td>------------------</td>
<td>-----------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>MCDevice</td>
<td>String</td>
<td>The Experience Cloud ID (MID) assigned to the site visitor. See also, Cookies and the Experience Cloud ID service.</td>
</tr>
<tr>
<td>All Segments</td>
<td>Numeric Array</td>
<td>An array of segment IDs that contains previously realized segments and new segments the visitor is qualified for.</td>
</tr>
<tr>
<td>All Traits</td>
<td>Numeric Array</td>
<td>An array of trait IDs that contains previously realized traits and new traits the visitor is qualified for.</td>
</tr>
</tbody>
</table>

**Customer Data Feed File Structure**

Lists and defines the data structure of a **Customer Data Feed** (CDF) file. This includes data sequence, field delimiters and separators, a data file map, and sample file.

Contents:

- *Data Field Identifiers and Sequence*
  - CDF File Map
  - Sample CDF File

**Data Field Identifiers and Sequence**

CDF files do not contain labeled columns or field headers. Instead, a CDF file defines fields and arrays with non-printing ASCII characters. Also, the CDF file lists each field and array in a specific order. Understanding the field identifiers and order will help you parse the file properly.

<table>
<thead>
<tr>
<th>CDF File Element</th>
<th>Description</th>
</tr>
</thead>
</table>
| Field Separators and Delimiters | These non-printing characters define the elements and structure of your CDF file:  
  • Ctrl + a (ASCII 001 or ^A) separates data in individual fields with a non-printing space indicator.  
  • Ctrl + b (ASCII 002 or ^B) separates data an array and request parameters.  
  • Ctrl + c (ASCII 003 or ^C) defines key-value pairs. |
| Field Sequence   | *Important*: Audience Manager reserves the right to add new fields to the end of the CDF file in future releases. This means the technical design of your file parsing system should not assume a fixed number of columns (though it may assume a fixed order for existing columns).  
  Data in your CDF file appears in the order shown below.  
  1. Event Time  
  2. Device  
  3. Container ID |
<table>
<thead>
<tr>
<th>CDF File Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Realized Traits</td>
<td></td>
</tr>
<tr>
<td>5. Realized Segments</td>
<td></td>
</tr>
<tr>
<td>6. Request Parameters</td>
<td></td>
</tr>
<tr>
<td>7. Referer</td>
<td></td>
</tr>
<tr>
<td>8. IP Address</td>
<td></td>
</tr>
<tr>
<td>9. Experience Cloud Device ID (or MID). See also, <em>Cookies and the Experience Cloud ID Service</em></td>
<td></td>
</tr>
<tr>
<td>10. All Segments</td>
<td></td>
</tr>
<tr>
<td>11. All Traits</td>
<td></td>
</tr>
</tbody>
</table>

For field descriptions, see *Customer Data Feed Contents Defined*.

CDF File Map

CDF file data appears in the order shown below.

Identifying Arrays

Arrays in a CDF file start and end with the Ctrl + a field separator. This makes the first element in an array appear like a standalone data field. For example, the realized traits array starts with ^A1234. The array delimiter and ID ^B5678 follows this entry. As a result, you might be tempted to think that the first element in the realized traits array is ID 5678 (because it starts with ^B). This is not the case, which is why you need to be familiar with the sequence and structure of a data file. Even though the first element in the realized trait array (or any of the other arrays in a CDF file) starts with ^A, the order of appearance or position in the file defines the start of an array. And, the first element in an array is always separated from the preceding entry by ^A.
Sample CDF File

A sample CDF file could look similar to the following. We've inserted line breaks into this example to help it fit the page.

CDF File Name: Syntax and Example

A typical CDF file name contains the elements listed below. Note, *italics* indicates a variable placeholder:

**Syntax:** s3://aam-cdf/your s3 bucket name/day=yyyy-mm-dd/hour=hh/AAM_CDF_partner ID_AAM process ID_0.gz

**Example:** s3://aam-cdf/dataCompany/day=2017-09-14/hour=17/AAM_CDF_1234_000058_0.gz

In your S3 storage bucket, files are sorted in ascending order by Partner ID (PID), day, and hour.

CDF File Name Elements Defined

The following table lists and defines the elements in a CDF file name.

<table>
<thead>
<tr>
<th>File Name Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>s3://aam-cdf/</td>
<td>This is the default, root storage bucket for your CDF file on an Amazon S3 server.</td>
</tr>
<tr>
<td>your S3 bucket name</td>
<td>The name of the read-only, S3 bucket that holds your CDF files.</td>
</tr>
<tr>
<td>day=yyyy-mm-dd</td>
<td>The date your file was processed.</td>
</tr>
</tbody>
</table>
### File Name Element | Description
---|---
hour=hh | A time value expressed in 24-hour notation and set in the UTC time zone. See also, *Customer Data Feed File Name Times and File Content Times are Different.*
partner ID | Your partner ID.
AAM process ID | An internal, Audience Manager process ID.
.gz | A gzip file extension. CDF files are gzip compressed.

### Customer Data Feed File Processing Notifications
Audience Manager writes a .info file to your S3 directory to let you know when your **Customer Data File** (CDF) is ready for download. The .info file also includes JSON-formatted metadata about the contents of your CDF files. Review this section for information about the syntax and fields used by this notification file.

#### Sample Info File
Each .info file contains a Files and Totals section. The Files section contains an array that holds specific metrics for each hourly file. The Totals section contains metrics aggregated across all your CDF files for a particular day. The contents of your .info file could look similar to the following example.

```json
{
   "Files": [
      {
         "FileSize": 2709730,
         "FileChecksumMD5": "a9ea418e79511642cff11c2a898037dc",
         "FileName": "AAM_CDF_1109_000000_0.gz",
         "FileSequenceNumber": 1
      },
      {
         "FileSize": 2783351,
         "FileChecksumMD5": "7b469485d60274b6991acd0817855840",
         "FileName": "AAM_CDF_1109_000001_0.gz",
         "FileSequenceNumber": 2
      }
   ],
   "Totals": {
      "Day": "2017-09-26",
      "Hour": "18",
      "TotalFileSize": 150092997,
      "TotalNumberFiles": 2
   }
}
```

### Info File Fields Defined
The following tables list and defines the elements in a CDF .info file.

**Files Object**

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Files</td>
<td>Starts the array that contains metadata about your CDF files.</td>
</tr>
</tbody>
</table>
### Totals Object

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Totals</td>
<td>Starts the object that contains aggregated data about all your CDF files.</td>
</tr>
<tr>
<td>Day</td>
<td>The day for which the data is available. Uses yyyy-mm-dd format.</td>
</tr>
<tr>
<td>Hour</td>
<td>The hour for which data is available. Uses 24-hour format set in UTC time zone.</td>
</tr>
<tr>
<td>TotalByteSize</td>
<td>Total size of all your CDF files for that date in bytes.</td>
</tr>
<tr>
<td>TotalNumberFiles</td>
<td>Total number of files uploaded to your S3 directory.</td>
</tr>
</tbody>
</table>

### Customer Data Feed File Name Times and File Content Times are Different

Your Customer Data Feed (CDF) file contains timestamps in the file name and file contents. These timestamps record different event processes for the same CDF file. It is not uncommon to see different timestamps in the name and contents of the same file. Understanding each timestamp can help you avoid common mistakes when working with this data or trying to sort it by time.

#### Locating CDF File Timestamps

CDF files record time differently in 2 separate locations.
Understanding the Difference Between Timestamps

The following table provides additional details about your CDF file timestamps along with information about how to use them properly.

<table>
<thead>
<tr>
<th>Timestamp Location</th>
<th>Description</th>
</tr>
</thead>
</table>
| **File Name**      | The timestamp in your CDF file name marks the time when Audience Manager started preparing your file for delivery. This timestamp is set in the UTC time zone. It uses the `hour=` parameter, with time formatted as a 2-digit hour in 24-hour notation. This time can be different than the event time recorded in the file contents. When working with CDF files, sometimes you'll notice that your S3 bucket is empty for a particular hour. An empty bucket means can mean either of the following:  
  • There's no data for that particular hour.  
  • Our servers are under heavy loads and can't process files for a particular hour. When the server catches up, it puts the files that should have gone in an earlier time bucket files into a bucket with a later time value. For example, you'll see this when a file that should have been in the hour 17 bucket appear in the hour 18 bucket (with `hour=18` in the file name). In this case, the server probably started processing your file in hour 17 but couldn't complete it within that time interval. Instead, the file gets pushed to the next hourly time bucket.  

  **Important:** Do not use the file name timestamp to group events by time. If you need to group by time, use the `EventTime` timestamp in the file contents. |
| **File Contents**  | The timestamp in your CDF file contents marks the time the **Data Collection Servers** started processing the file. This timestamp is set in the UTC time zone. It uses the `EventTime` field, with time formatted as `yyyy-mm-dd hh:mm:ss`. This time is close to the actual time of the event on the page, but it can be different than the hour indicator in the file name.  

  **Tip:** Unlike the `hour=` timestamp in the file name, you can use `EventTime` to group data by time. |

Data Export Controls

Data Export Controls prevent you from sending data to destinations when this action violates data privacy or data use agreements.

Contents:

- **Overview**
- **Controls and labels defined**
- **Workflow**
Overview

Data Export Controls let you classify *data sources* and *destinations*. The classifications you apply determine when data can or cannot be exported to a destination. This feature consists of:

- **Data Export Controls**: When set on a data source, these controls restrict how that data source and its traits can be used.
- **Data Export Labels**: When set on a destination, these labels identify how the destination uses data.

Based on the classifications applied to a data source and destination, the export controls stop you from:

- Adding traits to a segment when that segment is blocked by an export control/export label combination.
- Sending any data to a destination if that destination is blocked by an export control/export label combination.

Data Export Controls are available automatically. However, you need administrator permissions to add export controls to a data source. Adding export labels to a destination requires administrator permissions or sufficient privileges to create or edit a destination.

**Controls and labels defined**

Data Export Control provide the following controls to help you classify data sources and destinations.

To block data delivery, you must classify a data source with an export control and add an export label to a destination. If you apply export controls to a data source or destination only, this feature will not restrict data delivery. When set on both the data source *and* destination, the export controls will limit the traits you can add to a segment and prevent the segment from sending data to a destination.

Additionally, at least one export label must match an export control before data delivery restrictions take effect. For example, say you add the PII export control to a data source. Next, you add the on-site targeting label to a destination. In this case, export controls will not limit data delivery because the settings do not match. However, if you add the PII export label to the destination, the export controls will work.

<table>
<thead>
<tr>
<th>Data Export Controls for a Data Source</th>
<th>Data Export Labels for a Destination</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>No restriction</td>
<td>n/a</td>
<td>By default, export restrictions are not set on new data sources and destinations.</td>
</tr>
</tbody>
</table>
| Cannot be tied to personally identifiable information (PII) | This destination may enable a combination with personally identifiable information (PII) | When selected, you cannot:  
  - Add traits to segments mapped to destinations that use PII.  
  - Map segments to destinations that use PII.  
  This is often required by third-party data providers and when using data sources that contain ad/media tracking information. |
| Cannot be used for on site ad targeting | This destination may be used for on-site ad targeting | When selected, you cannot:  
  - Add traits to segments mapped to destinations that customize ad |
<table>
<thead>
<tr>
<th>Data Export Controls for a Data Source</th>
<th>Data Export Labels for a Destination</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>delivery based on a visitor's web-browsing history.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Map segments to destinations that customize ad delivery based on a visitor's web-browsing history.</td>
</tr>
<tr>
<td>Cannot be used for off site ad targeting</td>
<td>This destination may be used for off-site ad targeting</td>
<td>These restrictions are used generally with When selected, you cannot:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Add traits to segments mapped to destinations that re-target users on other sites.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Map segments to destinations that re-target users on other sites.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Often required when working with data from social media platforms.</td>
</tr>
<tr>
<td>Cannot be used for on site personalization</td>
<td>This destination may be used for on-site ad personalization</td>
<td>When selected, you cannot:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Add traits to segments mapped to destinations that customize content based on user interests or web-browsing history.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Map segments to destinations that customize content based on user interests or web-browsing history.</td>
</tr>
</tbody>
</table>

**Workflow**

To get started, review the data source and destination documentation. These articles provide instructions about how to add export controls and labels to your data sources and destinations.

- *Create a Data Source*
- *Add Data Export Labels to a Destination*

**Data Sources**

View a list of your currently configured data sources, add new data sources, and edit existing sources.

You can also manage data sources using API methods. For more information, see *Data Source API Methods*.

**Data Sources List View**

The Data Sources dashboard is a centralized workspace for managing data sources.

The Data Sources dashboard (**Manage Data > Data Sources**) contains features and tools that help you:
• See all your existing data sources, including each data source’s description, status, and whether it is Inbound, Outbound, both, or a Share Provider.
• Search for data sources by name.
• Create, edit, and delete data sources.

Create a Data Source

To create a new data source, go to Manage Data > Data Sources > Add New and complete the steps for each section described here. Administrator permissions are required to create a data source.

Tip: See Data Source Settings and Menu Options for descriptions of these different controls.

Data Source Details

To complete the Data Source Details section:

1. Name the data source.
2. (Optional) Describe the data source. A concise description helps you define the role or purpose of the data source.
3. Provide an integration code. Generally, integration codes are optional. They are required when you want to:
   • Create a cross-device data source.
   • Use the Experience Cloud ID service.
   • Work with Profile Merge Rules.
4. Choose an ID Type. ID Type options include:
   • Cookie
   • Device Advertising ID
   • Cross-device (Required to create a Profile Merge Rule). Note, for some customers, this selection exposes the ID Definition options.
5. Choose an ID Definition option. Options include:
   • Person
   • Household

Data Export Controls

Data Export Controls are optional classification rules you can apply to a data source and destination. They prevent you from sending data to a destination when that action violates a data privacy or use agreement. Skip this section if you do not use Data Export Controls.

Data Source Settings

These settings determine how a data source is identified, used, and shared. You can also enable error reporting for inbound data files. To complete the Data Source Settings section:

1. Select a Data Source Setting check box to apply an option to your data source.
2. Click Save.
Delete a Data Source

Delete a data source that you no longer need.

💡 Note: You cannot delete an Active Audience or Data Source Synced Trait.

1. Click Manage Data > Data Sources.
2. Select the check box next to one or more data sources.
   You can use the Search box to locate the desired data sources if you have a long list.
3. Click ✖️, then confirm the deletion.

Data Source Settings and Menu Options

The settings in the different sections of the Data Source management interface identify your data source, determine how it is used or shared, and let you enable error reporting for the Onboarding Status Report.

Contents:

- Data Source Details
- Data Export Controls
- Data Source Settings

Data Source Details

In addition to text fields, the Data Source Details section contains the controls and options listed below.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Menu Options</th>
</tr>
</thead>
</table>
| ID Type            | - **Cookie**: The cookie ID that identifies a device. You would select this when your data source is a web browser or when working with anonymous data or data that cannot be associated with a single person.  
                    - **Device Advertising ID**: The mobile device identifier. Select this when your data source is a mobile device or Internet enabled device.  
                    - **Cross Device**: A customer-provided, authenticated ID. Select this option when you want to create:  
                      - A cross-device data source and build a Profile Merge Rule.  
                      - A data source that uses links provided by the Adobe Experience Cloud Device Co-op or another, third-party device graph that is integrated with Audience Manager. |
| ID Definition      | The ID Definition options define the relationship a data source has to an Audience Manager user ID (UUID) and associated devices linked by the Adobe Experience Cloud Device Co-op or another, third-party device graph that is integrated with Audience Manager. Options include:  
                    - **Person**: The ID used to define a single person. This ID can be mapped to multiple Audience Manager IDs.  
                    - **Household**: The ID used to define a group of people. This ID can be mapped to multiple Audience Manager IDs. |
Data Export Controls

*Data Export Controls* are optional classification rules you can apply to a data source and destination. They prevent you from sending data to a destination when that action violates a data privacy or use agreement. Skip this section if you do not use *Data Export Controls*.

⚠️ **Important:** Export restrictions will not work unless you set a matching export label on a destination.

Options include:

- No Restriction
- Cannot be tied to personally identifiable information
- Cannot be used for on-site ad targeting
- Cannot be used for off-site ad targeting
- Cannot be used for on-site personalization

Data Source Settings

The *Data Source Settings* contains the controls and options listed below. Some of these settings have additional sub-options and menu items that you can select to modify a data source.

Inbound Data Source Settings

Select the **Inbound** check box when your data source is designed to receive inbound data. Selecting the **Inbound** check box exposes 2 additional groups of controls described below.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Menu Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ID Type</strong></td>
<td>The <strong>Inbound</strong> option requires an ID type. Options include:</td>
</tr>
<tr>
<td></td>
<td>• <strong>Customer ID</strong>: Identifies inbound data with a customer ID.</td>
</tr>
<tr>
<td></td>
<td>• <strong>Audience Manager ID</strong>: Identifies inbound data with an Audience Manager ID.</td>
</tr>
<tr>
<td></td>
<td>• <strong>Experience Cloud ID</strong>: Identifies inbound data with a Experience Cloud ID.</td>
</tr>
<tr>
<td></td>
<td>See <em>Cookies and the Experience Cloud ID</em></td>
</tr>
<tr>
<td><strong>File Format</strong></td>
<td>Select <strong>Enable file error sampling</strong> when you need to troubleshoot problems with inbound file processing. This feature generates an error sample report that shows you file format and syntax errors.</td>
</tr>
<tr>
<td><strong>Troubleshooting</strong></td>
<td>See <em>Onboarding Status Report: About</em> for information about error reporting and error sampling.</td>
</tr>
</tbody>
</table>

Other Data Source Settings

<table>
<thead>
<tr>
<th>Setting</th>
<th>Select When</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outbound</strong></td>
<td>Your data source sends data to a destination.</td>
</tr>
<tr>
<td><strong>Share Enabled</strong></td>
<td>Your data source can be shared with other partners.</td>
</tr>
<tr>
<td>Setting</td>
<td>Select When</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Use as an Authenticated Profile              | Your cross-device data source contains and Authenticated ID. An Authenticated ID is collected and synced to an Audience Manager ID during an authentication event (e.g., a user logs in on-site, in-app, etc.). The Authenticated ID can be used to on-board data from other sources which store this ID. It can also be used to link multiple device IDs in Profile Link.  
This option exposes a text field which lets you rename the data source with an alias. If you use an alias, this new name overrides the data source name and appears in the Authenticated Profile Options when you create a Profile Merge rule. |
| Use as a Device Graph                        | Creates a data source as a device graph which you can provide to other Audience Manager customers. Before you select this option, tell with your Audience Manager consultant which customers this Data Source should be shared with. Your consultant will have to provision those companies through our internal processes.  
This option exposes a text field which lets you rename the data source with an alias. If you use an alias, this new name overrides the data source name and appears in the Device Options when you create a Profile Merge rule. |
| Share associated visitor or device IDs with specific Audience Manager Customers | Your cross-device data source contains IDs from a device graph. A device graph is a collection of IDs which map to one or more Audience Manager IDs to a cluster. This cluster typically represents a person or larger, household group. Available only to accounts listed as a "Data Provider." |
| Share associated visitor or device IDs across the Audience Manager Platform | Your data source contains visitor or device IDs that can be shared across other Experience Cloud solutions.                                                                                                                                                                                                                                                                                                                                                       |
| Unique Trait Integration Codes               | You want to enforce that two traits from the same data source don’t have the same integration code.                                                                                                                                                                                                                                                                                                                                                                       |
| Unique Segment Integration Codes             | You want to enforce that two segments from the same data source don’t have the same integration code.                                                                                                                                                                                                                                                                                                                                                                       |

**Declared IDs**

How declared IDs work, set up procedures, code examples, and variables.

**Declared ID Targeting**

Exchange and synchronize user IDs with Audience Manager from devices or browsers that do not use or accept persistent storage mechanisms, such as third-party cookies.

This section contains the following information:
• Purpose of Declared ID Targeting
• Opt-out Calls
• Declared ID Opt-Out Examples

**Purpose of Declared ID Targeting**

Some browsers, and most mobile devices, do not accept third-party cookies. This makes it difficult to retain information about site visitors or assign persistent IDs. To resolve this issue, Audience Manager uses DIL to let you pass in declared IDs on an event call. Also, a declared ID can act as a universal ID that applies to the same user across all the solutions in the Experience Cloud. The following table describes the ID targeting/matching process:

<table>
<thead>
<tr>
<th>Process</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Event Call</td>
<td>To work, you need DIL and the <em>Experience Cloud ID service</em> code on the page. DIL gets declared IDs from the <code>setVisitorID</code> function provided by the Experience Cloud ID service and passes that on to Audience Manager.</td>
</tr>
<tr>
<td>Match ID</td>
<td>Audience Manager attempts to match the client and visitor ID with a corresponding ID in our system. If a matching ID does not exist, Audience Manager creates a new ID and associates it with the client and visitor ID.</td>
</tr>
<tr>
<td><strong>Note:</strong> The most recent mapping is used if your ID maps to more than one Audience Manager ID.</td>
<td></td>
</tr>
<tr>
<td>Return ID</td>
<td>Audience Manager writes its synchronized ID to a first-party cookie (or other addressable storage space) in the client domain or application.</td>
</tr>
<tr>
<td>Subsequent Event Calls</td>
<td>Additional event calls read the Audience Manager ID from the client's domain and send that to Audience Manager.</td>
</tr>
</tbody>
</table>

To get started, you need to configure the Experience Cloud ID service and DIL across the pages on your site that you want to use for data collection. See *DIL create* and *Declared ID Variables*.

**Opt-out Calls**

The declared ID process honors site visitor preferences to opt-out of Audience Manager targeting by your website. When Audience Manager receives an opt-out request, the DCS returns an empty JSON object instead of the Audience Manager user ID.

• Audience Manager can pass in a declared ID opt-out alongside an Audience Manager UUID in the URL.
• The declared ID opt-out is stored in the Profile Cache Server (PCS) on a per-partner basis. There is no platform-level opt-out using declared IDs. Additionally, Audience Manager opts the user out from that particular region on the edge (the opt-out does not cross DCS regions).

See *Data Privacy* for more information about opting-out of data collection.
Declared ID Opt-Out Examples

You can make a declared ID opt-out requests with the `d_cid` and `d_cid_ic` key-value pairs. The legacy parameters like `d_dpid` and `d_dpuuid` still work, but are considered deprecated. See [CID Replaces DPID and DPUUID](#). In the examples, *italics* indicates a variable placeholder.

Opt-Outs With CID and CID_IC

For a description and syntax, see [URL Variables and Syntax for Declared IDs](#).

<table>
<thead>
<tr>
<th>Opt-Out Using</th>
<th>Code Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>A data provider ID and user ID.</td>
<td><a href="http://domain">http://domain</a> name/demoptout.jpg?d_cid=123%01987...</td>
</tr>
<tr>
<td>An integration code and user ID.</td>
<td><a href="http://domain">http://domain</a> name/demoptout?d_cid_ic=456%01321...</td>
</tr>
<tr>
<td>Multiple <code>d_cid</code> and <code>d_cid_ic</code> key-value pairs.</td>
<td><a href="http://domain">http://domain</a> name/demoptout?d_cid=123%01987&amp;d_cid_ic=456%01321...</td>
</tr>
</tbody>
</table>

Opt-Outs With DPID, DPUUID, and UUID (Deprecated)

These methods still work but are considered deprecated. This information is provided for legacy purposes and reference. Legacy opt-outs include:

<table>
<thead>
<tr>
<th>Opt-Out (Deprecated)</th>
<th>Code Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>d_uuid</code> only</td>
<td><a href="http://domain/demoptout.jpg?d_uuid=AAM">http://domain/demoptout.jpg?d_uuid=AAM</a> ID</td>
</tr>
<tr>
<td>Partner level opt-out</td>
<td><a href="http://demoptout.jpg?d_dpuuid=user">http://demoptout.jpg?d_dpuuid=user</a> ID&amp;d_dpid=data provider ID</td>
</tr>
<tr>
<td>A partner level opt-out gets stored for the latest mapping of this <code>dpid + dpuuid</code> pair to an AAM UUID. If there is no previously existing mapping, Audience Manager checks whether the request contains an AAM UUID in the cookie, and if it does, uses that for storing the opt-out. Otherwise, Audience Manager generates a new AAM UUID and stores the opt-out under it.</td>
<td></td>
</tr>
<tr>
<td><code>d_dpuuid + d_dpid</code> and explicit <code>d_uuid</code></td>
<td><a href="http://domain/demoptout.jpg?d_uuid=user">http://domain/demoptout.jpg?d_uuid=user</a> ID&amp;d_dpuuid=data provider's user ID&amp;d_dpid=data provider ID</td>
</tr>
<tr>
<td><code>d_uuid</code> always takes precedence. If the <code>dpid + dpuuid</code> combination maps to another AAM UUID, the opt-out is stored under the AAM UUID passed in the request (<code>d_uuid</code>).</td>
<td></td>
</tr>
</tbody>
</table>

URL Variables and Syntax for Declared IDs

Describes the variables and event call URLs that send IDs directly to Audience Manager.
Variables and Syntax

The following table lists the key-value pairs that pass in your Audience Manager data provider ID and user IDs or integration codes, if used. Note, *italics* indicates a variable placeholder. Spaces have been added to make these easier to read.

In each key-value pair:

- The = symbol separates the key from its related values.
- The non-printing ASCII character %01 separates the values.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>d_cid = data provider ID %01 user ID</td>
<td>Contains a data provider ID and an associated unique user ID in a single key-value pair. d_cid replaces d_dpid and d_dpuuid, which are considered deprecated, but still supported. See <em>CID Replaces DPID and DPUUID</em>.</td>
</tr>
<tr>
<td>d_cid_ic = integration code %01 user ID</td>
<td>Contains an integration code and an associated unique user ID in a single key-value pair. d_cid_ic replaces d_dpid and d_dpuuid, which are deprecated, but still supported. See <em>CID Replaces DPID and DPUUID</em>.</td>
</tr>
</tbody>
</table>

Sample Event Calls

Given these key-value pairs and their required syntax, you would make event calls as shown below.

<table>
<thead>
<tr>
<th>Event Call Includes</th>
<th>Code Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>A data provider ID and user ID.</td>
<td><a href="http://domain">http://domain</a> name/event?d_cid=123%01987...</td>
</tr>
<tr>
<td>An integration code and user ID.</td>
<td><a href="http://domain">http://domain</a> name/event?d_cid_ic=456%01321...</td>
</tr>
<tr>
<td>Multiple d_cid and d_cid_ic key-value pairs.</td>
<td><a href="http://domain">http://domain</a> name/event?d_cid=123%01987&amp;d_cid_ic=456%01321...</td>
</tr>
</tbody>
</table>

Declared ID Variables

Describes the configuration variables used to pass declared IDs through DIL to Audience Manager.

DIL Uses the Visitor ID Service to Pass Declared IDs

When used with the [Visitor ID Service](#), you no longer need to pass in a declared IDs with the deprecated dpid and dpuuid variables. Instead, the current versions of DIL rely on the visitorService function to get the declared IDs from the setCustomerIDs function in the [Visitor ID Service](#). For more information, see [Customer IDs and Authentication States](#). You would call visitorService in DIL.create as shown below.

```javascript
var vDil = DIL.create({
    partner:"partner name",
    visitorService:{
        namespace:"INSERT-MCORG-ID-HERE"
    }
});
```
In the namespace key-value pair, MCORG is your Experience Cloud Organization ID. If you don’t have this ID, you can find it in the Administration section of the Experience Cloud dashboard. You need administrator permissions to view this dashboard. See Administration: Core Services.

Deprecated Functions

With the latest versions of DIL (6.2+), you don’t need to use these key-value pairs to pass in declared IDs. That’s because DIL now relies on the visitorService function shown in the code sample above. This function gets declared IDs from the Visitor ID Service. However, we’re referencing these variables here for historical and legacy purposes. See the code below for an example of how to configure DIL.create to get a declared ID from the Visitor ID Service.

The following table describes the legacy variables used by the declaredId object:

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>dpid</td>
<td>String</td>
<td>Data partner ID assigned by Audience Manager.</td>
</tr>
<tr>
<td>dpuuid</td>
<td>String</td>
<td>The data provider's unique ID for the user.</td>
</tr>
</tbody>
</table>

**dpid and dpuuid**

Audience Manager compares and matches the combined dpid and dpuuid to a corresponding user ID in our system. If an ID does not exist, Audience Manager creates a new user ID and synchronizes it to the dpid/dpuuid combination. Once Audience Manager matches or creates a user ID (the uuid) it returns that ID in the JSON response to the cookie in the client’s domain (first-party cookie) or other local storage.

Call this function when you’re using DIL v6.1 or earlier. However, this function has been deprecated in favor of the new version that gets declared IDs from the Visitor ID Service.

```javascript
DIL.create({
  partner : "partner name",
  declaredId : {
    dpuuid : <dpuuid>,
    dpid : <dpid>
  }
});
```

💡 **Note:** Note, you need to programmatically develop the code that supplies the ID values for the d_dpuuid and d_dpid keys.

**Pass In IDs After DIL Instantiates**

💡 **Note:** If you make an API call with a different declaredID combination, the new combination will be used for that call only. Further regular event calls will use the original DIL.create declaredID combination.

```javascript
DIL.getDil('partner name').api.signals({...}).declaredId({
  dpuuid : <dpuuid>
  dpid : <dpid>
}).submit();
```
Request/Response Examples

The request sends a data provider and user ID to Audience Manager:

```plaintext
http://my_domain.net/event?d_rtdb=json&d_cb=myCallback&key=val&d_dpuuid=1234&d_dpid=5678
```

The response returns the Audience Manager ID (e.g., uuid) which is written to a first-party cookie in the page domain.

```javascript
myCallback({
  ...
  "uuid": "abc123"
})
```

Do Not Target and Opt-Out Calls

The declared ID process honors site visitor preferences to opt-out of Audience Manager targeting by your website. When Audience Manager receives an opt-out request, the DCS returns an empty JSON object instead of the Audience Manager user ID.

Derived Signals

A derived signal qualifies site visitors for additional traits based on a trait they've already seen. In other words, additional trait qualification can be derived from a currently exhibited trait even if a user has never seen the new trait before.

Purpose of Derived Signals

In Audience Manager, you can create a relationship between signals (or trait rules) passed in during an event call to other, specified signals or traits. For example, assume an event call passes in a signal composed of the key-value "product = new_car" (http://<domain alias>/event?product=new_car). Audience Manager would connect that signal to any others created with the derived signals tool. Although the associated signals can be any key-values you specify, they are most useful when linked to existing signals already set up as Trait Builder rules. For example, in the illustration below, when a user action fires the signal "product = new car" that user can also qualify for traits defined by the target key and value signals.

<table>
<thead>
<tr>
<th>Integration Code</th>
<th>Source Key</th>
<th>Source Value</th>
<th>Target Key</th>
<th>Target Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>product</td>
<td>new car</td>
<td></td>
<td>electronics</td>
<td>camera</td>
</tr>
<tr>
<td>product</td>
<td>new car</td>
<td></td>
<td>electronics</td>
<td>audio</td>
</tr>
<tr>
<td>product</td>
<td>new car</td>
<td></td>
<td>brand</td>
<td>apple</td>
</tr>
</tbody>
</table>

Location of Derived Signals

Create and manage derived signals in Manage Data > Derived Signals from the sidebar navigation.

Create a Derived Signal

Information about creating a derived signal.

To create a derived signal

1. Select Derived Signals from the Manage Data menu.
2. Provide a:
   • (Optional) Integration Code
   • Source Key
   • Source Value
   • Target Key
   • Target Value
3. Click Add Signal.

**Edit a Derived Signal**
Information about editing a derived signal.

To edit a derived signal
1. Hover over the signal, then click Edit.
2. Make the required code, key, or value changes, then click Save.

**Delete a Derived Signal**
Information about deleting a derived signal.

To delete a derived signal
   • Hover over the signal, then click Delete.

**Destinations**

In Audience Manager, a destination is any third-party system (ad server, DSP, ad network, etc.) that you want to share data with. **Destination Builder** is the tool you used to create and manage cookie, URL, or server-to-server destinations.

**Purpose and Advantages**

Destinations and Destination Builder lets you create destinations and send information about segmented users to your data partner. This helps you:

• **Protect data value:** Rather than send all user data to a destination, Destination Builder let you share specific information about qualified users only.

• **Take action on your data:** Sending data to a destination partner helps them quickly develop and target qualified audience segments.

• **Reduce technical overhead:** Business users can set up destinations safely in the Destination Builder interface. This helps reduce the time required for pre-deployment testing. With Destination Builder, you create, manage, and delete destinations as your business needs change, all without working through a long development cycle.

**Related Topics**

See the following sections for more information about **Destination Builder**, how to create destinations, and related reference.
Destinations Home Page

The **Destination** landing page lists all of your URL, cookie, and server-to-server destinations. It provides features that let you create, edit, search for, and report on destinations. The landing page is located in **Manage Data > Destinations**.

Contents:

- Default Landing Page
- Addressable Audiences Landing Page

Default Landing Page

The default landing page lists and helps you manage all of your destinations. You can create, edit, and search for destinations here.

Addressable Audiences Landing Page

Slide the **Show Only Addressable Audience Metrics** toggle to see audience data and match rates for your server-to-server destinations. When enabled, this feature:
• Lets you filter the report to return audience data and match rates for fixed time intervals.
• Returns data for server-to-server destinations only. Cookie and URL destinations are excluded from the list. Slide the toggle again to return to the default view.

How to Choose a Destination Type

Describes technical and business reasons for choosing a URL, cookie, or server-to-server destination.

Technical Considerations

Data delivery depends on how your data partner wants to, or can, receive destination information. Technical or engineering constraints may prevent a destination from receiving data via URL, cookie, or server-to-server processes. Work with your third-party partner to determine which method they can use.

Business Considerations

Business decisions for selecting one delivery method over another depend on the technical capabilities of your destination partner and what you want to do with qualified user information. For example, technical constraints can limit your options if a destination cannot receive data by a particular delivery method. However, if there are no technical issues, you can send information based on how you want to take action on that data. For example:
• URLs and cookie-based destinations work almost synchronously with user actions on a page.
• Server-to-server methods are good for building deep audience segments over time.

Destination Types and Typical Uses

The examples in the following table can help you understand when to use a particular destination and the differences between each type.

<table>
<thead>
<tr>
<th>Destination Type</th>
<th>Typically Used When</th>
<th>Example</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>URL</td>
<td>You need to transfer data immediately so a destination can take action on a qualified user right away.</td>
<td>Sending data from a ticket purchasing site. Use a URL or cookie destination to qualify user and immediately re-target.</td>
<td>• Transfers data about new visitors only. • Visitors must be seen again to qualify for the segment.</td>
</tr>
<tr>
<td>Cookie</td>
<td>• Immediate data transfer is not required. • Collecting data to build a large audience pool of qualified users.</td>
<td>Collecting data over time (hours or days) to use it in a campaign set to run at a later date.</td>
<td>• Transfers data about new and previous site visitors. • Visitors don't have to be seen again to qualify for other segments.</td>
</tr>
<tr>
<td>Server-to-server</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Destination Builder

Destination Builder lets you create cookie-based or URL destinations. You cannot create server-to-server (S2S) destinations with Destination Builder, but you can manage their segment mappings. Contact your consultant to set up a S2S destination. Destination Builder is located in Manage Data > Destinations.

Destination Builder Settings

Destination Builder consists of the following sections and settings:

<table>
<thead>
<tr>
<th>Destination Builder Section</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Basic Information</strong></td>
<td>Used to name the destination, describe it, and select destination type (URL or cookie), and platform (all, Android, browser, or iOS).</td>
</tr>
<tr>
<td><strong>Configuration</strong></td>
<td>Includes controls for:</td>
</tr>
<tr>
<td></td>
<td>• Passing in key-value data to URL destinations. You can send data as individual or serialized key-value pairs. For details see, <a href="#">Destination Serialization</a> and <a href="#">Standard and Serial Key-Value Pairs</a>.</td>
</tr>
<tr>
<td></td>
<td>• Elements of a cookie destination such as cookie name, domain, size, expiration interval, data format, etc.</td>
</tr>
<tr>
<td><strong>Segment Mappings</strong></td>
<td>Lets you:</td>
</tr>
<tr>
<td></td>
<td>• Search for, add, and manage segments associated with all destination types.</td>
</tr>
<tr>
<td></td>
<td>• Set delivery priorities on individual segments (for cookie-based segments only).</td>
</tr>
</tbody>
</table>
Data Delivery Methods
Send information to a destination by passing it in through a URL string, by writing to a browser cookie, or through offline server-to-server data transfers.

- URL and cookie-based destinations transmit data synchronously, as a user takes action on a page.
- Server-to-server data transmission is asynchronous and can occur long after a user has left the page. The delivery type you select depends on your business requirements and how a particular data partner wants to, or can, receive data.

See *How to Choose a Destination Type* for more information.

Configure an Analytics Destination
Audience Analytics lets you send Audience Manager segments to Analytics. To use this feature, you create an Analytics destination and map segments to it in Audience Manager.

Requirements
See *Audience Analytics*.

Your Default Analytics Destination and New Analytics Destinations

<table>
<thead>
<tr>
<th>Analytics Destination Type</th>
<th>Description</th>
</tr>
</thead>
</table>
| Default                    | The name of this default destination is "Adobe Analytics," which you can edit. Mapped report suite IDs appear in folder storage for your Audience Manager traits and segments. Audience Manager creates one destination automatically if your account has:  
  • Met the requirements described in the *Audience Analytics* documentation.  
  • A report suite in Analytics.  
  • *Mapped a report suite to an organization.* |
| New                        | To create new Analytics destinations, go to Manage Data > Destinations > Create New Destination and follow the steps for each section described below. |

Step 1: Provide Basic Information
This section contains fields and options that start the Analytics destination creation process. To complete this section:

1. Click **Basic Information** to expose the controls.
2. Name the destination. Avoid abbreviations and special characters.
3. *(Optional)* Describe the destination. A concise description is an effective way to define or provide more information about a destination.
4. *(Optional)* In the **Platform** list, leave the default set to **All**. Currently, these options don't do anything. They're designed to support features that may be added at a later date.
5. In the **Category** list, select **Adobe Experience Cloud**.
6. In the **Type** list, select **Adobe Analytics**.
7. Click **Save** to go to the Configuration settings or click **Data Export Labels** to apply export controls to the destination.
Note: For an Analytics destination, the Auto-fill Destination Mapping check box and Segment ID option are selected by default. You cannot change these settings.

Provide basic information about your destination.

Step 2: Configure Data Export Controls

This section contains options that apply Data Export Controls to an Analytics destination. Skip this step if you do not use data export controls. To complete this section:

1. Click Data Export Controls to expose the controls.
2. Select a label that corresponds to the data export control applied to the destination (see Add Data Export Labels to a Destination). For Analytics destinations, the PII check box is selected by default.
3. Click Save.
Step 3: Map Report Suites

The Configuration section lists your Analytics Report Suites that have been enabled for server-side forwarding. If you have multiple Analytics destinations, the report suites assigned to these destinations will be mutually exclusive and enforced by Audience Manager.

To complete this section:

1. Click **Configuration** to expose the controls.
2. Select one (or more) report suites that you want to send segments to.
3. Click **Save**.
**Step 4: Segment Mappings**

This section provides options that let you map segments automatically or manually.

<table>
<thead>
<tr>
<th>Mapping Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Automatically map all current and future segments</strong></td>
<td>Selected by default, this feature sends all segments that a visitor qualifies for, on a per-hit basis, to Analytics.</td>
</tr>
<tr>
<td></td>
<td>If a visitor belongs to more than 150 Audience Manager segments on a single hit, only the 150-most recently qualified segments are sent to Analytics, while the remaining list is truncated. An additional flag is sent to Analytics signifying that the segment list was truncated. This action displays as “Audience limit reached” in the</td>
</tr>
<tr>
<td>Mapping Option</td>
<td>Description</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>Audiences Name dimension and “1” in the Audiences ID dimension.</strong> See the FAQ for details. Also, this option affects destination availability in <strong>Segment Builder.</strong> For example, if a segment is mapped automatically to an Analytics destination, that destination is not available for selection in the destination mappings section of Segment Builder. The Analytics destination appears grayed-out and shows &quot;Analytics&quot; in the Type column of the Destination browser.</td>
<td></td>
</tr>
<tr>
<td><strong>Manually map segments</strong></td>
<td>This option exposes search and browse controls that let you choose which segments you want to send to Analytics. To search for a segment: 1. Type the segment name or ID in the search field. 2. Click <strong>Add.</strong> 3. Continue to search and add segments or click <strong>Done.</strong> To browse for a segment: 1. Click <strong>Browse all segments.</strong> This exposes a list of available segments. 2. From the list, select the check box of the segment you want to use and click <strong>Add selected segments.</strong> 3. Click <strong>Save</strong> in the Add Mappings window. You can't change the mappings, start, or end dates during the beta release. 4. Continue to browse and add segments or click <strong>Done.</strong></td>
</tr>
</tbody>
</table>
Next Steps

After you create and save a destination, you can work with that data in Analytics. However, it can take a few hours before data is available in your selected report suites. See *Use the Audience Data in Analytics*.

**Configure a Cookie Destination**

A cookie destination returns and writes data to a cookie in the user's browser. The cookie contains data that can be read by other platforms that have access to the page. Follow these instructions to create a cookie destination with Destination Builder.

To create a new cookie destination, go to **Manage Data > Destinations > Create New Destination** and complete the sections as described below.
Basic Information
This section contains fields and options that start the cookie destination creation process. To complete this section:

1. Click **Basic Information** to expose the controls.
2. Name the destination. Avoid abbreviations and special characters.
3. *(Optional)* Describe the destination. A concise description is an effective way to define or provide more information about a destination.
4. *(Optional)* In the **Platform** list, leave the default set to *All*. Currently, these options don't do anything. They're designed to support features that may be added at a later date.
5. In the **Type** list, click **Cookie**.
6. *(Optional)* Select an **Auto-fill Destination Mapping**. Options include:
   - **Segment ID**: Automatically adds and sends the segment ID to the destination.
   - **Integration Code Value**: Automatically adds and sends the segment integration code to the destination mapping. The integration code is a unique identifier created and used by the customer. It is limited to 255 characters, maximum.
7. Click **Next** to go to the **Configuration** settings or click **Data Export Labels** to apply export controls to the destination.

Data Export Labels
This section contains options that apply *data export controls* to a cookie destination. Skip this step if you do not use data export controls. To complete this section:

1. Click **Data Export Labels** to expose the controls.
2. Select a label that corresponds to data export control applied to the destination (see *Add Export Labels to a Destination* for details).
3. Click **Save**.

Configuration
This section contains fields and options that let you set up the cookie for your destination.

*Note: Audience Manager encodes data written to the destination cookie. For example, spaces are encoded as %20 and semicolons are encoded as %3B. To complete this section:

1. Click **Configuration** to expose the controls
2. Name the cookie. Avoid abbreviations and special characters.
3. Choose a data format option. These options let you choose the delimiters and separators for the key-value pairs that send segment data to a destination. Format options include:
   - **Single key**: Lets you set the key in a key-value pair. You'll set the value after you select a segment in the Segment Mappings section below.
   - **Multi key**: Lets you set the key and value for a key-value pair. You'll create the key-value pair after you select a segment in the Segment Mappings section below.

   See *Standard and Serial Key-Value Pairs* for more information about these data elements.
4. Click **Save**.

All other settings are optional. For more information about the **Cookie Domain** and **Publish data to** settings, see *Optional Settings for Cookie Destinations*.
Segment Mappings

This section lets you search for and add segments to your destination. To complete this section:

1. Click **Segment Mappings** to expose the controls.
2. In the **Search and Add Segments** box, start typing the name of a segment or click **Browse All Segments** to browse a list of available segments.
3. Click **Add Selected Segments** when you find the segment you want to use. Adding a segment opens the **Edit Mapping** window.
4. In the **Edit Mapping** pop:
   - **Mapping** lets you set a value for the key specified in the Configuration section above.
   - **Publish from** lets you set start and end date for the destination. If the end date is blank, the destination never expires.
5. Click **Save**.
6. Click **Done**.

Configure a URL Destination

A URL destination makes pixel calls from a page to your destination. Follow these instructions to create a URL destination with Destination Builder.

To create a new URL destination, go to **Manage Data > Destinations > Create New Destination** and complete the sections as described below.

**Basic Information**

This section contains fields and options that start the URL destination creation process. To complete this section:

1. Click **Basic Information** to expose the controls.
2. Name the destination. Avoid abbreviations and special characters.
3. *(Optional)* Describe the destination. A concise description is an effective way to define or provide more information about a destination.
4. *(Optional)* In the **Platform** list, leave the default set to **All**. Currently, these options don't do anything. They're designed to support features that may be added at a later date.
5. In the **Type** list, click **URL**.
6. *(Optional)* Select an **Auto-fill Destination Mapping**. Options include:
   - **Segment ID**: Automatically adds and sends the segment ID to the destination.
   - **Integration Code Value**: Automatically adds and sends the segment integration code to the destination mapping. The integration code is a unique identifier created and used by the customer. It is limited to 255 characters, maximum.
7. Click **Next** to go to the **Configuration** settings or click **Data Export Labels** to apply export controls to the destination.

**Data Export Labels**

This section contains options that apply **data export controls** to a URL destination. Skip this step if you do not use data export controls. To complete this section:

1. Click **Data Export Labels** to expose the controls.
2. Select a label that corresponds to the data export control applied to the destination (see **Add Export Labels to a Destination** for details).
3. Click **Save**.

**Configuration**

This section contains options that let you set a base URL and data delimiters passed in by the URL string. This section is optional. To complete this section:

1. Click **Configuration** to expose the controls.
2. *(Optional)* Select the **Serialize** check box.
   
   This lets you send segments to a destination sequentially rather than making separate calls for each segment. Serialization helps make data transfers efficient. Selecting this check box exposes the URL and delimiter fields. For more information, see *Standard and Serial Key-Value Pairs*.

3. If you select **Serialize**, then you must also configure the URL and delimiter fields described below.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Base URL** | The base part of a standard HTTP URL that does not change. Also, you need to place the `%ALIAS%` placeholder macro in the base URL.  
  **Example**: `http://www.myCompany.com/?%alias%...` |
| **Secure URL** | The base part of a secure HTTPS URL that does not change. Also, you need to place the `%ALIAS%` placeholder macro in the base URL.  
  **Example**: `https://www.myCompany.com/?%alias%...` |
| **Delimiter** | The symbol that separates the segment variables in the URL string. This is usually a comma or semi-colon. Get this information from your destination partner. |

**Segment Mappings**

This section lets you search for and add segments to your destination. To complete this section:

1. Click **Segment Mappings** to expose the controls.
2. In the **Search and Add Segments** box, start typing the name of a segment or click **Browse All Segments** to browse a list of available segments.
3. Click **Add Selected Segments** when you find the segment you want to use. Adding a segment opens the **Edit Mapping** window.
4. In **Edit Mapping**:
   - **Mappings**: Provide the key-value pairs used by the segment.
   - **Start Date** and **End Date**: Choose a start and end date for the destination. If the end date is blank, the destination never expires.
5. Click **Done**.

**Optional Settings for Cookie Destinations**

In **Destination Builder**, the **Configuration section** contains the **Cookie Domain** and **Publish Data To** fields. These let you create rules to determine if a destination sets a cookie or returns a cookie. Cookie Domain and Publish
Data To work independently of each other and are optional. You can create a cookie destination without using either of them.

**Cookie Domain: Syntax and Examples**

<table>
<thead>
<tr>
<th>Cookie Domain</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Syntax**    | The *Cookie Domain* field accepts a simple text string that lets you set cookies on a specified domain or all domains. When using this feature:  
  • Set only one domain for each cookie destination. Do not type multiple domains in the *Cookie Domain* field. Create another Destination instead.  
  • Do not use wildcard characters.  
  Leave the *Cookie Domain* field blank to set a cookie on all domains. This is the default setting.  
  To set cookies on a specific domain and sub-domains:  
  • Type the name of the domain in the *Cookie Domain* field.  
  • Start the domain name with a period. For example, `.somedomain.com`.  
  • The `http://www` prefix is not required. | |
| **Example**    | As a simple example, let’s say we have a fictitious site called sports.com. Sports.com has domains for golf, baseball, and football. To set a cookie in all the sports domains, you would type that in the *Cookie Domain* box as shown below: |
|               | ![Cookie Domain: .sports.com](image) |
|               | This tells Audience Manager to set a cookie in any domain that contains the pattern *something*.sports.com. See below for a more complex set of examples. |

**Complex Cookie Domain Examples**

These examples show you if Audience Manager will set a cookie based on how the *Cookie Domain* option is configured.

<table>
<thead>
<tr>
<th>Website</th>
<th>Cookie Domain: .sports.com Cookie Set</th>
<th>Cookie Domain: .golf.sports.com Cookie Set</th>
<th>Cookie Domain: Blank Cookie Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>sports.com</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>golf.sports.com</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>baseball.sports.com</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>
### Publish Data To

The **Publish Data To** settings return a cookie if the domain meets the criteria set by the options you select. Options include:

- **All of our domains:** (Default) Returns a cookie for any domain.
- **Only the selected domains:** Returns a cookie only for the domains selected in the domains list.
- **All of our domains except the selected domains:** Prevents selected domains from receiving a cookie. All other domains can receive a cookie.

### Add or Edit Segments for Server-to-Server Destinations

You can only add or edit segments for a server-to-server (s2s) destination. You cannot create s2s destinations with Destination Builder. Contact your consultant to set up s2s destinations. Follow these instructions to add or edit segments for a s2s destination.

**To add or edit segment mappings for an s2s destination:**

1. Go to **Manage Data > Destinations** and find the s2s destination you want to work with.
2. In the **Action** column, click the pencil icon to edit the destination.
3. In the **Search and Add Segments** box, start typing the name of a segment or click **Browse All Segments** to browse a list of available segments.
4. Click **Add Selected Segments** when you find the segment you want to use. Adding a segment opens the **Edit Mapping** window.
5. In **Edit Mapping:**
   - **Mappings:** Set a value for the *key-value pair* used by this destination.
   - **Start Date** and **End Date:** Choose a start and end date for the destination. If the end date is blank, the destination never expires.
6. Click **Save** and then click **Done**.

### Add Data Export Labels to a Destination

Data Export Labels work with the Export Controls you set on a data source. Data Export Labels prevent you from adding restricted traits to a segment and from sending segment data to a destination. You can set multiple export labels to a new or existing cookie or URL destination.

**Note:** To add an export label, you need administrator permissions or sufficient privileges to create or edit a destination.

**To add export labels to a destination:**

1. Click **Manage Data:**
• For new destinations: Click **Create New Destination**. Complete the **Basic Information** section before you select a data export label. See *Configure a Cookie Destination* or *Configure a URL Destination* for information.

• For existing destinations: Use the Search box to find your destination or scroll through the list and click on the destination name to open it.

2. Select a Data Export Label. Leave the check boxes blank if you don’t want to set any export restrictions. Export labels include the following options:

   • This destination may enable a combination with personally identifiable information (PII)
   • This destination may be used for on-site ad targeting
   • This destination may be used for off-site ad targeting
   • This destination may be used for on-site ad personalization

   **Important:** Export restrictions will not work unless you set a matching export control on a data source.

3. Click **Save**.

### Destination Serialization

A serialized destination combines multiple traits into a single string and sends that information to a destination.

Serialized data transmission helps improve efficiency because multiple traits fire sequentially, rather than in parallel. This provides the destination server with enough time to receive, process, and return data before responding to additional requests. See *Standard and Serial Key-Value Pairs* for more information.

### Supported Destinations

In Audience Manager, you can serialize and send data to just about any destination you want to work with. However, before using this feature, you will need to know the destination URL and where to place some required or optional macros. Obtain the information about macro placement from your destination partner. See *Destination Macros Defined* for more information.

### Standard and Serial Key-Value Pairs

A key-value pair consists of related elements: A key, which is a constant that defines the data set (e.g., gender, color, price) and a value, which is a variable that belongs to the set (e.g., male/female, green, 100). Destination Builder sends data formatted as key-value pairs.

#### Basic Key-Value Pairs

Fully formed, a basic set of key-value pair could look like these:

• gender = male
• color = green
• price > 100

#### Standard and Serial Key-Value Pairs

Destinations accept key-value data in **standard** or **serialized** format.

• **Standard key-value pairs:** Formats destination data into separate key-value pairs. Each key is stated explicitly, even when used again to define a different value.

• **Serialized key-value pairs:** Condenses multiple values into a single key-value pair. In a serialized key-value pair, a special indicator separates the values within the key-value set.
Both standard and serialized key-values can contain single or multiple values. The following table provides examples of standard and serial key-value formats.

<table>
<thead>
<tr>
<th>Formatting</th>
<th>Single Key-Value Pairs</th>
<th>Multiple Key-Value Pairs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>x = 1 &amp; x = 2</td>
<td>x = 1 &amp; x = 2 &amp; y = 3 &amp; y = 4</td>
</tr>
<tr>
<td>Serialized</td>
<td>x = 1 ; 2</td>
<td>x = 1 ; 2 &amp; y = 3 ; 4</td>
</tr>
</tbody>
</table>

**Delimiters and Separators**

The characters that separate values within and between keys and values are known as *delimiters* and *separators*. These become particularly important when you send segments to a destination in a serial format. Serialization lets you pass in multiple values with a single key and combine key-value pairs. Delimiters and separators are defined as follows:

- **Key-value separator**: Separates a key and value within a key-value pair.
- **Key-value delimiter**: Separates sets of key-value pairs.
- **Serial separator**: Separates multiple values within sets of serialized key-value pairs.

**Examples**

With *Destination Builder* you can format key-value data in several different ways. Let's take a look at some examples of each type.

<table>
<thead>
<tr>
<th>Key-Value Pair Examples</th>
<th>Example</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Standard single key** | X = 1 & X = 2 | A simple set of key-value pairs. The example contains these elements:  
- Key: X  
- Values: 1, 2  
- Separator: =  
- Key-value delimiter: & |
| **Multiple key-value pairs** (non-serial) | X = 1 & X = 2 & Y = 3 & Y = 4 | A set of multiple key-value pairs that pass in values with separate key-value sets. The example contains these elements:  
- Keys: X, Y  
- Values: 1, 2, 3, 4  
- Separator: =  
- Key-value delimiter: & |
| **Serial single key** | X = 1 ; 2 ; 3 | A key-value set that passes in multiple values with a single key. Because this key has multiple values, it is known as a serialized key-value pair. The example contains these elements:  
- Key: X |
### Key-Value Pair Examples

<table>
<thead>
<tr>
<th>Description</th>
<th>Example</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Multiple key-value pairs** (serial) | X = 1 ; 2 & Y = 3 ; 4 | A set of multiple key-value pairs that pass in multiple values on separate keys. The example contains these elements:  
• Keys: X, Y  
• Values: 1, 2, 3, 4  
• Separator: =  
• Delimiter: &  
• Serial separator: semi-colon |

### Destination Macros Defined

Destination Macros Defined

Describes the macros you can add to a destination URL.

When creating a URL destination, you can insert the following macros into the URL string. Check with your data/destination partner about proper macro placement within the destination URL.

**Note:** Macros are optional unless indicated otherwise. Italics indicates a variable placeholder.

<table>
<thead>
<tr>
<th>Macro</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>%alias%</td>
<td>Required. Defines the location of the mapped segment value in a destination URL. Usually this is the Segment ID, but could also be the integration code.</td>
</tr>
<tr>
<td>%did%</td>
<td>Inserts the user’s Audience Manager ID into the destination URL.</td>
</tr>
</tbody>
</table>
| %dpid_{data source id}% | The *data source id* corresponds to the identifier for a data source passed in to the macro.  
Let's look at how this works in a simple example. In this case, we have an Audience Manager partner with the following IDs and conditions:  
• Data source ID: 1  
• An internal customer ID: CustomerABC  
• Declared ID: The partner wants to pass in these values as the declared ID 1:CustomerABC.  
To do this with the %dpid_{data source id}%, the Audience Manager partner would format the macro like this:  
%dpid_1% |
<table>
<thead>
<tr>
<th>Macro</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The macro will replace 1 with <code>CustomerABC</code>.</td>
</tr>
<tr>
<td><code>%http_proto%</code></td>
<td>Detects the protocol used in the parent webpage and inserts it into the destination URL. For example:</td>
</tr>
<tr>
<td></td>
<td>• if the webpage is <code>https://aam_client.com</code>, this macro will be replaced with <code>https://url-destination.com</code></td>
</tr>
<tr>
<td></td>
<td>• if the webpage is <code>http://aam_client.com</code>, this macro will be replaced with <code>http://url-destination.com</code></td>
</tr>
<tr>
<td><code>%mcid%</code></td>
<td>Inserts the Experience Cloud ID into the destination URL.</td>
</tr>
<tr>
<td><code>%region%</code></td>
<td>Inserts the Data Collection Server (DCS) region into the destination URL. In order to minimize latency, when the visitor makes an HTTP call to Audience Manager, they are being redirected to the closest DCS datacenter. This is achieved through DNS, which is able to detect the visitor’s location and direct them to the appropriate datacenter.</td>
</tr>
<tr>
<td><code>%rnd%</code></td>
<td>Performs a cache busting function by inserting a random number into the destination URL. This prevents browsers from serving cached content.</td>
</tr>
<tr>
<td><code>%timestamp%</code></td>
<td>Inserts a UNIX timestamp into the destination URL to prevent browsers from serving cached content.</td>
</tr>
</tbody>
</table>

**Cache Busting with Destination Macros**

The `%rnd%` and `%timestamp%` macros insert unique values into a URL string to prevent browser caching.

**Cache Busting with `%rnd%` and `%timestamp%`**

Browsers cache (save) save frequently requested content in memory. When a page loads, saved content serves from the cache rather than from a remote server. This process helps maintain efficient download times because data serves locally rather than from another location. However, because caching does not require a server call, it can skew reporting by artificially lowering the number of unique requests.

Cache busting prevents browsers from saving and reusing content. This technique uses code that inserts a random number or time stamp into a URL string, which makes it look unique to the browser. As a result, each HTTP call is counted as a separate request to the server. Forcing a new server call for each request helps maintain reporting accuracy and reduce discrepancies. Audience Manager provides two macros for cache bursting:

- `%rnd%`: Inserts a random number into a URL.
- `%timestamp%`: Inserts the Unix date/time into a URL.
Comparing %rnd% and %timestamp%

Both macros prevent caching, but %rnd% may be more efficient. For example, with %timestamp%, if several users view a page simultaneously they’ll get the same date/time value. As a result, the URL is not unique and multiple calls are counted only once. However, %rnd% generates a unique numeric value for each call (even when users see the same page simultaneously). This means the URL string contains different values and is counted as unique.

get_aamCookie Code

Code required by DART Enterprise (and other destination types) to capture the Audience Manager unique user ID (UUID) value.

Define this function at the top of the page, ideally within the <head> code block.

```javascript
<script type="text/javascript">
function get_aamCookie (c_name)
{
  var i,x,y,ARRcookies=document.cookie.split(";");
  for (i=0;i<ARRcookies.length;i++)
  {
    x=ARRcookies[i].substr(0,ARRcookies[i].indexOf("="));
    y=ARRcookies[i].substr(ARRcookies[i].indexOf("=")+1);
    x=x.replace(/\s+/g,"");
    if (x==c_name)
    {
      return unescape(y);
    }
  }
}
</script>
```

Profile Link

Profile Link works with cross-device data sources to identify and collect traits for authenticated site visitors. It includes the Profile Merge Rules feature. With Profile Merge Rules you get control over the data sets used for segmentation and can target a person accurately across multiple devices.

Contents

• Data collection and targeting with anonymous and authenticated profiles
• Advantages
• Getting started

Data collection and targeting with anonymous and authenticated profiles

Typically, audience segmentation and targeting relies on data collected from all users on a device. Data collection and targeting based on device-level data has some disadvantages. For example, you cannot distinguish between multiple users who share a device or accurately target users across multiple devices. Device-centered data collection is no longer sufficient for digital marketing campaigns or cross-device targeting.
**Profile Link** fundamentally changes how Audience Manager collects data and segments users for targeting. It lets you work with 2 distinct types of profiles, a device profile and an authenticated profile.

<table>
<thead>
<tr>
<th>Profile type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Device profile</td>
<td>A device profile is tied to an ID for a given device such as a cookie ID or mobile device ID. It includes:</td>
</tr>
<tr>
<td></td>
<td>• Rule-based traits realized when a user is not authenticated.</td>
</tr>
<tr>
<td></td>
<td>• Onboarded traits tied to a device ID such as cookie-based, third-party data.</td>
</tr>
<tr>
<td>Authenticated profile</td>
<td>The authenticated profile is tied to a user ID passed in when a person logs in to your site. It includes:</td>
</tr>
<tr>
<td></td>
<td>• Rule-based traits collected across devices when a user is authenticated.</td>
</tr>
<tr>
<td></td>
<td>• Onboarded traits in an offline file linked to the same user ID.</td>
</tr>
</tbody>
</table>

These different profiles control the data you can use for segmentation. For example, with an authenticated profile, you can build accurate segments based on data from multiple devices for a single person. This means you can deliver a consistent brand experience to customers across multiple devices. Additionally, cross-device authentication allows Audience Manager to map the different platforms a person uses for their online activities. This called the **Profile Merge Device Graph**.
Advantages

With Profile Link you can:

• Target users based on authenticated profiles, anonymous profiles, or combinations of both.
• Target a specific customer across their devices.
• Build a device graph based on deterministic data.
• Fine tune the data in your segments based on different profiles.
• Gain additional insight into your audience.

Getting started

See the following sections and the FAQ for more information about Profile Merge Rules.

Profile Merge Rules Dashboard

Create and manage all your merge rules from the dashboard. You can create a maximum of 3 Profile Merge Rules. The Profile Merge Rules dashboard provides a unified workspace that lets you manage your Profile Merge Rules. The dashboard is located at Manage Data > Profile Merge Rules. Your rules dashboard could look similar to the example shown below.

When working with Profile Merge Rules, you can:

• Create a maximum of 3 rules from your cross-device data sources. See Create a Cross-Device Data Source.
• Designate a default merge rule. Segment Builder automatically applies the default rule to any new segments you create.
• Apply Data Export Controls to a merge rule. Data Export Controls prevent you from sending data to destinations when that would violate data privacy or use agreements.
• Track the average number of devices for each user.
• Work with basic controls to create, edit, and delete rules. Only administrators can manage rules, but other users can view them and apply them to segments. See Profile Merge Rule Options Defined and General Use Cases for Profile Merge Rules.
Getting Started With Profile Merge Rules

To create Profile Merge Rules review and complete the steps in each of the procedures described in this section.

Create a Cross-Device Data Source

To create a cross-device data source, go to Manage Data > Data Sources > Add New and complete the steps for each section described here. Administrator permissions are required to create or edit a cross-device data source.

Tip: See Data Source Settings and Menu Options for descriptions of these different controls.

Data Source Details

To complete the Data Source Details section:

1. Name the data source.
2. (Optional) Describe the data source. A concise description helps you define the role or purpose of the data source.
3. Provide an integration code. An integration code is your own, unique ID for this data source.
4. In the ID Type list, select Cross Device.
5. In the ID Definition list, select an option that defines the data source type. Options include:
   - Person: An ID that defines a single person. This ID can be mapped to multiple Audience Manager IDs.
   - Household: An ID that defines a group of people. This ID can be mapped to multiple Audience Manager IDs.

Data Export Controls

Data Export Controls are optional classification rules you can apply to a data source and destination. They prevent you from sending data to a destination when that action violates a data privacy or use agreement. Skip this section if you do not use Data Export Controls.

Data Source Settings

Data Source Settings section provides multiple options, but these 2 are important for creating a cross-device data source:

- Use as Authenticated Profile: Selected by default, this setting lets you build a Profile Merge Rule with your own, authenticated data.
- Use as a Device Graph: This control is available only to accounts listed as a data provider. Selecting this check box creates your data source as a device graph and lets you share it with other Audience Manager customers. Work with your Audience Manager consultant to get set up as a data provider and to specify which customers this Data Source should be shared with. Your consultant will provision your account and device graph sharing through an internal provisioning processes.

The text fields associated with these settings let you rename the Data Source with an alias that appears in the Profile Merge Rule options. For example, if you add an alias to Use as Authenticated Profile, that name appears in the Authenticated Profile Options list. If you add an alias to Use as a Device Graph, that name appears in the Device Options list.
Create a Profile Merge Rule

To create a Profile Merge Rule, go to Manage Data > Profile Merge Rules > Add New Rule and complete the steps for each section described here. You can create up to 3 merge rules after setting up a cross-device data source. Administrator permissions are required to create, edit, or delete a rule. All users can view and use existing Profile Merge Rules.

Prerequisites: A cross-device data source is required to build a Profile Merge Rule. See Create a Data Source.

Tip: See Profile Merge Rule Options Defined for descriptions of these different controls.

Basic Information

To complete the Basic Information section:

1. Name the Profile Merge Rule.
2. (Optional) Describe the Profile Merge Rule. A concise description helps you define the role or purpose of your rule.
3. (Optional) Select Set as default if you want to make this the default Profile Merge Rule. New segments are automatically associated with the default rule.

Data Export Controls

Data Export Controls are optional classification rules you can apply to your Profile Merge Rule. They prevent you from sending data to a destination when that action violates a data privacy or use agreement. Skip this section if you do not use Data Export Controls.

Profile Merge Rule Setup

To complete the Profile Merge Rule Setup section:

1. Select an Authenticated Option. Options include:
   
   • No Authenticated Profile
   • Current Authenticated Profile
   • Last Authenticated Profile

2. Select an Authenticated Profile Option (up to 3, maximum). These are the cross-device data sources you have created previously.

3. Select a Device Option. Options include:
   
   • No Device Profile
   • Current Device Profile
   • Profile Link Device Graph
   • Device Co-op

4. Click Save.

Next Steps

Review and complete the procedures described in Configure Merge Rule Code.
Configure Merge Rule Code

Follow these instructions to set up the Visitor ID Service, DIL, and mobile SDK code to work with your merge rules.

Prerequisites: You must set up a cross-device data source and profile merge rules before completing these procedures.

Contents:

• For Visitor ID Service Customers
• Legacy DIL
• Configure SDKs

For Visitor ID Service Customers

The Visitor ID Service and the latest version of DIL are recommended when working with Profile Merge Rules. However, you don't have to use the Visitor ID Service to work with this feature. If you’re just using DIL, see the legacy DIL section below.

Configure the Set Customer ID Function

When working with the Visitor ID Service, the setCustomerIDs function passes declared IDs to Audience Manager. To use a profile merge rule, you must modify setCustomerIDs to use the integration code specified when you created a cross-device data source. For example, say you've created a cross-device data source with the integration code my_datasource_ic. To pass in a declared ID, you would add the integration code to the visitor ID function as shown in the modified code sample below.

<table>
<thead>
<tr>
<th>Generic code sample</th>
<th>Modified code sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>visitor.setCustomerIDs({&quot;userid&quot;:{  &quot;id&quot;:&quot;12345&quot;,  &quot;authState&quot;:Visitor.AuthState.AUTHENTICATED})</td>
<td>visitor.setCustomerIDs({&quot;my_datasource_ic&quot;:{  &quot;id&quot;:&quot;12345&quot;,  &quot;authState&quot;:Visitor.AuthState.AUTHENTICATED})</td>
</tr>
</tbody>
</table>

For more information, see and Customer IDs and Authentication States.

Configure DIL.create function

The latest versions of DIL now automatically pick up the declared ID from the visitorService function in DIL.create (see Declared ID Variables). Check your DIL.create function to make sure this is set up properly as shown in the code sample below.

```javascript
var vDil = DIL.create({
  partner:"partner name",
  visitorService:{
    namespace:"INSERT-MCORG-ID-HERE"
  } });
```

In the namespace key-value pair, the MCORG variable is your Experience Cloud Organization ID. If you don't have this ID, you can find it in the Administration section of the Experience Cloud dashboard. You need administrator permissions to view this dashboard. See Administration: Core Services.

Configure SDKs

See the Configure SDKs section below.
Legacy DIL

If you’re not using Visitor ID Service yet, you really ought to. But, we understand that moving to new code requires careful thought and testing. In these cases, check your `DIL.create` function to make sure this is set up properly as shown in the code sample below.

```javascript
DIL.create({
    partner: "partner name",
    declaredId: {
        dpuuid: dpuuid,
        dpid: dpid
    }
});
```

For more information, see the legacy DIL section in *Declared ID Variables*.

**Configure SDKs**

See the *Configure SDKs* section below.

**Configure SDKs**

Check the methods in your SDK code that let you pass declared IDs from Android and iOS mobile devices. The variable names for the Android and iOS code libraries are the same:

- *dpid*: The cross-device data source ID.
- *dpuuid*: The declared ID (i.e., the user ID).

<table>
<thead>
<tr>
<th>Device type</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Android</td>
<td><code>setDpidAndDpuuid</code></td>
</tr>
<tr>
<td></td>
<td><strong>Syntax:</strong></td>
</tr>
<tr>
<td></td>
<td><code>public static void setDpidAndDpuuid(String dpid, String dpuuid);</code></td>
</tr>
<tr>
<td></td>
<td><strong>Example:</strong></td>
</tr>
<tr>
<td></td>
<td><code>AudienceManager.setDpidAndDpuuid(&quot;myDpid&quot;,&quot;myDpuuid&quot;);</code></td>
</tr>
<tr>
<td>iOS</td>
<td><code>audienceSetDpid:dpuuid</code></td>
</tr>
<tr>
<td></td>
<td><strong>Syntax:</strong></td>
</tr>
<tr>
<td></td>
<td><code>+ (void) audienceSetDpid:(NSString *)dpid</code></td>
</tr>
<tr>
<td></td>
<td><code>    dpuuid:(NSString *)dpuuid;</code></td>
</tr>
<tr>
<td></td>
<td><strong>Example:</strong></td>
</tr>
<tr>
<td></td>
<td><code>[ADBMobile audienceSetDpid:@&quot;290&quot;</code></td>
</tr>
<tr>
<td></td>
<td><code>    dpuuid:@&quot;99301393923940&quot;];</code></td>
</tr>
</tbody>
</table>

See also, *Audience Manager Methods for Android* and *Audience Manager Methods for iOS*.

**Profile Merge Rule Options Defined**

The merge rule options let you control the type of data Audience Manager uses for segmentation. A merge rule can include device profiles mapped by the Profile Link device graph, the Adobe Experience Cloud Device Co-op, and/or other, third-party device graph providers who are integrated with Audience Manager. You can create a maximum of 3 Profile Merge Rules.
You build a **Profile Merge Rule** by making a selection from these options:

- **Authenticated Options**
- **Authenticated Profile Options**
- **Device Options**

**Authenticated Options**

The **Authenticated Options** let you select un-authenticated and authenticated users and leverage their cross-device profile for segmentation. These options help you identify and reach specific users on a shared device. For more information on anonymous and authenticated users, see [Visitor Authentication States in Audience Manager](#).

<table>
<thead>
<tr>
<th>Authenticated Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Authenticated Profile</td>
<td>Tells Audience Manager not to use data collected from authenticated users.</td>
</tr>
<tr>
<td>Current Authenticated Profile</td>
<td>Tells Audience Manager to read and write data to the authenticated profile if a visitor has logged in to your site.</td>
</tr>
<tr>
<td>Last Authenticated Profile</td>
<td>Tells Audience Manager to read data from the authenticated profile of the user who last logged in on the device. When selected, Audience Manager will not write new trait data to the authenticated profile if the user is anonymous. Upon authentication, new trait data gets written to the user's authenticated profile.</td>
</tr>
</tbody>
</table>

**Authenticated Profile Options**

The **Authenticated Profile Options** lists your cross-device data sources. These options use the names you provided when you created a cross-device data source (see [Create a Cross-Device Data Source](#)). You can select up to 3 cross-device data sources to use with each profile rule. The **Authenticated Profile Options** are available when you choose **Current Authenticated Profile** or **Last Authenticated Profile**.

**Device Options**

The **Device Options** let you select the type of **device profile** used by a **Profile Merge Rule**. A device profile is composed of traits collected by users as they anonymously browse the web. At a minimum, a profile merge rule includes an authenticated option and a device option.

<table>
<thead>
<tr>
<th>Device Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Device Profile</td>
<td>Tells Audience Manager not to use the traits contained in the anonymous profile for segmentation.</td>
</tr>
<tr>
<td>Current Device Profile</td>
<td>Tells Audience Manager to use the anonymous device profile for segmentation.</td>
</tr>
<tr>
<td>Profile Link Device Graph</td>
<td>Tells Audience Manager to read the profiles from the last 3 devices the user has authenticated from. This device graph is built on your own, first-party data in Audience Manager. It is ideal for customers who have a high level of authentication across their</td>
</tr>
<tr>
<td>Device Option</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Digital Properties</td>
<td>The Profile Link device graph is updated in real time. This option is available when you select Current Authenticated Profile or Last Authenticated Profile. See also, Profile Link Device Graph Use Cases.</td>
</tr>
<tr>
<td>Co-op Device Graph</td>
<td>Tells Audience Manager to merge device profiles using the links provided by the Experience Cloud Device Co-op.</td>
</tr>
<tr>
<td></td>
<td>The Device Co-op is a digital cooperative where participating customers share device link information. The Device Co-op processes this data in a device graph. A device graph links devices together form device clusters. These links are built from probabilistic and deterministic data. The clusters represent a group of devices used by an unknown person. The Device Co-op shares these clusters among its members, which helps them deliver valuable and consistent cross-device experiences to their customers. For more information about the Device Co-op, see the:</td>
</tr>
<tr>
<td></td>
<td>• Device Co-op Overview</td>
</tr>
<tr>
<td></td>
<td>• Membership Requirements</td>
</tr>
<tr>
<td></td>
<td>• Device Graph: Internal Processes and Output</td>
</tr>
<tr>
<td></td>
<td>• Audience Manager and External Device Graphs (PDF download).</td>
</tr>
<tr>
<td>Third-Party Device Graph Options (Person and Household)</td>
<td>These options let you build merge rules based on device graph technology provided by a third-party vendor. A third-party device graph provides:</td>
</tr>
<tr>
<td></td>
<td>• Probabilistic and/or deterministic data.</td>
</tr>
<tr>
<td></td>
<td>• Data at the person or household level.</td>
</tr>
<tr>
<td></td>
<td>To use these options, you must be a customer of a device graph provides who is already integrated with Audience Manager. Contact your account manager for more information or to get started. See also External Device Graph Use Cases and Audience Manager and External Device Graphs (PDF download).</td>
</tr>
</tbody>
</table>

**General Use Cases for Profile Merge Rules**

Profile Merge Rules options let you expand or tighten audience focus on specific audiences based on business needs or goals. These general use cases explore how to use available options and create merge rules for individual, household, and cross-device targeting. Currently, Profile Merge Rules work with real-time destinations only.
Tip: For definitions and descriptions of these Merge Rule settings, see Profile Merge Rule Options Defined.

Contents:

- Focus targeting
- Expand targeting
- External Device Graph Options

Focus targeting
User authentication to a website should trigger a declared ID call to Audience Manager. After this event, Audience Manager writes trait data to (and reads from) an authenticated profile. The authenticated profile lets Audience Manager:

- Write traits to the authenticated profile specific to a particular user.
- Identify and differentiate between multiple device users for segmentation.

Reach authenticated users
The authenticated profile options create rules let you reach users who are logged on to a website or app. For example, a financial services company would use this option to target authenticated users with credit card upgrade offers or specialized service offers based on income or account activity. Another example would be an airline targeting authenticated frequent fliers with deals based on accrued mileage.

To create a rule that reaches authenticated users, select **Current Authenticated Profile + No Device Profile**. These options tell your rule to use an authenticated profile only. This rule will ignore data in the anonymous device profile.
Reach users based on previous authentication state

These options reach specific users when they’re browsing but not logged on. You can do this with options that rely on inferred user-level targeting. Inferred targeting helps you reach people who are not explicitly authenticated to your site but may be browsing online. It works by reading (but not writing) data from the last authenticated profile. And, to help keep the authenticated profile clean, Audience Manager writes new trait qualifications to the device profile instead of the authenticated profile. For example, say you’re a marketer that wants to test different offers with existing customers who are not logged on to your site or app. As a marketer, you can test these ads with current, un-authenticated customers to see which offers get the most response.

Rules that reach users based on previous authentication include:

- Last Authenticated Profiles + Current Device Profile
- Last Authenticated Profiles + Profile Merge Device Graph

Expand targeting

Along with rules that help reach specific customers, marketers also need rules that increase the size of data sets available for targeting. Profile Merge lets you do this with the device profile options. The device options expand the data set eligible for segmentation because they draw on traits realized while a user was in an unauthenticated state on the device. For example, this could be useful when you’re trying to reach everyone in a household (household-level targeting) or all the users who share a device. A use case for these options could include advertising a family vacation offer. In this case, you’ll want to reach everyone using a device or in a household.

To create a rule that expands the targeting data set, select Current Authenticated Profiles + Current Device Profile.

External Device Graph Options

Choosing a device graph option for a Profile Merge rule depends on conditions unique to your digital properties and business goals. These general guidelines can help you understand when to use one type of graph vs another. Note, you must be a member of the Adobe Experience Cloud Device Co-op or have a contractual relationship with an external device graph to use these options. Refer to the table below for general guidance on when to choose a device graph option. For specific use cases, see Profile Link Device Graph Use Cases and External Device Graph Use Cases.

<table>
<thead>
<tr>
<th>Device Graph Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profile Link</td>
<td>Profile Merge rules built with the Profile Link option are ideal for:</td>
</tr>
<tr>
<td></td>
<td>• Digital properties that have a high-level of customer authentication.</td>
</tr>
<tr>
<td></td>
<td>• Focused, low-reach campaigns. The Profile Link device graph is built on deterministic data only. This pool of device profiles will always be smaller relative to the pool of unauthenticated users and devices.</td>
</tr>
<tr>
<td></td>
<td>• Use cases where customers need to be in an authenticated state to qualify for segmentation.</td>
</tr>
<tr>
<td>External Device Graph Options</td>
<td>Profile Merge rules built with the Experience Cloud Device Co-op or any external device graph integrated with Audience Manager are ideal for:</td>
</tr>
<tr>
<td></td>
<td>• Digital properties that have a low-level of customer authentication.</td>
</tr>
<tr>
<td></td>
<td>• Broad, high-reach brand campaigns.</td>
</tr>
<tr>
<td>Device Graph Type</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------</td>
</tr>
<tr>
<td></td>
<td>• Use cases where customers do not need to be in an authenticated state to qualify for segmentation.</td>
</tr>
</tbody>
</table>

**Tip:** The Device Co-op is your best option if you’re an Experience Cloud customer with low authentication and no relationship with any device graph provider.

### Profile Link Device Graph Use Cases

Recommendations and use cases for segment retargeting and personalized segment qualification with the **Profile Link** device graph.

**Contents:**

- **Recommendations**
- **Retargeting Use Case and Profile Merge Rule Configuration**
- **Personalization Use Case and Profile Merge Rule Configuration**

**Recommendations**

Consider the **Profile Link** device graph for campaigns that:

- Have a high-level of authentication across their digital properties. Use an external device graph option if you have a small amount of authenticated users.
- Require accurate targeting of known audiences. The Profile Link device graph is built using first-party, authenticated data.
- Target known audiences across their authenticated and unauthenticated states in real-time.
Retargeting Use Case and Profile Merge Rule Configuration

Retarget audiences which have previously authenticated on-site and/or in-app across multiple devices. Segments can be composed of the following profiles:

• Last known authenticated device profile.
• Anonymous activity across each device profile.

💡 Note: Trait information from either profile type can be used to create the segment.

Retargeting Example

Let’s take a look at how this works with a sample credit card company. This example uses trait information collected from anonymous activity seen across 3 device profiles only.

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Description</th>
</tr>
</thead>
</table>
| Conditions | This use case assumes these conditions:  
  • A user has 3 devices and has been the last person to authenticate on the credit card company site/app on all 3 devices.  
  • On the first device, a user in an unauthenticated state views an offer for a premium credit card.  
  • On the second device, a user in an unauthenticated state views the premium credit card benefits page.  
  • On the third device, a user in an unauthenticated state views the premium credit card fees and rates page. |
<table>
<thead>
<tr>
<th>Use Case</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results</td>
<td>Given these conditions, Audience Manager:</td>
</tr>
<tr>
<td></td>
<td>• Merges the anonymous, unauthenticated activity collected from all 3 devices using the last authenticated profile on the current device.</td>
</tr>
<tr>
<td></td>
<td>• Evaluates the anonymous user for segment qualification based on:</td>
</tr>
<tr>
<td></td>
<td>• A combination of anonymous activity across all 3 devices.</td>
</tr>
<tr>
<td></td>
<td>• The last authenticated profile on the current device.</td>
</tr>
<tr>
<td></td>
<td>• Sends the segment to any real-time destination for retargeting across all 3 devices.</td>
</tr>
</tbody>
</table>

**Retargeting Profile Merge Rule Example**

To set up retargeting with Profile Link, your **Authenticated Options** and **Device Options** should look like the rule configuration shown below. The **Authenticated Profile** options will be different from this example because these settings use the names of your cross-device data sources.

![Profile Merge Rule Setup](image)

**Personalization Use Case and Profile Merge Rule Configuration**

Personalize the experience for authenticated audiences on-site and/or in-app based on activity across multiple devices. Segments can be composed of the following profiles:

• Currently authenticated device profile.
• Anonymous device profiles.

💡 **Note**: A user must be in an authenticated state to qualify for a segment.
Personalization Example

Let’s take a look at how this works with a sample credit card company.

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Conditions** | Our use case assumes these conditions:  
• A user has 3 devices and has been the last person to authenticate on the credit card company site/app on all 3 devices.  
• On the first device, a user in an unauthenticated state views an offer for a premium credit card.  
• On the second device, a user in an unauthenticated state views the premium credit card benefits page.  
• On the third device, a user in an unauthenticated state views the premium credit card fees and rates page.  
• On any of these devices, the customer authenticates (by signing in) to check their balance. |

| Results | Given these conditions, Audience Manager:  
• Merges the anonymous, unauthenticated activity collected from all 3 devices using the current authenticated profile. The authenticated profile provides a common identifier across each device.  
• Evaluates the authenticated user for segment qualification based on:  
  • A combination of anonymous activity across all 3 devices.  
  • Their current authenticated profile.  
• Sends the segment to any real-time destination to create a personalized browsing experience for the user while authenticated on their current device.  

💡 Note: This qualifies all 3 devices for the segment, regardless of authentication state. This result may cause privacy concerns if these are shared devices. |

Personalization Profile Merge Rule Example

To set up personalization with Profile Link, your Authenticated Options and Device Options should look like the rule configuration shown below. The Authenticated Profile options will be different from this example because these settings use the names of your cross-device data sources.
For more information about how these device graph processes work, download our PDF, *Audience Manager and External Device Graphs*.

**External Device Graph Use Cases**

Recommendations and use cases for prospecting, retargeting, and personalization for unknown users with an external device graph. An external device graph is defined as a device graph that is separate from Audience Manager. This includes the Adobe Experience Cloud Device Co-op and other integrations Adobe has with third-party deterministic or probabilistic device graph companies.

Contents:

- **Recommendations**
  - Prospecting/Branding Use Case
  - Retargeting or Site Personalization Use Case
  - Profile Merge Rule Options for External Device Graph Use Cases

**Recommendations**

Consider the Experience Cloud Device Co-op and third-party device graph options for campaigns that:

- Have a low level of authentication across their digital properties. Use the *Profile Link device graph option* if you have a large number of authenticated users.
- Target large audiences. The Experience Cloud Device Co-op and third-party device graphs contain authenticated and un-authenticated data.
- Segment authenticated and/or unauthenticated visitors at the individual and household level.
Prospecting/Branding Use Case

A branding campaign is designed to reach as many people as possible. It places few limits on segment qualification. But, these campaigns can waste budget and impressions by constantly targeting people who see your content multiple times and don't convert. A Profile Merge rule that uses the Device Co-op or third-party option can help you create an efficient branding campaign. For example, you can add these unknown users to a "not in-market" segment after seeing them across multiple devices for your set frequency cap.

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Description</th>
</tr>
</thead>
</table>
| Conditions | This use case assumes these conditions:  
  • You want to deliver a maximum of 10 impressions to an anonymous user for a specific ad campaign.  
  • A user has multiple devices and may or may not have authenticated to your site.  
  • An anonymous user sees the ad a total of 10 times while browsing in an unauthenticated state on their current device and up to 3 devices linked by an external device graph. |
Use Case | Description
--- | ---
• You have defined an Audience Manager segment to qualify anonymous users after they have seen 10 impressions.

Results
Given these conditions, Audience Manager:
• Merges the anonymous, unauthenticated activity collected from the current device and the 3 devices linked by the external device graph (the ad impressions from each device).
• Evaluates the unauthenticated user for segment qualification based on a combination of anonymous activity across all 3 devices linked by the external device graph and the current device.
• Sends the segment to any real-time destination for use as a suppression segment on the current device and all 3 devices linked by the external device graph.

Retargeting or Site Personalization Use Case
These strategies are designed to bring an unauthenticated or unknown user back to your site or personalize their browsing experience while they're on-site.

Use Case | Description
--- | ---
Conditions
This use case assumes these conditions:
• You want to deliver a personalized on-site and/or off-site experience to an anonymous user based on their activity on your site while in an unauthenticated state.
• A user has multiple devices and may or may not have authenticated to your site.
• A user views multiple pages on your site while browsing in an unauthenticated state on their current device and up to 3 devices linked by an external device graph.
• You have defined an Audience Manager segment to qualify users after they have viewed multiple pages on your site while browsing in an unauthenticated state.

Results
Given these conditions, Audience Manager:
• Merges the anonymous, unauthenticated activity collected from the current devices and the 3 devices linked by the external device graph (the multiple page views from each device).
• Evaluates the unauthenticated user for segment qualification based on a combination of anonymous activity across all 3 devices linked by the external device graph and the current device.
• Sends the segment to any real-time destination to deliver a personalized on-site and/or off-site experience across the current device and all 3 devices linked by the external device graph.

Profile Merge Rule Options for External Device Graph Use Cases
Your merge rule options for these use cases would look similar to the available options shown below. The Authenticated Profile options are deactivated because these settings are only available when you select Current Authenticated Profile or Last Authenticated Profile. Your Device Options will vary depending on the type of device graph setting that you want to use or that is available to you.
Profile Merge Rule Setup
Select the authenticated and device-level option you want this rule to use for segmentation.

For more information about how these device graph processes work, download our PDF, *Audience Manager and External Device Graphs*.

**Report Metrics for Profile Merge Rules**

Profile Link metrics provide data about people and devices that authenticate to your site. The data and graphs in Profile Link update dynamically as you create a merge rules or when you click an existing rule from the **Profile Merge Rules** dashboard. These metrics can include device graph from the Adobe Experience Cloud Device Co-op or other third-party device graph sources.

Contents:

- **Merge Rule Metrics**
- **Device Graph Metrics**
- **Sample Reports**
- **Profile Link Trend Graphs**

**Merge Rule Metrics**

Reports return data in side-by-side bar graphs when your merge rules use data from the *Adobe Experience Cloud Device Co-op* or other, third-party device graphs you may have access to in Audience Manager. This lets you compare your authenticated, first-party data with cross-device data provided by the *Experience Cloud Device Co-op* or another, third-party device graph. For information about data returned by the *Device Co-op*, see *The Device Graph: Internal Processes and Output*. This data is updated daily.
Authenticated Activity shows:
- **Active people**: The number of people who have authenticated to your site for the last 60-days.
- **Total lifetime people**: The total number of people stored in the selected authenticated profile.
- **% Active People**: Shows Active People as a %.

**Authenticated Activity** lets you compare data sources by activity, volume, and percent. It can help you find a data source that has a lot of people and a high percentage of active users. Or, you may find value in comparing data sources with high proportion of active users compared to the total audience size. For example, sometimes a data source with low total lifetime numbers and high activity are more valuable than those with high lifetime results and low activity numbers.

*Note: The Authenticated Activity metrics contain Profile Link data only. This report does not include Device Graph data.*

**Average Devices per Person**
- Shows the average number of devices that are used by visitors who have authenticated to your site for the selected data source.

**Total Devices**
- Shows the total number of devices people have used to authenticate to your site for the selected data source.

**Total People**
- Shows the total number of people who have been identified deterministically for the selected data source.

**Device Graph Metrics**

The **Merge Rules** reports also show data on the total number of people and devices who have visited your site for the selected data source and device graph. These metrics return data based on pre-set time intervals (the look-back period) that vary depending on the device option you select when creating a rule. The following table lists these report intervals for each of the device graph options.

<table>
<thead>
<tr>
<th>Device Graph Option</th>
<th>Report Look-back Interval</th>
</tr>
</thead>
</table>
| **Profile Link**      | • Total People: 60-days  
                        | • Total Devices: 120-days            |
| **Co-op Device Graph**| • Total People: 180-days  
                        | • Total Devices: 180-days            |
| **LiveRamp**          | • Total People: 180-days  
                        | • Total Devices: 180-days            |
### Sample Reports

#### Standard Profile Link Report

A standard **Profile Link** report looks like the following example. Merge rules that use multiple data sources (up to 3, maximum) show graphs in separate tabs for each data source. This merge rule does not include **Device Co-op** data.
A Profile Link report that includes device graph data from the Adobe Experience Cloud Device Co-op or a third-party device graph shows Profile Link and device graph data with side-by-side bar graphs. Placing these graphs adjacent to each other lets you evaluate the benefits of using the Experience Cloud Device Co-op compared to Profile Link by itself. Merge rules that use multiple data sources (up to 3, maximum) show graphs in separate tabs for each data source. As a reminder, the Authenticated Activity graph and metrics do not return data from the Adobe device graph or other, third-party device graphs you may have access to in Audience Manager.

Profile Link Trend Graphs

In addition to the other data visualizations, Profile Link reports include a line graph. The line graph is designed to show you trends over time for your profile rules. Trend graphs (and the other reports) are available when you click a rule from the Profile Merge Rules landing page (Manage Data > Profile Merge Rules). These graphs include device graph data if you’re a member of the Device Co-op or other, third-party device graphs you may have access to in Audience Manager. Click on a trend line to see underlying data.
Profile Merge Rules and Device Un-Segmentation Processes

Unsegmentation describes processes that disqualify and remove device profiles from segments. Your ability to remove a device profile from a segment depends on the device option used to create a Profile Merge Rule. Rules that use the Current Device Profile can remove device profiles from a segment. Rules that use a device graph option require specialized segment logic. And, when using a device graph option, the unsegmentation process takes place in the destination that you’re sending data to rather than in Audience Manager.

Contents:

- Available Device Options
- Current Device Profile Option and Device Unsegmentation
- Device Graph Options and Device Unsegmentation
- Unsegmentation Workaround: AND NOT Use Case
- Unsegment Workaround: Less Than or Equal To Use Case

Available Device Options

As a reminder, the Device Options are available in the Profile Merge Rules Setup section when you create or edit a Profile Merge Rule.
Current Device Profile Option and Device Unsegmentation

Audience Manager can remove a device profile from a segment when your Profile Merge Rule uses the **Current Device Profile** option. Under these conditions, unsegmentation happens when:

- The device profile has been inactive for 120-days. A weekly data cleanup process removes inactive device profiles from your segments.
- The device no longer qualifies for a segment because updates or changes to the device profile disqualify it. This happens when segment qualification criteria change, or you apply an AND NOT operator to a segment rule, or specify *recency and frequency* conditions that use the less than/equal to settings.
Device Graph Options and Device Unsegmentation

Currently, Audience Manager cannot remove a device profile from a segment when your Profile Merge Rule uses a device graph option. This applies to rules created with these Device Options settings:

- Profile Link Device Graph.
- The Adobe device graph.
- Other third-party device graph options available that are available to you.

Unlike the previous case above, using the AND NOT operator or less than/equal to settings won’t remove all of the devices from a segment profile. However, you can unsegment device profiles if you create simple segment rules and apply unsegment logic in the destination that receives your data. The following sections walks you through different unsegmentation use cases.

Unsegmentation Workaround: AND NOT Use Case

This workaround shows you how to unsegment with Boolean AND NOT logic when your Profile Merge Rule uses a device graph option. This procedure uses separate, simple segments mapped to the same destination. In this case, you apply AND NOT logic on the destination rather than creating rules in Segment Builder. To set up unsegment rules for this use case:

1. Create separate, single-trait segments as shown in the following example.

   ![Segment 1](image1)
   ![Segment 2](image2)

2. Map the segments to the same destination. In this case, we’re sending these to Media Optimizer.
3. Set AND NOT logic on the destination (Media Optimizer) rather than in Audience Manager.
If you're not using Media Optimizer, apply AND NOT logic on whatever destination receives these segments.

**Unsegment Workaround: Less Than or Equal To Use Case**

This workaround shows you how to unsegment with the \(< =\) (less than/equal to) recency and frequency settings when your **Profile Merge Rule** uses a device graph option. To set up unsegment rules for this use case:

1. Create a segment that contains a single trait and apply a \(> =\) (greater than/equal to) recency and frequency rule to the trait.
2. Map the segment to a destination. In this case, we’re sending the segment to Media Optimizer.
3. Set NOT logic on the destination (Media Optimizer) rather than in Audience Manager. Use NOT logic to exclude all devices that qualify for this segment from your campaign.

If you’re not using Media Optimizer, apply NOT logic on whatever destination receives these segments.

**Reports**

Use the options under the **Analytics** menu to view the dashboard and various reports.

Individual sections describe available reports, their purposes, and typical uses. All reports are available from the **Analytics** dashboard.

For information describing the time frames when Audience Manager receives information to populate reports, see *How Data Delivery and File Processing Times Affect Reports*.

**Audience Optimization Reports**

The **Audience Optimization** reports use data visualization methods to return information on the destinations in your Audience Manager account. In each report, you can click on almost any data point to return detailed information about that item. *These reports are not available by default.* Contact your Audience Manager consultant to get started.

Contents:
Data Ingestion Methods

You can send data to Audience Manager for use in these reports by either of these methods. Sometimes, customers send data by both methods. This helps ensure your reports contain the most comprehensive and accurate information about a visitor. To use the Audience Optimization reports, your event calls must include all of the parameters listed in the Overview and Mappings for Metadata Files documentation. You can send data via the following methods listed below.

• Pixel calls: To pass the required metadata parameters to Audience Manager see Capturing Campaign Click Data via Pixel Calls and Capturing Campaign Impression Data via Pixel Calls.
• Data files: If you want to use these reports to analyze your own data or data from a source that is not integrated with Audience Manager, you need to create and upload data and metadata files for that data. For more information, see Data Files for Audience Optimization Reports and Data and Metadata Files for Audience Optimization Reports.

Role-Based Access Controls (RBAC)

The type of reports you can view depend on the RBAC group you’re assigned to. See Administration and Create a Group for more information.

RBAC groups must have some data sources set up in order to view the Audience Optimization reports. Your Audience Manager consultant will set up these data sources for you. The more data sources in each RBAC user group, the more data those group members will have access to. At a minimum, your consultant will set up at least one of these data sources:

• Advertiser data source
• Brand data source
• Platform data source

Users that belong to more than one RBAC user group can switch between each group’s view. The displayed data will update to respect the selected group. If your company does not use RBAC, all users will have admin privileges and access to all the data sources (conversion groups).

Conversion Groups

In the Audience Optimization reports, Conversion Groups are synonymous with data sources that contain at least one conversion trait. Data sources which do not contain at least one conversion trait do not appear in the Audience Optimization reports. You can view the conversion traits for conversion groups in the Reported Conversion Traits report.

Available Reports

The available Audience Optimization reports include the following:

Segment Performance Report

The Segment Performance report compares mapped and unmapped segments by impressions and conversion rates. A mapped segment is a segment you create and send to a destination for targeting. An unmapped segment
is a segment that you've created but have not sent to a destination for targeting. Comparing these different segment types within and between reports helps you optimize existing campaigns and find overlooked segments that you may want to send to a destination for targeting.

Contents:

   How to Read Your Mapped Segment Results
   How to Read Your Unmapped Segment Results

How to Read Your Mapped Segment Results

The position of your mapped segments in a report can tell you a lot about which segments are performing well and where you might need to make some adjustments. To read the report, it helps divide the results into 4 sections with imaginary lines (in red) and the categories shown in the sample report below.
The labels in the example and the following table can help you understand segment performance and how to respond to these results.

<table>
<thead>
<tr>
<th>Position</th>
<th>Placement Indicates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Top Left</strong></td>
<td>Good conversion rates.</td>
</tr>
<tr>
<td></td>
<td>You may be able to get more conversions by increasing impressions.</td>
</tr>
<tr>
<td><strong>Bottom Left</strong></td>
<td>Low conversion rates.</td>
</tr>
</tbody>
</table>
You may want to avoid targeting these segments. Segments in this section make great candidates for comparison with those in the unmapped segment results. Some of your unmapped segments may perform better than the segments you’re already targeting.

**Top Right**
Strong performance. Leave these segments alone.

**Bottom Right**
Low conversion rates and high impressions.

Segments in this section aren’t performing well. You may want to shift budget away from these segments and into segments in the top left quadrant of the report. This will help reduce the impressions and may help improve conversion rates for segments in this bottom right section. Also, compare these mapped segments to your unmapped segments. Some of your unmapped segments may perform better than the segments you’re already targeting.

### How to Read Your Unmapped Segment Results

Looking at unmapped segments in a **Segment Performance** report is a great way to find new segments you haven’t considered for targeting. In fact, some of these segments may outperform your mapped segments. This is because an unmapped segment has to meet a set of qualification criteria to be included in this report. To be included in this report, an unmapped segment must:

- Have conversions greater than the average of all your mapped segments.
- Be in the top 100 unmapped segments by conversion rate.

To read this report, it helps divide the results into 4 sections with imaginary lines (in red) and categories shown in the sample report below.
In this report, you just want to focus on those unmapped segments in the top left section. These unmapped segments exhibit high conversion rates for a low level of impressions when compared to segments in the other three sections.

*Note:* 7-day and 30-day look-back periods are only available for Sunday *Date Through* dates.

**Trend Analysis and Volume Analysis Reports**

These reports return data on impressions, click-through rates, and conversions for broad range of advertising dimensions. Compare trends and volume for your selected metrics to get a better picture of how your campaign performs over time.
Sample Trend Analysis Report

The Trend Analysis report returns data in a line graph for a 14-day interval only. In this example, the report shows impression, click-through, and conversion trends for a set of mapped segments.
Sample Volume Analysis Report

The **Volume Analysis** report returns data in a bar graph for your selected date range. In this example, the report shows impression, click-through, and conversions by volume for a set of mapped segments.

💡 **Note:** 7-day and 30-day look-back periods are only available for Sunday **Date Through** dates.

💡 **Tip:** For information about mapped and unmapped segments, see the **Segment Performance Report** documentation.
Optimal Frequency Report

The Optimal Frequency report helps you discover the optimal balance between the number of served impressions and conversions. It allows you to adjust the number of impressions you would want to display before starting to see diminishing returns.

Conversion volume typically decreases with higher impression frequency buckets. Fewer users see the higher number of impressions. This means those higher frequency buckets have fewer conversions. However, the overall conversion % increases with each impression frequency bucket. More conversions are generated with each bucket, so the sum of conversions (the numerator) approaches the total number of possible conversions (the denominator) and therefore the % increases. As shown in the sample report, the intersection of the 2 line plots provides a guide to the "optimal" impression frequency, i.e. the optimal number of impressions that need to be served, before the customer starts to see diminishing returns.

Sample Report
Unique User Reach

The **Unique User Reach** report returns data in a bubble chart. Each bubble is sized in direct proportion to the number of unique users for your selected dimension. A larger bubble indicates greater reach than a smaller bubble. The **Unique User Reach** report helps you find the advertiser, brand, campaign, creative, placement, or site that provides the broadest reach against your targeted users.

💡 **Note:** 7-day and 30-day look-back periods are only available for Sunday **Date Through** dates.
Sample Report

Your Unique User Reach report could look similar to the one below. In your report, click on a bubble to view the underlying data.

Reported Conversion Traits

The Conversion Traits report shows you all the traits labeled as conversion traits for a conversion group at a certain date. Conversion traits for conversion groups can change from reporting run to reporting run. The report displays conversion traits by conversion group for the selected reporting date.
Sample Report

Your **Reported Conversion Traits** report could look similar to the one below:

---

**Cross Channel Conversion**

The **Cross Channel Conversion** option in the **Audience Optimization** reports allows you to attribute offline conversions to served online impressions or clicks.

The **Cross Channel Conversion** reports combine results from the DoubleClick Campaign Manager (DCM) platform with Audience Manager conversion traits. This lets you link offline conversions to online impressions or clicks. You can use the **Cross Channel Conversion** for the **Segment Performance** and **Optimal Frequency** reports.

To view the **Cross Channel Conversion** reports, select the **AAM+DCM** item in the **Platform** drop-down list.

The following table lists important considerations when setting up **Cross Channel Conversion**

<table>
<thead>
<tr>
<th>Consideration</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum number of conversion traits</td>
<td>At least one conversion trait must be assigned to a data source in order for the <strong>Cross Channel Conversion</strong> reports to run. See <strong>Basic Information for Traits</strong> for more information on traits.</td>
</tr>
<tr>
<td>Maximum number of conversion traits</td>
<td>The reports pull in a <em>maximum</em> of 50 conversion traits from the user. If you reach the maximum, the reports use the first 50 conversion traits based on trait ID, in ascending order.</td>
</tr>
</tbody>
</table>
### Consideration | Description
--- | ---
Attribution window | The AAM+DCM attribution window is 14 days, meaning that only conversion traits exhibited in the last two weeks are considered.
Last-touch methodology | The creative that the user has seen last before converting is the one awarded the conversion.
Clicks versus impressions | A click takes precedence over an impression when deciding attribution if they occur at the exact same time. For example, on a page where multiple creatives are displayed, the one being clicked on is awarded the conversion.
Data recency | The reports are always calculated for data available the previous day.

### Custom Reports

Used for data sets that are too large to display in the browser or unavailable in the current reporting suite.

Your Partner Solutions manager runs a custom report and uploads data to Audience Manager. When a report is ready, you'll receive an automated email notification and see a link to the report under the Custom Reports section under the Analytics dashboard. Click the link to download the report.

### General Reports

A General report returns performance data on traits, segments, and destinations.

Audience Manager uses Role Based Access Control (RBAC) to extend user-group permissions to the General reports. Users can see only those traits and segments in reporting that they have permissions to view. RBAC functionality lets you control what reporting data internal teams are able to view. For example, an agency that manages different advertiser accounts can configure user-group permissions so that a team that manages Advertiser A's account cannot see Advertiser B's reporting data.

Run a General report when you need to:

- Review performance by trait, segment, or destination.
- Track impressions (total and unique) at 1, 7, 14, 30, 60, 90-day and lifetime intervals.
- Review total and unique load counts.
- Compare trait and segment performance.
- Identify strong or poor performance traits and segments, analyze demand, or compare load/fire data with third-party reports.
- Export data (.csv format) for further analysis and sharing.

The following illustration provides a high-level overview of key elements in the General report.
1. Configure the following options:

   **Report Type**: Select the desired report type (Trait, Segment, or Destination).

   **For Dates Through**: Specify the date range for the report.

2. Search for a trait, segment, or destination by name or ID.

3. From the folder list, drag and drop the traits, segments, or destinations you want to report to the **Selections** panel on the right side.

4. Generate the report to display in an exportable table.
General Reports Results Explained

The numbers in the General Reports are generated directly from our User Profile Store. The results reflect the number of users that Audience Manager contained in the backend at the time these reporting numbers were generated.

- These numbers do not include visitor IDs with excessive traffic. Traffic from bots is filtered prior to reaching our backend system. Also, some bot traffic is discarded during a weekly cleanup job run in the backend.
- If you onboard data via inbound processing keyed off the Audience Manager UUID, and these IDs include users that are no longer active in our system, these inactive Audience Manager UUIDs never reach the User Profile Store and are not reported.
- Total Trait Realizations are calculated for Rule-based Traits only.

Run a General Report

This procedure describes how to run a General report and set time and other performance options.

1. In the Analytics dashboard, click General Reports.
2. From the Report Type drop-down list, select the desired type:
   - Trait
   - Segment
   - Destination
3. (Conditional) Click the date box to display a calendar, then select the ending date for your report if you want to specify a date other than today.
4. Search for a trait, segment, or destination by name or ID.
5. From the folder list, drag and drop the traits, segments, or destinations you want to report to the Selections panel on the right side.
6. Click Run Report.
   
   Results display in an exportable table. Click the column headers to sort the results in ascending or descending order.
7. Select the desired option button at the top of the report to filter data by performance (Unique Trait Realizations, Total Trait Realizations, or Total Trait Population) or by time (1, 7, 14, 30, 60, 90-day range or lifetime).

   ❧ Note: Total Trait Realizations are calculated for Rule-based Traits only.

8. (Optional) Click Export to CSV. This exports the Unique Trait Realizations, Total Trait Realizations, and Total Trait Population for all day ranges.

Interactive and Overlap Reports

Interactive reports display performance and overlap data for traits and segments. Instead of using numbers arranged in columns and rows, these reports return data using different shapes, colors, and sizes. Additionally, you can choose individual or groups of data points and drill down into the report results for more details. These visualization techniques and report interactivity help make large amounts of numeric data easier to understand.

Delivery and Performance Report

Returns segment-level data on impressions and click-through rates.
The **Delivery and Performance** report lets you evaluate how segments perform on different advertiser sites. As an optimization tool, this report helps you:

- Identify high-performance segments for re-use in other campaigns or on other sites.
- Find and remove segments from underperforming sites.
- Visually analyze segment impression size and click-through rates.

**Note:** 1-day views are updated daily. 7-day and 30-day look-back periods are updated weekly.

Select an individual point to view data details in a pop up window. Also, you can click and drag the cursor over a group of points to return data about those data elements only. These actions automatically update the report results.

**Delivery and Performance Data Pop Fields Defined**

Describes the metrics displayed in the popup window when you click an individual data point.

The popup for the **Delivery and Performance Report** report contains the following metrics:

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Range Start</td>
<td>Start date used by the report.</td>
</tr>
<tr>
<td>Date Range End</td>
<td>End date used by the report.</td>
</tr>
</tbody>
</table>
Adobe Media Optimizer Search and Delivery Report

The Adobe Media Optimizer (AMO) Search Delivery and Performance Report lets a customer see how segments are responding to AMO search campaigns.

This report helps you do the following:

• Identify top-performing segments and keywords that are resonating with those segments. With that knowledge, a Google RLSA campaign can be launched targeting that segment to hit more users in that audience.
• Drive creative development by seeing which themes are resonating with each audience.
• Analyze average conversion value per user to identify high value segments.

These reports provide three different views that are filterable by network and account:

• AMO campaign-level reporting
• AMO ad-level reporting
• AAM segment-level reporting

The reports have the list of AMO tracked conversions that can be used in each report to see segment performance based on that metric.

Metrics include the following:

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clicks</td>
<td>Number of clicks recorded for that segment.</td>
</tr>
<tr>
<td>Click Reach</td>
<td>Number of unique users for whom a click was recorded in that segment.</td>
</tr>
<tr>
<td>Conversion Value</td>
<td>The aggregate value of AMO-tracked conversion recorded for that segment.</td>
</tr>
<tr>
<td>Conversion Reach</td>
<td>Number of unique users for whom a conversion was recorded in that segment.</td>
</tr>
<tr>
<td>Average Conversion Per Unique</td>
<td>The average conversion value per unique user in that segment.</td>
</tr>
</tbody>
</table>

Frequently Asked Questions

What does the "null" conversion mean?
This value shows all users who did not register a conversion.

**Why don't the numbers match up between Adobe Audience Manager and Adobe Media Optimizer?**

Reasons for number discrepancies include the following:

- Each system uses a different attribution mechanism. AMO allows for multi-event attribution. AAM applies the conversion to the last click.
- AAM reporting operates in UTC. The AMO reporting time zone is configurable per client.
- AAM shows data for the users it has seen. There could be users targeted in an AMO campaign that do not qualify for an AAM segment. Those users won't be reported in the AAM reports.
- Currently the AAM reports report only on AMO-tracked conversion events.
- AAM reporting aggregates the AMO metrics across all of the segments the user has qualified for. Taking the simple example of one campaign and a user who has generated one AMO conversion who is qualified for five segments in AAM. The AMO report shows one conversion, but the AAM report would attribute that one conversion to all the user's segments. So in the AAM report, if you sum the conversion count across this user's segmentation, the aggregate number would be five conversions (one per each of five segments). The purpose of this logic is to show the value of each segment that user qualifies for.

**Trait-to-Trait Overlap Report**

Returns data on the number of unique users shared among all your first and third-party traits.

**Overview**

The **Trait-to-Trait Overlap** report returns data on the % of unique users shared between all your own traits and your third-party traits. As an optimization tool, this report helps you:

- Create segments with high or low overlap, depending on your needs. Traits with high overlap give you a targeted audience, but fewer unique visitors. Traits with low overlap can be useful to reach a larger, unique visitor set.
- Validate third-party trait data: Strong overlap between similar first and third-party traits suggests that the trait from your data partner is accurate and trustworthy. Conversely, low overlap can indicate that a third-party trait may not actually contain the same information as your own, similar first-party trait.
- Find unexpected overlap between traits and use that information to build innovative segments.

**Sample Report**

The following illustration provides a high-level overview of elements in the **Trait-to-Trait Overlap** report.

*Note:* The **Trait-to-Trait Overlap** report returns an empty field when it compares the same trait to itself.
Drill Down on Individual Data Points

Select an individual point to view data details in a pop up window. Your click actions automatically update data displayed in the report.

Trait-to-Trait Overlap Data Pop Fields Defined

Describes the metrics displayed in the popup window when you click an individual data point.

The popup for the Trait-to-Trait Overlap report contains the following metrics:

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Provider Name</td>
<td>Name of the trait's owner.</td>
</tr>
<tr>
<td>Data Provider Type</td>
<td>Defines the type of provider a trait belongs to. Can be either:</td>
</tr>
<tr>
<td></td>
<td>• First-party (your own trait).</td>
</tr>
<tr>
<td></td>
<td>• Third-party (from an outside data partner/vendor).</td>
</tr>
<tr>
<td>Trait ID</td>
<td>Unique numeric ID for that trait.</td>
</tr>
<tr>
<td>Trait Name</td>
<td>Name of the trait.</td>
</tr>
<tr>
<td>Overlap %</td>
<td>Shows the % of unique overlap between compared traits (overlap uniques/trait uniques).</td>
</tr>
</tbody>
</table>
### Segment-to-Trait Overlap Report

Returns data on the number of unique users shared between a particular trait and an entire segment.

#### Overview

As an optimization tool, the Segment to Trait Overlap reports helps you build highly focused segments or expand segment reach. For example, you can create focused segments and traits with high overlap to reach a particular audience. However, a lot of overlap may mean fewer unique users (less reach). Running this report to help expand reach by removing traits with a lot of segment overlap and replacing them with traits that have less overlap.

#### Sample Report

The following illustration provides a high-level overview of the **Segment-to-Trait Overlap** report.

![Sample Report](image.png)

#### Drill Down on Individual Data Points

Select an individual point to view data details in a pop up window. Your click actions automatically update data displayed in the report.

#### Comparing Segments to Traits

Describes how you can compare segments and traits to derive meaningful information from the results.

#### Comparing Trait and Segment Uniques: An Example

At first glance, it may seem illogical to compare segments to traits and attempt to draw conclusions from the results. After all, segments and traits are different, so how can data derived from disparate items have meaning? However, in this case, we're not comparing traits and segments, but the number of unique visitors shared between them. The shared unique visitor count provides the common value that makes a segment to trait comparison possible.

The following diagram illustrates the relationship between a trait and the segment it belongs to. In this case, we have a trait with 10 visitors and a segment with 1,000 visitors. They share 3 unique visitors in common.
The unique visitor count is the common, constant value shared between these different classes of objects. As a result, you can determine the unique visitor relationship between them as follows:

- The trait shares 30% of its unique visitors with the segment \( \frac{3}{10} = 0.30 \).
- The segment shares 0.3% of its unique visitors with the trait \( \frac{3}{1,000} = 0.003 \).

### Find Value in Segment to Trait Comparisons

Looking at the overlap between traits and segments can help you estimate the total available visitor pool (forecasting) or find inefficient segments with too much overlap.

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Forecasting</strong></td>
<td>To determine the available visitor pool, sum the difference between the trait total (less overlap) and the segment total (less overlap). This segment-trait combination could reach up to 1004 new users.</td>
</tr>
<tr>
<td><strong>Find Inefficient Segments</strong></td>
<td>If a trait is part of an AND group in a segment definition, the unique visitors who have that trait are already in the segment and not available for adding to the segment. You can use this report to find relevant traits with low overlap and add them to the segment definition, therefore increasing the reach of that segment audience pool.</td>
</tr>
</tbody>
</table>

### Understanding the Data Filters in the Segment-to-Trait Overlap Report

Describes how the trait and segment unique overlap % sliders work.

The **Segment-to-Trait overlap** report lets you use two sliders to filter data by the overlap % by trait or segment.

- **Filter Trait Uniques %**: Filters data by the % of unique visitors shared between the trait and the segment.
- **Filter Segment Uniques Overlap %**: Filters data by the % of unique visitors share between the segment and the trait.

### Example

The following diagram illustrates the difference between the trait uniques % and the segment uniques %.

In this case, the trait and segment share 3 unique visitors. As proportions:
• The trait shares 30% of its unique visitors with the segment (3/10 = 0.30).
• The segment shares 0.3% of its unique visitors with the trait (3/1,000 = 0.003)

**Segment-to-Trait Data Pop Fields Defined**

Describes the metrics displayed in the popup window when you click an individual data point.

The popup for the **Segment-to-Trait Overlap** report contains the following metrics:

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Segment ID</td>
<td>Unique numeric ID for the segment.</td>
</tr>
<tr>
<td>Data Provider Name</td>
<td>Name of the segment owner.</td>
</tr>
<tr>
<td>Data Provider Type</td>
<td>Defines the type of provider a trait belongs to. Can be either:</td>
</tr>
<tr>
<td></td>
<td>• First-party (your own trait).</td>
</tr>
<tr>
<td></td>
<td>• Third-party (from an outside data partner/vendor).</td>
</tr>
<tr>
<td>SID</td>
<td>Unique numeric ID for the segment.</td>
</tr>
<tr>
<td>SID Name</td>
<td>Name of the segment.</td>
</tr>
<tr>
<td>Trait Uniques Overlap %</td>
<td>% of unique visitors a trait shares with the segment.</td>
</tr>
<tr>
<td>Segment Uniques Overlap %</td>
<td>% of unique visitors a segment shares with a trait.</td>
</tr>
<tr>
<td>Overlap Uniques</td>
<td>Number of unique visitors shared between the segment and the trait.</td>
</tr>
<tr>
<td>Segment Uniques</td>
<td>Number of unique visitors in the segment.</td>
</tr>
<tr>
<td>Trait Uniques</td>
<td>Number of unique visitors in the trait.</td>
</tr>
</tbody>
</table>

**Segment-to-Segment Overlap Report**

Returns data on how many unique users are shared between your segments.

**Overview**

The **Segment-to-Segment Overlap** report can help you:
• Identify segments with high or low overlap, depending on your needs. Traits with high overlap give you a targeted audience, but fewer unique visitors. Traits with low overlap can be useful to reach a larger, unique visitor set.
• Find unexpected overlap and use that information to build new, high-performance segments.

Sample Report
The following illustration provides a high-level overview of the Segment-to-Segment Overlap report.

💡 Note: The Segment-to-Segment Overlap report returns an empty field when it compares the same segment to itself.

Drill Down on Individual Data Points
Select an individual point to view data details in a pop up window. Your click actions automatically update data displayed in the report.

Segment-to-Segment Overlap Data Pop Fields Defined

The popup for the Segment-to-Segment Overlap report contains the following metrics:

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Segment ID1</td>
<td>Unique numeric ID for the segment that appears in the report results. Appears as the row ID for the segment.</td>
</tr>
<tr>
<td>Segment ID2</td>
<td>Unique numeric ID for the segment you select when running the report. Appears as the column ID for the segment.</td>
</tr>
<tr>
<td>Segment Name1</td>
<td>Name of the segment that appears in the report results row.</td>
</tr>
<tr>
<td>Segment Name2</td>
<td>Name of the segment you select when running the report. Appears in the report results column.</td>
</tr>
<tr>
<td>Overlap %</td>
<td>Shows the % of unique overlap between compared segments (overlap uniques/segment uniques 1).</td>
</tr>
<tr>
<td>Overlap Uniques</td>
<td>The number of unique visitors shared between compared segments.</td>
</tr>
<tr>
<td>Segment Uniques1</td>
<td>The number of unique visitors in segment 1.</td>
</tr>
<tr>
<td>Segment Uniques2</td>
<td>The number of unique visitors in segment 2.</td>
</tr>
</tbody>
</table>

Unused Signals Report
This report returns a frequency count of all the unused information collected on your inventory and sent to Audience Manager.
A signal is information from your website passed in to Audience Management in the form of **key-value pairs** (e.g., color=blue, price>100, gender=female, etc.). Unused signals consist of data that you collect but have not been mapped to a trait. The **Unused Signals** report shows data in a table by date, key, value, and frequency count. Review this report to help identify orphaned signals that can be mapped to new or existing traits.

**Note:** Specify a key or value name in the search fields to limit results to specific records.

### Use Cases

<table>
<thead>
<tr>
<th>Examples</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ensure Trait Uniformity or Add Related Values to a Single Key</strong></td>
<td>Review the report to account for different value variations for a particular signal. For example, say you have a trait for the state &quot;North Carolina&quot; defined in a key-value pair as c_state = North Carolina. The report can help you find name variants and add those to the trait (e.g., c_state = North Carolina, NC, N.C., NCariolina). Alternatively, you could spot name variants with the report and replace those with a uniform value across all sites.</td>
</tr>
<tr>
<td><strong>Create New Traits</strong></td>
<td>Review the report to see what new values get passed in on a particular key. You may want to create new key-value pairs based on these new values.</td>
</tr>
<tr>
<td><strong>Find Unmapped Values</strong></td>
<td>Review the report for the number 1. The number 1 in an <strong>Unused Signals</strong> report represents a null value. This is not necessarily bad. It simply means that a particular key does not have an associated value mapping. When you see a lot of 1 values for an important variable, check with your site team to make sure all your pages are tagged correctly.</td>
</tr>
</tbody>
</table>

### Best Practices

Run and check the **Unused Signals** report:

- After you create a trait or update trait rules. This helps ensure your traits and rules are set up properly. The number 1 in results indicates a new trait may not be configured correctly.
- Bi-weekly or monthly. Scheduled reviews help ensure trait mappings are up-to-date.

**Note:** When searching for unused values in the report, please consider the following particularity. There is a difference in expression between the two examples below:

- \( T(v=1 \ \text{AND} \ \text{NOT} \ (a=23)) \)
- \( T(v=1 \ \text{AND} \ (a\neq 23)) \)

Both examples show a trait which contains two key-value pairs v and a. The first expression translates into: the trait contains key v with the value 1 AND NOT the key a with the value 23. The second expression contains key v with the value 1 AND the key a with the value NOT EQUAL 23.
• Considering the two different expressions above, let's say you search in the Unused Signals Report for the values that get passed on key a with any value different than 23, you'll only obtain results in the first case because values for key were not sent AT ALL. In the second case, values different than 23 were sent so key a is not unused.

Bulk Trait Creation

Contact your Partner Solutions representative if you need to bulk create a lot of traits based on data obtained from the Unused Signals report.

Daily Trait Variation Report

This report returns a list of traits with a standard deviation greater than 1.7 in either direction over the past 30 days, and has a unique user base greater than 10,000 users. This report lets you evaluate how the number of impressions from unique users in a trait fluctuate over time.

Standard deviation measures the amount of variation or dispersion from the mean (or average/expected value). A low standard deviation indicates that the data points tend to be very close to the mean. A high standard deviation indicates that the data points are spread out over a large range of values.

From the Date list, select one or more dates for your report. A color-coded bar chart displays at the bottom of the list that provides a visual representative of the range of standard deviation for all traits across all selected dates. The black vertical line indicates the mean.

The middle column contains a list of traits, identified by Trait ID and Trait Name. Click any trait to access a pop-up dialog box that lets you select from the following options:

• **Keep Only**: Removes all other traits from the report and displays data for this trait only.
• **Exclude**: Removes this trait from the report and displays data for all other traits. You can exclude multiple traits.
• **View Data**: Lets you display data for that row. You can also download all rows as a text file.

The Standard Deviation column displays color-coded bar charts that display the standard deviation for each trait. Red bars indicate traits with a negative standard deviation (data points tend to be below the mean). Green bars
indicate traits with a positive standard deviation (data points tend to be above the mean). Mouse over any bar to display a pop-up dialog box with more information and options to keep or exclude that trait and view more information.

Icons display at the bottom of the report that let you export data in various formats, revert any changes you might have made to the report (such as excluding traits), enable or disable automatic updates, and refresh the report’s data. See Report Icons and Tools Explained.

**Improve Log File Processing Times with Lookup Tables**

Put data in Delivery Performance report log files into tables that contain IDs only. Put non-ID metadata in separate lookup tables to help reduce file size and processing times.

**Log File Metadata Increases File Size and Processing Time**

A typical log file used by the Delivery Performance report usually contains thousands of rows and dozens of columns. It consists of numeric IDs and human-readable information such as names for creatives, advertisers, insertion orders, etc. This non-ID information is referred to as metadata (i.e., information about other information) and gets written in each row of the log file. However, the Delivery Performance report mainly works with the IDs in the log file. The metadata is useful, but repetitious. It increases file size and data ingestion times.

**Reduce File Size and Shorten Processing Time With Index Tables**

To help improve performance, your main data file should contain IDs only. Put metadata in a separate lookup (or index) table and link those records to the main file with a key variable common to both.

**How Lookup Tables Reduce File Size**

Let’s say you have a data file that looks similar to the one below.

<table>
<thead>
<tr>
<th>User ID</th>
<th>Ad ID</th>
<th>Ad Name</th>
<th>Order ID</th>
<th>Order Name</th>
<th>Advertiser ID</th>
<th>Advertiser Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>111</td>
<td>Shoe A</td>
<td>456</td>
<td>Sneakers</td>
<td>27</td>
<td>Company A</td>
</tr>
<tr>
<td>2</td>
<td>111</td>
<td>Shoe A</td>
<td>456</td>
<td>Sneakers</td>
<td>27</td>
<td>Company A</td>
</tr>
<tr>
<td>3</td>
<td>111</td>
<td>Shoe A</td>
<td>456</td>
<td>Sneakers</td>
<td>27</td>
<td>Company A</td>
</tr>
<tr>
<td>4</td>
<td>222</td>
<td>Shoe B</td>
<td>789</td>
<td>Hiking</td>
<td>14</td>
<td>Company B</td>
</tr>
<tr>
<td>5</td>
<td>222</td>
<td>Shoe B</td>
<td>789</td>
<td>Hiking</td>
<td>14</td>
<td>Company B</td>
</tr>
</tbody>
</table>

Here’s the same log file with the metadata removed. The file is smaller and easier to process when it consists of IDs only.

<table>
<thead>
<tr>
<th>User ID</th>
<th>Ad ID</th>
<th>Order ID</th>
<th>Advertiser ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>111</td>
<td>456</td>
<td>27</td>
</tr>
<tr>
<td>2</td>
<td>111</td>
<td>456</td>
<td>27</td>
</tr>
<tr>
<td>3</td>
<td>111</td>
<td>456</td>
<td>27</td>
</tr>
<tr>
<td>4</td>
<td>222</td>
<td>789</td>
<td>14</td>
</tr>
<tr>
<td>5</td>
<td>222</td>
<td>789</td>
<td>14</td>
</tr>
</tbody>
</table>

The lookup file below holds the metadata and can be linked back to the main file with the Ad ID. Note the size as well. Instead of repeating each advertiser several times, you only need one reference for each.
APIs Can Eliminate the Need for Lookup Tables

If your ad serving system has an API, you might not need to send metadata in a lookup file. We may be able to get that information through the API. When this is the case, your log files should contain IDs only. We'll work with you to determine if metadata can be obtained through an API.

Filter Report Results With the Data Sliders

Use the various report sliders to show only the data that falls above, below, or within your specified range.

Set a Lower/Upper Range for Report Results With the Data Sliders

The report sliders let you set limits on the data returned by an interactive report. Move the left slider to exclude data below a specific value. Move the right slider to exclude data above a specific value. The report updates and returns data that falls within the desired range. Use the sliders to:

• Reduce the overall amount of data returned by the reports.
• Focus on traits or segments that fall within a particular size range.

Overlap Reports: Update Schedule and Minimum Segment Size

Describes the segment size and creation time requirements required by the Overlap report update process.

Update Schedule and Requirements

Overlap reports update weekly on Sunday. Report pre-processing begins on Saturday. This affects how new or existing segments appear in an overlap report on Monday. To be included in an overlap report, a segment must:

• Contain a minimum of 70,000 total real-time users during the last 14 days.
• Have been created prior to 12 AM Thursday UTC (2 full days before the weekly overlap report update process begins).

Segment Size and/or Creation Time Affects Reporting

If you do not see a segment in one of the Overlap reports, it may be because the segment does not meet these minimum requirements.

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Segment Size Too Small</td>
<td>Let's say you create a segment before 12 AM Thursday UTC, but it contains less than 70,000 total real-time users. This segment won't appear in an overlap report until it meets the user threshold requirements. Note, also, the segment must meet the required user count on, or prior to, the Thursday cutoff period. If it does not meet the weekly deadline, the segment will appear in the overlap reports for the week after the upcoming Sunday data run.</td>
</tr>
</tbody>
</table>
Use Case | Description
--- | ---
**Segment Created Too Late** | Let's say you create a segment on Friday and it contains more than 70,000 total real-time users. This segment won't appear in the overlap reports for the next week because it was created less than 2 days prior to the report update period. However, the segment will appear in an overlap report after the next weekly update.

### Shapes, Colors, and Sizes Used in Interactive Reports

Most of the interactive reports display results using shapes of different sizes and colors. This display format is designed to help you make sense of the data visually, without having to wade through rows and columns of numbers.

#### Report Legend

The following table defines the shapes, sizes, and colors used in the dynamic reports.

<table>
<thead>
<tr>
<th>Data Element</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Shapes** | • Circles indicate your own first-party traits.  
• Squares indicate third-party traits. |
| **Colors** | • Red shades indicate *low* overlap.  
• Green shades indicate *high* overlap. |
| **Size** | Size increases or decreases in direct proportion to reach (the number or % of clicks or unique users in a trait or segment). |

### Report Icons and Tools Explained

Describes how to search and use the various icon-tools used in the dynamic reports.

#### Data Icons and Tools

The following icons-tools are available at the bottom of each dynamic report window. The following illustration provides more information about these tools.

![Diagram of report icons](image)

Export Data
This tool lets you export data from the report in 4 different formats.

<table>
<thead>
<tr>
<th>Export Option</th>
<th>Exports Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image</td>
<td>As an image (.png) file. Useful when you want to download and share report data in its original, graphical format.</td>
</tr>
<tr>
<td>PDF</td>
<td>As a PDF file.</td>
</tr>
<tr>
<td>Data</td>
<td>In a new browser window as numeric data in columns and rows.</td>
</tr>
<tr>
<td>Crosstab</td>
<td>As a .csv file.</td>
</tr>
</tbody>
</table>

**Revert Changes**

Select this tool to undo any interactive click changes you may have performed on the report.

**Automatic Updates**

The **Delivery-Performance** and **Trait-to-Trait Overlap** reports are dynamic reports that respond and change based on user click actions. For example, say you want to select several advertisers in the Overlap report. When enabled, automatic updates will start to return data as soon as you select a checkbox. This dynamic behavior can interrupt your workflow because you have to wait until the report finishes processing before selecting another advertiser. Use this tool to turn that feature off (and on again) as required.

**Refresh Data**

Click the refresh icon to run a report or reload your data set. When automatic updates are off, click refresh to run or update the report.

**Search**

Search is represented by a generic magnifying glass icon (not shown). The search field is hidden until you click on the selection labels on the left side of the screen. The table below describes the location of the search tool for each report.

<table>
<thead>
<tr>
<th>Report</th>
<th>To find search, hover over</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery and Performance</td>
<td>The &quot;Advertiser Name&quot; label.</td>
</tr>
<tr>
<td>Overlap reports</td>
<td>The &quot;SID Name&quot; label.</td>
</tr>
</tbody>
</table>

**CSV Files for Overlap Reports**

You can request a .csv file for an Overlap Report when that report reaches its 1-million record limit. A report may have reached this limit when you see an "Unexpected error has occurred" message. Contact Customer Care to request a compressed .csv file, which you can import and work with in your own database system. Files are available for segment-to-segment, segment-to-trait, and trait-to-trait overlap reports.

Contents:

- **File Name Metadata**
- **File Contents**
- **Segment-to-Segment Report Records**
- **Segment-to-Trait Report Records**
- **Trait-to-Trait Report Records**
**File Name Metadata**

The following table lists and describes the file naming conventions and file extensions used in an overlap .csv file. In the examples, *italics* indicates a variable placeholder.

<table>
<thead>
<tr>
<th>Metadata Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>File Extension</td>
<td>Overlap report files are gzip compressed and have a .gz file extension. You must add the .csv extension to the file after decompression.</td>
</tr>
</tbody>
</table>
| File Name        | File name syntax:  
|                  | - **Segment-to-segment files**: `S2S_overlap_partner ID_yyyy-mm-dd_date range`  
|                  | - **Segment-to-trait files**: `S2T_overlap_partner ID_yyyy-mm-dd_date range`  
|                  | - **Trait-to-trait files**: `T2T_overlap_partner ID_yyyy-mm-dd_date range`  
| Date Range       | The date range for a report is a 5-digit ID that includes:  
|                  | - 70000 for a 7-day report.  
|                  | - 30000 for a 30-day report.  
| Multiple Files   | We increment the last digit in the file name if a report contains multiple files.  
| Examples         | File name examples for a single report:  
|                  | - Single, 7-day file: `S2S_overlap_12345_2017_01_14_70000.gz`  
|                  | - Single, 30-day file: `S2S_overlap_12345_2017_01_14_30000.gz`  
|                  | File name examples for a report with multiple files:  
|                  | - `S2S_overlap_12345_2017_01_14_70000.gz`  
|                  | - `S2S_overlap_12345_2017_01_14_70001.gz`  
|                  | - `S2S_overlap_12345_2017_01_14_70002.gz`  

**File Contents**

In the file, string data is enclosed in double quotes. See the mock data below. This has been truncated for brevity and to fit the screen.

```
//File header  
"segment_id1","segment_name1","segment_id2","segment_name3","range_id",...
//File body  
"123456","segmentA","654321","segmentB","30","yyyy-mm-dd","98765",...
```

**Segment-to-Segment Report Records**

A data file for your *Segment-to-Segment Overlap Report* contains the following records.

<table>
<thead>
<tr>
<th>Label</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>segment_id1</code></td>
<td>The ID of the segment you're comparing to the baseline segment.</td>
</tr>
<tr>
<td>Label</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>segment_name1</td>
<td>The name of the segment you’re comparing to the baseline segments.</td>
</tr>
<tr>
<td>segment_id2</td>
<td>The ID of your baseline segment. The baseline segment is the segment you</td>
</tr>
<tr>
<td></td>
<td>want to compare with other segments.</td>
</tr>
<tr>
<td>segment_name2</td>
<td>The name of the baseline segment you’re comparing to other segments.</td>
</tr>
<tr>
<td>rangeid</td>
<td>You can get reports for 7- and 30-day look-back intervals. The <code>rangeid</code></td>
</tr>
<tr>
<td></td>
<td>corresponds to the time intervals shown below.</td>
</tr>
<tr>
<td></td>
<td>• 7: 7-days</td>
</tr>
<tr>
<td></td>
<td>• 30: 30-days</td>
</tr>
<tr>
<td>datethru</td>
<td>The processing date for a report.</td>
</tr>
<tr>
<td>segment_uniques1</td>
<td>The number of unique users in the segment you’re comparing to the baseline</td>
</tr>
<tr>
<td></td>
<td>segment.</td>
</tr>
<tr>
<td>segment_uniques2</td>
<td>The number of unique users in the baseline segment.</td>
</tr>
<tr>
<td>overlap_uniques</td>
<td>A total count of the overlap of unique users between the baseline segment</td>
</tr>
<tr>
<td></td>
<td>and the other segments selected for comparison.</td>
</tr>
<tr>
<td>Overlap_perc</td>
<td>The % overlap of unique users between the baseline segment and the other</td>
</tr>
<tr>
<td></td>
<td>segments selected for comparison.</td>
</tr>
</tbody>
</table>

**Segment-to-Trait Report Records**

A data file for your *Segment-to-Trait Overlap Report* contains the following records.

<table>
<thead>
<tr>
<th>Label</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>trait_id</td>
<td>Trait ID.</td>
</tr>
<tr>
<td>trait_name</td>
<td>Trait name.</td>
</tr>
<tr>
<td>dataprovider_type</td>
<td>The data provider ID. IDs include:</td>
</tr>
<tr>
<td></td>
<td>• 1st Party</td>
</tr>
<tr>
<td></td>
<td>• 3rd Party</td>
</tr>
<tr>
<td>dataprovider</td>
<td>Name of the data provider.</td>
</tr>
<tr>
<td>Label</td>
<td>Description</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>rangeid</td>
<td>You can get reports for 7- and 30-day look-back intervals. The rangeid corresponds to the time intervals shown below.</td>
</tr>
<tr>
<td></td>
<td>• 7: 7-days</td>
</tr>
<tr>
<td></td>
<td>• 30: 30-days</td>
</tr>
<tr>
<td>datethru</td>
<td>The processing date for a report.</td>
</tr>
<tr>
<td>segment_uniques</td>
<td>The number of unique users in the selected segment.</td>
</tr>
<tr>
<td>trait_uniques</td>
<td>The number of unique users in a trait. In the UI report, this number appears in the pop up window when you hover over a trait in the heatmap results.</td>
</tr>
<tr>
<td>overlap_uniques</td>
<td>The number of unique users shared between the selected segments and traits. In the UI report, this number appears in the pop up window when you hover over a trait in the heatmap results.</td>
</tr>
<tr>
<td>trait_uniques_overlap_perc</td>
<td>% of unique users that overlap between the trait and segment. In the UI report, this number appears in the pop up window when you hover over a trait in the heatmap results.</td>
</tr>
<tr>
<td>segment_uniques_overlap_perc</td>
<td>% of uniques users that overlap between the segment and trait. In the UI report, this number appears in the pop up window when you hover over a trait in the heatmap results.</td>
</tr>
</tbody>
</table>

### Trait-to-Trait Report Records

A data file for your Trait-to-Trait Overlap Report contains the following records.

<table>
<thead>
<tr>
<th>Label</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>overlap_trait_id</td>
<td>The ID of the trait you’re comparing to the baseline trait.</td>
</tr>
<tr>
<td>overlap_trait_name</td>
<td>The name of the trait you’re comparing to the baseline trait.</td>
</tr>
<tr>
<td>base_trait_id</td>
<td>The ID of your baseline trait. The baseline trait is the trait you want to compare with other traits.</td>
</tr>
<tr>
<td>base_trait_name</td>
<td>The name of the baseline trait you’re comparing to other traits.</td>
</tr>
<tr>
<td>dataprovider_type</td>
<td>The data provider ID. IDs include:</td>
</tr>
<tr>
<td></td>
<td>• 1st Party</td>
</tr>
<tr>
<td></td>
<td>• 3rd Party</td>
</tr>
<tr>
<td>Label</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>dataprovider</td>
<td>Name of the data provider.</td>
</tr>
<tr>
<td>rangeid</td>
<td>You can get reports for 7- and 30-day look-back intervals. The rangeid corresponds to the time intervals shown below.</td>
</tr>
<tr>
<td></td>
<td>• 7: 7-days</td>
</tr>
<tr>
<td></td>
<td>• 30: 30-days</td>
</tr>
<tr>
<td>datethru</td>
<td>The processing date for a report.</td>
</tr>
<tr>
<td>overlap_trait_uniques</td>
<td>The number of unique users shared between the selected traits. In the UI report, this number appears in the pop up window when you hover over a trait in the heatmap results.</td>
</tr>
<tr>
<td>base_trait_uniques</td>
<td>The number of unique users in a base trait. In the UI report, this number appears in the pop up window when you hover over a trait in the heatmap results.</td>
</tr>
<tr>
<td>overlap_uniques</td>
<td>The number of unique users shared between the selected traits. In the UI report, this number appears in the pop up window when you hover over a trait in the heatmap results.</td>
</tr>
<tr>
<td>overlap_trait_uniques_overlap_perc</td>
<td>% of unique users that overlap between the selected traits. In the UI report, this number appears in the pop up window when you hover over a trait in the heatmap results.</td>
</tr>
<tr>
<td>base_trait_uniques_overlap_perc</td>
<td>% of unique users that overlap between the selected traits. In the UI report, this number appears in the pop up window when you hover over a trait in the heatmap results.</td>
</tr>
</tbody>
</table>

**Report Technology**

Describes the underlying software that powers the interactive reports and the data update schedule.

**Interactive Reports Use Tableau Technology**

Audience Manager uses *Tableau* software to display data in the interactive reports. With Tableau, the Delivery and Overlap reports use visual cues and symbols that help you:

- Find high and low performance traits.
- Spot traits and segments with low and high unique visitor overlap.
- Use overlap data to build targeted segments.
- Expand reach by identifying related traits with low overlap.

**Data Update Schedule**
Report data is updated weekly each Sunday. The update processes data from Saturday (the day before) back to the previous Sunday.

Onboarding Status Report: About

The Onboarding Status Report checks success and failure rates for processing records in your inbound data source files. This report displays data in an interactive bar chart and provides summary metrics in tabular form. And, it includes an option that samples files for a fixed time interval and displays the most common errors for each error type. You can find this report in Analytics > Onboarding Status Report. This report is also available when you create an inbound data source.

Contents:
- Error Reporting and Error Sampling
- Error Report Bar Chart
- Error Report Tables
- 14-Day Error Sampling Report
- Related Content

Error Reporting and Error Sampling

Error reporting and error sampling are 2 separate features of the Onboarding Status report.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Error Reporting</td>
<td>Error reporting shows you the success and failure rates for the number of records processed in an inbound data source. It returns data in an interactive, stacked bar graph and as summary metrics in tables below the graph. Error reporting is automatic. It runs continuously for all of your inbound data sources. It returns data based on range of preset time intervals or a customized time interval that you set with a calendar widget.</td>
</tr>
<tr>
<td>Error Sampling</td>
<td>Error sampling parses the contents of your data files and returns the 10 most common errors for each error type. The errors in your inbound data files prevent individual records from being processed. Use this report as a troubleshooting tool to help reduce the number of file errors and improve processing rates. You must activate error sampling manually. It runs for 14-days from the day of activation and then turns itself off. You can turn error sampling back on after the 14-day interval expires. You activate error sampling when you create an inbound data source or by checking the Error Sampling check box from the Data Source Settings section of an existing inbound data source. Error sampling is a computationally demanding process. As a result, it only returns first 10 errors for each error category. It is not designed to return every error contained in an inbound data source. These errors are a representative sample of a potentially larger group of similar errors. Review your entire file for the types of errors this report flags, reformat the file, and send it in again. See Inbound Data File Contents: Syntax, Invalid Characters, Variables, and Examples for more information about how to properly format an data file for an inbound data source.</td>
</tr>
</tbody>
</table>
Error Report Bar Chart

The error report graphs the success and failure rates for record processing in a stacked bar graph as shown in the following example. The graph is interactive. Clicking on a bar shows summary metrics for that day in a table below the graph.

Error Report Graph Sample

Error Report Tables

The error report displays tabular data below the bar graph. The table shows success and failure rates along with totals and percentages.

Successful and Failed Records

This default view shows you a frequency count of the total records in your report and includes a breakdown of the errors by error type.
Totals & Percentages

Click **Totals & Percentages** to see what % of your files were processed successfully.

14-Day Error Sampling Report

With error sampling active, the report will show you the top 10 errors for each error type. Click on an error type button at the top of the report to see each set of sampled data.

*Note:* The report does not highlight record errors with this current release. To find and fix file errors, you should review the results and compare those to the specifications in the *Inbound Data File Contents* documentation.
A Sample Error Report returns the number of records in a data source were processed successfully and how many failed. Follow these steps to generate a Sample Error Report.

1. Go to Analytics > Onboarding Status Report. Search for a data source or choose one from the list.
2. Select a date range. Options include:
   - A set of fixed report intervals.
   - Calendar widgets that let you create a custom date range.
3. Click OK.

### Onboarding Status Report Terms and Definitions

A reference guide for the labels and terms used in this report.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Sync File Name</td>
<td>Lists files that Audience Manager received and processed from your selected inbound data source. File processing will fail if the file name is formatted improperly. File name requirements vary depending on how you send this data to Audience Manager. Delivery methods include Amazon S3 and FTP. For instructions on how to name your files, see:</td>
</tr>
</tbody>
</table>
|                     | • Amazon S3 Name and File Size Requirements for Inbound Data Files
<p>|                     | • FTP Name and File Size Requirements for Inbound Data Files                                                                 |</p>
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Format Errors</strong></td>
<td>Lists the number of records that failed processing because they did not match the syntax or formatting requirements. See <em>Inbound Data File Contents: Syntax, Invalid Characters, Variables, and Examples</em> for information on how to format your data.</td>
</tr>
<tr>
<td><strong>Invalid AAM ID</strong></td>
<td>Lists the number of improperly formatted Audience Manager user IDs (UUID). Usually, this indicates the IDs:</td>
</tr>
<tr>
<td></td>
<td>• Did not match the expected 38-digit format.</td>
</tr>
<tr>
<td></td>
<td>• Contain alphabetical characters. IDs should be numbers only.</td>
</tr>
<tr>
<td><strong>No Matching AAM ID</strong></td>
<td>These are onboarded IDs Audience Manager cannot match to an existing ID. Onboarded IDs can have this status when Audience Manager has not yet performed an ID sync or it still can't match the ID even after a sync.</td>
</tr>
<tr>
<td></td>
<td>In the case of unmatched mobile IDs, Audience Manager will:</td>
</tr>
<tr>
<td></td>
<td>• Continue to store and try to synch this ID.</td>
</tr>
<tr>
<td></td>
<td>• Record it as a Stored Record in the report if the ID cannot be synched.</td>
</tr>
<tr>
<td></td>
<td>If your onboarded file contains mobile IDs, then you can treat these numbers a bit more lightly than the other metrics. They will not affect the success and match rates for subsequent files.</td>
</tr>
<tr>
<td><strong>No Trait Realized</strong></td>
<td>Lists traits that Audience Manager cannot match to an onboarded trait. This could be the result of:</td>
</tr>
<tr>
<td></td>
<td>• Improperly formatted traits in your inbound data file. For on how to format your data file, see <em>Inbound Data File Contents: Syntax, Invalid Characters, Variables, and Examples</em>.</td>
</tr>
<tr>
<td></td>
<td>• Traits that have not yet been defined in Audience Manager.</td>
</tr>
<tr>
<td><strong>Percent Success</strong></td>
<td>The percentage of records in your file that were stored successfully. Percent success = records processed / number of records in a file.</td>
</tr>
<tr>
<td><strong>Records Received</strong></td>
<td>The total number of records received. In most cases, this number should match the total number of records (lines) in your inbound data file.</td>
</tr>
<tr>
<td><strong>Stored Records</strong></td>
<td>Number of records stored successfully. Because of file format errors, some of the records received may not be stored by Audience Manager. The number of stored records can be less than the number of records received.</td>
</tr>
<tr>
<td><strong>Total Realized Traits</strong></td>
<td>The number of traits for all users across all inbound files that get stored in the Audience Manager platform.</td>
</tr>
<tr>
<td><strong>Total Unused Signals</strong></td>
<td>Total number of unused signals received in the report. This total is based on the total number of successfully stored records.</td>
</tr>
</tbody>
</table>

See *Unused Signals Report* for more information.
Outbound History Report

View outbound batch job history information for a specified destination and time period.

1. Click **Analytics > Outbound History**.

2. In the **Search for a Destination** box, start typing and select the desired destination.

3. In the **Select a Date Range** box, specify the start and end dates for your report, then click **Apply Date Filter**.

![Outbound History Report](image-url)
The following table contains information corresponding to columns in the report:

<table>
<thead>
<tr>
<th>Line</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Sync File Name</td>
<td>List of all outbound files that Adobe generated for this destination that were processed together.</td>
</tr>
<tr>
<td>Successful</td>
<td>Number of records that were successfully sent from Audience Manager to the destination.</td>
</tr>
<tr>
<td>Failed</td>
<td>Number of records that could not be sent to the destination.</td>
</tr>
<tr>
<td>Records Received</td>
<td>Total number of records Adobe generated in the files and attempted to send to the destination. In most cases, this should be the total number of successful files and failed files.</td>
</tr>
</tbody>
</table>

**Trend Reports**

A **Trend** report returns trend data on traits and segments.

Audience Manager uses Role Based Access Control (RBAC) to extend user-group permissions to the **Trend** reports. Users can see only those traits and segments in reporting that they have permissions to view. RBAC functionality lets you control what reporting data internal teams are able to view. For example, an agency that manages different advertiser accounts can configure user-group permissions so that a team that manages Advertiser A’s account cannot see Advertiser B’s reporting data.

Run a **Trend** report when you need to:

- Review trend data by traits and segments.
- Track trends by 1, 7, 14, 30, 60, and 90-day intervals.
- Compare trait and segment trends over time.
- Identify strong or poor performance traits and segments.
- Export data (.csv format) for further analysis and sharing.

The following illustration provides a high-level overview of key elements in the **Trend** report.
1. Configure the following options:

   **Report Type:** Select the desired report type (Trait or Segment).
   **Date Range:** Specify the date range for the report (start date and end date).
   **Display Interval:** Specify the display interval (1, 7, 14, 30, 60, and 90-day intervals).

2. Search for a trait or segment by name or ID.
3. From the folder list, drag and drop the traits or segments you want to report to the \textbf{Selections} panel on the right side.

4. Generate the report to display in data in graphical format or export the report to CSV format.

\textbf{Run a Trend Report}

This procedure describes how to run a \textbf{Trend} report.

1. In the \textbf{Analytics} dashboard, click \textbf{Trend Reports}.
2. From the \textbf{Report Type} drop-down list, select the desired type: \textbf{Trait} or \textbf{Segment}.
3. Click the date boxes to display a calendar, then select the starting and ending dates for your report.
4. Specify the display interval: by 1, 7, 14, 30, 60, or 90-day.
5. Search for a trait or segment by name or ID.
6. From the folder list, drag and drop the traits or segments you want to report to the \textbf{Selections} panel on the right side.

For best performance, run a \textbf{Trend} report on fewer than 20 traits or segments at a time.

7. Click \textbf{Graph Traits} or \textbf{Graph Segments}, depending on which type of report you are viewing (Traits or Segments).

These options ignore all folders and graphs only individually selected traits or segments.

Or

Click \textbf{Export to CSV} to export the trait or segment data and all folders in CSV format for further analysis and sharing. This exports the Unique Trait Realizations, Total Trait Realizations, and Total Trait Population for all day ranges.

\begin{itemize}
\item \textbf{Note:} Total Trait Realizations are calculated for Rule-based Traits only.
\end{itemize}

8. (Optional) Mouse over individual traits or segments to display the number of visits and the date for each data point.

You can click the column headers in the table to sort the results in ascending or descending order.

For Trended Trait reports, zeroes indicate that Audience Manager did not collect data for that day. Blank entries indicate that the trait didn't exist. The following example shows examples of both types of entries:

\begin{center}
\begin{tabular}{|c|c|c|c|}
\hline
10/12/2014 & 0 & 0 \\
10/13/2014 & 0 & 0 \\
10/14/2014 & 279295 & 94225 \\
10/15/2014 & 0 & 0 & 0 \\
10/16/2014 & 202437 & 68356 & 0 \\
10/17/2014 & 0 & 0 & 0 \\
10/18/2014 & 226062 & 75681 & 0 \\
\hline
\end{tabular}
\end{center}
Counting Unique Users in Overlap and General Reports

Describes the variation in unique user totals between reports for the same trait and time period.

Overlap Report: Unique User Count

The overlap reports count users as unique when they qualify for a trait:

• During the selected time interval for the report.
• That has a time-to-live value longer than the selected time interval for the report.
• If they’re seen as active in our system (i.e., qualified for any other trait, had an ID sync, etc.) within the past 60 days.

General Report: Unique User Count

The General report counts site visitors as unique if they qualified for the trait during the selected time period.

Reports Dashboard

Use the Dashboard to view information about your partners' unique visitor counts broken down by trait types and segments for a specified time frame.

Audience Manager uses Role Based Access Control (RBAC) to extend user-group permissions to the Dashboard. Users can see only information on the dashboard that they have permissions to view. RBAC functionality lets you control what reporting data internal teams are able to view. For example, an agency that manages different advertiser accounts can configure user-group permissions so that a team that manages Advertiser A's account cannot see Advertiser B's reporting data.

This dashboard can be used to troubleshoot data-delivery issues. For example, if you notice a dip or spike in total unique users with the breakdown of type of unique user (rule-based vs. onboarded), you have a better starting point to track down a potential data-delivery problem. If you notice a dip in total unique users and in onboarded unique users, you can go to the Onboarding Status report to see if there was an issue with an inbound file.

To access the Dashboard:

1. In the Analytics menu, click Dashboard.
2. (Optional) Select the desired time frame from the last reporting date from the drop-down list (7 Days, 14 Days (the default), 30 Day, or 60 Days).

Depending on the period selected, the delta change in the Largest Traits/Most Changed Traits and Largest Segments/Most Changed Segments panels displays the change in unique visitors in the audience over the period ending today vs. the prior period of the same length. For example, if you select 7 Days, the delta compares the unique visitors over the prior seven days ending today against the unique visitors for the seven days ending seven days ago.

Note: You can investigate a delta change that seems out of the ordinary by running a Trend report. For example, if you see an unusually large delta change during the last seven days, you could run a Trend report for the last 14 days (2 x 7) to better understand the numbers.

Depending on the logged-in user's permissions, the following panels display:

• Partner Uniques
• Largest Traits/Most Changed Traits
• Largest Segments/Most Changed Segments
3. (Optional) Click Normalize above any graph to show all of the data on the same scale. You can also mouse over any data point to see more information.

**Partner Uniques**

Permission Required to View: View All Traits.

![Partner Uniques graph](image)

This panel displays the number of unique visitors during the specified time frame. Individual, color-coded lines represent the total number of unique visitors and the number of unique visitors captured using algorithmic, rule-based, and onboarded traits.

💡 **Note:** The total number of unique visitors represents visitors captured via rule-based or onboarded traits. However, the total number of unique visitors does not equal the sum of unique visitors captured using the rule-based and onboarded traits. The same unique user might be represented in either of these two trait types.

**Largest Traits/Most Changed Traits**

Permission Required to View: View Traits.

![Largest Traits graph](image)

This panel displays the number of unique visitors captured by various traits.

Use the Show drop-down list to display information about different types of traits: All Traits, Algorithmic, Onboarded, or Rule-Based.

This panel contains the following tabs:
This panel displays the number of unique visitors captured by various segments in real-time.

This panel contains the following tabs:

<table>
<thead>
<tr>
<th>Tab</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Largest Segments</td>
<td>Displays information about the number of unique visitors and the delta change of unique visitors during the specified time frame.</td>
</tr>
<tr>
<td>Most Changed Segments</td>
<td>Displays information about the number of unique visitors sorted by the delta change.</td>
</tr>
</tbody>
</table>

**Data Sampling and Error Rates in Selected Audience Manager Reports**

A summary of the sampling methodology used for some reports, sampling error rates, and a list of reports that return information based on sampled data.

Contents:

- *Data Sampling Ratio and Minimum Requirements*
- *Error Rates*
- *Reports That Use Sampled Data*
**Data Sampling Ratio and Minimum Requirements**

Some Audience Manager reports display results based on a sampled set of the total amount of available data. The sampled data ratio is 1:54. For reports that use sampled data, this means your results are based on 1 record out of every set of 54 records. These reports use sampled data because they need a tremendous amount of computing power to generate results. Sampling helps strike a balance between reduced computational demands, maintaining system performance, and providing accurate results.

Reports that use sampling exclude traits and segments when they do not meet the minimum unique visitor requirements. These minimum requirements are as follows:

- Traits: 28,000 over a 14-day period.
- Segments: 70,000 real-time users over a 14-day period.

**Error Rates**

Errors can occur in reports that generate overlap data. An error is defined as the percentage of records that:

- Should not have been included in a report but were added anyway.
- Should have been included in a report but were left out.

It's important to note that our tests and models show that the error rate decreases in an inverse proportion to the number of records in your data set. Data sets that have a lot of records generate fewer errors than sets with a small number of records. Let's look at this assertion in a more quantitative manner. As shown in the following table, for a set number of records, 95% of your report results will be below a specific error rate.

<table>
<thead>
<tr>
<th>Number of Records</th>
<th>Error Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>500 - 1,000</td>
<td>95% are under a 42% error rate.</td>
</tr>
<tr>
<td>1,000 - 1,500</td>
<td>95% are under a 34% error rate.</td>
</tr>
<tr>
<td>10,000 - 50,000</td>
<td>95% are under a 14% error rate.</td>
</tr>
<tr>
<td>50,000</td>
<td>95% are under a 6% error rate.</td>
</tr>
<tr>
<td>100,000</td>
<td>95% are under a 4% error rate.</td>
</tr>
<tr>
<td>500,000 (or more)</td>
<td>95% are under a 2% error rate.</td>
</tr>
</tbody>
</table>

**Reports That Use Sampled Data**

The Audience Manager reports that use sampled data include:

- *Overlap reports* (trait-to-trait, segment-to-trait, and segment-to-segment).
- *Addressable Audience* data (customer- and segment-level data).
- The *Total Devices* metric for a *Profile Merge Rule.*
Segments

Features for working with segments in Audience Manager.

Segments: Purpose, Composition, and Rules

Describes segments, their constituent parts, and rule creation with Segment Builder.

Purpose of Segments

A segment (or an audience) is a set of users who share common attributes. In Audience Manager, you create segments with server-side rules. These rules let you build audience groups based on site visitor attributes such as:

• Behavior.
• Demographics (age, gender, income, etc.).
• Other characteristics you can define in the user interface.

Segment Composition

An Audience Manager segment is a server-side rule that consists of individual or groups of traits. Traits are composed of data elements called key-value pairs. Along with rules you set at the segment level, these key-value pairs contain the criteria that qualify visitors for trait and segment membership.

Create Rules-based Segments With Segment Builder

Unlike traditional pixels that fire in response to simple yes/no conditions, Segment Builder lets you create complex segment requirements. Like traits, segments evaluate data using Boolean expressions (AND, OR, NOT), comparison operators (greater than, less than, equal to, etc.), and recency/frequency criteria. These features help create focused audience segments relevant to your business needs.

Benefits

Segments improve upon standard pixel-based audience creation/segmentation processes because they let you:

• Build relevant, useful segments with first and third-party traits.
• Create sophisticated and complex segmentation rules with Boolean operators, comparison expressions, and recency/frequency criteria.
• Send segment data to a destination partner.
• Monitor performance with Audience Manager reports.

Segments List View

The Segments dashboard is a centralized workspace for managing destinations.

The main Segments page contains features and tools that help you:

• Create new segments.
• Edit and delete segments.
• Clone (duplicate) existing segments.
• See all your segments in a table with sortable columns.
• Manage segment storage.
• Search for segments by name.
Segment Summary View

The segment summary page displays details such as name, traits in the segment, rules, performance data, and destination mapping information.

Click a segment name from the main dashboard to access its summary page. Summary sections include:

1. **Basic Information**: Shows required and optional details specified when the segment was created.
2. **Segment Graph**: Displays performance data graphically and for fixed 1, 7, 14, 30, 60, 90-day and segment lifetime intervals. We explain segment population numbers in a separate document.
3. **Segment Rules**: Lists traits in the segment along with qualification rules.
4. **Destination Mappings**: Lists destination mappings for the segment.
5. **Management Tools**: Controls that let you create, edit, clone, and delete segments.

Retrieving Segment Metadata

When Audience Manager sends segment information to a data partner, it identifies these objects with numeric IDs. As a data partner, when you share this information with your customers (or work with it yourself), an actual name and description provide a better experience for customers in reports, dashboards, or other user interfaces (UI). Data partners can make these friendly names available to their customers with either the manual or automated methods described in this section.

**Manual method**

As a data partner, you're probably used to getting audience metadata from your customers through manual processes. This could include files attached to emails or from customers adding that data through a UI you've built and maintained for this purpose. These process work, but they're often cumbersome, time consuming, and may require manual data entry work. These methods are often used to help get an integration up and running quickly, but they do not provide the best customer experience in the long run. As an alternative, you can use the Audience Manager API to get segment metadata automatically.

**Automated method**

Audience Manager provides a set of REST APIs that let you retrieve segment metadata automatically. With the API, you can create jobs that retrieve segment metadata at scheduled intervals or automatically, whenever you process Audience Manager data and find a new segment ID. See the steps below for more information.

**Step 1: Review the Audience Manager APIs**

The Getting Started with REST APIs section contains information about general requirements, authentication, available methods, etc. This is a good place to begin if you haven't worked with the Audience Manager API before.

**Step 2: Request OAuth2 access credentials**

You need a client ID and secret to make API calls. You can obtain a client ID and secret from your integration specialist during the integration set up process. You can also send an email request to Audience Manager Customer Care at amsupport@adobe.com.

**Step 3: Collect customer-specific information from each integrated customer**

Request the following from each integrated customer:

- **Username**: This is for a restricted user that has read-only permissions for the destination associated with a specific integration.
• Password: The user password.
• Destination ID: This is the ID (an integer) associated with the destination created for the specific server-to-server integration.

Step 4: Retrieve segment metadata with an API call

After completing the previous steps, you can use a GET method to retrieve segment metadata. For a sample request and response, see Return Destination Mappings. This call returns segment data formatted as key-value pairs in a JSON object. Some of the important segment attributes returned in the response are listed in the following table.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>destinationMappingId</td>
<td>The Audience Manager segment ID.</td>
</tr>
<tr>
<td>elementName</td>
<td>The segment name.</td>
</tr>
<tr>
<td>elementDescription</td>
<td>Some text that briefly describes the segment.</td>
</tr>
<tr>
<td>elementStatus</td>
<td>The current status of the segment mapping. Returned status options include:</td>
</tr>
<tr>
<td></td>
<td>• active</td>
</tr>
<tr>
<td></td>
<td>• inactive</td>
</tr>
<tr>
<td></td>
<td>• deleted</td>
</tr>
</tbody>
</table>

Segment Builder

Describes how to create segments with Segment Builder.

Create a Segment

Describes the required and optional steps that create a segment in Segment Builder.

Segment Builder Section

Segment Builder consists of 3 separate sections: Basic Information, Traits, and Destinations Mapping. To create a segment, complete the required fields in the Basic Information and Traits sections. Destinations Mapping settings are optional. See the instructions below for additional help.

1. In the Basic Information section
   • Name the segment.
   • Set the segment status (active is default).
   • Choose a data source.
   • Select a profile merge rule to use for segment qualification.
   • Assign the segment to a storage folder.

2. In the Traits section
   • Search for the trait you want to add to a segment and click Add Trait. Add another trait to create a trait group.
• Bring up the Advanced Search modal by clicking **Browse All Traits**. Search for traits by name, ID, description or data source. Click on a folder while searching to limit results to that folder and its subfolders. You can also filter traits by trait type.

• Click and drag traits to create separate groups.

• Hover between groups to set relationships with Boolean AND, OR, AND NOT values.

• Hover over the clock icon to add *recency and frequency* rules to the trait.

• View segment population data as you add or remove traits. Click **Calculate Estimates** to see (or refresh) the estimated population numbers. Read more about **segment population data** in the Segment Builder.

• Click **Save** when done.

3. *(Optional)* Map a segment to a destination in the **Destination Mapping** section

• Search for the destination and click **Add Destination**. Note, the destination must already exist before you can add it to a segment.

• Click **Save** when done.

### Remove Traits from a Segment

Managing the traits in your segments is an important part of keeping segments viable. Follow these steps if you need to remove traits from a segment.

To remove traits from a segment:

1. Go to **Manage Data > Segments**. Scroll through the list or use the search feature to find the segment you want to work with.

2. Click the segment name to open the segment details screen.

3. Click **Edit** to open **Segment Builder** and then click **Traits** to open the traits panel.

4. Hover over the trait you want to delete and then click the X. This action immediately removes the trait from your segment.
Segment Builder Controls: Basic Information Section

In Segment Builder, the Basic Information settings let you create new, or edit existing traits. To create a new segment, provide a name, a data source, and select a storage folder. All other fields are optional. Move on to the Traits section when done.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Give the segment a short, logical name that describes its function or purpose. Avoid abbreviations and special characters.</td>
</tr>
<tr>
<td>Description</td>
<td>A field for additional descriptive information about the segment.</td>
</tr>
<tr>
<td>Integration Code</td>
<td>A field for a user-defined ID or other company-specific information.</td>
</tr>
<tr>
<td>Data Source</td>
<td>Associates the segment with a specific data provider.</td>
</tr>
<tr>
<td>Profile Merge Rule</td>
<td>Selects the Profile Merge Rule to use for segment qualification.</td>
</tr>
<tr>
<td>Status</td>
<td>Activates or deactivates the segment (active by default).</td>
</tr>
<tr>
<td>Folder Storage</td>
<td>Determines which storage folder the segment belongs to.</td>
</tr>
</tbody>
</table>

Click the X to remove traits from a segment.
Segment Builder Controls: Traits Section

In Segment Builder, the Traits section lets you manage traits in a segment, create trait groups, and set qualification criteria. To add a trait to a segment, type the trait name in the search field and click Add Trait. Save the trait (if finished) or move on to Destinations Mapping.

Prerequisites: Complete the required fields in the Basic Information section.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Basic View</strong></td>
<td>This section provides visual controls that let you:</td>
</tr>
<tr>
<td></td>
<td>• Build new and manage existing segments.</td>
</tr>
<tr>
<td></td>
<td>• Remove traits from a segment.</td>
</tr>
<tr>
<td></td>
<td>• Add up to 50 (maximum) traits to a segment.</td>
</tr>
<tr>
<td></td>
<td>• Drag and drop traits to create new groups.</td>
</tr>
<tr>
<td></td>
<td>• View traits and trait groups in a segment.</td>
</tr>
<tr>
<td></td>
<td>• Set qualification criteria with Boolean expressions, comparison operators, and recency/frequency settings.</td>
</tr>
<tr>
<td><strong>Code View</strong></td>
<td>Opens a development environment that lets you create and manage traits, groups, and qualification requirements with code instead of the visual interface. The code view is useful if your segments:</td>
</tr>
<tr>
<td></td>
<td>• Contain more than 50 traits in an individual segment.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> Segments are limited to 5000 traits (maximum).</td>
</tr>
<tr>
<td></td>
<td>• Contain many trait groups.</td>
</tr>
<tr>
<td></td>
<td>• Have complex qualification requirements.</td>
</tr>
<tr>
<td><strong>Search</strong></td>
<td>Helps you find traits to add to a segment.</td>
</tr>
<tr>
<td><strong>Real and Estimated Segment Size Data</strong></td>
<td>See Trait and Segment Population Data in Segment Builder.</td>
</tr>
</tbody>
</table>

Segment Builder Controls Destinations Mappings Section

In Segment Builder, the optional Destinations Mapping section lets you send segment data to a third-party cookie, URL, or server-to-server destination. To add a destination, search (or browse) for a destination, provide destination specific information, and click Add Destination.

Prerequisites: Complete the required fields in the Basic Information and Traits sections. Also, the destination must already exist.

Destination Mappings Search Tools

The Destination Mappings panel contains search tools as described in the table below.
<table>
<thead>
<tr>
<th>Search Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Search by Destination Name</strong></td>
<td>Lets you search for a specific destination by name. To search, start typing. The field will auto-complete based on your search terms. Click Add Destination when done.</td>
</tr>
<tr>
<td><strong>Browse All Destinations</strong></td>
<td>Browse a list of all destinations available to you. Select and add destinations to your segment from the popup list.</td>
</tr>
</tbody>
</table>

**Fields in the Destination Mappings Pop-up Windows**

In Segment Builder, the **Add Destination** pop appears after you select a destination. This window displays static information about the destination and fields that vary depending on the destination type. Provide the required information in the empty fields to set up a destination mapping.

💡 **Note:** Publication dates are optional. When blank, the destination becomes active and never expires.

**Cookie Destination Fields**

In the Destination Mapping fields, specify the key-value pairs used to send data to the destination. Enter the key in the first field and the values in the second. Your cookie destination pop could look similar to this:

![Add Destination Pop-up Window](image)

**URL Destination Fields**

In the URL and Secure URL fields, specify the complete standard or secure address used to send data to the destination.
Server-to-Server Destination Fields

In the Destination Value field specify the value (part of a key-value pair) used to send data to the destination.
Code Syntax Used in the Segment Expression Editor

Segment Builder lets you build trait rules for a segment using a code editor. Click the Segment Expressions (Code View) tab in the Traits panel to access this feature.

Expression Builder Code Syntax

You can add trait rules to a segment with code instead of using drag and drop features. When coding, replace italicized elements in the example with an actual expression or value. The base code uses following syntax:

```
FREQUENCY([<traitID1>T,<traitID2>T]<Recency Operator><Numeric Value>D)
<Frequency Operator><Numeric Value>
```

💡 **Note:** By default, Boolean OR conditions apply to multiple traits within an expression.

Join Segments with Boolean Operators

To build groups of segments, wrap the frequency function in parenthesis and set the relationship between each expression with a Boolean operator (AND, OR, and NOT).

Parameters

💡 **Note:** All parameters are required unless noted otherwise.

<table>
<thead>
<tr>
<th>Name or Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREQUENCY</td>
<td>A literal that must precede the expression.</td>
</tr>
<tr>
<td>[&lt;traitID&gt;T]</td>
<td>An array of trait IDs followed by the letter T. Separate multiple traits with a comma. For example, [123T, 456T].</td>
</tr>
<tr>
<td>&lt;Recency Operator&gt;&lt;Numeric Value&gt;D</td>
<td>(Optional) Sets recency rules on traits in the segment. The letter D indicates recency in days.</td>
</tr>
<tr>
<td>&lt;Frequency Operator&gt;&lt;Numeric Value&gt;</td>
<td>Sets frequency rules on traits in the segment.</td>
</tr>
</tbody>
</table>

Allowed Recency and Frequency Operators

Set recency and frequency intervals with a comparison operator and an integer. Segment Builder uses standard expressions like < (less than), > (greater than), == (equal), etc. However, the types of allowed operators vary when you set recency or frequency. The table below lists the allowed recency/frequency operators.

<table>
<thead>
<tr>
<th>Recency Operators</th>
<th>Frequency Operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>• &gt;= (greater than/equal to)</td>
<td>• &gt;= (greater than/equal to)</td>
</tr>
<tr>
<td>• &lt;= (less than/equal to)</td>
<td>• &lt;= (less than/equal to)</td>
</tr>
<tr>
<td>• == (equal to)</td>
<td>• == (equal to)</td>
</tr>
</tbody>
</table>

Recency and Frequency

In Segment Builder, recency and frequency let you segment visitors based on actions that occur or repeat over a set daily interval.

Contents:
Recency and Frequency: About

Audience Manager defines recency and frequency as follows:

- **Recency**: The number of days during which a user viewed or qualified for one (or more) traits.
- **Frequency**: The rate at which a user viewed or qualified for one (or more) traits.

Recency and frequency settings help you segment visitors based on their real (or perceived) level of interest in a site, section, or particular creative. For example, users who qualify for a segment with high recency/frequency requirements may be more interested in a site or product than users who visit less often or less frequently.

Location of Recency and Frequency Settings

In Segment Builder, recency and frequency settings are located in the Basic View section of the Traits panel. Click the clock icon to expose these controls.

Limitations and Rules

Review and understand these limits and rules when you want to apply recency and frequency to traits in your segments.

Recency

<table>
<thead>
<tr>
<th>Limit or Rule</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Value</td>
<td>Recency must be greater than 0.</td>
</tr>
</tbody>
</table>
Limit or Rule | Description
--- | ---
Third-Party Traits | You cannot set recency rules on individual third-party traits or trait groups that contain third-party traits. Recency and frequency applies to your own traits only.

Frequency

Limit or Rule | Description
--- | ---
Third-Party Traits | You cannot set frequency rules on individual third-party traits or trait groups that contain third-party traits. Recency and frequency applies to your own traits only.
Recency Requirements | You can configure frequency requirements without configuring recency requirements. Just set a frequency value and leave the recency field blank.
Profile Merge Rules | See Trait Frequency, Device Graphs, and Profile Merge Rules.

Frequency Capping Examples

Frequency-capping expressions include all the users whose number of trait realizations is below a desired value. Here are a few examples:

- The expression `frequency([1000T]) <= 5` includes all users that have realized the trait with the ID "1000" fewer than five times, including users who have not realized the trait.
- When you need recency/frequency requirements to be less than a specific number of times or days, join that trait to another with an `AND` operator. Using the example above, this expression becomes valid when joined with another trait as shown here: `frequency([1000T]) <= 5 AND isSiteVisitorTrait`
- For advertising frequency-capping use cases, you could create a segment rule similar to this: `(frequency([1000T] <= 2D) >= 5)`. This expression includes all users that have realized the trait with the ID "1000" in the last 2 days more than five times. Set frequency capping by sending this segment to the ad server with a `NOT` set on the segment in the ad server. This approach achieves greater performance in Audience Manager while still serving the same purpose for frequency capping.

Paused and Deleted Segments

Describes the effects on segmented users, data, and destinations when you pause or delete an active segment using Segment Builder.

Access to the Pause and Delete Controls

Hover over a segment name in the segments list to expose the pause and delete icons (in the Actions column). These features affect segments as described below.

Paused Segment Functionality

A paused (deactivated) segment:

- Stops segmenting new, qualified users.
- Retains a user’s segmentation status/membership (does not remove a user from the segment).
- Remains in the segment list and can be reactivated.
• Does not send data to associated destinations.
• Returns data in the available reports (up to the deactivation date).

**Deleted Segment Functionality**

A deleted segment:
• Stops segmenting new, qualified users.
• Removes qualified users from segment membership.
• Is removed from the segment list.
• Cannot be undeleted.
• Does not send data to associated destinations.
• Does not return data in the available reports.

💡 **Note:** You can also pause and delete segments using an API method. For more information, see REST APIs.

**Trait and Segment Population Data in Segment Builder**

Add and remove traits in **Segment Builder** to see actual trait populations along with actual and estimated segment population data. The estimated population size data helps you build the right segment for your campaign.

Contents:

* Trait Population Data
* Calculating Real and Estimated Segment Populations
* Segment Population Data Overview
* Estimated Segment Population Data Defined
* Existing (Actual) Segment Population Data Defined

**Trait Population Data**

**Segment Builder** shows you **Total Trait Population** for the last 30-days when you add a trait to a segment. This data appears in the blue field around your selected trait in the **Basic View** section.
The following table defines the trait population metrics:

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Trait Population</strong></td>
<td>The number of unique IDs that have the selected trait in their profile.</td>
</tr>
</tbody>
</table>

**Calculating Real and Estimated Segment Populations**

When you create a new segment, or change an existing segment, Audience Manager takes up to 24-hours to display results for actual real-time and total segment populations.

However, Audience Manager can immediately estimate the real-time and total population size of your segment. These estimates are based on sampled historical data and return results at the 95% confidence interval.

In *Segment Builder*, a blue bar on the estimated population graphs indicates the possible upper and lower ranges for segment size. Although past performance does not guarantee future results, the estimated data can help you understand the potential size of a new or edited segment.

**Segment Population Data Overview**

*Segment Builder* shows you segment population data as you create and edit segments.
• For estimated segment population data (real-time and total), **Segment Builder** does not update the graphs automatically as you add or remove traits in a segment. Click **Calculate Estimates** to see (or refresh) the estimated population numbers.

• For actual (real) segment population data (real-time and total), **Segment Builder** updates the graphs automatically when you load an existing segment. For new segments, or when you add new traits to an existing segment, actual population data is not updated until 24-hours after the segment is created.

---

See the definitions below for more information about estimated and actual segment population data.

**Estimated Segment Population Data Defined**

The following table defines the estimated population metrics.

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Estimated Real-Time Population (Potential)</strong></td>
<td>The estimated number of deduplicated visitors seen in real-time for the specified time range and who were qualified for the segment at the moment they were seen by Audience Manager.</td>
</tr>
<tr>
<td></td>
<td><strong>In Segment Builder</strong>, the last 30-day populations for traits (<strong>Total Trait Populations</strong>), can be different for traits and real-time segments.</td>
</tr>
<tr>
<td></td>
<td>• For traits, the last 30-day metric counts the number of unique users who qualified for that trait during the last 30-days.</td>
</tr>
<tr>
<td></td>
<td>• For real-time segments, the last 30-day metric counts the number of users who have qualified for a trait (in that segment) at some point in the past and have been seen again by Audience Manager within the last 30-days. For example, say you have a user who qualified for a trait 60-days ago and was seen again 10-days ago. In the data, this user won't be added to the trait count because they first qualified for the trait more than 30-days ago. However, they will be included in the last 30-day count for the real-time segment results because they've qualified for the segment within that time interval.</td>
</tr>
</tbody>
</table>
### Description

**Metric** | **Description**
--- | ---

| **Estimated Total Population (Potential)** | The estimated number of deduplicated visitors who could be in your new or modified segment. As with almost any estimate, past performance does not guarantee future results, but you can use the estimated total to:

- See how many people a new or revised segment might reach as you build a segment.
- Tune the segment depending on your goals. For example, large segments are useful for brand-awareness campaigns and smaller segments are useful for focused targeting or re-targeting campaigns.

*Note: The Estimated Total Population metric does not include devices that have qualified for a segment based on connections provided by a Profile Merge Rule that uses a device graph option.*

### Existing (Actual) Segment Population Data Defined

**Profile Merge Rules** affect the actual real-time and total population numbers. These totals vary depending on if the **Profile Merge Rule** a segment belongs to uses a device graph option or not. See also, **Profile Merge Rule Options Defined**.

### Segment Population Data for Merge Rules Without a Device Graph Option

The following table defines the actual real-time and total population metrics when your segments are used by a **Profile Merge Rule** created without a device graph option. These are the device options settings **No Device Options** and **Current Device Profile**.

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Real-Time Population (Existing)** | The actual number of deduplicated visitors seen in real-time for the specified time range and who were qualified for the segment at the moment they were seen by Audience Manager.

In **Segment Builder**, the last 30-day populations for traits (**Total Trait Populations**), can be different for traits and real-time segments.

- For traits, the last 30-day metric counts the number of deduplicated users who qualified for that trait during the last 30-days.
- For real-time segments, the last 30-day metric counts the number of users who have qualified for a trait (in that segment) at some point in the past and have been seen again by Audience Manager within the last 30-days. For example, say you have a user who qualified for a trait 60-days ago and was seen again 10-days ago. In the data, this user won’t be added to the trait count because they first qualified for the trait more than 30-days ago. However, they will be included in the last 30-day count |
Description Metric for the real-time segment results because they've qualified for the segment within that time interval.

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population (Existing)</td>
<td>The actual number of deduplicated visitors who were qualified for the segment as of yesterday.</td>
</tr>
</tbody>
</table>

**Segment Population Data for Merge Rules With a Device Graph Option**

The following table defines the actual real-time and total population metrics when your segments are used by a Profile Merge Rule created with a device graph option. These are the device options settings for the Profile Link Device Graph, the Adobe device graph, and other third-party device graph choices that are available to you.

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real-Time Population (Existing)</td>
<td>The actual number of devices seen in real-time with current profiles that, when merged with up to 3-other device profiles connected by the device graph, contains the traits to qualify for the segment the moment it was seen by Audience Manager.</td>
</tr>
<tr>
<td>Total Population (Existing)</td>
<td>The total number of devices with profiles that, when merged with up to 3-other device profiles connected by the device graph, were all qualified for the segment.</td>
</tr>
</tbody>
</table>

*Note: The Total Segment Population (Existing) will never decrease when a Profile Merge rule uses a device graph option. This is because the capability to un-segment a device is not currently supported for these types of Profile Merge Rules. For more information, see Device Graphs and Profile Merge Rules.*

**Tags**

*Tag Insertion Manager* (TIM) was used to create and manage data collection code. This feature is deprecated and has been replaced by the Adobe Dynamic Tag Manager.

For more information, see *Dynamic Tag Management*.

**Traits**

Manage data collection and audience creation with rules-based, onboarded, algorithmic or folder traits.

**Trait Details Page**

The details page for an individual trait provides overview of information like the trait name, ID, performance metrics, expressions that define the trait, segments it belongs to, and the trait audit log. To view these details, go to *Manage Data > Traits* and click the name of the trait you want to work with.

Contents:

- *Basic Information*
Basic Information

The **Basic Information** section shows details about required and optional fields you completed when building the trait. This includes things like the trait ID, description, data source, and other metadata. These details vary depending on trait type (folder, onboarded, or rule-based).

![Basic Information]

- **Trait ID:** 123455
- **Description:** Optional description here. Added when you create or edit a trait.
- **Data Source:** Demdex
- **Event type:**
- **Integration code:** 7344858
- **Stored In:** Subfolder A
- **Data Category:** undefined
- **Comments:** Trait for testing and evaluation.
Trait Graph

The **Trait Graph** provides at-a-glance performance metrics for your selected trait. Hold your cursor over a trend line to see additional data for the selected trait.

**Unique Trait Realizations** represent a count of unique users that added this trait to their profile over the given time range. The **Total Trait Population** indicates the number of unique users currently qualified for this trait.

- For rule-based traits, trait qualification happens in real-time, as users qualify for a trait in their browser.
- For onboarded traits, trait qualification happens after an inbound file is processed, i.e. the inbound file is fed into *Audience Manager* and that is when the trait qualification happens.
Trait Expression

The Trait Expression section shows you the criteria users must meet to qualify for the trait. These rules are set when you create or edit a trait.

![Trait Expression Example]

Trait Segments

The Segments with this Trait section lists all the segments the selected trait belongs to. You can click on a segment name to see details about that segment.

<table>
<thead>
<tr>
<th>Segment ID</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>953476</td>
<td>Omniture.com Pages</td>
<td>--</td>
</tr>
<tr>
<td>1011616</td>
<td>Omniture.com English Pages</td>
<td>--</td>
</tr>
</tbody>
</table>

Trait Audit/History Log

For rule-based and onboarded traits, the Trait Expression Change History shows you the last 10-changes made to a trait's expression rules and who made them. If your trait has more than 10 changes, click Export to CSV to download the entire audit log. The audit log is not available for folder or algorithmic traits.

💡 Note: "Not Available" in the By User column means the account for that user has been deleted.
Trait List View

The Traits dashboard is a centralized workspace for managing traits.

The Traits dashboard contains features and tools that help you:

1. See all your traits and related details in a table with columns you can sort.
2. Review and work with Active Audience Traits and Data Source Synced Traits.
3. Create, edit, and delete traits.
4. View and manage trait storage folders.
5. Search for traits by name, ID, description or data source. Click on a folder while searching to limit results to that folder and its subfolders.
6. Filter traits by trait type (onboarded, rules-based, algorithmic, folder traits).

Active Audience Traits and Data Source Synced Traits

These are special traits used by Addressable Audiences. Active Audience and Data Source Synced Traits are located in Manage Data > Traits > Audience Traits.

Note: Access requires administrator permissions.

Active Audience Traits

An Active Audience trait contains all of the devices under management in your Audience Manager account. You can use an Active Audience Trait like other traits when you build or edit segments. Also, Addressable Audiences
requires this trait to generate overlap data. All accounts have an **Active Audience** trait by default. This trait cannot be deleted.

**Data Source Synced Traits**

*Data Source Synced Traits* appear in the **Audience Traits** folder when you *create or edit a datasource* and apply either of these settings:

*Data Source Synced Traits* track all of the users associated with a data source. You can use a *Data Source Synched Trait* like other traits when you build or edit segments. When you create a *Data Source Synced Trait*, the trait name matches the name used by your data source. Edit the data source to change the trait name. These traits cannot be deleted.

**Tip:** *Data Source Synced Traits* are useful for troubleshooting. Click a trait name to check the metrics on the trait summary page. If your selected trait returns data, that indicates the ID synchronization process is set up properly and pushing data to Audience Manager.

**Folder Traits**

A folder trait allows you to capture all the users and activities from its associated folder and any child folder.

**Folder Traits: About**

Folder traits let you automatically aggregate traits that reside within the same folder and all child folders into a targetable segment.

Contents:

* Benefits of Using Folder Traits
* Folder Traits Realization - Recency and Frequency
* Folder Trait Reporting
* Role-Based Access Controls (RBAC) Permissions
* Limits and Other Considerations

**Benefits of Using Folder Traits**

A folder trait contains all the traits in a parent folder and its associated child folders. This lets you automatically segment and target your users at different folder levels. For example, let's say you have a folder structure like this:

- Electronics (parent)
- Laptops (child)
Brands (grandchild)

Folder traits qualify all the users in these folders in an automatically created Electronics Folder Trait (based on the name of the parent folder). And, this process repeats itself as you move down the file structure. In this case, folder traits capture all of the users in the Laptops and Brands folders in an automatically created Laptops Folder Trait.

Folder traits are selectable in segment expressions. Selecting a folder trait is equivalent to selecting all the traits within that folder and its subfolders with an "OR" grouping.
Folder Traits Realization - Recency and Frequency

The frequency count of a folder trait is the sum of realizations of the traits in its folder and its child folders. The illustration below shows traits A, B and C, which live in the Automobile folder. Consider that each of the traits have the following realizations:

- Trait A: 5
- Trait B: 1
- Trait C: 1

In this case, the Automobile Folder Trait has 7 realizations.

<table>
<thead>
<tr>
<th>Trait ID</th>
<th>Name</th>
<th>Description</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>7440714</td>
<td>Automobile Folder Trait</td>
<td>Auto Created Folder Trait</td>
<td>Folder Trait</td>
</tr>
<tr>
<td>7440715</td>
<td>Trait A</td>
<td></td>
<td>Rule-based</td>
</tr>
<tr>
<td>7440716</td>
<td>Trait B</td>
<td></td>
<td>Algorithmic</td>
</tr>
<tr>
<td>7440717</td>
<td>Trait C</td>
<td></td>
<td>Onboarded</td>
</tr>
</tbody>
</table>

Folder Trait Reporting

Folder traits capture all the users from the traits in the folder structure below them. If you move a trait from a folder to another folder, the change propagates to our data collection servers just like a trait rule change. The reporting updates in the next reporting run to reflect this change across the reporting date ranges (1, 7, 14, 30, 60, 90, lifetime). The old reporting numbers from the previous days will not change.

Role-Based Access Controls (RBAC) Permissions

For companies using Role-Based Access Controls (RBAC), your users with the appropriate RBAC permissions are able to change the data source associated to the folder trait. A user must belong to a group with either of the following:

- READ and WRITE group permissions to a trait data source.
- VIEW_ALL_TRAITS and EDIT_ALL_TRAITS wild card permissions for trait data sources.

Learn how to assign RBAC permissions in our administration documentation.

Limits and Other Considerations

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trait type</td>
<td>Onboarded traits and algorithmic traits contribute at most 1 realization to a folder trait's frequency.</td>
</tr>
<tr>
<td>Moving traits between folders</td>
<td>Moving a trait from a folder to another will disqualify that trait from the first folder trait and qualify it for the second folder trait. This means that if you delete or move a trait from the folder, the users in the trait's population will be unsegmented from the segments using the folder trait as a segment expression.</td>
</tr>
</tbody>
</table>
System variables
Folder traits cannot be realized in event calls using the d_sid parameter.

Reporting
Folder traits are autocalculated traits and do not appear in Overlap Reports.

Create a Folder Trait
A folder trait is created automatically when you create a new folder in your taxonomy.

To create a folder trait
1. Manage Data > Traits to navigate to the Traits dashboard.
2. In the Trait Storage window, hover over:
   - "All Traits" text to add a new root level folder.
   - An existing parent folder to add a new subordinate folder.
3. Click the + icon to create the folder. Note that you can create a maximum of 2,000 folders in your taxonomy. See the usage limits documentation for more information.
4. Name the folder and click Save. For example, a folder named Electronics will have a folder trait named ‘Electronics Folder Trait’.
   You can view and select the new folder trait in the traits dashboard.
5. The new folder trait is automatically assigned to the Audience Manager generated data source. Your users with appropriate Role-Based Access Control (RBAC) permissions can change the data source in the edit folder trait workflow. See Edit a Folder Trait.

Edit a Folder Trait
Describes how you can edit a folder trait.

To edit a folder trait
1. In the Traits dashboard, hover over the Actions column for the folder trait you want to edit.
2. Click the pencil to edit the trait.
3. The **Edit** workflow allows you to change the data source for folder traits. Select your desired data source and click **Save**. Data sources are sorted numerically, by DPID, in the drop-down box.

   If your company uses Role-Based Access Rights (RBAC), you or your users need **access permissions** to traits data sources.

   👨‍💼 **Note:** You cannot directly rename a folder trait. **Rename its associated storage folder in order to change the name of the folder trait.**

### Delete a Folder Trait

Delete a folder trait by deleting the storage folder that the trait belongs to.

**To delete a folder trait**

1. **Manage Data > Traits** to navigate to the **Traits** dashboard.
2. In the Trait Storage window, delete a folder by hovering over it and clicking the X icon.

   ![Trait Storage](image)

   👨‍💼 **Note:** You cannot delete a folder trait, if it is used in a segment expression. Navigate to the **trait view section** to see which segments use the folder trait. Then, click on the segment name to open the **segment summary view**, which allows you to remove traits from segment expressions.

### Trait Summary View

The trait summary page gives you a detailed overview of useful trait information.

Click on a trait name from the **main dashboard** to access its summary page. The trait summary page contains details about:

- **Basic Information**: Shows required and optional details specified when the trait was created.
- **Trait Graph**: Shows trait qualifications for the last 90-days.
  - For rule-based traits, trait qualification happens in real-time, as users qualify for a trait in their browser.
  - For onboarded traits, trait qualification happens after an inbound file is processed, i.e. the inbound file is **fed into Audience Manager** and that is when the trait qualification happens.
- **Unique Trait Realizations**: A count of unique users that added this trait to their profile over the given time range.
• Total Trait Population: The number of unique users currently qualified for this trait.
• Trait Expression: Shows the various rules for the trait. For rule-based traits, clicking "Edit" lets you manage the various rules that the trait consists of.
• Segments with this Trait: Shows you what segments the trait belongs to.
• Management Tools: Controls that let you create, edit, clone, and delete traits.

**Trait Builder**

Describes how to create rules-based, onboarded and algorithmic traits with Trait Builder.

**About Trait Builder**

Trait Builder is a feature that improves upon traditional pixel-based data collection and audience creation/segmentation processes. It works by processing page data with server-side rules you create in the user interface.

Compared to pixels, which fire in response to simple "yes" or "true" conditions, Trait Builder lets you:

• Collect *all* page data so you can use it later to build relevant, useful traits.
• Build traits based on *key-value pairs* passed in during data collection.
• Evaluate complex data conditions with server-side rules that work with *Boolean expressions* and *comparison operators*.
• Reduce or eliminate the need to maintain data collection pixels on your inventory.
• Monitor performance with Audience Manager reports.

**Create Rules-Based, Onboarded or Algorithmic Traits**

Contains information about set up steps, features, or tools unique to each trait type.

**Basic Information for Traits**

In Trait Builder, the **Basic Information** settings let you create new, or edit existing traits. The **Basic Information** settings are the same for rules-based, onboarded and algorithmic traits. To create a new trait, provide a name (avoid special characters), a data source, and select a storage folder. Other **Basic Information** fields are optional.

**Basic Information Fields Defined**

<table>
<thead>
<tr>
<th>Interface Element</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>The trait name. Required.</td>
</tr>
<tr>
<td></td>
<td><img src="image" alt="Note: When naming traits, avoid these special characters:" /></td>
</tr>
<tr>
<td></td>
<td>• Commas</td>
</tr>
<tr>
<td></td>
<td>• Dashes</td>
</tr>
<tr>
<td></td>
<td>• Hyphens</td>
</tr>
<tr>
<td></td>
<td>• Tabs</td>
</tr>
<tr>
<td></td>
<td>• Vertical bar or pipe symbol</td>
</tr>
<tr>
<td>Description</td>
<td>A few words to help describe the trait’s purpose or function. Optional.</td>
</tr>
<tr>
<td>Event Type</td>
<td>Assigns the trait to a type or category, usually according to function (e.g. conversion, site visitor, partner, page view, etc.). Optional.</td>
</tr>
<tr>
<td>Interface Element</td>
<td>Explanation</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Data Source</td>
<td>Associates the trait with a specific data provider. Required.</td>
</tr>
<tr>
<td>Integration Code</td>
<td>A field for an ID, SKU, or other value used by your internal business processes. Optional.</td>
</tr>
<tr>
<td>Comments</td>
<td>General notes about a trait. Optional.</td>
</tr>
<tr>
<td>Stored In</td>
<td>Determines which storage folder the trait belongs to. Required.</td>
</tr>
<tr>
<td>Data Category</td>
<td>Classifies traits according to commonly understood categories.</td>
</tr>
</tbody>
</table>

Note: Traits belong to a single category only. Optional.

Create Rules-Based or Onboarded Traits

Describes set up steps and features specific to the rules-based and onboarded trait creation process.

Managing Trait Rules

In Trait Builder, the Expression Builder lets you create and test rules that establish audience qualification requirements. Rules consist of key-value pairs such as "color == blue" or "price > 100". Comparison operators establish the relationship between keys and values. Boolean expressions determine the relationship between rule groups.

Main Signal Rules Features Described

1. The Expression Builder or Code View tabs provide an overview of the rules in your trait. The Expression Builder tab lets you create rules with fields and drop-down menus. The Code View lets you create rules by manually writing those expressions as code. The illustration above shows a simple trait composed of a signal that evaluates data for a qualifying condition where a product key equals a specific value, in this case color == "blue".

2. The fields and controls in this section let you create signals from key-value pairs and set the relationship between them with a comparison operator. A key, operator, and value are required.
3. The test fields let you validate combinations of signal rules or the URLs that you want to use when sending data to Audience Manager.

Create a Trait Rule

Rules (or expressions) consist of individual or groups of key-value pairs. Comparison operators set the relationship between key-value pairs. To create a rule, provide a key, a value, select an operator, and click "Add Rule."

Complete the required fields in the **Basic Information** section before creating trait rules.

**To create a rule**

1. Expand the **Trait Expression** section and enter a key and value name.
   This creates a *signal*.

   **Note:** Include the `c_` prefix (or any other naming convention) for key variable if your event calls send data to Audience Manager using that syntax.

2. Select a **comparison operator** from the **Operator** dropdown.
   The comparison operator evaluates the relationship between the elements in a signal.

   **Note:** The Boolean OR operator establishes the relationship between multiple signals within a group and cannot be changed.

3. Click **Add Rule**.
   The saved rule appears in the traits workspace above the data entry fields.

**Example**

In the example below, a user has created a new trait rule based on the product ID. To build this rule, the user provided the key `productKey` linked with an equals operator `==` to the value 2093.

Clicking **Add Rule** saves and moves the trait into the **Expression Builder** workspace.
Create a New Rule Group
This procedure describes how to create a new rule group.

Your trait must contain at least two rules before you can create a new rule group.

**To create a new rule group**

1. Move your cursor over the rule you want to move to highlight it.
2. Hover over the highlighted rule border. This automatically separates the rule from its current group and moves it into a new group.

   **Note:** Drag a rule back to its original group if you move it unintentionally.

3. Select a Boolean operator (AND, OR, AND NOT) from the dropdown menu to set the relationship between the rule groups.

Move Rules Between Groups
To move a rule, click and drag it to another group.

Edit a Trait
This procedure describes how to edit a trait.

**To edit a trait**

1. In the Traits dashboard, hover over the **Actions** column for the trait you want to edit. This brings up the trait management icons.
2. Click the pencil to edit the trait.

Delete a Trait Rule
This procedure describes how to delete a trait rule.

**To delete a rule**

1. In the Traits dashboard, hover over the **Actions** columns for the trait you want to edit and click the pencil icon. This brings up the trait management icons.
2. Expand the **Trait Expression** section.
3. Hover over the rule you want to delete and click the X icon. Clicking X deletes the rule immediately.
Set a Trait Expiration Interval

In Trait Builder, the Advanced Options lets you set a time-to-live (TTL) interval for a trait. TTL defines how many days a qualified visitor remains in a trait (120 days is default). When set to 0, trait membership never expires.

To set the TTL for a trait

1. Expand the Advanced Options section and enter a number to set a TTL value for the trait.
2. Click Save.

Create Algorithmic Traits

Describes set up steps and features unique to the algorithmic trait creation process.

Create an Algorithmic Trait

Describes the required and optional steps that let you create an algorithmic trait.

To create an algorithmic trait, go to Traits and follow the steps below:

1. Click Create New Trait and select Algorithmic from the drop down menu.
2. In the Basic Information section
   - Name the trait.
   - Select a data source.
   - Choose a storage folder.
3. Expand the Configuration pane and click Browse All Models. This opens a new window that lets you select the model you want to use with the trait.
4. Select a model and click Add Selected Model to Trait. Adding the model exposes the reach and accuracy settings.
5. Select reach or accuracy as your goal and choose a value from the respective drop down menus. Click Save when done.

Configuration Settings for Algorithmic Traits

In Trait Builder, the Configuration section lets you associate an algorithmic model to a trait. To complete the algorithmic trait creation process, select a model and choose a reach or accuracy goal.

Prerequisites:

- Create an algorithmic model.
- Wait for the notification email that lets you know the model data run has finished.
- Complete the required fields in the Basic Information section.

Configuration Fields and Settings
<table>
<thead>
<tr>
<th>Interface Element</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select Model for Algorithmic Trait</td>
<td>Click the <strong>Update</strong> button to open the models window. From the window, select the algorithmic model that you want to use to create the trait.</td>
</tr>
<tr>
<td>Select Goal Accuracy</td>
<td>Select this option to create a trait based on accuracy. Accuracy is a scored value that indicates how close potential users are to your baseline. The accuracy scale ranges from 0 (least accurate) to 1 (most accurate).</td>
</tr>
<tr>
<td>Reach and Accuracy Data Columns</td>
<td>Located on the right, this section displays up to 21 rows of numeric data that displays the accuracy and reach values for your model.</td>
</tr>
<tr>
<td>Reach and Accuracy Slider</td>
<td>Located at the bottom of the graph, the slider lets you set a numeric value for your reach or accuracy goals. You can set the slider and then choose the reach or accuracy goal button to create a trait.</td>
</tr>
</tbody>
</table>

**Trait Storage**

Trait storage folders store and help you organize traits.

**Purpose of Trait Storage Folders**

In Trait Builder, trait storage folders are directories that hold and organize traits into logical groups that you create. Access the storage folders from the **Traits** dashboard or when creating a new trait. Remember, you cannot create a new trait without assigning it to a storage folder.

**Create a Trait Storage Folder**

This procedure describes how to create a storage folder for your traits.
You can create a new storage folder in the Basic Information section when setting up a new trait. Also, folders can be created in Trait Storage section of the main Traits list dashboard.

To create a new storage folder

1. In the Trait Storage window, hover over:
   • "All Traits" text to add a new root level folder.
   • An existing parent folder to add a new subordinate folder.
2. Click the + icon to create the folder.
3. Name the folder and click Save.

Rename or Delete a Trait Storage Folder

This procedure describes how to rename or delete a storage folder.

You can rename or delete storage folders from the Trait Storage section of the main Traits list dashboard.

• Rename a folder by hovering over it and clicking the pencil icon.
• Delete a folder by hovering over it and clicking the X icon.

Trait Builder Reference

Concepts and other material related to traits.

Accuracy and Reach

Describes the relationship between accuracy and reach in algorithmic traits.

Accuracy vs Reach: About

It's important to understand the relationship between accuracy and reach when working with algorithmic traits. Accuracy is represented by a scored value that reflects how similar users are to your baseline. The accuracy scale ranges from 0 (least accurate) to 1 (most accurate). Reach is simply a value that represents the number of unique users you would like to include in a trait. Reach and accuracy are inversely related. Accurate traits reach fewer users and traits with greater reach are less accurate. The following image illustrates this concept.
Accuracy and Reach Affect Audience Size

Your business goals should help you make the right decisions about accuracy and reach when working with algorithmic traits. If accuracy is your goal, note that a trait’s population can increase or decrease across model runs. Population changes are the results of the algorithm making decisions during each evaluation period. Sometimes, the algorithm finds more qualified users during a processing cycle and, during others, it may find fewer. Results are determined by the baseline data used to create the model and new visitors and trait qualifications that have come since the previous model run. By contrast, when working with reach, the user population count remains constant. For example, if you want to reach 10,000 users, the algorithm will make sure it always hits that number for each model run.

General Use Cases for Accuracy vs Reach

The focus on accuracy or reach depends on what you want to achieve with a particular segment. The following table may help you evaluate accuracy vs reach when creating a trait.

<table>
<thead>
<tr>
<th>Trait Decision Favors</th>
<th>Helps Find</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy</td>
<td>Users similar to baseline customers in your model. Useful for targeted campaigns when you want to reach a specific audience.</td>
</tr>
<tr>
<td>Reach</td>
<td>A specific number of users for each data run. Useful for brand campaigns when you’re interested in reaching an audience of a specific size.</td>
</tr>
</tbody>
</table>

Working with Comparison Operators in Trait Builder

This article describes the comparison operators used by Trait Builder.

Purpose of Comparison Operators
Comparison operators (or relational operators) are used to compare, test, or evaluate the relationship between different values. In Trait Builder, when building signal rules, comparison operators let you test the relationship between different key-value pairs. For example, you could create a signal rule to define an audience for expensive camera shoppers. In this case, you could create a camera/price key-value pair and qualify a user if they've looked for a camera with a price equal to or greater than a set amount.

**Advantages of Comparison Operators**

Comparison operators are useful when you need to evaluate and create traits based on multiple values. Looking at prices on goods and services can illustrate this condition. For example, your business may want to identify visitors based on the prices of the products they view. However, it can be administratively inefficient to define individual segments based on specific values. Comparison operators help overcome this hurdle by establishing segmentation triggers based on price thresholds or ranges.

**Comparison Operators**

You can build rules with the following comparison operators:

<table>
<thead>
<tr>
<th>Operator</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>==</td>
<td>Equal to</td>
</tr>
<tr>
<td>!=</td>
<td>Not equal to</td>
</tr>
<tr>
<td>&gt;</td>
<td>Greater than</td>
</tr>
<tr>
<td>&lt;</td>
<td>Less than</td>
</tr>
<tr>
<td>=&gt;</td>
<td>Greater than/equal to</td>
</tr>
<tr>
<td>&lt;=</td>
<td>Less than/equal to</td>
</tr>
</tbody>
</table>

**Named Operators**

You can build rules with the following named operators:

<table>
<thead>
<tr>
<th>Operator</th>
<th>Evaluates to True When</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contains</td>
<td>The value in a key-value pair contains characters specified by this operator.</td>
</tr>
<tr>
<td>Matchesword</td>
<td>The value in a key-value pair matches the pattern specified by this operator.</td>
</tr>
<tr>
<td>Startswith</td>
<td>The value in a key-value pair starts with characters specified by this operator.</td>
</tr>
<tr>
<td>Endswith</td>
<td>The value in a key-value pair ends with the characters specified by this operator.</td>
</tr>
<tr>
<td>Matchesregex</td>
<td>The value in a key-value pair matches the pattern specified by a regular expression. Learn more about using regular expressions in Trait Builder.</td>
</tr>
</tbody>
</table>

**Classifying Traits with a Common Taxonomy**

This article provides general overview about classifying traits with a common taxonomy.
The Audience Manager Taxonomy

The Audience Manager taxonomy is an optional feature that classifies traits using uniform, logical, and commonly understood naming conventions. It operates at the platform level to help ensure naming consistency throughout the Audience Manager ecosystem. Ultimately, the common taxonomy is designed to bring our product into greater alignment with industry standards regarding consumer privacy and opt-out processes.

Advantages of Trait Classification

Enabling our customers to build custom segments and data models is core to the Audience Manager model and to your ability to capture value from our platform. What is also required, however, is a robust and scalable means to communicate information about segments to your customers and partners. Furthermore, this communication requires that segment information is shared in an easy-to-understand and universally understood language while protecting your proprietary trait and segment names. The Audience Manager common taxonomy provides this language and capability.

The Taxonomy Uses Industry Standard Classification Categories

The common taxonomy is based on the classifications created by the Interactive Advertising Bureau (IAB). Refer to the IAB's website for more information about quality assurance guidelines for networks and exchanges.

Taxonomic Organization

The Audience Manager taxonomy organizes data into nested categories called tiers. Each category can contain up to 3 separate tiers for data classification. At the highest level, a Tier 1 category groups data into its most general form (e.g., geography). Subsequent tiers provide greater specificity to the higher level, general category (e.g., geography --> United States --> New York). However, not every category has 3 tiers, some use just 2.

Classify Traits in Data Categories

You assign taxonomic classifications when creating or editing traits in the Add New Trait Wizard (located in Manage Data > Traits). Refer to the documentation on creating traits for more information.

Working With the Taxonomy: Additional Considerations

If you decide to classify traits according to our common taxonomy, it's important to remember:

• Classification is optional.

• Traits are not assigned to a taxonomic category by default (i.e., traits are not classified as "unknown" or "uncategorized" etc.).

• Traits can belong to one taxonomic category only (multiple and cross-category classifications are not allowed).

Order of Operations in Trait Builder

Trait Builder evaluates expressions according to the order-of-operations listed below, from high to low precedence. Trait elements defined by high-precedence operators are evaluated first, before other precedence operators. This section ranks each operator according to precedence, from high to low.

<table>
<thead>
<tr>
<th>Operator precedence</th>
<th>Symbol</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parenthesis</td>
<td>( )</td>
<td>Expressions in parenthesis are always evaluated first and follow precedence order.</td>
</tr>
<tr>
<td>Comparison operators</td>
<td>&lt; &gt; &lt;= &gt;=</td>
<td>Less than, greater than, less than/equal to, greater than/equal to are evaluated next.</td>
</tr>
</tbody>
</table>
Name Requirements for Key Variables

This article describes the naming conventions used by the key variable in a key-value pair.

Naming Requirements for Keys

In Expression Builder, the name of a key variable in a key-value pair can consist of any number of digits followed by 1 (or more) letters, a dash, an underscore, and additional digits.

- **Valid key names:** `price123`, `123price`, `price-123`, `c_price123`.
- **Invalid key names:** `123`, `price!123`.

Prefixing Key Variables with `c_`

The `c_` prefix is always required if the parameters that send in data on an event call URL use that syntax.

Segment Time to Live Explained

How trait time-to-live (TTL) interval affects segment membership.

Time to Live

TTL defines how long a site visitor remains in a segment after the last trait qualification event. TTL is set on traits and not on segments. Visitors fall out of a segment if they do not see a qualifying trait before the end of the TTL interval. The default TTL for new traits is 120-days. When set to 0-days, the trait never expires. Set the TTL value when you create or edit a trait in the Advanced Options section of the trait creation interface.

TTL and Dropping Out of a Segment

A user falls out of a segment if they do not see any of its traits within the TTL interval. For example, if you have a 1-trait segment with a 30-day TTL, the user will drop out of that segment if they do not see the trait again within the 30 days.

TTL and Segment Renewal

The TTL resets, and the user remains in a segment, if they see that segment’s trait within the TTL period. Also, because most segments contain multiple traits with their own TTL periods, a user can remain in a segment (and reset the TTL interval) as long as they keep seeing any traits associated with a segment. For example, say you have Segment 1 composed of Trait A (30-day TTL) and Trait B (15-day TTL). Assuming the user sees each trait only once, the illustration below outlines the TTL renewal process and total in-segment duration.
Audience Manager TTLs are Independent of Third-Party TTL Settings

Remember, the TTL set on your Audience Manager pixel operates independently from the TTL set on other pixels used by third parties (DSPs, ad networks, etc.).

Prefix Requirements for Key Variables

This article describes the prefixes you must attach to key variables when creating trait rules.

Purpose of Key Variable Prefixes

When you create Trait Builder rules, it is important to preface the key variable with a recommended prefix. These prefixes identify the type of data passed in and help avoid namespace conflicts within Audience Manager. Generally, you can give a variable any name, but data for a rule will not process if the key variable name does not match the variable name in an event call.

Prefixes for Key Variables

The following table defines the common prefixes used by Trait Builder.

<table>
<thead>
<tr>
<th>Key variable prefix</th>
<th>Identifies the variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>c_</td>
<td>As customer specific. This is key data sent in from your own properties.</td>
</tr>
<tr>
<td>d_</td>
<td>At the Audience Manager level. This data is uniform across the Audience Manager ecosystem. See Supported Attributes for DCS API Calls for a more complete list.</td>
</tr>
<tr>
<td>h_</td>
<td>That contains HTTP header information. Includes header parameters such as referer, IP, accept-language, etc.</td>
</tr>
</tbody>
</table>
| p_                  | Our Data Collection Servers allow passing of private parameters. Basically, any parameter that starts with p_ will be used for trait evaluation, but it will not be logged downstream, nor stored.  
Example: given /event?p_age=23 and a trait like YoungPeople = p_age < 25, the trait will be realized, but the p_age=23 key-value pair will be dropped after the request and will not be logged. |
**Geotargeting With Platform-level Keys**

Describes the common platform-level key-value pairs you can use to target users with geographic variables across all properties in your Audience Manager account.

This topic contains the following sections:

- **Purpose of Platform-level Variables**
- **Adding Values to Platform Level Keys**
- **User Defined Platform-Level Keys**
- **Platform Level Keys Defined by IP Address**

**Purpose of Platform-level Variables**

Platform-level variables let you take data passed in from a particular site and make it available for targeting across all the properties in your Audience Manager account. These variables are formed by *key-value pairs* with the key prefixed by `d_` as shown below.

**Adding Values to Platform Level Keys**

For some platform-level keys, you can specify the value yourself. With others, the keys are associated with corresponding IP addresses passed in on an event call. In either case, you still need to specify the value when building traits in Trait Builder.

**User Defined Platform-Level Keys**

You specify the value when building traits with these key-value pairs:

<table>
<thead>
<tr>
<th>Key</th>
<th>For Targeting</th>
</tr>
</thead>
<tbody>
<tr>
<td>d_zx</td>
<td>ZIP code (e.g., d_zx=10022).</td>
</tr>
</tbody>
</table>

**Platform Level Keys Defined by IP Address**

The values for these keys are determined by matching IP addresses to corresponding geographic and demographic data. However, you'll still have to enter the value parameter when creating the key-value pair in Trait Builder.

<table>
<thead>
<tr>
<th>Key</th>
<th>For Targeting</th>
</tr>
</thead>
<tbody>
<tr>
<td>d_area_code</td>
<td><em>North America area codes.</em></td>
</tr>
<tr>
<td></td>
<td>For example:</td>
</tr>
<tr>
<td></td>
<td>Trait: d_area_code=801</td>
</tr>
<tr>
<td></td>
<td>Trait Name: Utah</td>
</tr>
<tr>
<td>d_city</td>
<td>Cities and towns. Download the <em>City List.</em></td>
</tr>
<tr>
<td></td>
<td>For example:</td>
</tr>
<tr>
<td></td>
<td>Trait: d_city=bonn</td>
</tr>
<tr>
<td></td>
<td>Trait Name: Bonn</td>
</tr>
</tbody>
</table>
## Features

<table>
<thead>
<tr>
<th>Key</th>
<th>For Targeting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>d_country</strong></td>
<td>Values correspond to ISO country codes. For a searchable list of codes, see the ISO Online Browsing Platform.</td>
</tr>
<tr>
<td></td>
<td>Targeting for the United Kingdom is the only special case that does not obey ISO 3166. You should use &quot;UK&quot; instead of &quot;GB&quot; for targeting in the United Kingdom.</td>
</tr>
<tr>
<td></td>
<td>To target the Netherlands Antilles, the code &quot;AN&quot; has been deprecated since 2010. The area has been dissolved into five separate territorial units. The implication is that for targeting in the Netherlands Antilles, you should not use &quot;AN,&quot; but a combination of the country codes for &quot;CW,&quot; &quot;SX,&quot; and &quot;BQ.&quot; For example:</td>
</tr>
<tr>
<td></td>
<td>Trait: $d_country=CZ$</td>
</tr>
<tr>
<td></td>
<td>Trait Name: Czech Republic</td>
</tr>
<tr>
<td></td>
<td>Trait: $d_country=UK$</td>
</tr>
<tr>
<td></td>
<td>Trait Name: United Kingdom</td>
</tr>
<tr>
<td></td>
<td>Trait: $d_country=CW \ OR \ d_country=SX \ OR \ d_country=BQ$</td>
</tr>
<tr>
<td></td>
<td>Trait Name: Netherlands Antilles</td>
</tr>
<tr>
<td><strong>d_dma_code</strong></td>
<td>Metropolitan area DMA codes. Download the DMA region list (.csv format).</td>
</tr>
<tr>
<td></td>
<td>For example:</td>
</tr>
<tr>
<td></td>
<td>Trait: $d_dma_code=807$</td>
</tr>
<tr>
<td></td>
<td>Trait Name: San Francisco</td>
</tr>
<tr>
<td><strong>d_lat</strong></td>
<td>Latitude (e.g. $d_lat=40.75$). Download the latitudes list.</td>
</tr>
<tr>
<td><strong>d_long</strong></td>
<td>Longitude (e.g. $d_long=73.98$). Download the longitudes list.</td>
</tr>
<tr>
<td><strong>d_postal_code</strong></td>
<td>ZIP codes (exclude the extended +4 code). Download the postal codes list.</td>
</tr>
<tr>
<td></td>
<td>For example:</td>
</tr>
<tr>
<td></td>
<td>Trait: $d_postal_code=84004$</td>
</tr>
<tr>
<td></td>
<td>Trait Name: Alpine</td>
</tr>
<tr>
<td><strong>d_state</strong></td>
<td>2-character abbreviation for a US state. Download the states codes list.</td>
</tr>
<tr>
<td></td>
<td>For example:</td>
</tr>
<tr>
<td></td>
<td>Trait: $d_state=NY$</td>
</tr>
<tr>
<td></td>
<td>Trait Name: New York</td>
</tr>
<tr>
<td><strong>d_region</strong></td>
<td>Regional alphanumeric IDs. Download the region list.</td>
</tr>
</tbody>
</table>
For Targeting
ISP/organization. Download the ISP List.

The list of all location-based signals comprises all the signals above, in the following order:
d_country, d_city, d_region, d_state, d_dma_code, d_postal_code, d_area_code, d_lat, d_long

Device Targeting With Platform-level Keys

Describes the common platform-level key-value pairs you can use to target users with device-related variables across all properties in your Audience Manager account.

Purpose of Platform-level Variables

Platform-level variables let you take data passed in from a particular site and make it available for targeting across all the properties in your Audience Manager account. These variables are formed by key-value pairs with the key prefixed by d_ as shown below.

Platform-level Keys Defined by User Agent

The Data Collection Servers extract the values for these keys from the user agent header in HTTP requests. The values represent device-level information from the Device Atlas database. The signals in the table below are available, as extracted from the user agent example. Download a list of the most common keys, according to Device Atlas measurements.

<table>
<thead>
<tr>
<th>Signal</th>
<th>Type</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>d_device_vendor</td>
<td>VENDOR</td>
<td>apple</td>
</tr>
<tr>
<td>d_device_hardware_type</td>
<td>HARDWARE</td>
<td>mobile phone</td>
</tr>
<tr>
<td>d_device_os_version</td>
<td>OS VERSION</td>
<td>5_0</td>
</tr>
<tr>
<td>d_device_os_name</td>
<td>OS NAME</td>
<td>ios</td>
</tr>
<tr>
<td>d_device_model</td>
<td>MODEL</td>
<td>iphone</td>
</tr>
<tr>
<td>d_device_marketing_name</td>
<td>MARKETING NAME</td>
<td>iphone</td>
</tr>
<tr>
<td>d_device_manufacturer</td>
<td>MANUFACTURER</td>
<td>apple</td>
</tr>
</tbody>
</table>

Mozilla/5.0 (iPhone; CPU iPhone OS 5_0 like Mac OS X) AppleWebKit/534.46 (KHTML, like Gecko) Version/5.1 Mobile/9A334 Safari/7534.48.3

💡 Note: Even if one or more signals cannot be retrieved from the user agent header, the other signals will still be passed to the Data Collection Servers.

Sample Expressions With Boolean and Comparison Operators

Examples you can refer to for creating expressions in the Expression Builder code editor.
Code Samples Overview

Create your own trait rules with the Expression Builder code editor. The following examples can help you get started. Some of the examples preface the key variable with c_ to identify it as a user-defined variable. Include the c_ prefix (or any other naming convention) for key variable if your event calls send data to Audience Management using that syntax.

Boolean Expressions

AND Example

The rule establishes trait qualification requirements using Boolean AND operators.

<table>
<thead>
<tr>
<th>Sample Code</th>
<th>To qualify, a visitor must</th>
</tr>
</thead>
</table>
| (c_make=="A") AND (c_model=="B") AND (c_search=="1") | • Look for a specific make and model.  
• Find the product from a search results page (search = "1" or "true"). |

OR Example

This rule establishes trait qualification requirements using Boolean OR and AND operators.

<table>
<thead>
<tr>
<th>Sample code</th>
<th>To qualify, a visitor must</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a== &quot;1&quot; OR b==&quot;1&quot;) AND (c== &quot;new&quot;)</td>
<td>Meet the conditions set by variables a or b and c.</td>
</tr>
</tbody>
</table>

Range Example with Greater Than, Less Than, Equal To

This rule establishes trait qualification requirements using a range.

<table>
<thead>
<tr>
<th>Sample code</th>
<th>To qualify, a visitor must</th>
</tr>
</thead>
<tbody>
<tr>
<td>(price&gt;== &quot;1.00&quot; OR price&lt;= &quot;100.00&quot;)</td>
<td>Meet any price condition between 1.00 and 100.00.</td>
</tr>
</tbody>
</table>

Trait Qualification Reference

Trait qualification, or trait realization is treated differently in Audience Manager, depending on trait type. See the table below for detailed information on trait qualification.

### Trait Qualification by Trait Type

### Trait Qualification Limit

<table>
<thead>
<tr>
<th>Trait Qualification by Trait Type</th>
<th>Qualification criteria</th>
</tr>
</thead>
</table>
| Rule-based Traits                 | Trait qualification happens in real-time, as users qualify for a trait in their browser.  
Rule-based traits allow you to use recency and frequency controls for ad frequency capping and other use cases. |
<table>
<thead>
<tr>
<th>Trait type</th>
<th>Qualification criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onboarded Traits</td>
<td>Trait qualification happens after an inbound file is processed, i.e. the inbound file is <em>imported into Audience Manager</em> and that is when the trait qualification happens. For onboardead traits, the maximum number of qualifications for a user profile is 1.</td>
</tr>
<tr>
<td>Algorithmic Traits</td>
<td>For algorithmic traits, the maximum number of qualifications for a user profile is 1.</td>
</tr>
<tr>
<td>Folder Traits</td>
<td>A folder trait sums up the trait qualifications of the traits it contains. Read <a href="folder_traits_about"><em>Folder Traits: About</em></a> for more information.</td>
</tr>
<tr>
<td>Active Audience Traits and Data Source Synced Traits</td>
<td>An Active Audience trait contains all of the devices under management in your Audience Manager account. Data Source Synced Traits track all of the users associated with a data source. Read more about <a href="active_audience_traits_data_source_synced_traits"><em>Active Audience Traits and Data Source Synced Traits</em></a>.</td>
</tr>
</tbody>
</table>

**Trait Qualification Limit**

We enforce a limit of 100,000 trait qualifications for each user profile, whether it is an authenticated profile (*DPUUID*) or a device ID (*UUID*). Note that while the DPUUIDs are unique to a specific instance of Audience Manager, UUIDs are shared across the Audience Manager platform. For UUIDs, we impose a fairness policy when storing trait qualifications. An algorithm ensures that an equal share of the UUID profile is made available for every instance of Audience Manager.

**Using Regular Expressions in Trait Builder**

You can create your own trait rules with the *Trait Builder* code editor. Find the code editor in *Traits > Add New > Rule-based > Trait Expression* and switch to *Code View*. Audience Manager supports all the available regular expression constructs referenced in the Java Regular Expression Class Pattern. You can validate any of the regular expressions directly in the Expression Builder. See also, [*Java Regular Expression Class Patterns*](java_regular_expression_class_patterns).

**Visitor Profile Viewer**

Use the *Visitor Profile Viewer* to display the current state of a user profile for the current browser, including its traits and segments. For each trait, you can view its SID, name, details about how visitor traits were realized (first- or third-party), the realization date, and the frequency of realizations. For each segment, you can view its SID, name, and the segment membership date. You can also view the visitor profile for another Audience Manager profile ID (*UUID*). The Visitor Profile Viewer is helpful for troubleshooting purposes.
Note:

• Access requires Administrator permissions.
• There is a 24-hour delay before information about realized segments and onboarded traits appears in the user interface.
• Traits that are not part of a segment will not appear in the Visitor Profile Viewer.

1. Click Tools > Visitor Profile Viewer.
2. (Optional) Click the trait name to display that trait in the Trait Builder.
   For more information, see Traits.
3. (Optional) Click the segment name to display that segment in the Segment Builder.
   For more information, see Segments.
4. (Conditional) In the UUID box, specify another Audience Manager profile ID, then click Refresh to view the traits and segments for that user.
API and SDK Code

APIs and toolkits that let you work programmatically with Audience Manager.

💡 **Note:** These features are not supported by our APIs:
- General, Trend, and Interactive reports.
- Deprecated Tag Insertion Manager (TIM) functionality.

Audience Manager API Code Migration

Here at Audience Manager, we’re engineers, developers, and code ninjas just like you. And, like you, we want to work with reliable, accurate API documentation. As a result, we’re re-writing our API content in Swagger and moving it to a new location. These changes are designed to help improve your experience with the Audience Manager API code.

Movin’ On Up

The *Adobe Audience Manager API Docs* site is the new home for our revised API content. We'll try to re-write and move a few sets of API methods with each release. This means you'll have to check in both the new location and the REST API documentation to find all of the available methods. Eventually, all of the public APIs will be on the Audience Manager API docs site. The following table lists the revised and migrated APIs.

<table>
<thead>
<tr>
<th>API Type</th>
<th>API Methods</th>
</tr>
</thead>
</table>
| Audience Marketplace | • Data Feeds  
|                    | • Data Feed Request  
|                    | • Data Feed Finance  
|                    | • Data Feed Plans  
|                    | • Data Feed Subscriptions |
| Data Source        | Data Sources                                     |
| Folders            | • Segment Folders  
|                    | • Trait Folders                                     |
| Reporting          | Reporting                                         |
| Segments           | • Segments  
|                    | • Segment Test Groups  
|                    | • Segment Test Group Draft API  |
| Traits             | Traits                                           |
Data Collection Server (DCS) API Methods and Code

Code, methods, and techniques that let you work programmatically with the Audience Manager Data Collection Servers (DCS).

DCS Event Call APIs

Event calls send information to the DCS in a URL string. In a typical Audience Manager deployment, customers use our JavaScript data collection code (DIL) to send data to the DCS. However, sometimes customers cannot put our JavaScript code on their pages.

If company policies or other technical issues prevent you from placing our JavaScript code on your pages, you can still work with Audience Manager to send and return data from DCS with these event call APIs.

Getting Started

This section contains information and related reference that shows you how to:

• Make calls to the DCS.
• Receive data from the DCS.
• Format data elements in your calls.
• Understand the parameters returned by the DCS.

To get started, see the sections below. Start with Send Data to the DCS. After that, move on to Receive Data From the DCS.

Send Data to the DCS

Start here for information about making /event calls to the DCS. This section includes information about call syntax, parameters, formatting, and a request example.

Contents:

Call Syntax
Call Parameters
Sample Call
Next Steps

Note: In the code and examples, italics represents a variable placeholder. Substitute a real value for the placeholder when you send data to the DCS with this method.

Call Syntax

A basic URL string that sends data to the DCS uses the syntax shown below.

http://domain alias.demdex.net/event?key1=val1,&key2=val2&d_dst=1&d_rtbd=json&d_cb=callback

Note: You can also send data to the DCS by using the POST method. The call syntax is described in DCS API Methods.
Call Parameters

The following table defines the basic components of a simple DCS call.

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
</table>
| domain alias.demdex.net | This part of the call contains:
  • Your domain alias assigned by Audience Manager (e.g., my_domain.demdex.net).
  • The destination domain, which is always demdex.net. See Understanding Calls to the Demdex Domain. |
| /event? | This part of the call:
  • Identifies the call as an event call.
  • Defines the start of the URL string that contains the data you want to send to the DCS. |
| key | A unique identifier in the key-value pair. These key-value pairs use a specific prefix to identify the type of data you're sending to the DCS. For more information, see Supported Attributes for DCS API Calls. |
| val | A variable value that belongs to a set defined by a key in the key-value pair. When working with values:
  • Enclose string data in double quotes (e.g., age="41 to 55").
  • You can pass multiple keys in on a single value (e.g., key=val1,val2,val3). See Formatting Key-Value Pairs in DCS Calls. |
| • d_dst=1 | Optional response parameters. None of these are required to send data to the DCS. However, if you want the DCS to return a response, you must include d_rtbd=json in your request. See d_ Attributes. |
| • d_rtbd=json | |
| • d_cb=callback | |

Sample Call

This example shows the fictional company Acme, Inc. sending data to the DCS via an HTTP call. Note that this call includes the optional parameters d_dst=1, d_rtbd=json, and d_cb=callback. These indicate that Acme wants to receive a JSON response from the DCS with a call back function. Remember, this is just an example. Do not cut and paste this code.

http://acme_aam_domain.demdex.net/event?videoTypeID=2&data=moarData&d_dst=1&d_rtbd=json&d_cb=acme_callback

Next Steps

Now that you're familiar with sending data to the DCS, it's time to look at how to get data back from the DCS and parse that information. See Receive Data From the DCS.
Receive Data From the DCS

Continue here for information about how to request a DCS response in a /event call. This section includes a response example and definitions for common data elements in a response.

Before reviewing this content, see Send Data to the DCS.

Contents:

DCS Response Parameters: A Review
Sample Response
Response Parameters

DCS Response Parameters: A Review

Your DCS request must include `d_rtbd=json` if you want to receive a response from the DCS. The DCS will not return data if you omit this parameter. A basic call to the DCS to request data uses this syntax:

```
http://domain alias.demdex.net/event?key1=val1,&key2=val2&d_dst=1&d_rtbd=json&d_cb=callback
```

Sample Response

Recall that from the Send Data to the DCS documentation, the fictional company Acme, Inc. made this call:

```
http://acme_aam_domain.demdex.net/event?videoTypeID=2&data=moarData&d_dst=1&d_rtbd=json&d_cb=acme_callback
```

As this call includes the required response parameter, the DCS sent back the JSON object shown below. Yours may be similar or more complex.

```
{
  "stuff": [],
  "uuid": "22920112968019678612904394744954398990",
  "dcs_region": 7,
  "tid": "312pxW5bQGc=
}
```

Response Parameters

The table below lists and defines the more common parameters you may see in a response from the DCS. This applies to event calls or other DCS API queries that return data.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>c</code></td>
<td>A URL that has been set as a URL destination.</td>
</tr>
<tr>
<td><code>cn</code></td>
<td>The name or ID set in the cookie name field of a cookie destination.</td>
</tr>
<tr>
<td><code>cv</code></td>
<td>The values sent to the destination defined by the &quot;cn&quot;:&quot;destination name&quot; parameter.</td>
</tr>
<tr>
<td><code>dcs_region</code></td>
<td>The DCS region ID. The region ID is required if you're making server-to-server DCS calls.</td>
</tr>
<tr>
<td><code>dests</code></td>
<td>This object contains information for all URL destinations which are configured in the UI. This object's list is dynamic based on the user's actions.</td>
</tr>
</tbody>
</table>
Parameter | Description
--- | ---
**dmn** | This is the domain specified in the Cookie Domain field for a cookie destination. See [Optional Settings for Cookie Destinations](#). For Server to Server integrations we recommend using a domain like `aam-api.com`.
**e** | The secure URL that has been set in a URL destination. [LINK TO URL DESTINATION](#)
**stuff** | This object contains information for all Cookie destinations. This object's list is dynamic based on the user's actions.
**tid** | Transaction ID, which is a unique 12-character ID used for debugging purposes. Each `/event` call to the DCS receives a tid that you can reference in support enquiries for a better and faster response.
**ttl** | The cookie time-to-live value in days.
**u and uuid** | Unique User ID assigned by Audience Manager. This is required if you're making server-to-server DCS calls.
**y** | Destination type, iFrame (`iframe`) or image (`img`).

**DCS APIs for Server-to-Server Data Transfers**

Server-to-server (S2S) APIs provide code and methods that let you send and receive DCS user data and work with this information in your own systems or applications.

Contents:

- Common Use Cases
- Requirements: User IDs and Regional Server Names
- Getting Started

**Common Use Cases**

Server-to-server transfers can help you customize landing pages or other interactions based on visitor interests. Some common use cases include:

- On-site personalization: Tailor a visitor's experience on your site by dynamically adding relevant content and calls to action based on the segments they belong to.
- Improve customer service: Import Audience Manager segments into a CRM or other system through a server-to-server data transfer. This data can provide call service or on-line chat operators with relevant, personalized information about a customer.

**Requirements: User IDs and Regional Server Names**

The DCS API requires user IDs and region IDs to validate and make data requests.
• The user ID is required because you need to associate data with a particular visitor.
• The region ID is required to tie calls back to a server name and because user data is stored in data centers that are geographically closest to site visitors.

**Getting Started**

Currently, this guide covers how to:

• Get the user and region IDs from the DCS files you may already receive as an Audience Manager customer.
• Get the user and region IDs if you use the Visitor ID Service.
• Make calls to the DCS after you have the user and region ID.

We'll add new methods as they become available. Refer to the following sections to get started.

**Get User IDs and Regions From a DCS Response**

This section describes how to parse a DCS response to retrieve the visitor and region IDs required to make real-time calls to the DCS.

**User and Region IDs**

A DCS response contains data about your site visitors. You need the visitor and region ID before you can make server-to-server calls to the DCS.

• The user ID is required to identify and associate data with a particular visitor.
• The region ID is required because it is tied to a regional server name, which you need to send data to the DCS. The DCS stores information in data centers that are geographically closest to site visitors. See *DCS Region IDs, Locations, and Host Names*.

These parameters are described below. Code in *italics* represents a variable placeholder.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Data type</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;uuid&quot;:user ID</td>
<td>String</td>
<td>&quot;uuid&quot;:&quot;123456789&quot;</td>
</tr>
<tr>
<td>&quot;dcs_region&quot;:region ID</td>
<td>Int</td>
<td>&quot;dcs_region&quot;:9</td>
</tr>
</tbody>
</table>

**Sample Response**

This simple response shows the UUID and region ID. Note, this is sample data only. Your log files may be longer and more complex.

```json
{
  "stuff": [],
  "uuid": "2292011296801967861290439474954398990",
  "dcs_region": 7,
  "tid": "312pxW5bQGc="
}
```

**Next Steps**

Once you have the user ID and regional server name, you can start sending and receiving DCS data. See *Making Server-to-Server DCS API Calls*. 
Get User IDs and Regions Through the Experience Cloud ID Service

ID service customers should refer to this section for information on how to read the visitor cookie for the IDs required to make DCS API calls.

Contents:

- Get the User ID from the ID Service Cookie
- Working With getMarketingCloudVisitorID
- Next Steps

Get the User ID from the ID Service Cookie

The Experience Cloud ID service assigns visitor and region IDs to users who come to your website. These IDs identify users across all the solutions in the Experience Cloud and they are required if you want to make DCS calls.

- The user ID is required to identify and associate data with a particular visitor.
- The region ID is required because it is tied to a regional server name, which you need to send data to the DCS.

The DCS stores information in data centers that are geographically closest to site visitors. See DCS Region IDs, Locations, and Host Names.

ID service customers can extract this information from the ID service cookie or by calling a function. The table below describes the tasks or steps you need to complete to get started.

Code in *italics* represents a variable placeholder.

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Check your Experience Cloud</strong> status</td>
<td>You need a Experience Cloud account to use the ID service. If you have a Experience Cloud account, great! If you're not part of the Experience Cloud, then sign up. We'd love to have you and there's always room for more. For instructions on how to set up an account, see Core Services - Enabling Your Solutions.</td>
</tr>
<tr>
<td><strong>2. Set up the ID service</strong></td>
<td>The ID service consists of JavaScript code that gets put on each page you want to use for data collection. See the ID service implementation guides for more information.</td>
</tr>
<tr>
<td><strong>3. Read the ID service cookie</strong></td>
<td>The ID service stores the user and region ID in the AMCV cookie. The full cookie name is AMCV_###AdobeOrg. The ### elements are placeholders for your organization ID. See Cookies and the Experience Cloud ID for details. Parse the AMCV cookie for these key-value pairs:</td>
</tr>
</tbody>
</table>
  * `mid=user ID`: This key-value pair holds the Experience Cloud user ID.  
  * `aamlh=region ID`: This key-value pair holds the region ID (sometimes called a location hint) which is associated with a regional server name. |

You can make calls to the DCS once you have the user and region IDs.
4. Retrieve the Experience Cloud ID with `getMarketingCloudVisitorID`

(Optional) This function returns the Experience Cloud visitor ID. It is designed for custom solutions and specific use cases. See Working With `getMarketingCloudVisitorID` below and the related ID service documentation.

You don't need to use this if you get the user and location IDs from the ID service cookie.

**Working With `getMarketingCloudVisitorID`**

Another way to get the visitor ID is with the `getMarketingCloudVisitorID` function. When invoked, this function queries the ID service and returns an ID. `getMarketingCloudVisitorID` accepts the optional `callback` argument as shown:

```javascript
var analyticsID = visitor.getAnalyticsVisitorID(callback)
```

**Callback Usage and Purpose**

`callback` is optional. This function works without it, but returns an ID only when a visitor has a Experience Cloud cookie in their browser. If the visitor cookie is missing, or a visitor doesn't have an ID, the function returns an empty (`()`) object. This can happen even after the page loads and the visitor receives a new ID. To avoid this, `callback` forces this function to check for a visitor ID after the page loads. Without `callback`, the visitor ID function won't return an ID even if it's written to the visitor's browser later.

**Next Steps**

Once you have the user and region ID, you can start sending and receiving DCS data. See *Making Server-to-Server DCS API Calls*.

**Making Server-to-Server DCS API Calls**

Calls require the host name of the regional DCS server and the user ID. If you do not have the required user and region IDs, see *Get User IDs and Regions From a DCS Response* and/or *Experience Cloud*. Once you have user and region IDs, you can make server-to-server calls to the DCS. Refer to this section for syntax and examples.

Contents:

- Call Syntax and Example
- Call Parameters
- Sample Response

💡 **Note:** In the code and examples, italics represents a variable placeholder. Substitute a real value for the placeholder when you server-to-server calls to the DCS.

**Call Syntax and Example**

A basic server-to-server request that sends data to the DCS uses the syntax shown below.

```
"Host:domain alias.demdex.net" "https://DCS host name.demdex.net/event?d_rtbd=json&d_jsonv=1&d_uuid=user ID
```
A sample call looks similar to the following example.

"Host:foo.demdex.net" "https://usw2.demdex.net/event?d_rtbd=json&d_jsonv=1&d_uuid=123456789"

### Call Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>domain alias.demdex.net</strong></td>
<td>This part of the call contains: \n• Your domain alias assigned by Audience Manager (e.g., my_domain.demdex.net). \n• The destination domain, which is always demdex.net. See <em>Understanding Calls to the Demdex Domain</em>.</td>
</tr>
<tr>
<td><strong>DCS host name.demdex.net</strong></td>
<td>The http header host parameter which shows the name of the regional DCS server. The host name is tied to a region ID, which is why you need this before making these types of calls. See <em>DCS Region IDs, Locations, and Host Names</em>.</td>
</tr>
<tr>
<td><strong>/event?</strong></td>
<td>This part of the call: \n• Identifies the call as an event call. \n• Defines the start of the URL string that contains the data you want to send to the DCS.</td>
</tr>
<tr>
<td>**d_uuid=**Audience Manager user ID</td>
<td>This is the unique user ID key that holds the Audience Manager user ID value in a key-value pair. \nUse d_uuid if you’re passing in the Audience Manager user ID.</td>
</tr>
<tr>
<td>**d_mid=**Experience Cloud user ID</td>
<td>This is the unique user ID key that holds the Experience Cloud user ID value in a key-value pair. See also <em>Get the User ID from the ID Service Cookie</em>. \nUse d_mid if you’re passing in a Experience Cloud ID captured from the Experience Cloud ID service.</td>
</tr>
<tr>
<td><strong>d_dst=1</strong></td>
<td>Optional response parameters. None of these are required to send data to the DCS. However, if you want the DCS to return a response, you must include d_rtbd=json in your request.</td>
</tr>
<tr>
<td><strong>d_rtbd=json</strong></td>
<td></td>
</tr>
<tr>
<td><strong>d_cb=callback</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Sample Response

See *Receive Data From the DCS*. 
DCS API Reference

Conceptual information, descriptions, and definitions for DCS API code, methods, and processes.

DCS API Methods

Send data to the DCS API using GET or POST methods.

You can send data to the DCS using either one of the GET or POST methods. Take a look at the sample calls below, using `curl`. In all three sample calls, we are adding the signals `c_likes = famous popstar` and `c_loves = famous actress` to the device profile 12345678901234567890123456789012345678.

💡 **Note:** In the code and examples, italics represents a variable placeholder. Substitute a real value for the placeholder when you send data to the DCS with this method.

Send Data via GET

curl -i "yourcompany.demdex.net/event?
d_uuid=12345678901234567890123456789012345678&d_rtbd=json&c_likes=famous%20popstar&c_loves=famous%20actress"

Send Data via POST

Note the requirements for sending data using the POST method:

- The maximum allowed content length is 32K.
- Set the content type to either `application/x-www-form-urlencoded` or `application/json`.

Sample call with content type `application/x-www-form-urlencoded`

curl -X POST \
  http://yourcompany.demdex.net/event \
  -H 'content-type: application/x-www-form-urlencoded' \
  -d 'c_likes=famous%20popstar&c_loves=famous%20actress&d_uuid=12345678901234567890123456789012345678'

Sample call with content type `application/json`

curl -X POST \
  http://yourcompany.demdex.net/event \
  -H 'content-type: application/json' \
  -d '{c_likes=famous%20popstar&c_loves=famous%20actress&d_uuid=12345678901234567890123456789012345678}"

DCS Error Codes, Messages, and Examples

Error codes and messages generated by the Data Collection Servers (DCS) listed in numeric order by code ID.

Contents:

- **System Error Codes**
- **Integration Error Codes**
- **Opt-Out Error Codes**
- **Profile Retrieval Error Codes**
- **Integration Warning Codes**
- **Sample Error Code Messages**

In the tables below, italics represents a variable placeholder.
### System Error Codes

<table>
<thead>
<tr>
<th>Code ID</th>
<th>Error Message</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Unspecified error</td>
<td>This is a catch-all error that handles events that is not covered by the other error handlers. Troubleshooting this error is difficult. It can be caused by a variety of unknown actions or events. If you receive this error, try your DCS request again. Contact your Adobe representative if the problem persists.</td>
</tr>
<tr>
<td>1</td>
<td>Could not find config for hostname: hostname</td>
<td>The host name sent in the request has not been set up by our partner provisioning team. Contact your Adobe representative if you see this error message.</td>
</tr>
<tr>
<td>2</td>
<td>Invalid d_orgid value (could not find a config for this org id): ID</td>
<td>The Organization ID is incorrect. Check your ID and try the request again. If you do not know or have your Organization ID, see the &quot;Administration Page&quot; section in Experience Cloud Administration for information about how to find it.</td>
</tr>
</tbody>
</table>

### Integration Error Codes

<table>
<thead>
<tr>
<th>Code ID</th>
<th>Message</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>Could not retrieve host name for the request</td>
<td>An API call did not send the host HTTP header in the request. Add host header to the call and try again. Note, most browsers and API clients do this automatically.</td>
</tr>
<tr>
<td>101</td>
<td>Invalid marketing cloud id passed in ID</td>
<td>The DCS call contains an invalid Experience Cloud ID. Check the d_mid= key-value pair in the header string. Make sure you're passing in the correct Experience Cloud ID and try the request again.</td>
</tr>
<tr>
<td>102</td>
<td>Invalid aam id passed in request ID</td>
<td>The DCS call contains an invalid Audience Manager ID. Check the d_uuid= key-value pair in the header string. Make sure you're passing in the correct Audience Manager ID and try the request again.</td>
</tr>
<tr>
<td>104</td>
<td>All customer ids are invalid</td>
<td>All of the customer IDs in your call are invalid. Check your IDs and try again.</td>
</tr>
<tr>
<td>111</td>
<td>Invalid IMS token received</td>
<td>Returned for Audience Manager - Adobe Target integrations. The error is thrown when a call is made to the DCS, containing an invalid IMS token. The token might be malformed, expired or the user might not be authorized to access the required resource.</td>
</tr>
</tbody>
</table>
### Opt-Out Error Codes

<table>
<thead>
<tr>
<th>Code ID</th>
<th>Message</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>171</td>
<td>Encountered opt out tag for id ID</td>
<td>A customer has opted-out from receiving interest-based advertising.</td>
</tr>
<tr>
<td>172</td>
<td>Blocked cookies</td>
<td>Returned when the user’s browser blocks third-party cookies.</td>
</tr>
<tr>
<td>173</td>
<td>Encountered trust relationship via NAI</td>
<td>The user has initiated an opt-out process through NAI.</td>
</tr>
<tr>
<td>199</td>
<td>Requests from this country are not allowed</td>
<td>Based on the IP address, the DCS blocks requests from the following countries:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Cuba (CU)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Iran (IR)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• North Korea (KP)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Sudan (SD)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Syria (SY)</td>
</tr>
</tbody>
</table>

### Profile Retrieval Error Codes

<table>
<thead>
<tr>
<th>Code ID</th>
<th>Message</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>Cannot read traits from profile cache for id: ID</td>
<td>Returned when a user profile cannot be read from our internal storage.</td>
</tr>
<tr>
<td>201</td>
<td>Cannot read device ids from profile cache for customer id: ID</td>
<td>Returned when the device ID cannot be retrieved for a Profile Link merge rule.</td>
</tr>
<tr>
<td>202</td>
<td>Cannot read related customer for device id: ID</td>
<td>Returned when the customer ID (UUID) associated to a device ID cannot be retrieved for a Last Authenticated merge rule from our internal storage.</td>
</tr>
<tr>
<td>203</td>
<td>Cannot read device cluster for id: ID</td>
<td>The linked device IDs from the same device graph cluster cannot be returned for this device ID.</td>
</tr>
</tbody>
</table>

### Integration Warning Codes

<table>
<thead>
<tr>
<th>Code ID</th>
<th>Message</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>300</td>
<td>Invalid customer id ID</td>
<td>The customer ID is invalid (missing values for data source, missing integration codes, invalid format for data sources, blocked customer ID, blank customer ID, unauthorized access attempt to a data source that does not belong to the partner).</td>
</tr>
<tr>
<td>Code ID</td>
<td>Message</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>--------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>301</td>
<td>Maximum number of customer ids exceeded. Maximum allowed is <em>maximum allowed</em>. Found is <em>maximum found</em></td>
<td>The number of customer IDs associated with a cross-device data source exceed the allowed number of cross-device IDs per request. These IDs include cross device, mobile, or cookie IDs. The limit is currently set to 10.</td>
</tr>
<tr>
<td>302</td>
<td>Unauthorized customer id <em>ID</em></td>
<td>Returned when the customer ID data source is not owned by the current Organization ID. If you do not know or have your Organization ID, see the &quot;Administration Page&quot; section in <em>Experience Cloud Administration</em> for information about how to find it.</td>
</tr>
<tr>
<td>303</td>
<td>Blocked customer id <em>ID</em></td>
<td>Returned when the customer ID has been identified as malicious and has been blacklisted.</td>
</tr>
<tr>
<td>304</td>
<td>Blocked datasource id <em>ID</em></td>
<td>Returned when the data source ID has been identified as malicious and has been blacklisted.</td>
</tr>
<tr>
<td>306</td>
<td>Blocked declared device id <em>ID</em></td>
<td>The device ID has been identified as malicious and has been blacklisted. This can happen when we receive an extreme amount of DCS requests containing this device ID in a short amount of time.</td>
</tr>
<tr>
<td>307</td>
<td>Blocked profile operation for <em>ID</em></td>
<td>A read/write action has been blocked because an ID has been identified as malicious and has been blacklisted. See error code 306.</td>
</tr>
<tr>
<td>309</td>
<td>Customer id <em>ID</em> was discarded because it exceeded the limit of declared customer ids per request</td>
<td>Related to error 301. This error specifies which customer ID was discarded because the limit was exceeded. For example, If there are 12 customer IDs declared on the DCS call, two of them will be discarded. In order to relay which ones were discarded, this error will appear twice in the response (once for each of discarded customer ID ).</td>
</tr>
</tbody>
</table>
| 310    | Customer id was discarded because it exceeded the limit for a given namespace. Namespace id is *ID*, customer id is *ID* | This error code is returned if there are more than 3 customer IDs declared for the same namespace (DPID) on a DCS call.  

http://partner.demdex.net/event?d_cid_ic=one&d_cid_ic=one&d_cid_ic=one&d_cid_ic=one

In this sample DCS request, there are 4 ids declared for the same namespace (with the integration code one). One of the IDs is discarded and error 310 is returned.                                                                                                                                                                                                                                                                                                                                 |

**Sample Error Code Messages**

The DCS returns error codes and messages in a JSON object or in an X- header in the HTTP response string.
Message Type | Description
--- | ---
Sample DCS Error Code and Message | 
```
{ 
  "errors": [
    { 
      "code": 101, 
      "msg": "Invalid marketing cloud id passed in"
    }, 
    { 
      "code": 102, 
      "msg": "Invalid aam id passed in request"
    }
  
}
```

X-Error | Error codes captured by the X- header appear in the URL string like this, X-Error: 101,102.

---

**Race Conditions and Error Handling**

**DCS Region IDs, Locations, and Host Names**

The regional DCS server host name is required to make calls to the DCS. This is because the DCS stores information in data centers that are geographically close to site visitors. Your queries will work if you send them to the wrong DCS, but these calls are inefficient and can delay the response. To make a DCS request, match the region ID to its corresponding regional host name and form your query with the proper host name.

<table>
<thead>
<tr>
<th>DCS Region ID (dcs_region)</th>
<th>Region (and Location)</th>
<th>Host Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID 3</td>
<td>Southeast Asia (Singapore)</td>
<td>apse.demdex.net</td>
</tr>
<tr>
<td>ID 4</td>
<td>South America (São Paulo, Brazil)</td>
<td>sae.demdex.net</td>
</tr>
<tr>
<td>ID 6</td>
<td>Europe (Dublin, Ireland)</td>
<td>ir1l.demdex.net</td>
</tr>
<tr>
<td>ID 7</td>
<td>US East (Virginia, USA)</td>
<td>use.demdex.net</td>
</tr>
<tr>
<td>ID 8</td>
<td>South Pacific / Oceana (Sydney, Australia)</td>
<td>apse2.demdex.net</td>
</tr>
<tr>
<td>ID 9</td>
<td>US West (Oregon, USA)</td>
<td>usw2.demdex.net</td>
</tr>
<tr>
<td>ID 11</td>
<td>Asia (Tokyo, Japan)</td>
<td>tyo3.demdex.net</td>
</tr>
</tbody>
</table>

You can also use API methods to get a list of the available DCS regions. See [DCS Region API Methods](#).
Formatting Key-Value Pairs in DCS Calls

When making a call, the DCS accepts key-value data in standard or serialized format. Review this section for information about how to format standard and serialized key-value data.

### Standard and Serialized Key-Value Pairs

<table>
<thead>
<tr>
<th>Key-Value Type</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>A standard key-value pair consists of a single key and value. This structure organizes data into separate key-value pairs. Each key is stated explicitly, even when it's used again to define a different value. This is the most common way to send data to the DCS.</td>
<td>key1=val1&amp;key2=val2&amp;key3=val3</td>
</tr>
<tr>
<td>Serialized</td>
<td>A serialized key-value pair consists of a single key and multiple values. This can be an efficient way to organize data, but serialized key-value pairs require specific symbols to separate each key and each key-value set.</td>
<td>key1=val1,val2,val3</td>
</tr>
</tbody>
</table>

### Delimiters and Separators for Serialized Key-Value Pairs

With serialized key-value pairs, you must specify the markers that separate values within and between these variables. Audience Manager requires the following delimiters and separators:

<table>
<thead>
<tr>
<th>Requirements for</th>
<th>Symbol</th>
<th>Separates Individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delimiters</td>
<td>Ampersand &amp;</td>
<td>Key-value pairs:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>key1=val1&amp;key2=val2,val3</td>
</tr>
<tr>
<td>Separators</td>
<td>Comma ,</td>
<td>Values within key-value pairs:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>key1=val1,val2,val3&amp;key2=valA,valB,valC</td>
</tr>
</tbody>
</table>

### Race Conditions and Error Handling

Describes how to prevent race conditions and DCS error handling.

### Preventing Race Conditions

A race condition can occur if you send multiple calls simultaneously (or in rapid succession) to the DCS before it finishes responding to the initial queries and writing data to the user's cookie. A race condition is undesirable because it can corrupt or improperly overwrite cookie data. As a best practice, consider the following methods to help avoid this problem:

- Don't make simultaneous calls, or calls in rapid succession, to the DCS from the same user.
- Wait for each response to come back before making subsequent calls.
Error Handling

Error handling is limited for invalid or poorly formed queries. An invalid request returns an HTTP 200 OK response and no data. Also, the DCS stops processing a request, discards trait data, and returns an HTTP 200 OK response when a user:

• Opted out of tracking at the Audience Manager or partner level.
• Comes from an invalid/unselected geographic region.
• Disables browser cookies (either all or third-party).

See also, DCS Error Codes, Messages, and Examples.

Supported Attributes for DCS API Calls

Lists and describes the syntax and supported attributes (or key-value pairs) you can pass in to the Data Collection Servers (DCS). This information can help you format your DCS requests and understand the parameters returned by this system.

Attribute Prefixes

The DCS relies on specific prefixes added to the keys in key-value pairs to classify the type of data you’re passing in.

<table>
<thead>
<tr>
<th>Key Prefix</th>
<th>Reserved For</th>
</tr>
</thead>
<tbody>
<tr>
<td>c_</td>
<td>Customer-defined attributes.</td>
</tr>
<tr>
<td>d_</td>
<td>Audience Manager attributes.</td>
</tr>
<tr>
<td>h_</td>
<td>HTTP header data.</td>
</tr>
<tr>
<td>p_</td>
<td>Private, customer-defined attributes.</td>
</tr>
</tbody>
</table>

The DCS accepts your own, private data when the key has a p_ prefix. Private data is used for trait evaluation, but it will not be logged or stored in our system. For example, lets say you have a trait defined as customers = p_age<25 and you pass in p_age=23 in an event call. Given these conditions, the user who meets the age-based qualification criteria qualifies for the trait, but the key-value pair is dropped after Audience Manager receives the request and is not logged.

d Attributes

All of these are optional, unless you want a response from the DCS. If you want the DCS to return a response, then d_rtbd=json is required.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>d_caller</td>
<td>Used to identify the caller who is making the call to the DCS API.</td>
</tr>
<tr>
<td>d_cb</td>
<td>Specifies a JavaScript function you want to execute using the DCS response as a function parameter of the callback function.</td>
</tr>
<tr>
<td>Attribute</td>
<td>Description</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
</tr>
</tbody>
</table>
| **d_cid** | Contains one or more pairs of data provider IDs (DPID) and data provider user IDs (DPUUID) assigned by Audience Manager. If you use multiple pairs of DPIDs and DPUUIDs, separate each pair with the non-printing character %01. For example: DPID%01DPUUID.  

_**d_cid replaces**_ d_dpid and _**d_dpuuid**_, which are deprecated but still supported. See CID Replaces DPID and DPUUID. |
| **d_cid_ic** | Contains an integration code and an associated unique user ID in a single key-value pair.  

_**d_cid_ic replaces**_ d_dpid and d_dpuuid, which are deprecated but still supported. See CID Replaces DPID and DPUUID. |
| **d_cts=1** | Optional. Enabled on customer request. Contact your Adobe Audience Manager consultant or Customer Care.  

Indicates that traits and segments should be returned inside the JSON response.  

- _**d_cts=1**_ returns legacy segment IDs for the segments.  
- _**d_cts=2**_ returns segment IDs for the segments.  

A sample response could look like the one below: |
| **d_cts=2** |  |
| **d_dpid** | Deprecated. See _**d_cid** and _**d_cid_ic**. |
| **d_dpuuid** | Deprecated. See _**d_cid** and _**d_cid_ic**. |
| **d_dst=1** | Returns URL destination data in the JSON response. |
| **d_jsonv=1|0** | Indicates the JSON version to use in the response. Normally, you should set this to _**d_jsonv=1**_. Setting _**d_jsonv=0**_ disables ID syncs. |
| **d_mid** | Specifies the visitor ID set and used by the Experience Cloud ID service. For more information about the MID, see Cookies and the Experience Cloud ID. |
| **d_nsid** | Name Space ID. Indicates which JavaScript container is used. Used by DIL to for id-syncing. |
| **d_ptfm** | Allows Audience Manager to distinguish mobile requests from desktop requests. Supported values include:  

- _**ios**_ |
<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>android</td>
<td>Required if you want a JSON response from the DCS.</td>
</tr>
<tr>
<td>browser</td>
<td>Required if you want a JSON response from the DCS.</td>
</tr>
<tr>
<td>all</td>
<td>Required if you want a JSON response from the DCS.</td>
</tr>
<tr>
<td>d_rtbd=json</td>
<td>Required if you want a JSON response from the DCS.</td>
</tr>
<tr>
<td>d_sid</td>
<td>SID stands for score ID. This is a unique ID for a trait or a segment.</td>
</tr>
<tr>
<td>d_uuid</td>
<td>Unique user ID. Identifies a visitor when this value is not available from a cookie.</td>
</tr>
</tbody>
</table>

Data Integration Library (DIL) API

Overview, getting started, and code methods available in the Audience Manager DIL code library.

Understanding the Data Integration Library (DIL)

An overview of DIL and how it works.

Purpose of DIL

DIL is an API library. You can think it as a body of helper code for Adobe Audience Manager. It is not required to use Audience Manager, but the methods and functions DIL provides means you don't have to develop your own code to send data to Audience Manager. Also, DIL is different than the API provided by the Experience Cloud ID service. That service is designed to manage visitor identity across different Experience Cloud solutions. By contrast, DIL is designed to:

- Make event calls and send data to the Data Collection Server.
- Send data to destinations.

Getting and Implementing DIL Code

DIL code isn't available for download. Contact your consultant to get the latest version.

Rather than work with DIL and set up Audience Manager manually, we recommend that you use Adobe Dynamic Tag Manager (DTM) instead. DTM is the recommended implementation tool because it simplifies code deployment, placement, and version management.
Sample Call
DIL sends data to Audience Manager in an event call. An event call is an XML HTTP request from your page. It uses a POST method to send data in the body of the request.

<table>
<thead>
<tr>
<th>Event Call Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>URL</td>
<td>DIL event calls use the following syntax: <a href="http://adobe.demdex.net/event?_ts">http://adobe.demdex.net/event?_ts</a> = UNIX UTC timestamp</td>
</tr>
<tr>
<td>Body</td>
<td>As shown in sample below, DIL passes data as key-value pairs. Special prefix characters identify the key-value pairs as Audience Manager or partner variables.</td>
</tr>
<tr>
<td></td>
<td>d_dst=1</td>
</tr>
<tr>
<td></td>
<td>d_jsonv=1</td>
</tr>
<tr>
<td></td>
<td>d_ld_ts=1473693143821</td>
</tr>
<tr>
<td></td>
<td>d_mid=54192285857942994142875423154873503351</td>
</tr>
<tr>
<td></td>
<td>d_nsid=0</td>
</tr>
<tr>
<td></td>
<td>d_rtbde=json</td>
</tr>
</tbody>
</table>

See also:
- Prefix Requirements for Key Variables
- Supported Attributes for DCS API Calls

Class-level DIL Methods
The class-level DIL APIs let you programmatically create and work with Audience Manager objects. The class-level APIs work with the other instance-level functions to set values or return data.

Getting Started With Class-level DIL APIs
Describes authentication requirements and the text formatting used in the class-level DIL documentation.

When working with the class-level DIL APIs:
- Access requires a partner name and container namespace ID (NSID). Contact your Audience Manager account manager to obtain this information.
- Replace any sample italicized text in the API documentation with value, ID, or other variable as required by the method you’re working with.
- DIL writes encoded data to a destination cookie. For example, spaces are encoded as %20 and semicolons as %3B.

DIL create
Creates a partner-specific DIL instance.

Function Signature: DIL.create: function (initConfig) {}  

initConfig Elements

⚠️ **Important:** The visitorService property is always required. Other properties listed here are optional, unless indicated otherwise.

initConfig accepts the following elements:
<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
</table>
| containerNSID      | Integer  | This property sets the container ID used by Audience Manager for ID syncs. You would set `containerNSID` if you have DIL deployed across multiple sites. Each of these sites will have their own container ID and ID syncs. When you have only 1 site, the container ID is 0 by default and you don't need to set this properly. Contact your consultant to get a list of your sites and their container IDs. In the *Experience Cloud ID service*, the property `idSyncContainerID` corresponds to `containerNSID` in DIL. Note the following if you're using DIL and the ID service across multiple sites:  
  • For each site, set the same container IDs on `containerNSID` and `idSyncContainerID`.  
  • Both DIL and the ID service will try to send ID syncs to our data collection iFrame. However, the iFrame ensures that DIL won't fire an ID sync. This prevents duplication.  
  • Only DIL sends data to a *URL destination*.  
  See also, `idSyncContainerID`. |
| declaredId         | Object   | `declaredId` is used to pass in either the:  
  • `dpid`: Data partner ID assigned to you by Audience Manager.  
  • `dpuuid`: Your unique ID for a user.  
  
  **Important:** Only use un-encoded values for your IDs. Encoding will create double-encoded identifiers.  
  
  **Note:** If you use the *Visitor ID Service*, set customer IDs with the `setCustomerIDs` method instead of DIL. See Customer IDs and Authentication States. |
<p>| delayAllUntilWindowLoad | Boolean  | If true, defers all requests (IFRAME, event calls, ID sync, and destinationing) from executing until the Page Load event fires. Default is false. |
| disableDeclaredUUIDCookie | Boolean  | False by default, which means Audience Management sets a cookie in the partner’s domain (sets a first party cookie). |
| disableDestinationPublishingIframe | Boolean  | If true, will not attach the destination publishing IFRAME to the DOM or fire destinations. Default is false. |
| disableIDSyncs     | Boolean  | Disables ID synchronization. You must disable ID syncs when using DIL v6.2+ and the Visitor ID Service. The <code>visitorService</code> function (see sample code below) takes care of this operation. |</p>
<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>enableErrorReporting</td>
<td>Boolean</td>
<td>Set to true to enable error reporting for all DIL instances on the page. Works with Boolean true only.</td>
</tr>
<tr>
<td>iframeAkamaiHTTPS</td>
<td>Boolean</td>
<td>Specifies if the destination publishing template should use Akamai for HTTPS connections. Enabled on a per-partner basis.</td>
</tr>
<tr>
<td>mappings</td>
<td>Object</td>
<td>Associates the value from one key-value pair to another. See Map Key Values to Other Keys. Released with v2.4.</td>
</tr>
<tr>
<td>namespace</td>
<td>String</td>
<td>Required.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The namespace key-value pair contains is your Experience Cloud Organization ID. If you don't have this ID, you can find it in the Administration section of the Experience Cloud dashboard. You need administrator permissions to view this dashboard. See the Product Features and Functions FAQ and Administration - User Management and FAQ.</td>
</tr>
<tr>
<td>partner</td>
<td>String</td>
<td>Required.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Partner name as provided by Audience Management.</td>
</tr>
<tr>
<td>removeFinishedScriptsAndCallbacks</td>
<td>Boolean</td>
<td>Removes scripts and callbacks. Default is False. Applies to the current DIL instance only. Released with v3.3.</td>
</tr>
<tr>
<td>uuidCookie</td>
<td>Object</td>
<td>Sets a cookie with the unique user ID returned from Audience Management. See uuidCookie Properties.</td>
</tr>
<tr>
<td>visitorService</td>
<td>Object</td>
<td>Required with DIL 6.2 or greater. DIL relies on the setCustomerIDs function in the Visitor ID Service to pass declared IDs into Audience Manager. See Customer IDs and Authentication States for more information.</td>
</tr>
</tbody>
</table>

Sample Code

A sample DIL call could look similar to the following:

```javascript
var partnerObject1 = DIL.create({
  partner: "partner name",
  visitorService: {
    namespace: "INSERT-ORGANIZATION-ID-HERE"
  },
  containerNSID: 3,
  uuidCookie: {
    name: 'ad_uuid',
    days: 200,
    path: '/test',
    domain: 'adobe.com',
    secure: true
  },
  // other DIL options...
});
```
var partnerObject2 = DIL.create({
    partner: "partner name",
    visitorService: {
        namespace: "INSERT-MCORG-ID-HERE"
    },
    containerNSID: 3,
    disableDestinationPublishingIframe: true
});

A successful response returns the DIL instance. An unsuccessful attempt returns an error object (not thrown) if your code is configured improperly or whenever an error is encountered.

**uuidCookie Properties**

Defines the properties used by the uuidCookie variable. This variable is part of the DIL.create method.

uuidCookie has the following properties:

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>The cookie name (aam_did is default).</td>
</tr>
<tr>
<td>days</td>
<td>Cookie lifetime (100 days is default).</td>
</tr>
<tr>
<td>path</td>
<td>Cookie path, e.g., '/test' (/ is default).</td>
</tr>
</tbody>
</table>
| domain | The domain the cookie is set in, e.g., 'adobe.com' ('.)+'
        | (document.domain is default).                    |
| secure | Sets a flag to send data over an HTTPS connection only. |

**visitorService Properties**

Defines the properties used by the visitorService variable. This variable is part of the DIL.create method.

visitorService has the following properties:

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>namespace</td>
<td>String</td>
<td>Required. Represents The Experience Cloud Org ID. This is needed for</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Experience Cloud Core Service functionality. Same parameter used to instantiate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the Visitor ID functionality.</td>
</tr>
</tbody>
</table>

**Code Sample:**

```javascript
var vDil = DIL.create({
    partner: 'demofirst',
    visitorService: {
        namespace: "INSERT-MCORG-ID-HERE"
    }
});
```

**getDil**

Retrieves a partner-specific DIL instance.

**Function Signature:** `getDil: function (partner, containerNSID) {}`

**Parameters**
### Response

A successful partner and container NSID match returns a partner-specific DIL instance. If there is no match, the API returns (does not throw) an error with the message, "The DIL instance with partner <name> and containerNSID <ID> was not found."

**Sample Code**

```javascript
DIL.getDil('<partner>', <containerNSID>);
DIL.getDil('<partner>');
```

### dexGetQSVars

Retrieves a specific value from an ad server.

**Function Signature:** `dexGetQSVars: function (variableName, partner, containerNSID) {}`

**Parameters**

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>variableName</td>
<td>String</td>
<td>The name of the variable you want to get a value for.</td>
</tr>
<tr>
<td>partner</td>
<td>String</td>
<td>The partner name to search for.</td>
</tr>
<tr>
<td>containerNSID</td>
<td>Integer</td>
<td>The NSID of the container you're searching for. Defaults is 0.</td>
</tr>
</tbody>
</table>

**Response**

Returns the variable value for a DIL instance.

**Sample Code**

```javascript
var value = DIL.dexGetQSVars('variableName', 'partnerName', containerNSID);
```

### isAddedPostWindowLoad

Used to let DIL know that it is loaded after the window loads.

**Function Signature:** `isAddedPostWindowLoad: function()`

**Sample Code**

```javascript
DIL.isAddedPostWindowLoad();
```

### isCooopSafe

An optional, Boolean configuration that determines if DIL sends (or does not send) data to the Adobe Experience Cloud Device Co-op.

**Contents:**

- **Requirements**
- **Use Cases**
Requirements

To use `isCoopSafe` you must:

- Use DIL v6.11 or higher.
- Participate in the *Experience Cloud Device Co-op*. Prospective co-op members should also review this documentation to determine if `isCoopSafe` addresses possible concerns about how data is used to create the device graph.
- Work with your Adobe consultant to set a whitelist or a blacklist flag on your Device Co-op account. There is no self-service path to enable these flags.

Use Cases

`isCoopSafe` helps resolve 2 use cases related to data collection by current or prospective members of the Device Co-op. These use cases relate to how site visitor data is passed on to the Device co-op to help build the device graph. The following table describes how `isCoopSafe` works with these use cases to block or send data to the device graph:

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authenticated Visitors</td>
<td>Add <code>isCoopSafe</code> to your DIL code to control how data for authenticated visitors who have or have not accepted term-of-use agreements is used by the Device Co-op to build the device graph.</td>
</tr>
<tr>
<td>DIL on Third-Party Sites</td>
<td>Add <code>isCoopSafe</code> to your DIL code for use on third-party sites where you:</td>
</tr>
<tr>
<td></td>
<td>• Cannot ensure that authenticated visitors have or have not accepted term-of-use agreements.</td>
</tr>
<tr>
<td></td>
<td>• Need to control how that data is used by the Device Co-op to build the device graph.</td>
</tr>
</tbody>
</table>

Syntax and Code Sample

**Syntax:**

`isCoopSafe: true | false`

The Boolean options determine how customer data is or is not used by the Device Co-op.

- `isCoopSafe: true`: Visitor data collected by a mobile SDK or website *can* be used to help build the device graph.
- `isCoopSafe: false`: Visitor data collected by a mobile SDK or website *cannot* be used to help build the device graph.

**Code Sample**

Set this when DIL instantiates.

```javascript
var dilInstance = DIL.create({
  ...
  isCoopSafe: true
});
```
Event Call POST Parameters

Depending on the flag you set (true or false), DIL translates isCoopSafe into these POST parameters and sends them to Adobe in an event call:

* `d_coop_safe=1`
* `d_coopUnsafe=1`

The POST parameters tell the Experience Cloud Device Co-op if it can or cannot include user data in the device graph. The table below defines the relationship between the isCoopSafe Boolean flags and the POST parameters passed in on an event call. If you don’t use isCoopSafe, neither of these are passed in an event call.

<table>
<thead>
<tr>
<th>Configuration Status</th>
<th>POST Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>isCoopSafe: true</td>
<td><code>d_coop_safe=1</code></td>
<td>The Device Co-op can use visitor data to help build the device graph.</td>
</tr>
<tr>
<td>isCoopSafe: false</td>
<td><code>d_coop_unsafe=1</code></td>
<td>The Device Co-op cannot use visitor data to help build the device graph.</td>
</tr>
</tbody>
</table>

Post-Instantiation APIs

These APIs allow you to override the isCoopSafe status. These are necessary because they let you change a visitor’s post-instantiation/post-login status on a site or in a single page app where the page does not refresh. For example, you would need to call these APIs if a user authenticates to your site or app and later accepts a terms-of-use policy that allows the Device Co-op to use their data.

<table>
<thead>
<tr>
<th>API</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>dilInstance.api.setAsCoopSafe();</code></td>
<td>Sets POST parameter <code>d_coop_safe=1</code> in all subsequent event calls.</td>
</tr>
<tr>
<td><code>dilInstance.api.setAsCoopUnsafe();</code></td>
<td>Sets POST parameter <code>d_coop_unsafe=1</code> in all subsequent event calls.</td>
</tr>
</tbody>
</table>

Instance-level DIL Methods

The instance-level DIL APIs let you programmatically create and work with Audience Manager objects. The instance-level methods enhance API functionality established by the class-level methods.

Getting Started With Instance-level DIL APIs

Describes authentication requirements and the text formatting used in the instance-level DIL documentation.

When working with the instance-level DIL APIs:

- Access requires a partner name and container namespace ID (NSID). Contact your Audience Manager account manager to obtain this information.
- Replace any sample italicized text in the API documentation with value, ID, or other variable as required by the method you’re working with.
signals

Adds customer and platform-level mappings to the query string of a pending request.

**Function Signature:** `signals: function ({key1:value1, key2:value2},prefix){}`

💡 **Note:**
- You can chain other API calls to this method.
- If the Adobe Experience Cloud JavaScript library is on the page, `submit()` waits for the Cloud to set a cookie before sending a request.

**Reserved Request Keys**

The following request keys are reserved and cannot be overwritten by this method:

- `sids`
- `pdata`
- `logdata`
- `callback`
- `postCallbackFn`
- `useImageRequest`

**Parameters**

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>obj</td>
<td>Object</td>
<td>An object representing the key-value pairs for platform-level mappings. Parameter accepts strings and arrays as property values in the object.</td>
</tr>
<tr>
<td>prefix</td>
<td>String</td>
<td>Optional. The string value prefixed to each object key (replaces original key).</td>
</tr>
<tr>
<td>return</td>
<td>DIL.api</td>
<td>Returns the API object of the current DIL instance.</td>
</tr>
</tbody>
</table>

**Response**

Returns the API object of the current DIL instance.

**Sample Code**

```javascript
var dataLib = DIL.create({
    partner: 'partnerName',
    containerNSID: containerNSID
});

// Method 1
var obj = { key1 : 1, key2 : 2 }; dataLib.api.signals(obj, 'c_').submit();

// Method 2
dataLib.api.signals({c_zdid: 54321}).submit();

// Method 3
// Will send 'c_key=a&c_key=2&c_key=3' to Audience Manager
var obj = { key : ['a', 'b', 'c'] };
dataLib.api.signals(obj, 'c_').submit();
```
traits
Adds SIDs to the query string of a pending request.

**Function signature:** traits:function (sids){}

💡 **Note:** You can chain other API calls to this method.

**Parameters**

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>sids</td>
<td>Array</td>
<td>Trait segment IDs in an array.</td>
</tr>
</tbody>
</table>

**Response**
Returns the API object of the current DIL instance.

**Sample Code**
```javascript
var partnerObject = DIL.create({
    partner: 'partner name',
    containerNSID: NSID
});
partnerObject.api.traits([123, 456, 789]);
```

logs
Add data to log files in the pending request.

**Function signature:** logs: function {key1:value1, key2:value2}

**Response**
Returns the API object of the current DIL instance.

**Sample Code**
```javascript
var partnerObject = DIL.create({
    partner: 'partner',
    containerNSID: NSID
});
partnerObject.api.logs({
    file: 'dil.js',
    message: 'This is the first request'
});
```

submit
Submits all pending data to Audience Manager for the DIL instance.

**Function Signature:** submit: function () {}  

💡 **Note:** You can chain other API calls to this method. Also, DIL writes encoded data to a destination cookie. For example, spaces are encoded as %20 and semicolons as %3B.

**Response**
Returns the API object of the current DIL instance.
Sample Code

```javascript
var dataLib = DIL.create({
    partner: 'partnerName',
    containerNSID: containerNSID
});

dataLib.api.traits([123, 456, 789]).logs({
    file: 'dil.js',
    message: 'This is the first request'
}).signals({
    c_zdid: 1111
    d_dma: 'default'
}).submit();
```

**afterResult**

A function that executes after the default destination publishing callback.

**Function Signature:** `afterResult: function (fn) {}`

💡 **Note:** You can chain other API calls to this method.

**Parameters**

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>fn</td>
<td>Function</td>
<td>The function you want to execute after JSON is processed by the default callback that handles destination publishing.</td>
</tr>
</tbody>
</table>

**Response**

Returns an API object of the current DIL instance.

**Sample Code**

```javascript
var dataLib = DIL.create({
    partner: 'partnerName',
    containerNSID: containerNSID
});

dataLib.api.signals({
    c_zdid: 54321
    d_dma: 'default'
}).afterResult(function(json){
    //Do something with the JSON data returned from the server.
}).submit();
```

clearData

Clears all data in a pending request.

**Function Signature:** `clearData: function () {}`

💡 **Note:** You can chain other API calls to this method.

**Response**

Returns the API object of the current DIL instance.
Sample Code

```javascript
var dataLib = DIL.create({
    partner: 'partnerName',
    containerNSID: containerNSID
});

dataLib.api.traits([123, 456, 789]).logs({
    file: 'dil.js'
    message: 'This is the first request'
}).signals({
    c_zdid: 1111
    d_dma: 'default'
});

//Reset the pending data
dataLib.clearData();
```

**customQueryParams**

Adds custom query parameters that are not explicitly defined by the data collection server to a pending request.

**Function Signature:** `customQueryParams: function (obj) {}`

💡 **Note:** You can chain other API calls to this method.

**Reserved Request Keys**

The following request keys are reserved and cannot be overwritten by this method:

- `sids`
- `pdata`
- `logdata`
- `callback`
- `postCallbackFn`
- `useImageRequest`

**Response**

Returns the API object of the current DIL instance.

**Sample Code**

```javascript
var partnerObject = DIL.create({
    partner: 'partner',
    containerNSID: NSID
});
partnerObject.api.customQueryParams({
    nid: 54231,
    ntype: 'default'
});
```

**getContainerNSID**

Returns the value of the container NSID for the DIL instance. Useful for debugging and troubleshooting.

**Function Signature:** `dil.api.getContainerNSID: function () {}`

**Sample Code**

```javascript
var dataLib = DIL.create({
    partner: 'partnerName',
    containerNSID: containerNSID
```
getEventLog

Returns chronologically sorted event log data as an array of strings. Useful for debugging and troubleshooting.

**Function Signature:** `dil.api.getEventLog: function () {}`

**Sample Code**

```javascript
var dataLib = DIL.create({
  partner: 'partnerName',
  containerNSID: containerNSID
});

dataLib.api.traits([123, 456, 789]).logs({
  file: 'dil.js',
  message: 'This is the first request'
});.signals({
  c_zdid: 1111,
  d_dma: 'default'
});.submit();

//Check log for messages
var log = dataLib.api.getEventLog();
if (log && log.length) {
  alert(log.join('
'));
} else{
  alert('No log messages');
}
```

getPartner

Returns the partner name for a DIL instance. Useful for debugging and troubleshooting.

**Function Signature:** `dil.api.getPartner: function () {}`

**Sample Code**

```javascript
var dataLib = DIL.create({
  partner: 'partnerName',
  containerNSID: containerNSID
});

//Verify the partner name
var partner = dataLib.api.getPartner();
```

getState

Returns the state of the current DIL instance. Useful for debugging and troubleshooting.

**Function Signature:** `dil.api.getState: function () {}`

**Sample Code**

```javascript
var dataLib = DIL.create({
  partner: 'partnerName',
  containerNSID: containerNSID
});

dataLib.api.traits([123, 456, 789]).logs({
  file: 'dil.js',
  message: 'This is the first request'
});.signals({
  c_zdid: 1111,
  d_dma: 'default'
});.submit();
```
var state = dataLib.api.getState();

/*Object outline of state
state = {
  pendingRequest: {pending data for call to server),
  otherRequestInfo: {
    firingQueue: [],
    fired: [],
    firing: false,
    errored: [],
    reservedKeys: {
      sids: true,
      pdata: true,
      logdata: true,
      callback: true,
      postCallbackFn: true,
      useImageRequest: true,
    },
    firstRequestHasFired: false,
    num_ofjsonp_responses: 0,
    num_ofjsonp_errors: 0,
    num_of_img_responses: 0,
    num_of_img_errors: 0
  },
  destinationPublishingInfo: {
    THROTTLE_START: 3000,
    throttleTimerSet: false,
    id: 'destination_publishing_iframe_' + partner + '_' + containerNSID,
    url: (constants.isHTTPS ? 'https://' : 'http://fast.') + partner + 
      '.demdex.net/dest3.html?d_nsid='
        + containerNSID + '#' + encodeURIComponent(document.location.href),
    iframe: null,
    iframeHasLoaded: false,
    sendingMessages: false,
    messages: [],
    messageSendingInterval: constants.POST_MESSAGE_ENABLED ? 15: 100,
    //Recommend 100ms for IE 6 & 7, 15ms for other browsers
    jsonProcessed: []
  }
};

*/

idSync

Consists of two functions that let data partners exchange and synchronize user IDs among themselves and Audience Manager.

Function Signature:

Works with DIL versions 2.10 and 3.1 or higher.

<table>
<thead>
<tr>
<th>Code</th>
<th>Synchronizes User IDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>dil.Instance.api.idSync(initConfig)</td>
<td>Between different data partners and Audience Manager. For example, partner x would use this to synchronize a user ID with partner y and then send that to Audience Manager.</td>
</tr>
<tr>
<td>dil.Instance.api.aamIdSync(initConfig)</td>
<td>When you already know the user ID and want to send it to Audience Manager.</td>
</tr>
</tbody>
</table>
idSync Elements

idSync can consist of the following:

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>dpid</td>
<td>String</td>
<td>Data provider ID assigned by Audience Manager.</td>
</tr>
<tr>
<td>dpuuid</td>
<td>String</td>
<td>The data provider’s unique ID for the user.</td>
</tr>
<tr>
<td>minutesToLive</td>
<td>Number</td>
<td>(Optional) Sets the cookie expiration time. Must be an integer. Default is 20160 minutes (14 days).</td>
</tr>
<tr>
<td>url</td>
<td>String</td>
<td>Destination URL.</td>
</tr>
</tbody>
</table>

Macros

idSync accepts the following macros:

- `%TIMESTAMP%`: Generates a timestamp (in milliseconds). Used for cache busting.
- `%DID%`: Inserts the Audience Manager ID for the user.
- `%HTTP_PROTO%`: Sets the page protocol (http or https).

Response

Both functions return Successfully queued if successful. They return an error message string if not.

Sample Code

dilInstance.api.idSync(initConfig)
// Fires url with macros replaced
dilInstance.api.idSync({
  dpid: '23', // must be a string
  url: '//su.addthis.com/red/usync?pid=16&puid=%DID%&url=%HTTPPROTO%3A%2F%2Fdpm.demdex.net%2Fibs%3Adpid%3D420%26dpuuid%3D%7B%7Buid%7D%7D',
  minutesToLive: 20160 // optional, defaults to 20160 minutes (14 days)
});

dilInstance.api.aamIdSync(initConfig)
// Fires 'http://https:' + 'dpm.demdex.net/ibs:dpid=<dpid>&dpuuid=<dpuuid>'
dilInstance.api.aamIdSync({
  dpid: '23', // must be a string
  dpuuid: '98765', // must be a string
  minutesToLive: 20160 // optional, defaults to 20160 minutes (14 days)
});

result

Adds a callback (that receives JSON) to the pending request.

Function Signature: result: function (callback) {}  

This callback replaces the default callback that handles destination publishing.

💡 Note: You can chain other API calls to this method.
Parameters

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>callback</td>
<td>Function</td>
<td>JavaScript function executed by the JSONP callback.</td>
</tr>
</tbody>
</table>

Response

Returns the API object of the current DIL instance.

Sample Code

```javascript
var dataLib = DIL.create({
    partner: 'partnerName',
    containerNSID: containerNSID
});

dataLib.api.traits([123, 456, 789]).result(function(json){
    //Do something, possibly with the JSON data returned from the server.
});.submit();
```

secureDataCollection

secureDataCollection is a boolean parameter that controls how DIL makes calls to the Data Collection Servers (DCS) and Akamai.

- When `secureDataCollection= true` (default), DIL always makes secure, HTTPS calls.
- When `secureDataCollection= false`, DIL makes either HTTP or HTTPS calls by following the security protocol set by the page.

⚠️ Important: Set `secureDataCollection= false` if you use visitorAPI.js and DIL on the same page. See the code sample below.

```javascript
var dilInstance = DIL.create({
    ...}
    secureDataCollection: false
});
```

useCORSOnly

useCORSOnly is a boolean true/false parameter that controls how the browser requests resources from other domains.

Overview

useCORSOnly is false by default. False means the browser can perform resource checks with CORS or JSONP. However, DIL always tries to request resources with CORS first. It reverts to JSONP on older browsers that do not support CORS. If you need to force the browser to use CORS only, such as with sites that have high-security requirements, set `useCORSOnly: true`.

Code Sample

```javascript
var dilInstance = DIL.create({
    ...
    useCORSOnly: true
});
```

⚠️ Important:

- We recommend that you set `useCORSOnly: true` only when you're sure that your site visitors have browsers that support this feature.
• When useCORSOnly: true, DIL will not make ID calls from Internet Explorer version 9 or older.

useImageRequest
Changes the request type to image `<img>` from script `<src>`.

**Function Signature:** useImageRequest: function () {}

💡 **Note:** You can chain other API calls to this method.

**Response**
Returns an API object of the current DIL instance.

**Sample Code**
```javascript
var dataLib = DIL.create({
  partner: 'partnerName',
  containerNSID: containerNSID
});

dataLib.api.traits([123, 456, 789]).useImageRequest().submit();
```

**DIL Modules**
Describes methods in the DIL.modules namespace. These modules let you programmatically collect data and work with Audience Manager objects.

**siteCatalyst.init**
Works with DIL to send Analytics tag elements (variables, props, eVars, etc.) to Audience Manager. Returns data in a comma separated list. Available in version 2.6.

**Function Signature:** DIL.modules.siteCatalyst.init(siteCatalystReportingSuite, dilInstance, trackVars, options)

💡 **Note:** You must place this code on the page before the `s.t();` function.

**Parameters**

<table>
<thead>
<tr>
<th>Names</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>names</td>
<td>String</td>
<td>An array of strings that contains un-enumerated Analytics variables like pageName, channel, campaign, product, etc.</td>
</tr>
<tr>
<td>iteratedNames</td>
<td>Object</td>
<td>An array of objects that contains enumerated Analytics variables like props and evars (e.g. prop1, prop2, evar3, evar4).</td>
</tr>
<tr>
<td>maxIndex</td>
<td>Integer</td>
<td>Indicates how many iterated names you want to return. For example, to return two props or evars, set maxIndex:2.</td>
</tr>
<tr>
<td>Names</td>
<td>Type</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------</td>
<td>--------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>siteCatalystReportingSuite</td>
<td>Object</td>
<td>An object that represents the Analytics object.</td>
</tr>
<tr>
<td>dilInstance</td>
<td>Object</td>
<td>An object that represents DIL.</td>
</tr>
<tr>
<td>options</td>
<td>Object</td>
<td>Additional options:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• replaceContextDataPeriodsWith</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If you do not specify something else, periods are replaced with the default underscore ( _ ).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>For example s.contextData = {abc.def = '123'} would result in c_contextData_abc_def=123 in the event call query string.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>This option is available only in DIL version 5.0 or later.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• filterFromContextVariables</td>
</tr>
<tr>
<td></td>
<td></td>
<td>For example, filterFromContextVariables: ['email', 'zip', 'accountNumber'] would result in the array of strings being filtered from the data collection of context data. This option excludes Personally Identifiable Information (PII).</td>
</tr>
</tbody>
</table>

Data Captured by siteCatalyst.init

This function returns details on the following Analytics properties:

- pageName
- channel
- campaign
- products
- events
- eVar (1 - 250)
- prop (1 - 75)
- pe
- pev1
- pev2
- pev3

Sample Code

This code creates a comma separated list of Analytics events (props, eVars, etc.) if values for them exist.

```javascript
// Get the Site Catalyst object instance:
var s = s_gi(s_account);

// Instantiate DIL code:
var scDil = DIL.create({
```
To track all the monitored Analytics data points without the additional function shown above, invoke `siteCatalyst.init` by itself like this:

```
DIL.modules.siteCatalyst.init(s, scDil);
```

### GA.submitUniversalAnalytics

The `GA.submitUniversalAnalytics();` function sends data from Google’s Universal Analytics to Audience Manager. This DIL function is designed to work with `analytics.js`, which is the latest code library for Google Universal Analytics.

**Important:**

- **Audience Manager does not have any insight into or control over the Google `analytics.js` code library.** You should verify that DIL data collection is still working if or when Google releases new versions of `analytics.js`.
- **You cannot use `GA.submitUniversalAnalytics();` if you’re still working with Google’s legacy analytics tracking code (e.g., `ga.js` or `dc.js`). See `GA.init` instead.

**Function Signature:**

```
DIL.modules.GA.submitUniversalAnalytics(gaObject, dilInstance, internalPropertyName);
```

**Properties**

The `GA.submitUniversalAnalytics();` function accepts the following properties.

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>gaObject</td>
<td>The global variable for your instance of Google Analytics. This is usually <code>ga</code> by default, unless you’ve customized your Google Analytics code.</td>
</tr>
<tr>
<td>dilInstance</td>
<td>The variable that represents your instance of DIL.</td>
</tr>
<tr>
<td>internalPropertyName</td>
<td><em>(Optional)</em> In the <code>analytics.js</code> library, the internal property is the minified variable <code>b</code>. This variable holds Google Analytics data. This property is optional because you don’t need to set it unless Google changes the name of their internal variable. For example, if this minified variable changed to <code>a</code>, you would call <code>GA.submitUniversalAnalytics();</code> like this:</td>
</tr>
</tbody>
</table>
**Example**

Remember to define the Google Analytics `ga` object first, before calling DIL and `GA.submitUniversalAnalytics();`. Your code could look similar to this:

```javascript
// Instantiate DIL
var dilInstance = DIL.create({
  partner: "adobe"
});

// Call the DIL Universal Analytics function
DIL.modules.GA.submitUniversalAnalytics(ga, dilInstance);
```

**GA.init**

The `GA.init()` function sends data from the legacy/deprecated version of Google Analytics to Audience Manager.

⚠️ **Important:** `GA.init()` only works with Google's legacy analytics tracking code, `ga.js` or `dc.js`. You cannot invoke this DIL function if you use `analytics.js`, which is the latest code library for Google Universal Analytics. Audience Manager customers who use DIL and Universal Analytics should see `GA.submitUniversalAnalytics`.

**Function Signature:** `DIL.modules.GA.init(_gaq, dilInstance, trackVars);`

**Parameters**

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>_gaq</td>
<td>Array</td>
<td>An array that contains GA commands.</td>
</tr>
<tr>
<td>dilInstance</td>
<td>Object</td>
<td>An object that contains the DIL instance.</td>
</tr>
<tr>
<td>trackVars</td>
<td>Object</td>
<td><em>(Optional)</em> An object that consists of the <code>names</code> property. This property is an array of GA command names that you want to track.</td>
</tr>
</tbody>
</table>

**Supported GA Function Calls**

By default, `GA.init` captures data from the following functions:

- `_setCustomVar`
- `_addItem`
- `_addTrans`
- `_setAccount`
- `_trackSocial`

**DIL Creates Keys for GA Data**

Audience Manager accepts data in the form of key-value pairs while GA works with items in an array. To work with GA data, DIL creates a key-value pair automatically and forms a key like this: `c_<key name>`. Also, items in GA
arrays appear in a specific order. As a result, you must supply all parameters in that order, even when they contain no data. DIL maps keys for the following GA methods:

```javascript
// Tracking Social Interactions
_gaq.push(['_trackSocial',
    'facebook', // c_socialNetwork
    'like', // c_socialAction
    'http://www.adobe.com/cool.php', // c_socialTarget
    '/cool.php' // c_socialPagePath
]);

// Tracking a Transaction
_gaq.push(['_addTrans',
    '1234', // c_transOrderId
    'Womens Apparel', // c_transAffiliation
    '28.28', // c_transTotal
    '1.29', // c_tranTax
    '15.00', // c_transShipping
    'San Jose', // c_transCity
    'California', // c_transState
    'USA' // c_transCountry
]);

// Tracking an item
_gaq.push(['_addItem',
    '1234', // c_itemOrderId=1234
    'DD44', // c_itemSku
    'T-Shirt', // c_itemName
    'Olive Medium', // c_itemCategory
    '11.99', // c_itemPrice
    '1' // c_itemQuantity
]);
```

**Sample Code**

```javascript
// DIL JavaScript library needs to be loaded and executed here
var dilInstance = DIL.create({
    partner : "adobe"
});

// Assume ga.js has not loaded
var _gaq = _gaq || [];
_gaq.push(
    ['_setAccount', 'UA-XXXXX-X'],
    ['_setDomainName', 'example.com'],
    ['_setCustomVar', 1, 'Section', 'Life & Style', 3],
    ['_trackPageview']
);
_gaq.push([_
    '_addItem',
    '1234', // order ID - necessary to associate item with transaction
    'DD44', // SKU/code - required
    'T-Shirt', // product name - necessary to associate revenue with product
    'Olive Medium', // category or variation
    '11.99', // unit price - required
    '1' // quantity - required
]);
```

To track all the monitored GA metrics without the additional function shown above, invoke `GA.init` by itself like this:

```javascript
DIL.modules.GA.init(_gaq, dilInstance).submit();
```

**Sample Event Call**

The URL event call to Audience Manager could look similar to this:
DIL Tools

Describes methods in the DIL.tools namespace. These utility functions help you perform specific tasks.

getSearchReferrer

Returns search terms used to reach the current page.

Purpose of getSearchReferrer

In DIL, getSearchReferrer returns search results (names and key words) used to reach your site. You can pass in specific search terms to this function or let it search the supported search engines (AOL, Ask, Bing, Google, and Yahoo) against document.referrer by default.

Function signature: DIL.tools.getSearchReferrer(uri, initConfig)

Function Parameters

getSearchReferrer accepts:

• (string): (Optional) A string containing the search URL (uses document.referrer if undefined).
• (object): (Optional) An object containing the configuration for the hostPattern,QueryParam, or QueryPattern.

And returns:

• (object): An object that contains valid names and keywords.

Examples
<table>
<thead>
<tr>
<th>Search Type</th>
<th>Description</th>
<th>Code Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default Search</td>
<td>Returns keyword search terms used by the AOL, Ask, Bing, Google, and Yahoo search engines.</td>
<td>var results = DIL.tools.getSearchReferrer();</td>
</tr>
<tr>
<td>Match URL Hostname with a Custom Regex</td>
<td>Pass in a custom regex to match the host name of the referring URL.</td>
<td>var results = DIL.tools.getSearchReferrer(&quot;<a href="http://www.ehow.com/search.aspx?q=adobe+rules%22,%7B">http://www.ehow.com/search.aspx?q=adobe+rules&quot;,{</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>hostPattern:/ehow./, queryParam:&quot;p&quot;})</td>
</tr>
<tr>
<td></td>
<td></td>
<td>hostPattern:/ehow./, search_pattern:[^?]p=(^[^&amp;]+/})</td>
</tr>
</tbody>
</table>

**decomposeURI**

Disassembles a Uniform Resource Identifier (URI) into its constituent components: hash, host, href, pathname, protocol, search, and uriParams.

Function signature: DIL.tools.decomposeURI

**Function Parameters**

decomposeURI accepts:

- *uri (string): (Optional) A string containing the URI. Defaults to document.location.href if not specified.

And returns:

- *{object}: An object that contains valid names and keywords.

**Sample Code**

```javascript
var uriData = DIL.tools.decomposeURI('http://www.adobe.com/?arg1=123&arg2=456#am');

{  
  hash : "#am",
  host : "www.adobe.com",
  hostname : "www.adobe.com",
  href : "http://www.adobe.com/?arg1=123&arg2=456#am",
  pathname : "",
  protocol : "http:",
  search : "?arg1=123&arg2=456",
  uriParams : {
    arg1 : "123",
    arg2 : "456"
  }
}
```

**getMetaTags**

Searches for specific content defined in the meta tags on a Web page and returns that data in an object.
**Function signature:** `DIL.tools.getMetaTags(1 or more parameters)`

**Function Parameters**

`getMetaTags` accepts one or more name parameters (string type) to search for. It returns an object composed of key-value pairs.

**Sample Code**

```javascript
var dataLib = DIL.create(
    {
        partner: 'partnerName',
        containerNSID: containerNSID
    });

dataLib.api.signals(DIL.tools.getMetaTags('application', 'keywords', 'description'), 'c_').submit();
```

**DIL Use Cases and Code Samples**

Code samples and descriptions for specific DIL use cases.

**Send Data Elements to Audience Manager with DIL**

Create an object variable that sends information about page elements to Audience Manager. This is useful for general data collection or as an alternative to gathering data with Analytics variables.

**Description**

The following code demonstrates how to collect page data and send it to Audience Manager with DIL. These examples use a variable to hold data elements in a flat list or an array. Remember, pass in variables as **key-value pairs**. Also, note the `c_` prefix before the key in the key-value pair. This **required prefix** identifies information as user-defined data. In the first example, you need to manually append `c_` to the key. In the second example, DIL does this for you automatically.

**Keep Value Properties Consistent**

Remember to keep the value properties the same when passing in data. For example, if you have two identical keys with different values, the value of the last key-value pair takes precedence over the preceding value objects. For example, passing in `color:blue` and `color:red` sets the returned value to red (overwrites blue).

**Example 1: Send Data as Key-Value Pairs**

This basic example sends color and price data to Audience Manager in the form of key-value pairs. Your code could look similar to the following:

```javascript
var sample_dil = DIL.create({
    partner: "partner name"
});

sample_dil.api.signals(
    {
        c_color: "blue",
        c_price: "900"
    }
);

sample_dil.api.submit();
```

**Example 2: Send Data in an Object**

This advanced example demonstrates how to send data in an object to Audience Manager. When working with this method, DIL lets you pass an object as a function parameter into the `signals()` method. DIL Your code could look similar to the following:

```javascript
var my_object = {
    color : "blue",
    price : "900"
};
```
Example 3: Send Page Data in an Array

In this case, the variable my_object uses an array to hold data. This example builds on the information passed in by the recommended method above, but adds an additional layer to accommodate a product type and model. Your code could look similar to the following:

```javascript
var my_objects = [{
  color : "blue",
  price : "900"
}, {
  type : "acura",
  model : "tl"
}];
var sample_dil = DIL.create({ partner : "partner name" });
for (var i = 0; i < my_objects.length; i++) {
  sample_dil.api.signals(my_objects[i], "c_");
}

Capture Referring URL

Capture and send a referring URL to Audience Manager.

⚠️ Note: This method works only when users move between pages with similar protocols (HTTP vs HTTPS). For example, the browser retains a referring URL when you navigate from a secure site to another secure site. Browsers do not retain the referring URL when you move between secure and unsecure sites. This behavior is normal browser functionality and cannot be circumvented by DIL.

Code Sample

Your code could look similar to the following:

```javascript
var adobe_dil = DIL.create({ partner : "partner name" });
adobe_dil.api.signals({ d_referer : document.referrer }).submit();
```

Capture Search Engine Types and Keyword Search Terms

Send information about search engine type and keyword searches to Audience Manager.

Supported Search Engines

By default, DIL.getSearchReferrer recognizes searches from these search engines (including international variations):

- AOL
- Ask
- Bing
- Google
- Yahoo!

Description
The following code demonstrates how to get the search referrer for any of the supported search engines. In this case, let's assume a user searched on the term "homes" from Google Canada (www.google.ca). This code will help you capture those search terms and send them to Audience Manager.

**Basic Code**

Basic code for getting the search referrer (from google.com, for example) looks like this:

```javascript
var search_referrer = DIL.tools.getSearchReferrer();
```

**Listed Search Engine Code Sample**

In this case, let's assume that a user searched for the term "homes" from Google Canada (www.google.ca). Note how the code prefixes the required `c_` parameter to search engine (`c_se`) and search term (`c_st`). `c_` is a **required prefix** that identifies these as customer-defined variables to Audience Manager.

```javascript
var adobe_dil = DIL.create({partner: "partner name"});
var se = DIL.tools.getSearchReferrer();
if (se && se.valid) {
  adobe_dil.api.signals({
    c_se : se.name,
    c_st : se.keywords
  }).submit();
}
```

**Unlisted Search Engine Code Sample**

In this case, let's assume that a user searched for the term "homes" from dogpile.com. Because Dogpile is not supported by default, you can configure DIL to recognize this search engine and return the search terms to Audience Manager. Your code could look similar to the following:

```javascript
var adobe_dil = DIL.create({partner: "partner name"});
var search_referrer = DIL.tools.getSearchReferrer(document.referrer, {
  hostPattern:/dogpile\./,
  queryParam:"q"
});
if (se && se.valid) {
  adobe_dil.api.signals({
    c_se : se.name,
    c_st : se.keywords
  }).submit();
}
```

**Map Key Values to Other Keys**

Associate the value from a key-value pair to another key.

**Description**

In a key-value pair, the `c_` prefix appended to the key identifies the signal as customer-defined data. Customer-defined data is used for targeting on the specific site that passed in data on an event call. However, sometimes you want this information available across all properties in your Audience Manager account. To do this, map the value in a `c_` key-value pair to a platform level key. A platform level key is prefixed with `a_` and makes the signal available for targeting across all properties in your account.

As an example, you collect ZIP code data from a particular site but want to target it to all your Audience Manager properties. To make the ZIP code available at the platform level, you could map your customer-defined ZIP code key (e.g. `c_zip`) to a platform defined key as shown below.

**Code Sample**
Your code could look similar to the following:

```javascript
var adobe_dil = DIL.create({
    partner : "adobe",
    mappings : {
        c_zip : 'd_zip',
        d_key2 : 'h_dil_key2'
    }
});
adobe_dil.api.signals({c_zip : '10010'}).submit();
// Request will look like /event?c_zip=10010&d_zip=10010
```

**Traffic DIL in Google Tag Manager (GTM)**

Set up and serve DIL with a GTM tag.

This procedure assumes you have a Google Tag Manager account, some working knowledge of that product, and your Audience Manager `dil.js` file.

To traffic the `dil.js` file in GTM:

1. Create a new container or open an existing container.
2. Add a new tag to the container.
3. Open the tag to edit it and:
   • Name the tag.
   • Select **Custom HTML Tag** from the **Tag Type** drop-down list.
   • In the HTML field, place the DIL code (library + the custom code) within script tags `<script>DIL code</script>`.
   • Click **Save**.
4. Publish the container.
5. Generate container tag code and place it on your inventory.

**Flash DIL**

Collect data sent from FLA files to Analytics and work with that information in Audience Manager.

Flash DIL is an ActionScript code library that lets you work with video playback data in Audience Manager. Flash DIL works by capturing SWF content the Adobe AppMeasurement library passes in to Analytics. Flash DIL sends that data to the separate DIL JavaScript data collection module, which passes that information to Audience Manager. Analytics data (Props, eVars, events, etc.) captured from the FLA file is available in Audience Manager as traits or unused signals.

**Requirements for Flash DIL Data Collection**

General implementation and code-related requirements.

**Implementation Requirements**

Flash data collection requires:

• The DIL class library (`dil.swc`). Obtain the DIL class library from your Partner Solutions contact.
• JavaScript DIL data collection code on the page.
• **DIL ActionScript library** loaded in the Flash object you want to collect data from.
• Adobe AppMeasurement AS library (version 3.5.2, or later) loaded the Flash object you want to collect data from.
Set AllowScriptAccess to Always or sameDomain

The AllowScriptAccess in HTML code that loads a SWF file controls the ability to perform outbound URL access from within the SWF file. When you configure a Flash DIL data integration, make sure the Flash AllowScriptAccess parameter is set to always or sameDomain. Flash DIL data collection will not work if AllowScriptAccess is set to never. See Control Access to Scripts or Host Web Page.

JS DIL Code Placement

Try to place the JS DIL data collection module on the page so it loads before the FLA file. When the FLA file loads first, before DIL data collection is ready, you can miss the initial data signals that Flash DIL sends to that module. However, once instantiated, the DIL data collection module will capture all subsequent SWF file data passed in by Flash DIL.

Data Collected by Flash DIL

Flash DIL captures page view, link tracking, media tracking, and other media view events from the Adobe AppMeasurement library.

Page View Events

Unless specified otherwise by s.trackVars, Flash DIL collects the following data from Adobe AppMeasurement:

- `pageName`
- `channel`
- `campaign`
- `products`
- `events`
- `prop1` - `prop75`
- `eVar1` - `eVar75`

Link Tracking Events

Unless specified otherwise by s.linkTrackVars, Flash DIL collects the following data from Adobe AppMeasurement:

- `pe` (Type of track link called)
- `pev1` (Link URL)
- `pev2` (Link text)

Media Tracking Events

Unless specified otherwise by s.Media.trackVars, Flash DIL collects all the data enumerated in the Page View Events section.

Other Data Points

Data from these parameters is collected by default:

- `mediaName` (Media/video element name)
- `mediaAdName` (Ad name)
- `mediaAdParentName` (Name of the primary media content the ad is nested under)
- `mediaAdParentPod` (The pod or ad break within the primary content where the ad plays)
- `mediaAdParentPodPos` (The numeric position within the pod where the ad plays. More than one ad can play within a pod.)
Flash DIL Data in Audience Manager

The Flash DIL module turns Adobe AppMeasurement data into Audience Management traits and unused signals. Analytics Props, eVars, and events work like traits in Audience Management. Traits are key-value pairs and are used to build segments. For example, in an Analytics prop like prop35=foo, prop35 is the key (a constant) and foo is the value (a variable).

Match Audience Manager Traits to Analytics Variables

To use the Analytics data passed by Flash DIL, you should create Audience Manager traits that have:

- The same names as their Analytics equivalents.
- A key value prefixed with c_.

See the table for examples:

<table>
<thead>
<tr>
<th>Analytics Data Element</th>
<th>Analytics Example</th>
<th>As Audience Manager Trait</th>
</tr>
</thead>
<tbody>
<tr>
<td>prop</td>
<td>c30=foo</td>
<td>c_prop35=foo</td>
</tr>
<tr>
<td>evar</td>
<td>v35=bar</td>
<td>c_evar=bar</td>
</tr>
<tr>
<td>events</td>
<td>events=event10</td>
<td>c_events=event10</td>
</tr>
</tbody>
</table>

Flash DIL/Analytics Data as Unused Signals

Audience Manager accepts Analytics Props, eVars, and events even without a corresponding trait. In this case, the data is unavailable for trait creation and appears in the Unused Signals report instead. To make the most of this information, create Audience Manager traits that match the Analytics data passed in by the Flash DIL library.

Flash DIL ActionScript Library

Code for your Flash object to send Analytics data to Audience Management.

💡 Note:

- For each Flash object, the code supports one partner instance (d.partner) only.
- Requires the Adobe AppMeasurement AS library version 3.5.2 or higher.

```actionscript
import com.omniture.AppMeasurement; // Omit this line if it already exists in the code
import com.adobe.am.DIL;

var s:AppMeasurement = new AppMeasurement(); // Omit this line if it already exists in the code
var d:DIL = new DIL();
d.partner = "<partner>"; // Partner name
d.containerNSID = <container NSID>; // Optional, defaults to 0
s.loadModule(d);
```

REST APIs

RESTful APIs let you work programmatically with Audience Manager.

The Audience Manager REST API follows JavaScript Object Notation (JSON) standards for formatting sent and received data. A principal advantage of JSON is that it helps make API queries easy to write, read, and parse by developers and machines.
Review the *Getting Started* material before working with these API methods.

**Getting Started with REST APIs**

Information about general requirements, authentication, optional query parameters, request URLs, and other references.

**API Requirements and Recommendations**

Things you must and should do when working with the Audience Manager APIs.

**Requirements**

Note the following when working with Audience Manager API code:

- **Request parameters**: All request parameters are required unless specified otherwise.
- **JSON content type**: Specify `content-type: application/json and accept: application/json` in your code.
- **Requests and responses**: Send requests as a properly formatted JSON object. Audience Manager responds with JSON formatted data. Server responses can contain requested data, a status code, or both.
- **Access**: Your Audience Manager consultant will provide you with a client ID and key that lets you make API requests.
- **Documentation and code samples**: Text in *italics* represents a variable that you provide or pass in when making or receiving API data. Replace *italicised* text with your own code, parameters, or other required information.

**Recommendations: Create a Generic API User**

We recommend you create a separate, technical user account for working with the Audience Manager APIs. This is a generic account that is not tied to or associated with a specific user in your organization. This type of API user account helps you accomplish 2 things:

- Identify what service is calling the API (e.g., calls from your apps that use our APIs or from other tools that make API requests).
- Provide uninterrupted access to the APIs. An account tied to a specific person may be deleted when they leave your company. This will prevent you from working with the available API code. A generic account that’s not tied to a particular employee helps you avoid this problem.

As an example or use case for this type of account, let's say you want to change a lot of segments at once with the *Bulk Management Tools*. Well, to do this, your user account needs API access. Rather than add permissions to a specific user, create a non-specific, API user account that has the appropriate credentials, key, and secret to make API calls. This is also useful if you develop your own applications that use the Audience Manager APIs.

Work with your Audience Manager consultant to set up a generic, API-only user account.

**OAuth Authentication**

The Audience Manager REST API follows OAuth 2.0 standards for token authentication and renewal.

**Contents:**

- *Password Authentication Workflow*
- *Refresh Token*
- *Authorization Code and Implicit Authentication*
Password Authentication Workflow

Password authentication secure access our REST API. The following table outlines the workflow for password authentication from a JSON client in your browser.

💡 **Tip:** Encrypt access and refresh tokens if you store them in a database.

<table>
<thead>
<tr>
<th>Process Step</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Request API Access** | Contact your Partner Solutions manager. They will provide you with an API client ID and secret. The ID and secret authenticate you to the API.  

💡 **Note:** If you’d like to receive a refresh token, specify that when you request API access. |

| Request the Token | Pass in a token request with your preferred JSON client. When you build the request:  

• Use a **POST** method to call [https://api.demdex.com/oauth/token](https://api.demdex.com/oauth/token).  

• Convert your client ID and secret to a base-64 encoded string. Separate the ID and secret with a colon during the conversion process. For example, the credentials `testId:testSecret` convert to `dGVzdElkOnRlc3RTZWNyZXQ=`.  

• Pass in the HTTP headers **Authorization:** Basic `<base-64 clientID:clientSecret>` and **Content-Type:** `application/x-www-form-urlencoded`. For example, your header could look like this:  

`Authorization: Basic dGVzdElkOnRlc3RTZWNyZXQ=`  
`Content-Type: application/x-www-form-urlencoded`  

• Set up the request body as follows:  

```plaintext
grant_type=password&username=<your AudienceManager user name>&password=<your AudienceManager password>
```

| Receive the Token | The JSON response contains your access token. The response should look like this:  

```json
{
    "access_token": "28fed402-eafd-456c-9341-ac753f25bbbc",
    "token_type": "bearer",
    "refresh_token": "b27122c0-b0c7-4b39-a71b-1547a3b388e",
    "expires_in": 21922,
    "scope": "read write"
}
```

The "expires_in" key represents the number of seconds until the access token expires. As best practice, use short expiration times to limit exposure if the token is ever exposed. |

| Refresh Token | Refresh tokens renew API access after the original token expires. If requested, the response JSON in the password workflow includes a refresh token. If you don't receive a refresh token, create a new one through the password authentication process.  

You can also use a refresh token to generate a new token before the existing access token expires.  

If your access token has expired, you receive a **401 Status Code** and the following header in the response: |
The following table outlines the workflow for using a refresh token to create a new access token from a JSON client in your browser.

<table>
<thead>
<tr>
<th>Process Step</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Request the New Token** | Pass in a refresh token request with your preferred JSON client. When you build the request:  
  • Use a POST method to call https://api.demdex.com/oauth/token.  
  • Convert your client ID and secret to a base-64 encoded string. Separate the ID and secret with a colon during the conversion process. For example, the credentials testId:testSecret convert to dGVzdElkOnRlc3RTZWNyZXQ=.  
  • Pass in the HTTP headers Authorization:Basic <base-64 clientID:clientSecret> and Content-Type: application/x-www-form-urlencoded. For example, your header could look like this:
    ```plaintext
    Authorization: Basic dGVzdElkOnRlc3RTZWNyZXQ=
    Content-Type: application/x-www-form-urlencoded
    ```  
  • In the request body, specify the grant_type:refresh_token and pass in the refresh token you received in your previous access request. The request should look like this:
    ```plaintext
    grant_type=refresh_token&refresh_token=b27122c0-b0c7-4b39-a71b-1547a3b3b88e
    ``` |
| **Receive the New Token** | The JSON response contains your new access token. The response should look like this:
    ```json
    {
      "access_token": "4fdfc261-2ffc-4fb7-8dbd-64221714c45f",
      "token_type": "bearer",
      "refresh_token": "295fa487-1825-4caa-a715-80b81ac17dae",
      "expires_in": 21922,
      "scope": "read write"
    }
    ``` |

**Authorization Code and Implicit Authentication**

The Audience Manager REST API supports authorization code and implicit authentication. To use these access methods, your users need to log in to https://api.demdex.com/oauth/authorize to get access and refresh tokens.

**Make Authenticated API Requests**

Requirements for calling API methods after you receive an authentication token.

To make calls against the available API methods:

• In the HTTP header, set Authorization: Bearer <token>.
• Call the required API method.
Optional API Query Parameters

Set the optional parameters available to methods that return all properties for an object.

You can use these optional parameters with API methods that return all properties for an object. Set these options in the request string when passing that query in to the API.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>page</td>
<td>Returns results by page number. Numbering starts at 0.</td>
</tr>
<tr>
<td>pageSize</td>
<td>Sets the number of response results returned by the request (10 is default).</td>
</tr>
<tr>
<td>sortBy</td>
<td>Sorts and returns results according to the specified JSON property.</td>
</tr>
<tr>
<td>descending</td>
<td>Sorts and returns results in descending order. Ascending is default.</td>
</tr>
</tbody>
</table>
| search      | Returns results based on the specified string you want to use as a search parameter. For example, let's say you want to find results for all models that have the word "Test" in any of the value fields for that item. Your sample request could look like this:  
  
  
  You can search on any value returned by a "get all" method. |
| folderId    | Returns all the IDs for traits inside the specified folder. Not available to all methods. |
| permissions | Returns a list of segments based on the specified permission. **READ** is default. Permissions include:  
  
  • **READ**: Return and view information about a segment.  
  • **WRITE**: Use PUT to update a segment.  
  • **CREATE**: Use POST to create a segment.  
  • **DELETE**: Delete a segment. Requires access to underlying traits, if any. For example, you'll need rights to delete the traits that belong to a segment if you want to remove it.  
  
  Specify multiple permissions with separate key-value pairs. For example, to return a list of segments with **READ** and **WRITE** permissions only, pass in "permissions":"READ", "permissions":"WRITE". |
| includePermissions | (Boolean) Set to true to return your permissions for the segment. Default is false. |

A Note About Page Options

When page information is not specified, the request returns plain JSON results in an array. If page information is specified, then the returned list is wrapped in a JSON object that contains information about the total result and current page. Your sample request using page options could look similar to this:

```
GET https://api.demdex.com/v1/models/?page=1&pageSize=2&search=Test
```

API URLs

URLs for requests, staging and production environments, and versions.

This section contains the following information:
**Request URLs**
The following table lists the request URLs used to pass in API requests, by method.

<table>
<thead>
<tr>
<th>API Methods</th>
<th>Request URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algorithmic Modeling</td>
<td><a href="https://api.demdex.com/v1/models/">https://api.demdex.com/v1/models/</a></td>
</tr>
<tr>
<td>Data Source</td>
<td><a href="https://api.demdex.com/v1/datasources/">https://api.demdex.com/v1/datasources/</a></td>
</tr>
<tr>
<td>Derived Signals</td>
<td><a href="https://api.demdex.com/v1/signals/derived/">https://api.demdex.com/v1/signals/derived/</a></td>
</tr>
<tr>
<td>Destinations</td>
<td><a href="https://api.demdex.com/v1/destinations/">https://api.demdex.com/v1/destinations/</a></td>
</tr>
<tr>
<td>Domains</td>
<td><a href="https://api.demdex.com/v1/partner-sites/">https://api.demdex.com/v1/partner-sites/</a></td>
</tr>
<tr>
<td>Folders</td>
<td>• Traits: <a href="https://api.demdex.com/v1/folders/traits/">https://api.demdex.com/v1/folders/traits/</a></td>
</tr>
<tr>
<td></td>
<td>• Segments: <a href="https://api.demdex.com/v1/folders/segments/">https://api.demdex.com/v1/folders/segments/</a></td>
</tr>
<tr>
<td>Schema</td>
<td><a href="https://api.demdex.com/v1/schemas/">https://api.demdex.com/v1/schemas/</a></td>
</tr>
<tr>
<td>Segments</td>
<td><a href="https://api.demdex.com/v1/segments/">https://api.demdex.com/v1/segments/</a></td>
</tr>
<tr>
<td>Traits</td>
<td><a href="https://api.demdex.com/v1/traits/">https://api.demdex.com/v1/traits/</a></td>
</tr>
<tr>
<td>Trait Types</td>
<td><a href="https://api.demdex.com/v1/customer-trait-types">https://api.demdex.com/v1/customer-trait-types</a></td>
</tr>
<tr>
<td>Taxonomy</td>
<td><a href="https://api.demdex.com/v1/taxonomies/0/">https://api.demdex.com/v1/taxonomies/0/</a></td>
</tr>
</tbody>
</table>

**Environments**
The Audience Manager APIs provide access to different working environments. These environments help you test code against separate databases without affecting live, production data. The following table lists the available API environments and corresponding resource hostnames.

<table>
<thead>
<tr>
<th>Environment</th>
<th>Hostname</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td><a href="https://api.demdex.com/">https://api.demdex.com/</a>...</td>
</tr>
<tr>
<td>Beta</td>
<td><a href="https://api-beta.demdex.com/">https://api-beta.demdex.com/</a>...</td>
</tr>
</tbody>
</table>

**Note:** The Audience Manager beta environment is a smaller-scale, standalone version of the production environment. All the data that you want to test must be entered and collected in this environment.

**Versions**
New versions of these APIs are released on a regular schedule. A new release increments the API version number. The version number is referenced in the request URL as v<version number> as shown in the following example:

https://<host>/v1/...  

**Response Codes Defined**
HTTP status codes and response text returned by the Audience Management REST API.
<table>
<thead>
<tr>
<th>Response code ID</th>
<th>Response text</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>OK</td>
<td>The request processed successfully. Will return expected content or data if required.</td>
</tr>
<tr>
<td>201</td>
<td>Created</td>
<td>The resource was created. Returns for <strong>PUT</strong> and <strong>POST</strong> requests.</td>
</tr>
<tr>
<td>204</td>
<td>No Content</td>
<td>The resource has been deleted. The response body will be blank.</td>
</tr>
<tr>
<td>400</td>
<td>Bad Request</td>
<td>The server did not understand the request. Usually due to malformed syntax. Check your request and try again.</td>
</tr>
<tr>
<td>403</td>
<td>Forbidden</td>
<td>You do not have access to the resource.</td>
</tr>
<tr>
<td>404</td>
<td>Not Found</td>
<td>The resource could not be found for the specified path.</td>
</tr>
<tr>
<td>409</td>
<td>Conflict</td>
<td>The request could not be completed due to a conflict with the state of the resource.</td>
</tr>
<tr>
<td>500</td>
<td>Server Error</td>
<td>The server encountered an unexpected error that prevented it from fulfilling the request.</td>
</tr>
</tbody>
</table>

**Algorithmic API Methods**

Methods that let you work programmatically with algorithmic modeling features.

**Create a New Model**

A **POST** method that lets you create a new algorithmic model.

**Request**

**POST** https://api.demdex.com/v1/models/

**Sample Request**

All request values are required unless otherwise indicated.

```json
{
  "name" : "New model",
  "description" : "Test Model",
  "dataSources" : [<data_provider_id_1>, <data_provider_id_2>],
  "sid" : 8,
  "algoTypeId" : <Algorithm ID. Currently, only ID 1 is available>,
  "lookBackPeriod" : <Specify 30, 60, or 90 days>
}
```

**Sample Response**

```json
{
  "algoModelId": 1394,
  "pid": 1099,
  "name": "New model",
  "description": "Test Model",
  "algoTypeId": 1,
  "intervalSeconds": 86400,
  "lookBackPeriod": 30,
  "crUID": 3,
  "upUID": 3,
  "status": 1,
  "processingStatus": 0,
  "createTime": 1346092322000,
  "algoModelVersion": 0,
...}
```
Update a Model

A **PUT** method that lets you revise the model's name, description, and status.

Request

```
PUT https://api.demdex.com/v1/models/<model-id>/
```

Sample Request

All request values are required unless otherwise indicated. Model status settings include **active** and **inactive** only.

```
{
  "name": "New name",
  "description": "Revised description",
  "status": "active",
  "algoTypeId": 1,
  "dataSources": [3, 4],
  "sid": 8,
  "lookBackPeriod": 90
}
```

Sample Response

```
{
  "algoModelId": 1394,
  "pid": 1,
  "name": "New name",
  "description": "Revised description",
  "algoTypeId": 1,
  "intervalSeconds": 86400,
  "lookBackPeriod": 30,
  "crUID": 3,
  "upUID": 3,
  "status": 1,
  "processingStatus": 0,
  "createTime": 1346092322000,
  "algoModelVersion": 0,
  "lookBackPeriod": 90,
  "dataSources": [3, 4],
  "sid": 8,
  "latestRunTS": 10000,
  "baselineTraitType": 3,
  "updateTime": 1346092322000
}
```

Delete a Model

A **DELETE** method that removes a model from your collection.

Request

```
DELETE https://api.demdex.com/v1/models/<model-id>/
```

Sample Response
Returns response code 204 No Content if successful. Returns 400 Bad Request if there are any active traits created with this model and returns those trait IDs in an array. Remove traits from the model (or delete them) before you delete a model.

Delete Models

A POST method that lets you bulk delete multiple models.

Request

POST https://api.demdex.com/v1/models/bulk-delete/

Sample Request

In the request body, pass in a JSON array that includes the model IDs you want to delete.

```
[111,
  222
]
```

Sample Response

Returns 204 No Content.

Return Properties for an Algorithm

A GET method that returns ID, name, and description for the available algorithms. Currently, TraitWeight (ID 1) is the only available algorithm.

Request

GET https://api.demdex.com/v1/algorithms/

Sample Response

A successful response returns response code 200 OK and the list of algorithm IDs, name, and a brief description.

```
[
  {
    "algoTypeId": 1,
    "name": "Trait Weight",
    "description": "Trait Weight"
  }
]
```

Return Properties for an Algorithm by ID

A GET method that returns algorithm details (ID, name, and description) based on the passed in algorithm ID. Currently, TraitWeight (ID 1) is the only available algorithm.

Request

GET https://api.demdex.com/v1/algorithms/<algotype-id>/

Sample Response

A successful response returns response code 200 OK and the algorithm ID, name, and a brief description.

```
{
  "algoTypeId": 1,
  "name": "TF-IDF",
  "description": "TF-IDF"
}
```
Return Properties for all Models

A GET method that returns details about all your models.

Request

GET https://api.demdex.com/v1/models/

Optional Query Parameters

You can use these optional parameters with API methods that return all properties for an object. Set these options in the request string when passing that query in to the API. See Optional Parameters.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>page</td>
<td>Returns results by page number. Numbering starts at 0.</td>
</tr>
<tr>
<td>pageSize</td>
<td>Sets the number of response results returned by the request (10 is default).</td>
</tr>
<tr>
<td>sortBy</td>
<td>Sorts and returns results according to the specified JSON property.</td>
</tr>
<tr>
<td>descending</td>
<td>Sorts and returns results in descending order. Ascending is default.</td>
</tr>
<tr>
<td>search</td>
<td>Returns results based on the specified string you want to use as a search parameter. For example, let's say you want to find results for all models that have the word &quot;Test&quot; in any of the value fields for that item. Your sample request could look like this: GET <a href="https://api.demdex.com/v1/models/?search=Test">https://api.demdex.com/v1/models/?search=Test</a>. You can search on any value returned by a &quot;get all&quot; method.</td>
</tr>
</tbody>
</table>

Sample Request

GET https://api.demdex.com/v1/models/?page=1&pageSize=2&search=Test

Sample Response

```json
["total": 43, 
"page": 1, 
"pageSize": 2, 
"list": [ 
  { 
    "algoModelId":698, 
    "pid":1099, 
    "name":"Test model", 
    "description":"For testing", 
    "algoTypeId":1, 
    "intervalSeconds":604800, 
    "lookBackPeriod":30, 
    "crUID":833, 
    "upUID":833, 
    "status":"INACTIVE", 
    "lastRunStatus":null, 
    "createTime":1427474087000, 
    "algoModelVersion":0, 
    "sid":1784945, 
    "lastRunTimestamp":null, 
    "baselineTraitType":"SEGMENT", 
    "lastSuccessfulRunTimestamp":null, 
    "updateTime":1427474947000 
  }, 
  { 
    "algoModelId":738, 
    "pid":1099, 
    "name":"Test model", 
    "description":"For testing", 
    "algoTypeId":1, 
    "intervalSeconds":604800, 
    "lookBackPeriod":30, 
    "crUID":833, 
    "upUID":833, 
    "status":"INACTIVE", 
    "lastRunStatus":null, 
    "createTime":1427474087000, 
    "algoModelVersion":0, 
    "sid":1784945, 
    "lastRunTimestamp":null, 
    "baselineTraitType":"SEGMENT", 
    "lastSuccessfulRunTimestamp":null, 
    "updateTime":1427474947000 
  }
]```
Return Properties for a Model by ID

A GET method that returns algorithmic model details based on the passed in model ID.

**Request**

GET https://api.demdex.com/v1/models/<model-id>

**Sample Response**

A successful request returns details for the model. An unsuccessful request throws an exception and related error code.

```json
{
    "algoModelId": 16,
    "pid": 1099,
    "name": "newmodel78",
    "description": "descriptions is in the name",
    "algoTypeId": 1,
    "intervalSeconds": 864000,
    "lookBackPeriod": 30,
    "crUID": 3,
    "upUID": 3,
    "status": 1,
    "processingStatus": 0,
    "createTime": 1344969143000,
    "algoModelVersion": 0,
    "dataSources": [4],
    "sid": 8,
    "latestRunTS": 10000,
    "baselineTraitType": 3,
    "updateTime": 1344969143000
}
```

Return Properties for Your Most Accurate Traits

A GET method that returns a list of your most influential (accurate) traits.

**Request**

GET https://api.demdex.com/v1/models/<model-id>/runs/latest/traits/

**Optional Query Parameters**
You can use these optional parameters with API methods that return all properties for an object. Set these options in the request string when passing that query in to the API. See also Optional Parameters.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>page</td>
<td>Returns results by page number. Numbering starts at 0.</td>
</tr>
<tr>
<td>pageSize</td>
<td>Sets the number of response results returned by the request (10 is default).</td>
</tr>
<tr>
<td>sortBy</td>
<td>Sorts and returns results according to the specified JSON property.</td>
</tr>
<tr>
<td>descending</td>
<td>Sorts and returns results in descending order. Ascending is default.</td>
</tr>
<tr>
<td>search</td>
<td>Returns results based on the specified string you want to use as a search parameter. For example, let's say you want to find results for all models that have the word &quot;Test&quot; in any of the value fields for that item. Your sample request could look like this: GET <a href="https://api.demdex.com/v1/models/?search=Test">https://api.demdex.com/v1/models/?search=Test</a>. You can search on any value returned by a &quot;get all&quot; method.</td>
</tr>
<tr>
<td>folderId</td>
<td>Returns all the IDs for traits inside the specified folder. Not available to all methods.</td>
</tr>
</tbody>
</table>

**Sample Response**

```json
{
  "total": 2,
  "page": 0,
  "pageSize": 10,
  "list": [
    {
      "sid": 914,
      "pid": 1,
      "name": "sample rule",
      "description": "hello world, i am your rule.. err",
      "traitRuleVersion": 0,
      "ttl": 0,
      "crUID": 3,
      "upUID": 3,
      "createTime": 1346790825000,
      "updateTime": 1346790825000,
      "dataSourceId": 3,
      "folderId": 10,
      "traitType": "RULE_BASED_TRAIT",
      "uniques7Day": 213930,
      "uniques14Day": 415599,
      "uniques30Day": 770717,
      "uniques60Day": 9,
      "count7Day": 657,
      "count14Day": 626,
      "count30Day": 5201,
      "count60Day": 149,
      "weight": 67,
      "rank": 1
    },
    {
      "sid": 9,
      "pid": 1,
      "name": "trait2",
      "description": "new trait 2",
      "comments": "",
      "integrationCode": "",
      "traitRule": "",
      "traitRuleVersion": 0,
    }
  ]
}
```
Return Accuracy and Reach Values for a Model

A GET method that returns accuracy and reach values for your algorithmic model.

Request

GET https://api.demdex.com/v1/models/<model-id>/runs/latest/stats/

Sample Response

```
[
  {
    "AccuracyValue": 0.12,
    "ReachValue": 0
  },
  {
    "AccuracyValue": 0.18,
    "ReachValue": 0
  },
  {
    "AccuracyValue": 0.19,
    "ReachValue": 23232
  },
  {
    "AccuracyValue": 0.28,
    "ReachValue": 33432
  }
]
```

Return Processing Timestamp

A GET method that returns an array of UNIX time stamps (UTC) of successful data runs for your model.

Request

GET https://api.demdex.com/v1/models/<model-id>/processing-history/

Sample Response

```
[
  102032939, 1223030409, 1346236373
]
```
Data Integration Library API Methods

Methods that let you work programmatically with the Data Integration Library (DIL).

Return Versions for DIL

A GET method that returns a list of versions ordered from oldest to newest.

Request

GET https://api.demdex.com/v1/dil/

Sample Response

A successful request returns response code ["4.0", "4.1"] as shown below.

["4.0", "4.1"]

Return JSON Schema for Version

A GET method that returns the JSON schema for the version. Supports using alias LATEST for version to get the latest version of DIL.

Request

GET https://api.demdex.com/v1/dil/<version>

Sample Response

A successful request returns response code ["4.0", "4.1"] and data as shown below.

```json
{
  "type": "object",
  "$schema": "http://json-schema.org/draft-03/schema",
  "required": true,
  "additionalProperties": false,
  "properties": {
    "core": {
      "id": "core",
      "required": true,
      "type": "object",
      "properties": {
        "code": {
          "type": "boolean",
          "required": true,
          "id": "code"
        },
        "instanceVariable": {
          "type": "string",
          "id": "instanceVariable",
          "required": false
        },
        "create": {
          "type": "object",
          "id": "create",
          "required": false,
          "properties": {
            "initConfig": {
              "additionalProperties": false,
              "type": "object",
              "id": "initConfig",
              "required": true,
              "properties": {
                "declaredId": {
                  "id": "declaredId",
                  "required": false,
```
"type": "object",
"additionalProperties": false,
"properties": {
  "dpid": {
    "id": "dpid",
    "required": true,
    "type": "string"
  },
  "dpuuid": {
    "id": "dpuuid",
    "required": true,
    "type": "string"
  }
},
"containerNSID": {
  "type": "number",
  "id": "containerNSID",
  "required": false
},
"disableDestinationPublishingIframe": {
  "type": "boolean",
  "id": "disableDestinationPublishingIframe",
  "required": false
},
"enableErrorReporting": {
  "type": "boolean",
  "id": "enableErrorReporting",
  "required": false
},
"iframeAkamaiHTTPS": {
  "type": "boolean",
  "id": "iframeAkamaiHTTPS",
  "required": false
},
"iframeAttachmentDelay": {
  "type": "number",
  "id": "iframeAttachmentDelay",
  "required": false
},
"mappings": {
  "type": "object",
  "id": "mappings",
  "required": false,
  "additionalProperties": {
    "type": "string"
  }
},
"removeFinishedScriptsAndCallbacks": {
  "type": "boolean",
  "id": "removeFinishedScriptsAndCallbacks",
  "required": false
},
"uuidCookie": {
  "type": "object",
  "id": "uuidCookie",
  "additionalProperties": false,
  "required": false,
  "properties": {
    "days": {
      "type": "number",
      "id": "days",
      "required": false
    },
    "domain": {
      "type": "string",
      "id": "domain",
      "required": false
    }
  }
}
"name": {  
  "type": "string",  
  "id": "name",  
  "required": true
},  
"path": {  
  "type": "string",  
  "id": "path",  
  "required": false
},  
"secure": {  
  "type": "boolean",  
  "id": "secure",  
  "required": false
}
}
,"visitorService": {  
  "type": "object",  
  "id": "visitorService",  
  "required": false,  
  "properties": {  
    "namespace": {  
      "type": "string",  
      "id": "namespace",  
      "required": true
    }
  }
}
,"options": {  
  "id": "options",  
  "type": "object",  
  "required": false,  
  "properties": {  
    "minify": {  
      "id": "minify",  
      "required": false,  
      "type": "boolean"
    }
  }
}
,"include": {  
  "type": "object",  
  "id": "include",  
  "required": false,  
  "properties": {  
    "modules": {  
      "type": "object",  
      "id": "modules",  
      "required": false,  
      "additionalProperties": false,  
      "properties": {  
        "GoogleAnalytics": {  
          "type": "object",  
          "id": "GoogleAnalytics",  
          "required": false,  
          "properties": {  
            "code": {  
              "id": "code",  
              "type": "boolean",  
              "required": true
            }
          }
        }
      }
    }
  }
}
},
"Peer39": {
  "type": "object",
  "id": "Peer39",
  "required": false,
  "properties": {
    "code": {
      "id": "code",
      "type": "boolean",
      "required": true
    }
  }
},
"SiteCatalyst": {
  "type": "object",
  "id": "SiteCatalyst",
  "required": false,
  "additionalProperties": false,
  "properties": {
    "code": {
      "type": "boolean",
      "id": "code",
      "required": true
    },
    "init": {
      "type": "object",
      "id": "init",
      "required": false,
      "additionalProperties": false,
      "properties": {
        "siteCatalystInstance": {
          "type": "string",
          "id": "siteCatalystInstance",
          "required": true
        },
        "dilInstance": {
          "type": "string",
          "id": "dilInstance",
          "required": true
        }
      }
    },
    "trackedVariables": {
      "id": "trackedVariables",
      "required": false,
      "type": "object",
      "properties": {
        "iteratedNames": {
          "type": "array",
          "id": "iteratedNames",
          "required": false,
          "items": {
            "type": "object",
            "id": "0",
            "required": true,
            "properties": {
              "maxIndex": {
                "type": "number",
                "id": "maxIndex",
                "required": true
              },
              "name": {
                "type": "string",
                "id": "name",
                "required": true
              }
            }
          }
        },
        "names": {
          "type": "array",
          "required": false,
          "additionalProperties": false
        }
      }
    }
  }
}
"additionalItems": false,
"id": "names",
"required": false,
"items": [
  {
    "type": "string",
    "required": true
  },
  {
    "type": "string",
    "required": false
  },
  {
    "type": "string",
    "required": false
  },
  {
    "type": "string",
    "required": false
  },
  {
    "type": "string",
    "required": false
  },
  {
    "type": "string",
    "required": false
  },
  {
    "type": "string",
    "required": false
  },
  {
    "type": "string",
    "required": false
  }
]
],

"tools": {
  "type": "object",
  "id": "tools",
  "required": false,
  "additionalProperties": false,
  "properties": {
    "getMetaTags": {
      "type": "boolean",
      "id": "getMetaTags",
      "required": false
    },
    "getSearchReferrer": {
      "type": "boolean",
      "id": "getSearchReferrer",
      "required": false
    },
    "decomposeURI": {
      "type": "boolean",
      "id": "decomposeURI",
      "required": false
    }
  }
}
Generate DIL

A GET method that generates DIL based on passed in request body using the specified version of DIL. If the alias LATEST is used for version in the URL, the latest version of DIL is generated.

Request

POST https://api.demdex.com/v1/dil/<version>/generate

Sample Request

```json
{
  core: {
    code: true,
    instanceVariable: 'dil_instance',
    create: {
      initConfig: {
        declaredId: {
          dpid: '159',
          dpuuid: '456'
        },
        containerNSID: 81,
        disableDestinationPublishingIframe: false,
        enableErrorReporting: false,
        iframeAkamaiHTTPS: false,
        iframeAttachmentDelay: 575,
        mappings: {
          c_k1: 'd_k1',
          c_k2: 'd_k2'
        },
        removeFinishedScriptsAndCallbacks: false,
        uuidCookie: {
          days: 12,
          domain: 'adobe.com',
          name: 'adobe_did',
          path: '/',
          secure: false
        },
        visitorService: {
          namespace: 'demofirst'
        }
      }
    }
  },
  options: {
    minify: true
  },
  include: {
    modules: {
      GoogleAnalytics: {
        code: true
      },
      Peer39: {
        code: true
      },
      SiteCatalyst: {
        code: true,
        init: {
          siteCatalystInstance: 'sc_instance',
```
Sample Response

A successful update returns response code 201 created along with the DIL JavaScript code.

Data Source API Methods

API methods that let you manage data sources associated with your account.

⚠️ Important: The data source API methods have been rewritten with Swagger and migrated. See:

- Adobe Audience Manager API Docs
- Audience Manager API Code Migration

Derived Signals API Methods

API methods that let you work with derived signals. A derived signal qualifies site visitors for additional traits based on a trait they’ve already seen.

For more information about derived signals, see Derived Signals.

Create a New Derived Signal

A POST method that lets you create a new derived signal.

Request

POST https://api.demdex.com/v1/signals/derived/

Sample Request Body

The JSON request body contains a source key and source value. These parameters are used to associate the source key-value pair with other traits that are associated (derived) from those values. For example, in this request the key-value pair product SKU=1234 are also associated with a related target key-value pair. Note, source key and value variables must be unique. All request values are required unless otherwise indicated.

```json
{
    "sourceKey": "product SKU",
    "sourceValue": "1234",
    "targetKey": "camera",
    "targetValue": "camera"
}
```
Sample Response

A successful update returns response code 201 Created and data as shown below. An unsuccessful attempt returns response code 409 Conflict if the source/target mapping already exists.

```
{
    "derivedSignalId": 2,
    "targetKey": "camera",
    "sourceKey": "product SKU",
    "integrationCode": null,
    "targetValue": "brand x",
    "pid": 1099,
    "updateTime": 1319752831000,
    "version": 0,
    "upUID": 507,
    "crUID": 507,
    "sourceValue": "1234",
    "createTime": 1319752831000
}
```

Delete a Derived Signal

A DELETE method that lets you remove a derived signal from your collection.

Request

DELETE https://api.demdex.com/v1/signals/derived/<derivedSignalId>

Sample Response

Returns response code 204 No Content if successful.

Return Properties for a Derived Signal

A GET method that returns details for an individual derived signal.

Request

GET https://api.demdex.com/v1/signals/derived/<derivedSignalId>

Sample Response

A successful request returns response code 200 OK and data as shown below.

```
{
    "derivedSignalId": 2,
    "targetKey": "targetKey",
    "sourceKey": "sourceKey",
    "integrationCode": null,
    "targetValue": "targetValue",
    "pid": 1099,
    "updateTime": 1319752928000,
    "version": 1,
    "upUID": 507,
    "crUID": 507,
    "sourceValue": "sourceValue",
    "createTime": 1319752831000
}
```

Return Properties for all Derived Signals

A GET method that returns details for all your derived signals.
Request

GET https://api.demdex.com/v1/signals/derived/

Optional Query Parameters

You can use these optional parameters with API methods that return all properties for an object. Set these options in the request string when passing that query in to the API. See Optional Parameters.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>page</td>
<td>Returns results by page number. Numbering starts at 0.</td>
</tr>
<tr>
<td>pageSize</td>
<td>Sets the number of response results returned by the request (10 is default).</td>
</tr>
<tr>
<td>sortBy</td>
<td>Sorts and returns results according to the specified JSON property.</td>
</tr>
<tr>
<td>descending</td>
<td>Sorts and returns results in descending order. Ascending is default.</td>
</tr>
<tr>
<td>search</td>
<td>Returns results based on the specified string you want to use as a search parameter. For example, let's say you want to find results for all models that have the word &quot;Test&quot; in any of the value fields for that item. Your sample request could look like this: GET <a href="https://api.demdex.com/v1/models/?search=Test">https://api.demdex.com/v1/models/?search=Test</a>. You can search on any value returned by a &quot;get all&quot; method.</td>
</tr>
</tbody>
</table>

Sample Response

A successful update returns response code 200 OK and data (in an array) as shown below. All request values are required unless otherwise indicated.

```
[  
  {  
    "derivedSignalId": 1,  
    "targetKey": "targetKey",  
    "sourceKey": "sourceKey",  
    "integrationCode": null,  
    "targetValue": "targetValue",  
    "pid": 1099,  
    "updateTime": 1319746748000,  
    "version": 0,  
    "upUID": 507,  
    "crUID": 507,  
    "sourceValue": "sourceValue",  
    "createTime": 1319746748000
  },  
  {  
    "DerivedSignalId": 2,  
    "targetKey": "targetKey",  
    "sourceKey": "sourceKey",  
    "integrationCode": null,  
    "targetValue": "targetValue",  
    "pid": 1099,  
    "updateTime": 1319752831000,  
    "version": 0,  
    "upUID": 507,  
    "crUID": 507,  
    "sourceValue": "sourceValue2",  
    "createTime": 1319752831000
  }
]
```
Destination API Methods

Methods that let you work programmatically with destination features.

In Audience Manager, a destination is any other system (ad server, DSP, ad network, exchange, your own first-party cookie, etc.) that you want to share data with.

Destination Types: URL and Cookie

Lists the variables used by the `destinationType` parameter. Specify push or ADS to work with a URL or cookie destination. You cannot create server-to-server destinations with the available destination API methods.

<table>
<thead>
<tr>
<th>API Destination Type</th>
<th>UI Destination Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUSH</td>
<td>URL</td>
</tr>
<tr>
<td>ADS</td>
<td>Cookie</td>
</tr>
</tbody>
</table>

Create Destinations

Create destinations with these RESTful API methods.

Supported Destination Types: URL and Cookie Only

The available POST methods let you create URL and cookie destinations only. Currently, you cannot create server-to-server destinations with these REST API methods. However, the related destination GET methods let you retrieve information about server-to-server destinations created in the user interface.

Create a Non-Serial URL Destination

A POST method that lets you create a destination that accepts segments composed of single key-value pairs (e.g., `gender=male` or `gender=female`).

Request

POST https://api.demdex.com/v1/destinations/

Sample Request

This request creates a single destination. All request values are required unless otherwise indicated.

```
{
  "name":"Sample URL Destination (not serialized)",
  "description":"
  "destinationType":"PUSH",
  "serializationEnabled":false
}
```

Sample Response

A successful request returns 201 created and the destination.

```
{
  "destinationType":"PUSH",
  "destinationId":4033,
  "dataSourceId":null,
  "pid":1099,
  "name":"Sample URL Destination (not serialized)",
  "description":",
  "startDate":null,
  "endDate":null,
  "status":"ACTIVE",
```
Create a Serialized URL Destination

A POST method that lets you create a destination that accepts multiple values associated with a single key (e.g., color=blue, red, green).

Request

POST https://api.demdex.com/v1/destinations/

Sample Request

Specify the secure URL and delimiter for the key-value pair passed in to the destination. All request values are required unless otherwise indicated.

```
{
  "name": "Sample URL Destination (Serialized)",
  "destinationType": "PUSH",
  "serializationEnabled": true,
  "urlFormatString": "http://www.adobe.com/send?data=\%ALIAS\%",
  "secureUrlFormatString": "https://www.adobe.com/%ALIAS%",
  "delimiter": "-",
  "mappings": null
}
```

Sample Response

A successful update returns response code 201 created and the destination.

```
{
  "destinationType": "PUSH",
  "destinationId": 4034,
  "dataSourceId": null,
  "pid": 1099,
  "name": "Sample URL Destination (Serialized)",
  "description": "",
  "startDate": null,
  "endDate": null,
  "status": "active",
  "destinationType": "PUSH",
  "createTime": 1338937420000,
  "updateTime": 1338937420000,
  "crUID": 694,
  "upUID": 694,
  "domainRestrictions": "all_domains",
  "tagType": 0,
  "serializationEnabled": true,
  "urlFormatString": "http://www.adobe.com/send?\%ALIAS\%",
  "secureUrlFormatString": "https://www.adobe.com/%ALIAS%",
  "delimiter": ",",
  "mappings": null
}
```
Create a Cookie Destination: Single-Key, Non-Serialized

A **POST** method that lets you create a cookie destination that accepts segments composed of single key-value pairs (e.g., *gender=male* or *gender=female*).

**Request**

**POST** https://api.demdex.com/v1/destinations/

**Sample Request**

All request values are required unless otherwise indicated.

```
{
    "name":"Cookie Destination Single Key Not Serialized",
    "destinationType":"ADS",
    "adServerTypeID":1,
    "cookieName":"adobe",
    "cnameDomain":"adobe.com",
    "maxSize":"2048",
    "ttl":"0",
    "domainRestrictions":"inclusion",
    "siteIDs": [312],
    "formatType":"single_key",
    "singleKey":"key",
    "keySeparator":"=",
    "valueSeparator": ",",
    "serializationEnabled":false
}
```

**Sample Response**

A successful update returns response code **201 created** and the destination.

```
{
    "destinationType":"ADS",
    "destinationId":4035,
    "pid": 1099,
    "name": "Cookie Destination Single Key Not Serialized",
    "status": "active",
    "destinationType": "ADS",
    "createTime": 1338937984000,
    "updateTime": 1338937984000,
    "crUID": 694,
    "upUID": 694,
    "domainRestrictions": "inclusion",
    "cnameDomain": "adobe.com",
    "cookieName": "adobe",
    "singleKey": "key",
    "keySeparator": ",",
    "valueSeparator": ",",
    "formatType": "single_key",
    "transferMethod": 0,
    "serializationEnabled": false,
    "maxSize": 2048,
    "ttl": 0,
    "siteIDs": [312],
    "uparamEnabled": false
}
```

Create a Cookie Destination: Single Key, Serialized

A **POST** method that lets you create a destination that accepts multiple values associated with a single key (e.g., color=blue, red, green).
Request

POST https://api.demdex.com/v1/destinations/

Sample Request

All request values are required unless otherwise indicated.

```json
{
    "name": "Cookie Destination Single Key Serialized",
    "destinationType": "ADS",
    "adServerTypeID": 1,
    "cookieName": "adobe",
    "cnameDomain": "adobe.com",
    "maxSize": "2048",
    "ttl": "0",
    "domainRestrictions": "all_domains",
    "siteIDs": [],
    "formatType": "single_key",
    "singleKey": "k",
    "keySeparator": ":",
    "valueSeparator": ",",
    "serializationEnabled": true,
    "serializationSeparator": "#"
}
```

Sample Response

A successful update returns response code 201 created and the destination.

```json
{
    "destinationType": "ADS",
    "destinationId": 4036,
    "pid": 1099,
    "name": "Cookie Destination Single Key Serialized",
    "status": "active",
    "destinationType": "ADS",
    "createTime": 1338938329000,
    "updateTime": 1338938329000,
    "crUID": 694,
    "upUID": 694,
    "domainRestrictions": "all_domains",
    "cnameDomain": "adobe.com",
    "cookieName": "adobe",
    "singleKey": "k",
    "keySeparator": ":",
    "valueSeparator": ",",
    "formatType": "single_key",
    "transferMethod": 0,
    "serializationEnabled": true,
    "serializationSeparator": "#",
    "maxSize": 2048,
    "ttl": 0,
    "siteIDs": [],
    "uparamEnabled": false
}
```

Create a Cookie Destination: Multi-Key, Non-Serialized

A `POST` method that lets you create a destination that accepts segments that contain multiple keys with different values (e.g., gender=male; gender=female; color=blue; color=red).

Request

POST https://api.demdex.com/v1/destinations/
**Sample Request**

All request values are required unless otherwise indicated.

```json
{
    "name": "Ad Server Multi-Key Not Serialized",
    "destinationType": "ADS",
    "adServerTypeID": 1,
    "cookieName": "adobe",
    "cnameDomain": "adobe.com",
    "maxSize": "2048",
    "ttl": "0",
    "domainRestrictions": "all_domains",
    "siteIDs": [],
    "formatType": "key_value",
    "keySeparator": "=",
    "valueSeparator": ",",
    "serializationEnabled": false
}
```

**Sample Response**

A successful update returns response code 201 created and the destination.

```json
{
    "destinationType": "ADS",
    "destinationId": 4037,
    "pid": 1099,
    "name": "Ad Server Multi-Key Not Serialized",
    "status": 1,
    "destinationType": "ADS",
    "createTime": 1338938666000,
    "updateTime": 1338938666000,
    "crUID": 694,
    "upUID": 694,
    "domainRestrictions": "all_domains",
    "cnameDomain": "adobe.com",
    "cookieName": "adobe",
    "keySeparator": "=",
    "valueSeparator": ",",
    "formatType": "key_value",
    "transferMethod": 0,
    "serializationEnabled": false,
    "maxSize": 2048,
    "ttl": 0,
    "siteIDs": [],
    "uparamEnabled": false
}
```

**Create a Cookie Destination: Multi-Key, Serialized**

A **POST** method that lets you create a destination that accepts segments that contain multiple keys and values (e.g., gender=male, female; color=blue, red, green).

**Request**

**POST** https://api.demdex.com/v1/destinations/

**Sample Request**

All request values are required unless otherwise indicated.

```json
{
    "name": "Cookie Destination Multi-Key Serialized",
    "destinationType": "ADS",
    "adServerTypeID": 1,
    "cookieName": "adobe",
    "cnameDomain": "adobe.com",
    "maxSize": "2048",
    "ttl": "0",
    "domainRestrictions": "all_domains",
    "siteIDs": [],
    "formatType": "key_value",
    "keySeparator": "=",
    "valueSeparator": ",",
    "serializationEnabled": false
}
```
"adServerTypeID":1,
"cookieName":"adobe",
"cnameDomain":"adobe.com",
"maxSize":"2048",
"ttl":0,
"domainRestrictions":"all_domains",
"siteIDs":[]
],
"formatType":"key_value",
"keySeparator":"=",
"valueSeparator":",",
"serializationEnabled":true,
"serializationSeparator":"#"
}

Sample Response

A successful update returns response code 201 created and the destination.

{
  "destinationType":"ADS",
  "destinationId":4038,
  "pid":1099,
  "name":"Ad Server Multi-Key Serialized",
  "status":"active",
  "destinationType":"ADS",
  "createTime":1338938872000,
  "updateTime":1338938872000,
  "cruID":694,
  "upUID":694,
  "domainRestrictions":"all_domains",
  "cnameDomain":"adobe.com",
  "cookieName":"adobe",
  "keySeparator":"=",
  "valueSeparator":",",
  "formatType":"key_value",
  "transferMethod":0,
  "serializationEnabled":true,
  "serializationSeparator":"#",
  "maxSize":2048,
  "ttl":0,
  "siteIDs":[]
  },
  "uparamEnabled":false
}

Map Segments to a Destination

Map segments to destinations with these RESTful API methods.

Supported Destination Types: URL and Cookie Only

The available POST methods let you map segments to URL and cookie destinations only. Currently, you cannot map segments to server-to-server destinations with these REST API methods. Use the user interface instead. However, the related destination GET methods let you retrieve information about server-to-server destinations created in the user interface.

Map a Segment to a Non-Serialized URL Destination

A POST method that lets you map a segment to a non-serial URL destination.

Request

POST https://api.demdex.com/v1/destinations/<destinationId>/mappings/
Sample Request

All request values are required unless otherwise indicated.

```
{
    "sid": 87723,
    "traitType": "SEGMENT",
    "url": "http://adobe.com",
    "startDate": "2012-07-04"
}
```

Sample Response

```
{
    "mappingId": 65334,
    "traitType": "SEGMENT",
    "traitValue": 0,
    "destinationId": 4033,
    "elementName": "Sample games",
    "elementDescription": "Sample games pixel",
    "elementStatus": "active",
    "createTime": 1338940094000,
    "updateTime": 1338940094000,
    "crUID": 694,
    "upUID": 694,
    "sid": 87723,
    "startDate": "2012-07-03",
    "endDate": null,
    "priority": null,
    "url": "http://adobe.com",
    "secureUrl": null,
    "tagCode": null,
    "secureTagCode": null,
    "traitAlias": null
}
```

Map a Segment to a Serialized URL Destination

A POST method that lets you map a segment to a serialized URL destination.

Request

```
POST https://api.demdex.com/v1/destinations/<dataOrderId>/traits/
```

Sample Request

In the request, the traitAlias corresponds to the key in a key-value pair. All request values are required unless otherwise indicated.

```
{
    "sid": 87723,
    "traitType": "SEGMENT",
    "startDate": "2012-07-04",
    "traitAlias": "123"
}
```

Sample Response

```
{
    "mappingId": 65335,
    "traitType": "SEGMENT",
    "traitValue": 0,
    "destinationId": 4034,
    "elementName": "Sample Games",
    "elementDescription": "Migration of Sample Games Pixel",
    "elementStatus": "active",
    "createTime": 1338940401000,
    "updateTime": 1338940401000,
    "crUID": 694,
    "upUID": 694,
}
```
Map a Segment to a Cookie Destination: Single-Key, Non-Serialized

A POST method that lets you map a segment to single-key, non-serialized cookie destination.

Request

POST https://api.demdex.com/v1/destinations/<destinationId>/mappings/

Sample Request

In the request, the valueAlias corresponds to the value in a key-value pair. All request values are required unless otherwise indicated.

```json
{
    "sid":87723,
    "traitType":"SEGMENT",
    "startDate":"2012-07-04",
    "valueAlias":"123"
}
```

Sample Response

```json
{
    "destinationMappingId":65336,
    "traitType":"SEGMENT",
    "traitValue":0,
    "destinationId":4035,
    "elementName":"Sample Games",
    "elementDescription":"Migration of Sample Games Pixel",
    "elementStatus":"active",
    "createTime":1338940704000,
    "updateTime":1338940704000,
    "crUID":694,
    "upUID":694,
    "sid":87723,
    "startDate":"2012-07-03",
    "endDate":null,
    "priority":1,
    "traitAlias":null,
    "valueAlias":"123"
}
```

Map a Segment to a Cookie Destination: Multi-Key, Non-Serialized

A POST method that lets you map a segment to multi-key, non-serialized cookie destination.

Request

POST https://api.demdex.com/v1/destinations/<destinationId>/mappings/

Sample Request

In the request, the traitAlias and valueAlias set the key and the value respectively in a key-value pair. All request values are required unless otherwise indicated.

```json
{
    "sid":87723,
    "traitType":"SEGMENT",
    "startDate":"2012-07-04",
    "valueAlias":"123"
}
```
Sample Response

```json
{
  "mappingId": 65338,
  "traitType": "SEGMENT",
  "traitValue": 0,
  "destinationId": 4037,
  "elementName": "Sample Games",
  "elementDescription": "Migration of Sample Games Pixel",
  "elementStatus": "active",
  "createTime": 1338941092000,
  "updateTime": 1338941092000,
  "crUID": 694,
  "upUID": 694,
  "sid": 87723,
  "startDate": "2012-07-03",
  "endDate": null,
  "priority": 1,
  "traitAlias": "type",
  "valueAlias": "123"
}
```

**Map a Segment to a Cookie Destination: Multi-Key, Serialized**

A **POST** method that lets you map a segment to a multi-key, serialized cookie destination.

**Request**

```text
POST https://api.demdex.com/v1/destinations/<destinationId>/mappings/
```

**Sample Request**

In the request, the **traitAlias** and **valueAlias** set the key and the value in a key-value pair. All request values are required unless otherwise indicated.

```json
{
  "sid": 87723,
  "traitType": "SEGMENT",
  "startDate": "2012-07-04",
  "traitAlias": "type",
  "valueAlias": "123"
}
```

**Sample Response**

```json
{
  "destinationMappingId": 65340,
  "traitType": "SEGMENT",
  "traitValue": 0,
  "destinationId": 4038,
  "elementName": "Sample Games",
  "elementDescription": "Migration of Sample Games Pixel",
  "elementStatus": "active",
  "createTime": 1338941273000,
  "updateTime": 1338941273000,
  "crUID": 694,
  "upUID": 694,
  "sid": 87723,
  "startDate": "2012-07-03",
  "endDate": null,
  "priority": 2,
  "traitAlias": "type",
  "valueAlias": "123"
}
```
Map a Segment to a Server-to-Server Destination

A **POST** method that lets you map a segment to an existing server-to-server destination. Note, however, that you cannot create server-to-server destinations with these currently available API methods.

**Request**

POST https://api.demdex.com/v1/destinations/<destinationId>/mappings/

**Sample Request**

In the request, the `traitAlias` corresponds to the key in a key-value pair. All request values are required unless otherwise indicated.

```json
{
  "sid":87723,
  "traitType":"SEGMENT",
  "startDate":"2012-07-04",
  "traitAlias":"123"
}
```

**Sample Response**

```json
{
  "destinationMappingId":65341,
  "traitType":"SEGMENT",
  "traitValue":0,
  "destinationId":566,
  "elementName":null,
  "elementDescription":null,
  "elementStatus":"active",
  "createTime":1338942118000,
  "updateTime":1338942118000,
  "crUID":308,
  "upUID":308,
  "sid":84326,
  "startDate":"2012-07-03",
  "endDate":null,
  "priority":null,
  "traitAlias":"123"
}
```

**Bulk Create Destination Mappings**

A **POST** method that lets you pass in an array of cookie or URL destination mappings.

**Request**

POST https://api.demdex.com/v1/destinations/<destinationId>/bulk-create

**Sample Request**

All request values are required unless otherwise indicated.

```json
[
  {
    "sid": 105123,
    "traitType": "SEGMENT",
    "url": "http://adobe.com",
    "startDate": "2012-11-20"
  },
  {
    "sid": 121070,
    "traitType": "SEGMENT",
    "url": "http://my.adobeconnect.com",
    "startDate": "2012-11-21"
  }
]
```
Sample Response

A successful response returns the array of created mappings.

```
[{
  "mappingId": 103454,
  "traitType": "SEGMENT",
  "traitValue": 0,
  "destinationId": 780,
  "elementName": "Case of the Mondays",
  "elementDescription": "test",
  "elementStatus": "active",
  "createTime": 1353373234000,
  "updateTime": 1353373234000,
  "crUID": 1065,
  "upUID": 1065,
  "sid": 105123,
  "startDate": "2012-11-19",
  "endDate": null,
  "priority": null,
  "url": "http://adobe.com",
  "secureUrl": null,
  "tagCode": null,
  "secureTagCode": null,
  "traitAlias": null
},
{
  "mappingId": 103455,
  "traitType": "SEGMENT",
  "traitValue": 0,
  "orderId": 780,
  "elementName": "Test Trait",
  "elementDescription": "This trait",
  "elementStatus": 1,
  "createTime": 1353373234000,
  "updateTime": 1353373234000,
  "crUID": 1065,
  "upUID": 1065,
  "sid": 121070,
  "startDate": "2012-11-20",
  "endDate": null,
  "priority": null,
  "url": "http://my.adobeconnect.com",
  "secureUrl": null,
  "tagCode": null,
  "secureTagCode": null,
  "traitAlias": null
}
]
```

Delete Destinations

**DELETE** and **POST** methods that let you remove destinations and segment mappings.

Delete a Destination

A **DELETE** method that removes a destination.

💡 **Note:** You must remove all segment mappings before you can delete a destination.

- **Request:** DELETE https://api.demdex.com/v1/destinations/<destinationId>
- **Response:** Returns code 204 No Content if successful.

Bulk Delete Destinations
Remove multiple destinations with this **POST** method. Pass in destination IDs (**destinationId**) with an array in the request body.

- **Request:** POST https://api.demdex.com/v1/destinations/bulk-delete/
- **Response:** Returns code 204 No Content if successful.

**Delete Destination Mappings by Segment Mapping ID**

A **POST** method that removes destination mappings according to the specified segment ID.

- **Request:** DELETE https://api.demdex.com/v1/destinations/<destinationId>/segments/<mappingId>
- **Response:** Returns code 204 No Content if successful.

**Add Multiple Segments to a Destination**

A **POST** method that lets you map multiple segments to a destination.

**Request**

POST https://api.demdex.com/v1/destinations/<destinationId>/bulk-create

**Sample Request**

Create multiple destination mappings in an array. All request values are required unless otherwise indicated.

```json
[
  {
    "sid": 105123,
    "traitType": "SEGMENT",
    "url": "http://adobe.com",
    "startDate": "2012-11-20"
  },
  {
    "sid": 121070,
    "traitType": "SEGMENT",
    "url": "http://my.adobeconnect.com",
    "startDate": "2012-11-21"
  }
]
```

**Sample Response**

Returns an array of created mappings.

```json
[
  {
    "destinationMappingId": 103454,
    "traitType": "SEGMENT",
    "traitValue": 0,
    "destinationId": 780,
    "elementName": "Case of the Mondays",
    "elementDescription": "test",
    "elementStatus": "active",
    "createTime": 1353373234000,
    "updateTime": 1353373234000,
    "crUID": 1065,
    "upUID": 1065,
    "sid": 105123,
    "startDate": "2012-11-19",
    "endDate": null,
    "priority": null,
    "url": "http://adobe.com",
    "secureUrl": null,
    "tagCode": null,
    "secureTagCode": null,
    "traitAlias": null
  },
  {
    ...
  }
]```
Update a Destination by Destination ID

A PUT method that lets you update an existing destination by destinationId.

Request

PUT https://api.demdex.com/v1/destinations/<destinationId>

Sample Request

All request values are required unless otherwise indicated.

{
  "name":"Updated URL Destination (not serialized)"
  "description":"new description",
  "destinationType":"PUSH",
  "serializationEnabled":false
}

Sample Response

{
  "destinationType": "PUSH",
  "destinationId": 780,
  "dataSourceId": null,
  "pid": 1099,
  "name": "Updated URL Destination (not serialized)",
  "description": "new description",
  "startDate": null,
  "endDate": null,
  "status": 1,
  "createTime": 1348851790000,
  "updateTime": 1353372029000,
  "crUID": 884,
  "upUID": 1065,
  "domainRestrictions":"all_domains",
  "tagType": 0,
  "serializationEnabled": false,
  "urlFormatString": null,
  "secureUrlFormatString": null,
  "delimiter": null,
  "mappings": null
}
Update a Mapping to a Destination by Mapping ID

A **PUT** method that lets you update a mapping to a destination by the specified `mappingId`.

**Request**

```
PUT https://api.demdex.com/v1/destinations/mappings/<mappingId>
```

**Sample Request**

All request values are required unless otherwise indicated.

```
{
   "sid": 105123,
   "traitType": "SEGMENT",
   "url": "http://adobe.com",
   "startDate": "2012-11-20"
}
```

**Sample Response**

```
{
   "mappingId": 103453,
   "traitType": "SEGMENT",
   "traitValue": 0,
   "destinationId": 780,
   "elementName": "sample",
   "elementDescription": "test",
   "elementStatus": "active",
   "createTime": 1353373005000,
   "updateTime": 1353373005000,
   "crUID": 1065,
   "upUID": 1065,
   "sid": 105123,
   "startDate": "2012-11-19",
   "endDate": null,
   "priority": null,
   "url": "http://www.adobe.com/send?%ALIAS%",
   "secureUrl": null,
   "tagCode": null,
   "secureTagCode": null,
   "traitAlias": null
}
```

Return A Destination by Destination ID

A **GET** method that returns the destination for the specified `destinationId`.

**Request**

```
GET https://api.demdex.com/v1/destinations/<destinationId>
```

**Note:** To populate the `mappings` field pass in `includeMappings=true` in the URL.

**Sample Response**

```
{
   "destinationType": "PUSH",
   "destinationId": 314,
   "dataSourceId": null,
   "pid": 1099,
   "name": "sample destination",
   "description": "Turn",
   "startDate": null,
   "endDate": null,
   "status": "active",
```
Return All Destinations

A GET method that returns all destinations for the specified partner.

Request

GET https://api.demdex.com/v1/destinations

Note:

- (Optional) Pass in containsSegment=<sid> to return an array of all destinations mapped to the specified segment. For example, your query could look similar to this: GET ...
  /destinations/?containsSegment=4321.

- Does not return the full destination object. Get the destination by data order if you need fully populated object.

Optional Query Parameters

You can use these optional parameters with API methods that return all properties for an object. Set these options in the request string when passing that query in to the API. See Optional Parameters.

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</tr>
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</tr>
<tr>
<td>descending</td>
<td>Sorts and returns results in descending order. Ascending is default.</td>
</tr>
<tr>
<td>search</td>
<td>Returns results based on the specified string you want to use as a search parameter. For example, let's say you want to find results for all models that have the word &quot;Test&quot; in any of the value fields for that item. Your sample request could look like this: GET <a href="https://api.demdex.com/v1/models/?search=Test">https://api.demdex.com/v1/models/?search=Test</a>. You can search on any value returned by a &quot;get all&quot; method.</td>
</tr>
</tbody>
</table>

Sample Response

```
[
    {
        "destinationId":364,
        "pid":1099,
        "name":"Test",
        "description":"",
        "status":"active",
    }
]
```
Return a Destination Mapping With the Mapping ID

A GET method that returns an individual destination mapping based on the `mappingId`.

**Request**

GET https://api.demdex.com/v1/destinations/<destinationId>/mappings/<destinationMappingId>

**Sample Response**

```json
{
    "mappingId": 14593,
    "traitType": "SEGMENT",
    "traitValue": 0,
    "destinationId": 314,
    "elementName": "sample",
    "elementDescription": "Migration Pixel",
    "elementStatus": "active",
    "createTime": 1281997484000,
    "updateTime": 1300752888000,
    "crUID": 224,
    "upUID": 308,
    "sid": 80920,
    "startDate": "2010-11-15",
    "endDate": null,
    "priority": null,
    "url": "http://www.adobe.com/send?%ALIAS%",
    "secureUrl": "https://www.adobe.com/send?%ALIAS%",
    "tagCode": null,
    "secureTagCode": null,
    "traitAlias": null
}
```

Return Destination Mappings

A GET method that returns the mappings for a destination.

💡 **Note:** The returned mapping is specific to the destination type and configuration.

**Request**

GET https://api.demdex.com/v1/destinations/<destinationId>/mappings

Note: Supports paging parameters.

Sample Response

```json
{
  "total":354,
  "page":0,
  "pageSize":2,
  "list":[
    {
      "destinationMappingId":14395,
      "traitType":"SEGMENT",
      "traitValue":0,
      "destinationId":314,
      "elementName":"sample pixel",
      "elementDescription":"Migration Pixel",
      "elementStatus":"active",
      "createTime":1281997484000,
      "updateTime":1300752888000,
      "crUID":224,
      "upUID":308,
      "sid":80920,
      "startDate":"2010-11-15",
      "endDate":null,
      "priority":null,
      "url":"http://www.adobe.com/send?%ALIAS%",
      "secureUrl":"https://www.adobe.com/send?%ALIAS%",
      "tagCode":null,
      "secureTagCode":null,
      "traitAlias":null
    },
    {
      "destinationMappingId":15934,
      "traitType":"SEGMENT",
      "traitValue":0,
      "destinationId":314,
      "elementName":"sample pixel",
      "elementDescription":"Migration Pixel",
      "elementStatus":"active",
      "createTime":1281997484000,
      "updateTime":1300752888000,
      "crUID":242,
      "upUID":803,
      "sid":90820,
      "startDate":"2010-11-15",
      "endDate":null,
      "priority":null,
      "url":"http://www.adobe.com/send?%ALIAS%",
      "secureUrl":"https://www.adobe.com/send?%ALIAS%",
      "tagCode":null,
      "secureTagCode":null,
      "traitAlias":null
    }
  ]
}
```

Return All Available Destination Platforms

A GET method that returns all available device platforms for destinations.

**Request**

GET /destinations/configurations/available-platforms/
Sample Response

[
  BROWSER, ANDROID, iOS, ALL
]

Return S2S and Bulk S2S Destination Job History

A **GET** method that returns outbound Server-to-Server (S2S) and bulk S2S destination job history information.

**Request**

**GET**

https://api.demdex.com/v1/destinations/655/history/outbound?startDate=1000000000&endDate=1403034473000

Required query parameters: **startDate**=<epochtime> and **endDate**=<epochtime>.

**Sample Response**

[
  {
    "pushID":34090,
    "orderID":655,
    "dataProviderID":269,
    "syncType":1,
    "fullPublish":false,
    "receivedRecords":1,
    "attemptedRecords":1,
    "successRecords":1,
    "startTime":1337292466000,
    "endTime":1337292466000,
    "dataFileName":"ftp_655_269_iter_1337229891903.sync",
    "success":true
  },
  {
    "pushID":34104,
    "orderID":655,
    "dataProviderID":269,
    "syncType":1,
    "fullPublish":false,
    "receivedRecords":1,
    "attemptedRecords":1,
    "successRecords":1,
    "startTime":1337346397000,
    "endTime":1337346397000,
    "dataFileName":"ftp_655_269_iter_1337285714581.sync",
    "success":true
  },
  {
    "pushID":34124,
    "orderID":655,
    "dataProviderID":269,
    "syncType":1,
    "fullPublish":false,
    "receivedRecords":1,
    "attemptedRecords":1,
    "successRecords":1,
    "startTime":1337396811000,
    "endTime":1337396812000,
    "dataFileName":"ftp_655_269_iter_1337338243600.sync",
    "success":true
  }
]
Domain Management API Methods

Domain management methods that let you create and manage the domains to which you want to send data (for cookie destinations only).

Create a New Domain

A POST method that lets you create a new domain for (cookie destinations only).

Request

POST https://api.demdex.com/v1/partner-sites/

Sample Request

```
{
  "url": "example1.com"
}
```

Sample Response

A successful response returns 201 created and the partner site, including its unique ID.

```
{
  "pid": 1111,
  "siteId": 111,
  "url": "example1.com"
}
```

Delete a Domain

A DELETE method that lets you remove a domain (for cookie destinations only).

Request

DELETE https://api.demdex.com/v1/partner-sites/<site-Id>

Sample Response

A successful response returns 204 no content. Returns 404 not found if the partner site cannot be found.

Return Properties for a Domain

A GET method that returns details about the specified domain (for cookie destinations only).

Request

GET https://api.demdex.com/v1/partner-sites/<siteId>

Sample Response

A successful response returns 200 OK and data as shown in the sample below. Returns 404 Not found if the site ID or partner is not found.

```
{
  "pid": 1111,
  "siteId": 111,
  "url": "example1.com"
}
```

Return Properties for all Domains

A GET method that returns information about all your domains (for cookie destinations only).
Request

GET https://api.demdex.com/v1/partner-sites/

Optional Query Parameters

You can use these optional parameters with API methods that return all properties for an object. Set these options in the request string when passing that query in to the API. See Optional Parameters.

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</tr>
</tbody>
</table>

Sample Response

A successful response returns 200 OK and data in an array as shown in the sample below. Returns 404 Not found if the site ID or partner is not found.

```
[
  {
    "pid": 1111,
    "siteId": 111,
    "url": "example1.com"
  },
  {
    "pid": 2222,
    "siteId": 222,
    "url": "example2.com"
  },
  {
    "pid": 3333,
    "siteId": 333,
    "url": "example3.com"
  }
]
```

Folder API Methods

Methods that let you work programmatically with trait and segment folders. Folders are directories that hold and organize traits and segments in logical groups.

⚠️ Important: The folder API methods have been rewritten with Swagger and migrated. See:

- Adobe Audience Manager API Docs
- Audience Manager API Code Migration
Segment API Methods

Methods that let you work programmatically with segments.

⚠️ **Important:** The segment API methods have been rewritten with Swagger and migrated. See:
- Adobe Audience Manager API Docs
- Audience Manager API Code Migration

Taxonomic API Methods

Methods that let you view the Audience Manager common taxonomy. This optional classification scheme organizes traits into industry standard categories.

💡 **Note:** You cannot create new taxonomic categories or classify traits with these methods. To classify a trait, specify the appropriate `categoryId` with a trait create or update method.

Return a Specific Taxonomy

A **GET** method that returns details about the specified taxonomic category.

**Request**

```
GET https://api.demdex.com/v1/taxonomies/0/<categoryId>
```

**Sample Response**

A successful response returns **200 OK** and the category for the specified ID. An unsuccessful request returns **404 No Content** if the ID does not exist.

```
{
    "crUID": 158,
    "name": "Arts & Entertainment",
    "upUID": 158,
    "description": "Arts & Entertainment",
    "categoryID": 1,
    "parentCategoryID": 0
}
```

Return all Taxonomic Categories

A **GET** method that returns a list of the top-level categories in an array.

**Request**

```
GET https://api.demdex.com/v1/taxonomies/0/
```

**Sample Response**

Truncated for brevity.

```
[
    {
        "crUID": 158,
        "name": "Arts & Entertainment",
        "upUID": 158,
        "description": "Arts & Entertainment",
        "categoryID": 1,
        "parentCategoryID": 0
    },
```
Return Taxonomic Sub-Categories

A GET method that returns sub-categories for the specified parent category in an array.

Request

GET https://api.demdex.com/v1/taxonomies/0/<categoryId>/childCategories/

Sample Response

A successful response returns 200 OK and the category for the specified ID. An unsuccessful request returns 404 No Content if the ID does not exist. Truncated for brevity.

[ {
   "crUID": 158,
   "name": "Books & Literature",
   "upUID": 158,
   "description": "Books & Literature",
   "categoryID": 25,
   "parentCategoryID": 1
 },
 {
   "crUID": 158,
   "name": "Celebrity Fan/Gossip",
   "upUID": 158,
   "description": "Celebrity Fan/Gossip",
   "categoryID": 49,
   "parentCategoryID": 1
 },
 {
   "crUID": 158,
   "name": "Fine Art",
   "upUID": 158,
   "description": "Fine Art",
   "categoryID": 72,
   "parentCategoryID": 1
 }
]

Trait API Methods

Methods that let you work programmatically with traits.

⚠️ Important: The trait API methods have been rewritten with Swagger and migrated. See:

- Adobe Audience Manager API Docs
• Audience Manager API Code Migration

Trait Type Methods

Optional methods that let you to assign traits to a user-defined type or category, usually according to function or for your own internal reporting processes.

💡 Note: Trait type methods do not assign traits to categories used by the common taxonomy. Think of these as labels that are separate from the common taxonomy.

For visual reference, Trait Types is a dropdown control located in the UI under Traits > Create new trait > Basic Information.

Create a New Trait Type

A POST method that lets you create a new trait type.

Request

POST https://api.demdex.com/v1/customer-trait-types

Sample Request

```json
{
    "name": "Custom trait type"
}
```

Sample Response

```json
{
    "pixelType": 34,
    "pid": 1099,
    "name": "Custom type",
    "description": null,
    "crUID": 694,
    "upUID": 694,
    "createTime": 1358297352000,
    "updateTime": 1358297352000
}
```

Return Properties for a Trait Type

A GET method that returns details about the specified trait type.

Request

GET https://api.demdex.com/v1/customer-trait-types/<customerTraitTypeId>

Sample Response

```json
{
    "pixelType": 4,
    "pid": 0,
    "name": "Delivery Event",
    "description": "Delivery Event",
    "crUID": 158,
    "upUID": 158,
    "createTime": 1299115496000,
    "updateTime": 1299115496000
}
```
Return Properties for all Trait Types

A GET method that returns details about all your trait types in an array.

Request

GET https://api.demdex.com/v1/customer-trait-types/

Sample Response

```json
[
  {
    "pixelType": 200,
    "pid": 1099,
    "name": "Customer Specific Trait Type",
    "description": "Test",
    "crUID": 158,
    "upUID": 158,
    "createTime": 1349990458000,
    "updateTime": 1349990458000
  },
  {
    "pixelType": 1,
    "pid": 0,
    "name": "User Trait",
    "description": "User Trait",
    "crUID": 158,
    "upUID": 158,
    "createTime": 1299115492000,
    "updateTime": 1299115492000
  },
  {
    "pixelType": 2,
    "pid": 0,
    "name": "Site Visitor",
    "description": "Site Visitor",
    "crUID": 158,
    "upUID": 158,
    "createTime": 1299115493000,
    "updateTime": 1299115493000
  }
]
```

User, Group, and Permissions Management API Methods

Methods that let you work programmatically to manage users, groups, and permissions.

User Management API Methods

Rest API methods to manage users, including creating, updating, listing, deleting, and returning user objects.

Create a User

A POST method to create a new user.

Request

POST /api/v1/users/

Sample Request Body

```json
{
  "username": <string>,
  "status": "ACTIVE" | "INACTIVE" | "LOCKED",
  "firstName": <string>,
  "lastName": <string>,
  "emailAddress": <string>
}
```
If isAdmin is set to true, the user is created as a partner admin. This property also lets you know whether a user is a partner admin.

Returns 409 Conflict if the username is already taken.

Update a User

A **PUT** method to update a user.

**Request**

PUT /api/v1/users/<userId>

**Sample Request Body**

```json
{
  "username": <string>,
  "status": "ACTIVE"|"INACTIVE"|"LOCKED",
  "firstName": <string>,
  "lastName": <string>,
  "emailAddress": <string>,
  "title": <string>,
  "phoneNumber": <string>,
  "groups": [ <group_1_id>, ... ]
}
```

**Sample Response**

```json
{
  "pid": <integer>,
  "userId": <integer>,
  "username": <string>,
  "status": "ACTIVE"|"INACTIVE"|"LOCKED",
  "firstName": <string>,
  "lastName": <string>,
  "emailAddress": <string>,
  "title": <string>,
  "phoneNumber": <string>,
  "groups": [ <group_1_id>, ... ]
}
```

Returns 409 Conflict if the username is already taken.

Update Logged-In User

A **PUT** method to update the currently logged-in user.
Note: Whereas most API methods are only callable by partner admins, this method is callable by non-admin users.

Request
PUT /self/update

Sample Request Body
```
{
    "status" : "ACTIVE" | "INACTIVE" | "LOCKED",
    "firstName" : <string>,
    "lastName" : <string>,
    "emailAddress" : <string>,
    "title" : <string_may be_null>,
    "phoneNumber" : <string_may be_null>
}
```

Sample Response
```
{
    "userId": <integer>,
    "status" : "ACTIVE" | "INACTIVE" | "LOCKED",
    "firstName" : <string>,
    "lastName" : <string>,
    "emailAddress" : <string>
}
```

Returns 409 Conflict if the username is already taken.

Update Logged-In User Password
A PUT method to update the currently logged-in user.

Note: Whereas most API methods are only callable by partner admins, this method is callable by non-admin users.

Request
POST /users/self/update-password

Sample Request Body
```
{ "oldPassword" : "old password", "newPassword" : "new password" }
```

Returns 200 OK if successful. Returns 400 Bad Request if something is wrong with either password.

Reset Logged-In User Password
A PUT method to reset the currently logged-in user. Audience Management sends the user a system-generated password.

Note: Whereas most API methods are only callable by partner admins, this method is callable by non-admin users.

Request
POST /self/reset-password

Returns 200 OK if successful.
Return User Object for a User ID

A Get method to return the user object for a User ID.

**Request**

GET /api/v1/users/<userId>

**Sample Response**

```json
{
    "pid" : <integer>,
    "userId": <integer>,
    "username" : <string>,
    "status" : "ACTIVE"|"INACTIVE"|"LOCKED",
    "firstName": <string>,
    "lastName": <string>,
    "emailAddress" : <string>,
    "title": <string_may_be_null>,
    "phoneNumber" : <string_may_be_null>,
    "groups" : [<group_id_1>, ...]
}
```

Return User Object for Logged-In User

A Get method to return the user object for the currently logged-in user.

💡 **Note:** Whereas most API methods are only callable by partner admins, this method is callable by non-admin users.

**Request**

GET /api/v1/users/self

**Sample Response**

```json
{
    "pid" : <integer>,
    "userId": <integer>,
    "username" : <string>,
    "status" : "ACTIVE"|"INACTIVE"|"LOCKED",
    "firstName": <string>,
    "lastName": <string>,
    "emailAddress" : <string>,
    "title": <string_may_be_null>,
    "phoneNumber" : <string_may_be_null>,
    "groups" : [<group_id_1>, ...]
}
```

List Users

A GET method to list users.

**Request**

GET /api/v1/users/

You can specify multiple group IDs in the query parameters:

GET /api/v1/users/?groupId=343&groupId=12

This query returns a list of all users in the specified groups.
Sample Response

```json
{
  "pid" : <integer>,
  "userId": <integer>,
  "username" : <string>,
  "status" : "ACTIVE"|"INACTIVE"|"LOCKED">
  "firstName" : <string>,
  "lastName" : <string>,
  "emailAddress" : <string>,
  "title" : <string_may_be_null>,
  "phoneNumber" : <string_may_be_null>,
  "groups" : [<group_1_id>, ...]
}
```

Delete a User

A **DELETE** method to delete a user.

Request

`DELETE /api/v1/users/<user_id>`

Returns **204 No Content** if successful. In case of conflict returns **409 Conflict**.

Delete Users in Bulk

A **POST** method to delete multiple users in bulk.

Request

`POST /api/v1/users/bulk-delete`

Sample Request Body

```
{[<user_id_1>, <user_id_2>, ...]}
```

Group Management API Methods

Rest API methods to manage groups, including creating, updating, listing, deleting groups.

Create a Group

A **POST** method to create a new user group.

Request

`POST /api/v1/groups/`

Sample Request Body

```
{
  "name" : <string>,
  "description" : <string_may_be_null>,
}
```

Sample Response

```
{
  "groupId" : <integer>,
  "pid" : <integer>,
  "name" : <string>,
  "description" : <string_may_be_null>,
  "membershipCount" : <integer>,
  "wildcards" : <list of strings>,
  "users" : <list of user IDs>
}
```
Update a Group

A **PUT** method to update a user group.

**Request**

```plaintext
PUT /api/v1/groups/<groupId>
```

**Sample Request Body**

```json
{
   "name" : <string>,
   "description" : <string_may_be_null>,
}
```

**Sample Response**

```json
{
   "groupId" : <integer>,
   "pid" : <integer>,
   "name" : <string>,
   "description" : <string_may_be_null>,
   "membershipCount" : <integer>,
   "wildcards" : <list of strings>,
   "users" : <list of user IDs>
}
```

List Groups

A **GET** method to list user groups.

**Request**

```plaintext
GET /api/v1/groups/
```

**Sample Response**

```json
[
{
   "groupId" : <integer>,
   "pid" : <integer>,
   "name" : <string>,
   "description" : <string_may_be_null>,
   "membershipCount" : <integer>,
   "wildcards" : <list of strings>,
   "users" : <list of user IDs>
}, ...
]
```

Delete a Group

A **DELETE** method to delete a user group and remove all members from that group.

**Request**

```plaintext
DELETE /api/v1/groups/<groupId>
```

**Returns**

204 No Content if successful. In case of conflict returns 409 Conflict.

Delete Groups in Bulk

A **DELETE** method to delete multiple groups in bulk and remove all members from that group.

**Request**

```plaintext
DELETE /api/v1/groups/bulk-delete
```

**Returns**

204 No Content if successful. In case of conflict returns 409 Conflict.
List All Permissions for a Group

A GET method to list the permission objects on a group.

Request

GET /api/v1/groups/{groupId}/permissions

Sample Response

```json
[
  {
    "objectId": 34,
    "objectType": "SEGMENT",
    "permissions": ["READ", "WRITE", "DELETE", "MAP_TO_MODELS"],
  },
  {
    "objectId": 234,
    "objectType": "TRAIT",
    "permissions": ["READ", "WRITE", "DELETE", "MAP_TO_MODELS"],
  },
  {
    "objectId": 277,
    "objectType": "SEGMENT",
    "permissions": ["READ", "WRITE", "MAP_TO_MODELS"],
  }
]
```

Returns 400 Bad Request if the group is inaccessible.

Set Permissions for a Group

A PUT method to update group permissions. This method overwrites the old permissions with the new permissions.

Request

PUT /api/v1/groups/{groupId}/permissions/

Sample Response

```json
[
  { "objectType": "SEGMENT",
    "objectId": 563,
    "permissions": [ "READ", "WRITE"]
  },
  { "objectType": "SEGMENT",
    "objectId": 2363,
    "permissions": [ "CREATE", "WRITE"]
  },
  { "objectType": "TRAIT",
    "objectId": 83498,
    "permissions": [ "READ", "MAP_TO_SEGMENTS"]
  },
  { "objectType": "DESTINATION",
    "objectId": 304,
    "permissions": [ "READ", "WRITE", "CREATE"]
  }
]
```

The sample response represents the updated list of permission objects.

Returns 200 OK if successful. Returns 400 if any given permission is invalid. Can also return 403 if the object is not accessible by the logged-in user.

Permissions Management API Methods

Rest API methods to manage permissions for objects and groups.
List Available Object Types

A **GET** method to list available object types on which role-based access controls can be set.

**Request**

```
GET /api/v1/permissionable-object-types/
```

**Sample Response**

```
[ "SEGMENT", "TRAIT", "DESTINATION", "DERIVED_SIGNALS", "TAGS" ]
```

List Available Permissions for an Object Type

A **GET** method to list available permissions for an object type.

**Request**

```
GET /api/v1/permissionable-object-types/SEGMENT/
```

**Sample Response**

```
{
  "wildcard" : [ "VIEW_ALL_SEGMENTS", "EDIT_ALL_SEGMENTS", "CREATE_ALL_SEGMENTS",
                "DELETE_ALL_SEGMENTS", "MAP_ALL_SEGMENTS_TO_MODELS", "MAP_ALL_TO_DESTINATIONS" ],
  "perObject" : [ "READ", "WRITE", "CREATE", "DELETE", "MAP_TO_MODELS", "MAP_TO_DESTINATION" ]
}
```

💡 **Note**: The object types **TAGS** and **DERIVED SIGNALS** have no regular permissions to use. Controls on these object types are changed by the All or Nothing Wild Card Permissions only.

DCS Region API Methods

Methods that let you programmatically list Audience Manager DCS regions.

For a list of regions and their corresponding integers, see [DCS Region IDs, Locations, and Host Names](#).

List a Specific DCS Region

A **GET** method to list a specific DCS region.

**Request**

```
GET /v1/dcs-regions/<id>
```

**Sample Response**

```
{
  "regionId" : <id>,
  "location" : "<location>",
  "host" : "<host>",
  "code" : "<code>",
  "status" : "ACTIVE" | "INACTIVE",
  "createTime" : long of milliseconds since epoch,
  "updateTime" : long of milliseconds since epoch,
  "crUID" : <userId who created>,
  "upUID" : <userId who updated>
}
```

Returns **200 OK** if successful.

For a list of regions and their corresponding integers, see [DCS Region IDs, Locations, and Host Names](#).
List DCS Regions

A GET method to list DCS regions.

Request

GET /v1/dcs-regions/

Sample Response

```
[
    {
        "regionId" : <id>,
        "location" : "<location>",
        "host" : "<host>",
        "code" : "<code> # APSE, USE, etc,
        "status" : "ACTIVE" | "INACTIVE",
        "createTime" : long of milliseconds since epoch,
        "updateTime" : long of milliseconds since epoch,
        "crUID" : <userId who created>,
        "upUID" : <userId who updated>
    },
    ...
]
```

Returns 200 OK if successful.

For a list of regions and their corresponding integers, see DCS Region IDs, Locations, and Host Names.

SDK Code

Audience Manager provides software development kits (SDKs) for Android and iOS.

For SDK code libraries, see:

- Android SDK
- iOS SDK
Implementation and Integration Guides

Work with data from Experience Cloud solutions or other external systems in Audience Manager. Adobe data partners who want to receive audiences through a server-to-server integration should see Audience Manager Targeting Integration to get started.

Data Integration Methods

A high-level overview of how Audience Manager exchanges information with other data providers and systems.

Supported Data Integration Methods: Real-Time and Server-to-Server

Choosing the right integration method depends on a combination of business requirements and the technical capabilities of your data partner. Audience Manager exchanges visitor information with other data providers by either of the following methods:

- **Real-Time**: Transfers data immediately as a user visits your site. This method is also known as a *synchronous* integration.
- **Batch (Server-to-Server)**: Transfers data between servers on a set schedule after a visitor has left the page. This method is also known as an *out-of-band* or *asynchronous* integration.

Prerequisites: Create a Trait Taxonomy

Before the integration process begins, remember to *create traits* and a *folder structure* in the Audience Manager UI. The taxonomy will contain all your traits organized in a logical hierarchy.

Related Topics

Integration Use Cases

A use-case summary of Audience Manager data integration methods along with the advantages and disadvantages of each.

Real-Time Server-to-Server Integrations

A real-time server-to-server data integration rapidly synchronizes user data between Audience Manager servers and another targeting system. In most cases, data exchange takes place within seconds or minutes, depending on the refresh rate of the targeting system. Note, however, the targeted system determines this refresh interval, not Audience Manager. Furthermore, the refresh rate can vary between different systems. A real-time, server-to-server integration is the preferred integration type for data exchanges. Audience Manager uses this method whenever targeting partners can support it.

| Advantages: | • Lets you qualify users for segments without seeing them again on the page, in a video player, etc.  
• Reduces the number of HTTP calls from the page. Fewer calls helps preserve the user experience.  
• Helps with time sensitive targeting so you can take action on a qualified user quickly.  
• Useful when moving to a DSP for offsite targeting. |
### Server-to-Server Batch Integrations

A server-to-server batch integration bundles data and sends it to other systems at set intervals rather than in near real time. Data transfer intervals can range from 2 to 24 hours. Some data providers support this integration type only. However, we’ve seen a general trend away from batch integrations towards real-time integration methodologies.

| Advantages: | • Lets you qualify users for segments without seeing them again on the page, in a video player, etc.  
• Useful for targeting that is not time sensitive. |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Disadvantages:</td>
<td>The synchronization interval can delay targeting against the most current data.</td>
</tr>
</tbody>
</table>

### Real-time Calls

Real-time calls exchange data with Audience Manager immediately, as a user visits your site or takes action on the page. With this method, targeting systems get the most updated segment qualification data and can take that information into account during a content or ad delivery decision. Also, this process works with publisher ad servers where we update qualified segments to a first-party cookie that is read into an ad call as key-value pairs. Currently, Audience Manager uses real-time calls to integrate with Target, Adobe Auditude/Primetime, and other content management systems.

<table>
<thead>
<tr>
<th>Advantages:</th>
<th>Lets you target the next page, content area, or ad impression based the most recent segment qualification.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disadvantages:</td>
<td>Adds a call to Audience Manager from the page.</td>
</tr>
</tbody>
</table>

### Pixels Syncs to Targeting Systems

Pixel synchronization maps segments to pixels on the page. The pixel fires and transmits data when a user qualifies for a particular segment. Pixel synchronization is a rudimentary and unreliable data transfer mechanism. Top tier data providers and systems rarely use it.

<table>
<thead>
<tr>
<th>Advantages:</th>
<th>Real-time data transfers.</th>
</tr>
</thead>
</table>
| Disadvantages: | • Can add a lot of client-side calls from the page.  
• Unreliable for data transmission. 5% to 20% loss is normal. |

### How to Choose a Data Delivery Method

Describes technical and business reasons for sending data via synchronous (real-time) or asynchronous (server-to-server) methodologies.

#### Selecting a Data Delivery Type

- **Technical Considerations:** Data delivery depends on the technical capabilities of the data partner. Audience Manager can send/receive data in real-time from the browser or by batch updates through offline, server-to-server communication processes.
**Business Considerations:** The business reasons for selecting one delivery method or another depend on the technical capabilities of your destination partner and how you want to use this data. Typically, synchronous data transfers are useful when you need to take action on user data immediately. Asynchronous data transfers may be useful when immediate action is not required and when you have time to build deeper user profiles for later use.

**Real-Time Data Transfer Process**
A general overview of how Audience Manager performs a synchronous data exchange with a third-party vendor.

**Real-Time Data Transfer**
Real-time data transfers send and receive segment IDs as a user visits or takes action on your site. Typically, synchronous data transfers are useful when you need to qualify or segment users right away, as they navigate through your inventory.

**Data Integration Steps**
The real-time data integration process works as follows:

1. A user visits a customer's site that contains Audience Manager code.
2. Audience Manager loads an Iframe and makes a call to the Data Collection Server (DCS).
3. The DCS calls the third-party server (in real time) to check if the vendor has any segment information about the user.
4. The third party returns segment information about that user to Audience Manager.
5. Audience Manager ingests segment information and makes it available for targeting.
Batch Data Transfer Process

A general overview of how Audience Manager exchanges data synchronously (in real time) with a third-party vendor.

Batch Data Integration

The batch (server-to-server) data integration process follows most of the steps outlined in the real-time data transfer process. However, instead of returning segment IDs immediately, user information is saved to our servers and synchronized with a third-party data provider at regular intervals. The asynchronous data transfer process is useful when:

- Immediate data transfers are not required.
- Collecting data to build a large pool of segmented users.
- You want to reduce data discrepancies and HTTP calls from the browser.

Data Integration Steps

1. A user visits a customer site.
2. Audience Manager and the third-party data provider assign the visitor a unique ID (usually with a cookie).
3. Audience Manager calls the third-party data provider to match visitor IDs.
4. A scheduled request, usually on a daily interval, exchanges visitor segment data between Audience Manager and your third-party data provider.
For information describing the time frames when Audience Manager processes inbound and outbound Server-to-Server (S2S) file transfers, see *How Data Delivery and File Processing Times Affect Reports*.

**Data and Metadata Files for Audience Optimization Reports**

A data file contains impression, click, or conversion data that you can import into the **Audience Optimization** reports. A metadata file contains human-readable names that correspond to various report options and menu items. Format your data and metadata files according to the specifications in this section.

⚠️ **Important:** To use metadata files, your event calls must include all of the parameters listed in the overview and mappings section.

**Data Files for Audience Optimization Reports**

A data file contains impression, click, or conversion data. When formatted properly, you can import this data into Audience Manager and view it in the **Audience Optimization** reports. Format your data files according to these specifications in this section.

Contents:
Overview

Naming Conventions for Data Files

Content Format for Data Files

Delivery Methods for Data Files

Overview

A properly named and formatted data file lets you import impression, click, or conversion data into the Audience Optimization Reports. This is useful when working with partner who is not integrated with Audience Manager and you want to work with their data in that report suite. This process requires separate files for impression, click, and conversion data. Do not mix these events in a single file.

A data file must be accompanied by a metadata file. The metadata file contents match data file information to related, human-readable labels in the report menus. For more information, see Overview and Mappings for Metadata Files.

Naming Conventions for Data Files

The following syntax defines the structure of a well-formed data file name. Note, *italics* indicates a variable placeholder that changes depending on the file contents.

**Syntax:**  
*event type* _*yyyyymmdd*

In a file name:

* The event type indicates the file contains impressions, clicks, or conversions. Create a separate file for each event type.
* An underscore separates the event type and a year-month-date timestamp.
* Before uploading, compress your files using gzip and save them with the `.gz` file extension.

Given these requirements, name your data files based on their contents like this:

* Impression data: `impressions_yyyyymmdd.gz`
* Click data: `clicks_yyyyymmdd.gz`
* Conversion data: `conversions_yyyyymmdd.gz`

Content Format for Data Files

The following syntax defines the content structure in well-formed data file. Note, *italics* indicates a variable placeholder and is replaced with an label in an actual data file.

**Syntax:**  
`header label 1 | header label 2 ... header label n | version`

In the file contents:

* The header labels must appear in the order as shown in the table below. Impressions and clicks use the same labels. Conversion files contain extra headers.
* If you don't have data for a particular column, populate that field with a NULL object or `-1`.
* Files must end with a version number. The current version is 1.1.
* Separate file headers and contents with the non-printing ASCII 001 character. If you cannot use ASCII 001, then separate the headers and data with a tab delimiter. As these are non-printing characters, the syntax example above shows a pipe `|` for display purposes only.

**Field Labels**
The table below lists and describes the column headers for your data file. Headers are case-sensitive and must appear as ordered in the table. All data types are integers (INT) unless indicated otherwise.

<table>
<thead>
<tr>
<th>Label</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time-Stamp</td>
<td>A UTC date and time for the impression, click, or conversion event. Use the \texttt{yyyy-dd-mm hh:mm:ss} format.</td>
</tr>
<tr>
<td>User-ID</td>
<td>Your ID for a site visitor, also known as the \textit{data provider unique user ID} or DPUUID.</td>
</tr>
<tr>
<td>Advertiser-ID</td>
<td>The data source ID or integration code for your advertiser.</td>
</tr>
<tr>
<td>BU-ID</td>
<td>Business unit ID.</td>
</tr>
<tr>
<td>Campaign-ID</td>
<td>Campaign ID.</td>
</tr>
<tr>
<td>Creative-ID</td>
<td>Creative ID.</td>
</tr>
<tr>
<td>Site-ID</td>
<td>Site ID.</td>
</tr>
<tr>
<td>Placement-ID</td>
<td>Numeric placement ID from the ad server.</td>
</tr>
<tr>
<td>Insertion-Order-ID</td>
<td>Insertion Order ID.</td>
</tr>
<tr>
<td>Tactic-ID</td>
<td>Tactic ID.</td>
</tr>
<tr>
<td>Vertical-ID</td>
<td>ID for an industry vertical or category.</td>
</tr>
<tr>
<td>Quantity</td>
<td>The number of items sold in a conversion event.</td>
</tr>
<tr>
<td>Revenue</td>
<td>Purchase or other conversion amount. Data type: Float.</td>
</tr>
<tr>
<td>Other-Data</td>
<td>URL of the conversion landing page. Data type: String.</td>
</tr>
<tr>
<td>Event-Type</td>
<td>Conversion type. Indicates whether a conversion is matched or not. Options include:</td>
</tr>
<tr>
<td></td>
<td>\begin{itemize}</td>
</tr>
<tr>
<td></td>
<td>\item 0: Impression</td>
</tr>
<tr>
<td></td>
<td>\item 1: Click</td>
</tr>
<tr>
<td></td>
<td>\item -1: Unattributed or unknown</td>
</tr>
<tr>
<td></td>
<td>\end{itemize}</td>
</tr>
</tbody>
</table>

\textit{For conversion data files only.}
Label | Description
--- | ---
Version | A required version number that appears at the end of every row in an impression, click, or conversion data file. The current version is 1.1.

Delivery Methods for Data Files

Upload your impression, click, or conversion data files to an Amazon S3 directory for your Audience Manager account. Refer to this section for information about delivery/directory paths, file processing times, and updates.

Delivery Path Syntax and Examples

Data is stored in a separate namespace for each customer in an Amazon S3 directory. The file path follows the syntax shown below. Note, *italics* indicates a variable placeholder. Other elements are constants or keys and do not change.

**Syntax:** .../log_ingestion/pid=AAM ID/dpid=d_src/logs/file type_yyyymmdd

The following table defines each of these elements in a file delivery path.

<table>
<thead>
<tr>
<th>File Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>.../log_ingestion/</td>
<td>This is the start of the directory storage path. You'll receive the full path when everything is set up.</td>
</tr>
<tr>
<td>pid=AAM ID</td>
<td>This key-value pair that contains your Audience Manager customer ID.</td>
</tr>
<tr>
<td>dpid=d_src</td>
<td>This key-value pair contains the data source ID passed in on an event call. It identifies the agency the data comes from and ties that data to a supporting metadata file.</td>
</tr>
<tr>
<td>logs</td>
<td>A higher level directory for data files.</td>
</tr>
<tr>
<td>file type_yyyymmdd</td>
<td>A file type name that indicates what sort of data it contains and a delivery timestamp.</td>
</tr>
</tbody>
</table>

Sample Upload Path and File Name

When you upload a file, the path will look similar to this:

.../log_ingestion/pid=1234/dpid=567/logs/impressions_20150902

File Processing Times and Updates

Data files are processed twice daily, at 04:30 UTC and 17:30 UTC. If you miss these deadlines, your file will be processed the next day.

To update your data, send in a file that contains all of the impressions, clicks, or conversions for a particular day. In this case, a day is the 24-hour period from one midnight to the next. As a best practice, you may want to use UTC time to define your day interval.
Next Steps

Review the requirements for naming and creating metadata files. To get started, see *Overview and Mappings for Metadata Files*.

Overview and Mappings for Metadata Files

A metadata file links numeric IDs with names you can read and understand. The *Audience Optimization* reports display readable names in the various report options menus.

Contents:

• Overview
• File Mappings
• How Event Call IDs Shape File Names, Contents, and Delivery Paths

Overview

A review of metadata and how it’s used. A metadata file must be accompanied by a data file. The metadata file contents match data file information to related, human-readable labels in the report menus. For more information, see *Data Files for Audience Optimization Reports*.

Metadata Files Contain Data About Other Data

A metadata file contains information about other types of data. To help you understand how this works, let’s review how Audience Manager receives data. During an impression or click event, Audience Manager receives data in an URL string known as an event call. The event call organizes information into sets of defined key-value pairs. The values in a key-value pair contain of numeric data. The metadata file contains names and other readable information corresponding to the ID in each key-value pair.

Metadata Links IDs to Readable Names

The metadata file is required to tie a numeric ID to a readable name. As an example, say an event call contains a creative ID in a key-value pair like this: `d_creative:1234`. Without a metadata file, this creative would show up as 1234 in an options menu. However, a properly formatted metadata file can tie this creative to back to a real name like “Advertiser Creative A,” which is a name you can read and recognize in a report.

When Do You Need a Metadata File

First, a metadata file, and all of the parameters listed below, are required in an event call when you want to use the *Audience Optimization Reports*.

Second, you need a metadata file if you’re sending your own data to Audience Manager or if you want to see data in the reports from other providers we’re not integrated with. For example, Audience Manager has an integration with Google’s *Double-click Campaign Manager* (DCM). Because of this relationship, Audience Manager can associate IDs with names and descriptions used by the report options. Without an integration, we can still ingest data, but the report options will show numeric IDs instead of descriptive name.
File Mappings

The following table lists the key-value pairs that hold data used by the Audience Optimization reports. If you need to use a metadata file, it would contain human-readable information that corresponds to the values in these key-value pairs. The values for these keys accept integers only (data type INT). Note, *italics* indicates a variable placeholder. Other elements are constants or keys and do not change.

⚠️ **Important:** If you’re using the Audience Optimization reports, all of these values are required in the event call.

<table>
<thead>
<tr>
<th>Report Option</th>
<th>Metadata Key-Value Pairs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertiser</td>
<td>d_adsr = data source ID or integration code</td>
</tr>
<tr>
<td></td>
<td>This is the advertiser's data source ID or integration code provided when creating a data source. See <em>Create a Data Source</em>.</td>
</tr>
<tr>
<td>Business Unit (BU)</td>
<td>d_bu = business unit ID</td>
</tr>
<tr>
<td>Campaign</td>
<td>d_campaign = campaign ID</td>
</tr>
</tbody>
</table>
### Report Option | Metadata Key-Value Pairs
--- | ---
Creative | d_creative = creative ID
Exchange | Accepts 2 different key-value pairs:
  • d_exchange = ID for the exchange that served the ad
  • d_site = ID for the site an ad served on
Insertion Order (IO) | d_io = insertion order ID
Platform | d_src = data source ID
  This is the data source ID for the platform providing metadata information (e.g., DFA, Atlas, GBM, MediaMath, etc.).
Tactic | d_tactic = tactic ID
Vertical | d_vert = vertical ID

### How Event Call IDs Shape File Names, Contents, and Delivery Paths
The IDs passed in by these key-value pairs help create the metadata file name and its contents. The following sections and illustrations demonstrate how this works. These examples build a file that contains the name of a creative in a campaign, but other combinations are possible.

#### Event Call
In this example we'll create a metadata file that brings creative names in to an Audience Optimization report. To do this, we need to extract creative, campaign, and data source IDs from an event call.

![Event Call IDs Diagram](image)

**File Name**
The file name is based on the creative, campaign, and data source IDs. In this case, compare the differences here between the key-value data in an event call and how it's used in a file name.

In a file name:
- The data source key changes to `dpid` from `d_src`.
- The creative and campaign IDs represent a category rather than an actual identifier.

See *Naming Conventions for Metadata Files*.

**File Contents**

In this example, the file contents reflect the creative and campaign IDs passed in on the event call. The new element here is a readable name. Once processed, the name in this file will appear as an option in the Creative menu of an *Audience Optimization* report.

See *Content Format for Metadata Files*.

**File Delivery**
After you name and add data to a file, you send it to an Amazon S3 storage directory provided by Audience Manager. See *Delivery Methods for Metadata Files* and *Status Updates for Metadata Files*.

**Naming Conventions for Metadata Files**

Name your **Audience Optimization** metadata file according to these specifications.

**Syntax and ID Categories**

The following syntax defines the structure of a well-formed metadata file name. Note, *italics* indicates a variable placeholder. The other elements are constants and do not change.

**Syntax:** `yyyymmdd_parentID_childID`

In the name syntax, you'll notice a parent ID variable. Don't confuse it with the parent ID used in the *metadata file contents*. These 2 variables seem similar, but they represent different things:

* In the file name, the parent ID corresponds to a category like "campaign" (ID 1), "placement" (ID 3), or "tactic" (ID 9), etc.
* In the file body, the parent ID is the actual ID of the object that the contents belong to. For example, if your file contains creatives that are part of a campaign, the parent ID is the actual ID of the campaigns these creatives belong to.

**Metadata File ID and Categories**

In the metadata file name, the parent and child IDs are identifiers that classify the type of data in a file and place it into a hierarchy. You can tag the parent and child elements in file name with the following category IDs:

* 0: No parent
* 1: Campaign
* 2: Creative
* 3: Placement
* 4: Exchange
* 5: Site
* 6: Advertiser (if using integration codes in a *data source*)
* 7: Insertion Order (IO)
* 8: Vertical (i.e., a specific industry or business category like "computers," "automobiles," "real estate," etc.)
* 9: Tactic
* 10: Business unit or brand

**Example**

Let's take a look at how you would use these IDs in a metadata file name. As an example, say your data file consists of campaign creatives. In this case, the campaign is a parent object and the creatives are child objects because they belong to, or are contained by, the campaign. As a result, you'd choose the following IDs for the metadata file name:

* Parent ID: 1
* Child ID: 2

Your metadata file name would look like this: `20150827_1_2`

Sometimes, you might have data that does not belong to a parent object. Whenever this is the case, select ID 0 for the parent ID. In this case, your file title would look like this: `20150827_0_2`.
Content Format for Metadata Files

Format the contents of your Audience Optimization metadata file according to these specifications.

Syntax

The following syntax defines the structure of well-formed contents in a metadata file. Note, *italics* indicates a variable placeholder.

Syntax:  
\[ \text{content ID} \mid \text{name} \mid \text{parent ID} \]

In the contents syntax, you'll notice a parent ID variable. Don't confuse it with the parent ID used in the metadata file name. These 2 variables seem similar, but they represent different things. In the file name, the parent ID corresponds to a category like "campaign" (ID 1), "placement" (ID 3), or "tactic" (ID 9), etc. In the file body:

- The parent ID is the numeric ID of the object that the file contents belong to. For example, if your file contains creatives in a campaign, this value is the campaign ID.
- If your file content does not have a parent ID, then use the NULL object (i.e., the non-printing programming object) or -1. You would use NULL or -1 when the parent ID in the file name is set to ID 0.

Separate File Entries With ASCII 001 or Tab

The non-printing ASCII 001 character is the preferred delimiter for separating contents in your file. If you cannot use ASCII 001, then separate file contents with a tab delimiter. As these are non-printing characters, the syntax example above shows a pipe "|" for display purposes only.

Examples

Let's take a look at how you would structure content in a metadata file. Part of this structure depends on the type of information categorized by the parent ID the file title.

With a Parent Object

Let's say you want to populate the creative drop down menu with creative names from a particular campaign. In this case, your metadata file name would include ID 1 (campaign) and ID 2 (creative). Following the content syntax, your metadata file would contain the creative ID, creative name, and actual campaign ID.

```
//file title
20150827_1_2

//creative IDs, names, and campaign IDs
111 Creative A 456
222 Creative B 456
333 Creative C 987
```

Without a Parent Object

Sometimes, the content in a metadata file does not have a parent object. In these cases, the:

- File name parent ID is 0.
- File content parent ID is the non-printing NULL object (preferred) or -1.

```
//file title
20150827_0_2

//file contents: creative IDs, names, and campaign IDs
888 Creative X NULL
777 Creative Y NULL
666 Creative Z NULL
```
Delivery Methods for Metadata Files

Send or update metadata files by sending them to a special Amazon S3 directory for your Audience Manager account. Refer to this section for information about delivery/directory paths, file processing times, and updates.

Delivery Path Syntax and Examples

Data is stored in separate namespace for each customer in an Amazon S3 directory. The file path follows the syntax shown below. Note, *italics* indicates a variable placeholder. Brackets [ ] indicate optional parameters. The other elements are constants and do not change.

**Syntax:** .../log_ingestion/pid=**AAM ID**/dpid=d_src/[meta|status]/yyyymmdd_parent ID_child ID

The following table defines each of these elements in a file delivery path.

<table>
<thead>
<tr>
<th>File Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>.../log_ingestion/</td>
<td>This is the start of the directory storage path. You'll receive the full path when everything is set up.</td>
</tr>
<tr>
<td>pid=AAM ID</td>
<td>This key-value pair that contains your Audience Manager customer ID.</td>
</tr>
<tr>
<td>dpid=d_src</td>
<td>This key-value pair contains the data source ID passed in on an event call. The data source ID is the value that ties all the contents in your file to the actual data it belongs to. For example, say you have a creative with the ID 123 and the name “Advertiser Creative A.” As an event call only passes in the ID you need to include “Advertiser Creative A” in the metadata file. The campaign and creative belong to a data source. The data source ID is what ties these together and lets us accurately associate file contents to an ID sent in on an event call. See How Event Call IDs Shape File Names, Contents, and Delivery Paths.</td>
</tr>
<tr>
<td>*meta</td>
<td>*meta is a file upload/storage directory.</td>
</tr>
<tr>
<td>*status</td>
<td>*status is a path to a directory that holds success or failure information about your processed files. After your file is processed, you'll see a .info file with yyyymmdd timestamp title. Status files contain data in a JSON object. See Status Updates for Metadata Files.</td>
</tr>
<tr>
<td>yyyymmdd_parent ID_child ID</td>
<td>This is the file name. See Naming Conventions for Metadata Files.</td>
</tr>
</tbody>
</table>

Sample Upload and Status Paths

To upload a metadata file or to check its status, the file paths will look similar to these:

- Upload path: /log_ingestion/pid=1234/dpid=567/meta/20150827_1_2
- Processing status path: /log_ingestion/pid=1234/dpid=567/status/20150827.info.
File Processing Times and Updates

Metadata files are processed twice daily, at 04:30 UTC and 17:30 UTC. If you miss these deadlines, your file will be processed the next day.

To update your metadata records, just send a file that contains new information. You don't need to send full updates each time.

Status Updates for Metadata Files

The S3 status directory holds a .info file with success and failure information about your uploaded files. The file contains JSON-formatted data with status results in an array.

The contents of your .info file will look similar to this example.

```json
//sample file path
/log_ingestion/pid=1234/dpid=567/status/20150827.info

//sample contents
{
  "Files": [ 
  
    
    { "FileByteSize": 488900,  
    "FileChecksumMD5": "94b821082daaff242e452c0d8796b08f0",  
    "FileName": "20141112_4_2",  
    "MetadataType": "Creative",  
    "Parent": "Site",  
    "Status": "SUCCESS",  
    "Description": ""
    
    }, 
    
  
    { "FileByteSize": 58812,  
    "FileChecksumMD5": "db79f148e6a635629701cl3a7bccc8db0",  
    "FileName": "20141112_0_4",  
    "MetadataType": "Site",  
    "Parent": "None",  
    "Status": "FAILURE",  
    "Description": "Invalid format."
    
    }
  
  ]

  "Summary": { 
  "Day": "2014-11-12",  
  "ProcessingTimestampPOSIX": 1418263678,  
  "TotalByteSize": 547712,  
  "TotalNumberFiles": 2,  
  "NumberSuccess": 1,  
  "NumberFailure": 1,  
  "GlobalStatus": "FAILURE"
  
  }

} 
```

Metadata Key-Value Pairs Defined

The following tables list and define the keys in the Files and Summary sections of a metadata status file.

### Keys in the Files Array

<table>
<thead>
<tr>
<th>Key</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Contains a brief description of why processing failed. This field is empty when processing is successful.</td>
</tr>
<tr>
<td><strong>Key</strong></td>
<td><strong>Description</strong></td>
</tr>
<tr>
<td>-----------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>FileByteSize</td>
<td>File size in bytes.</td>
</tr>
<tr>
<td>FileChecksumMD5</td>
<td>The MD 5 checksum for the metadata file uploaded to your meta directory.</td>
</tr>
<tr>
<td>FileName</td>
<td>The name of the metadata file uploaded to your meta directory.</td>
</tr>
<tr>
<td>MetadataType</td>
<td>The human-readable name for the type of data your file contains. It is based on the child ID in your file name.</td>
</tr>
<tr>
<td></td>
<td>See <em>Naming Conventions for Metadata Files</em>.</td>
</tr>
<tr>
<td>Parent</td>
<td>The human-readable name for the type of data your file contains. It is based on the parent ID in your file name.</td>
</tr>
<tr>
<td></td>
<td>See <em>Naming Conventions for Metadata Files</em>.</td>
</tr>
<tr>
<td>Status</td>
<td>Returns 2 text values that describe the processing status of your metadata file:</td>
</tr>
<tr>
<td></td>
<td>• SUCCESS</td>
</tr>
<tr>
<td></td>
<td>• FAILURE</td>
</tr>
</tbody>
</table>

**Keys in the Summary Object**

<table>
<thead>
<tr>
<th><strong>Key</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Day</td>
<td>File processing date in <code>yyyyMMdd</code> format.</td>
</tr>
<tr>
<td>GlobalStatus</td>
<td>Returns 2 text values that describe the processing status for all your files for an entire day:</td>
</tr>
<tr>
<td></td>
<td>• SUCCESS</td>
</tr>
<tr>
<td></td>
<td>• FAILURE</td>
</tr>
<tr>
<td>NumberFailure</td>
<td>The number of files that were processed unsuccessfullyally.</td>
</tr>
<tr>
<td>NumberSuccess</td>
<td>The number of files processed successfully.</td>
</tr>
<tr>
<td>ProcessingTimeRFC2822</td>
<td>Returns a human-readable time stamp for processing start times.</td>
</tr>
<tr>
<td>ProcessingTimePOSIX</td>
<td>A UNIX time stamp for processing start times.</td>
</tr>
<tr>
<td>TotalByteSize</td>
<td>Total number of bytes for all your metadata files for the day.</td>
</tr>
</tbody>
</table>
DFP as an Audience Manager Destination

Set up DFP as a destination and send Audience Manager segment data to that platform.

DFP Destination Requirements

Standards for code placement, supported key-value formats, reports, and the type of segment data sent to DFP.

Requirements

This destination type requires the following:

- **DIL**: Data Integration Library code should be deployed on your inventory. DIL helps eliminate the need to write special code for data collection, integration, reading cookie values, and recovering page data.
- **get_aamCookie Function**: Code that captures the Audience Manager user ID and cookie data. Place this code on the top of the page or inside the `<head>` codeblock.
- **Send Delivery Logs to Audience Manager**: If you want a segment delivery report (optional), provide Audience Manager with a daily log that contains impression-level delivery data. The data can be in a raw format, but each record must contain the Audience Manager UUID. Audience Manager can pick up or receive these via FTP.

Cookie Format and Key-Value Data

Audience Manager can send segment data to a browser cookie as follows:

- Single keys (x=1&x=2).
- Multiple keys (x=1&x=2&y=3&y=4).
- Serialized values (x=1,2,3)
- A standard value delimiter separates individual key-value pairs.

Only Qualified Segments are Sent to DFP

The amount data passed in to DFP depends on how many segments a particular user qualifies for. For example, say you set up 100 Audience Management segments. If a site visitor qualifies for five of them, then only those five segments get sent to DFP (not all 100).

Create a DFP Destination

Create a cookie-based destination for DFP in Audience Manager.

In Audience Manager, a destination is any other system (ad server, DSP, ad network, etc.) that you want to share data with. **Destination Builder** provides the tools that let you create and manage these data delivery processes. Audience Manager destination features are located in Manage Data > Destinations. To get started, click **Add New Destination** and follow the steps below.

**Step 1: Basic Information**

To complete the **Basic Information** section:

1. Name the destination.
2. Select "Cookie" from the Type drop-down list.
3. Click Next and move on to the Configuration and Segment Mappings sections.

Step 2: Configuration Information

To complete the Configuration section:

1. **Cookie Name**: Provide a short, descriptive name for your cookie.
2. **Cookie Domain**: Leave blank to set a cookie in the domain of the user's current page. If you want to specify a domain, prefix the name with a period like this, .mydomain.com.
3. Choose a key option in the Data Format section.
4. If your keys use data with serialized values, select the Serialize control and specify the serial delimiter (the character that separates the serialized values).
5. Click Save and expand the Segment Mappings section.

Step 3: Segment Mappings

To add a segment to a cookie destination:

1. **Find segments**: The Segment Mappings section provides two search tools to help locate segments. To find a segment:
   - Option 1: Start typing a segment name in the search field. The field updates automatically based on the text. Click Add once you find the segment you want to use.
   - Option 2: Click Browse All Segments to open a window that lets you browse for segments by name or storage location. Click Add Selected Segments when done.
2. **Add Mappings**: In the mappings pop, enter the segment ID in the mappings field and click Save.
3. Click Done.

DFP Setup

Modify DFP settings to work with Audience Manager segment data.

To set up DFP:

- Install DIL code across your site.
- Create DFP as a cookie destination in Audience Manager.
- Place the `get_aamCookie` function at the top of the page, ideally within the `<head>` codeblock. The `get_aamCookie` code is available here.
- Modify your ad tag to call the `get_aamCookie` function and include the cookie name you provided when setting up the DFP destination. For example, if you named the cookie `test_cookie`, then the ad tag should call `get_aamCookie` and reference the cookie name. Your ad tag could look similar example below.

```html
<a href= "http://client.adserver.net/?" + get_aamCookie(‘test_cookie’) + 
"&etc&u=" + get_aamCookie(‘aam_uuid’)
```

Remember to include the `u=` variable. It holds the actual unique user ID (UUID) passed in during an ad call.

GPT as an Audience Manager Destination

Set up Google Publisher Tags (GPT) as a destination to send Audience Manager segment data to DFP.

GPT Destination Requirements

Requirements and related information about setting up Google Publisher Tags (GPT) as an Audience Manager destination.
Consider the following points when you want to set up GPT as an Audience Management destination:

- **Add DIL:** Deploy Data Integration Library (DIL) code on all the pages you want to target. DIL writes Audience Manager segment data and user IDs to cookies that get used by GPT for targeting.

- **Create a Cookie Destination:** GPT must be set up as a cookie-based destination in Audience Management.

- **Implement Cookie Checking Code:** Wrap the GPT `.setTargeting` API method in our recommended cookie checking code. This code helps prevent errors by looking for valid AAM cookies before the `.setTargeting` method gets invoked.

- **Add the AamGpt Function:** The `AamGpt` code captures data from Audience Manager cookies and sends it to GPT. Place the *Audience Manager Code for Google Publisher Tags* (`AamGpt`) at the top of the page or inside the `<head>` codeblock.

  **Note:** *The `AamGpt` function is not required if you use your own code to read Audience Manager cookie data.*

- **Send Delivery Logs to Audience Manager:** If you want a segment delivery report (optional), provide Audience Manager with a daily log that contains impression-level delivery data. The data can be in a raw format, but each record must contain the Audience Manager UUID. Audience Manager can pick up or receive these via FTP.

**Only Qualified Segments are Sent to GPT**

The amount of data passed in to GPT depends on how many segments a particular user qualifies for. For example, say you set up 100 Audience Management segments. If a site visitor qualifies for five of them, then only those five segments get sent to GPT (not all 100).

**Note:** *There are no limits to the number of key-values you can send, but the Google request URL does have limits to the number of characters it can accept. See Setting targeting and sizes with GPT.*

**Create a GPT Destination**

Create a cookie-based destination for Google Publisher Tags in Audience Manager.

**Destinations**

In Audience Manager, a *destination* is any other system (ad server, DSP, ad network, etc.) that you want to share data with. **Destination Builder** provides the tools that let you create and manage these data delivery processes. Audience Manager destination features are located in *Manage Data > Destinations*. To get started, click **Add New Destination** and follow the steps below.

**Basic Information**

To complete the **Basic Information** section:

1. Name the destination.
2. Select "Cookie" from the **Type** drop-down list.
3. Click **Next** and move on to the **Configuration** and **Segment Mappings** sections.

**Cookie Configuration**

Provide the following to complete the **Configuration** section (other fields are optional):

1. **Cookie Name:** Provide a short, descriptive name for your cookie.
2. **Data Format:** Select the "Single Key" option.
3. **Key:** Provide a key name.
4. **Serialize:** Select the Enable checkbox.
5. **Serial Delimiter:** Use a comma only.

### Segment Mappings

To add a segment to a cookie destination:

1. **Find segments:** The **Segment Mappings** section provides two search tools to help locate segments. To find a segment:
   - Option 1: Start typing a segment name in the search field. The field updates automatically based on entered text. Click **Add** once you find the segment you want to use.
   - Option 2: Click **Browse All Segments** to open a window that lets you browse for segments by name or storage location. Click **Add Selected Segments** when done.

2. **Add Mappings:** In the mappings pop, enter the segment ID in the mappings field and click **Save**.
3. **Click Done.**

### Modify the GPT setTargeting API Call

Add an **if** statement to check for Audience Manager cookies before calling the Google Publisher Tag .setTargeting method.

#### Check for Audience Manager Cookies With an IF Statement

The .setTargeting method gets data from the Audience Management destination cookie and the unique user ID cookie (aam_uuid). However, if .setTargeting gets invoked before DIL writes these cookies, or the cookies are empty, you may see errors when the page loads. To help avoid this, wrap the .setTargeting method in an **if** statement that checks for these cookies. If they’re not set, this statement prevents .setTargeting from calling the AamGpt function.

**IF Statement Code Sample**

In this example, the Audience Manager destination cookie name is **Sample**. You set this name when you create the destination cookie in the Audience Manager UI. DIL sets the aam_uuid cookie and the name cannot be changed.

```javascript
if(typeof AamGpt.getCookie("Sample") != "undefined"){
  googletag.pubads().setTargeting(AamGpt.getKey("Sample"),AamGpt.getValues("Sample"));
};
if(typeof AamGpt.getCookie("aam_uuid") != "undefined"){
  googletag.pubads().setTargeting("aamId", AamGpt.getCookie("aam_uuid"));
};
```

#### AamGpt Functions and Data Types

Defines the key variables used in the **if** statement.

<table>
<thead>
<tr>
<th>Function</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AamGpt.getKey</td>
<td>String</td>
<td>Returns the key in the key-value segment pair. For example, if your key-value pair consisted of color=blue, this returns color.</td>
</tr>
<tr>
<td>AamGpt.getValues</td>
<td>Array of strings</td>
<td>Returns values in an array, e.g., [&quot;value1&quot;,&quot;value2&quot;].</td>
</tr>
<tr>
<td>AamGpt.getCookie</td>
<td>Int</td>
<td>Returns the Audience Manager user ID, e.g., 12345.</td>
</tr>
</tbody>
</table>
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Audience Manager Code for Google Publisher Tags
AamGpt is a JavaScript function that reads Audience Manager cookie data and sends that information to Google

Publisher Tags.
Note: This function is not required if you have your own code to read Audience Manager cookie data from
the UUID and destination cookies.
Sample Code
Place the AamGpt code at the top of the page, ideally within the <head> code block. The AamGpt code is available
below:
var AamGpt = {
strictEncode: function(str){
return encodeURIComponent(str).replace(/[!'()]/g, escape).replace(/\*/g, "%2A");
},
getCookie: function(c_name)
{
var i,x,y,c=document.cookie.split(";");
for (i=0;i<c.length;i++)
{
x=c[i].substr(0,c[i].indexOf("="));
y=c[i].substr(c[i].indexOf("=")+1);
x=x.replace(/^\s+|\s+$/g,"");
if (x==c_name)
{
return unescape(y);
}
}
},
getKey: function(c_name){
var c=this.getCookie(c_name);
c=this.strictEncode(c);
if(typeof c != "undefined" && c.match(/\w+%3D/)){
var cList=c.split("%3D");
if(typeof cList[0] != "undefined" && cList[0].match(/\w+/))
{
return cList[0];
}
}
},
getValues: function(c_name){
var c=this.getCookie(c_name);
c=this.strictEncode(c);
if(typeof c != "undefined" && c.match(/\w+%3D\w+/)){
var cList=c.split("%3D");
if(typeof cList[1] != "undefined" && cList[1].match(/\w+/))
{
var vList=cList[1].split("%2C");
if(typeof vList[0] != "undefined")
{
return vList;
} else {
return null;
}
} else {
return null;
}
} else {
return null;
}
}
};


Implementing Audience Manager

This section outlines and explains the processes related to getting started with the Audience Manager data management platform (DMP). This section is designed to help business teams, project managers, and technology managers understand the Audience Manager implementation process.

Implementation Overview

Getting started with Audience Manager can take approximately six weeks to three months, depending on your data collection needs.

Our implementation techniques help create consultative partnership with new clients. This process is designed to:

• Discover and understand your business requirements
• Produce an actionable plan to address those demands
• Develop custom solutions to help meet unique requirements or use cases
• Ensure that your proprietary data is imported and made available in the Audience Manager

Our Partner Solutions and Account Management teams will work closely with you before, during, and after the implementation process.

Audience Manager takes a phased approach to setup and implementation.

Define Phase

The define phase introduces you to our Partner Solutions project leads and begins the project management process. This step is designed to help potential clients define and agree on project scope, understand custom requirements, establish milestones, and set up communications.

The following table describes key activities that take place during this phase:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Purpose/Description</th>
<th>Suggested Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kick-off call/meeting</td>
<td>• Introduce project leads</td>
<td>Business and technical teams</td>
</tr>
<tr>
<td></td>
<td>• Define roles and responsibilities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Establish goals and milestones tied to delivery dates</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Confirm plans for on-site work</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Establish communications for questions and status updates</td>
<td></td>
</tr>
<tr>
<td>Provide access</td>
<td>Establish access to shared resources and distribute log-in credentials</td>
<td>Business and technical teams</td>
</tr>
<tr>
<td>Status reports and project team</td>
<td>Establish and maintain clear communication about plans and progress</td>
<td>Business and technical teams</td>
</tr>
<tr>
<td>calls</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Deliverables for this phase can include the following:

• Documents that identify roles and responsibilities
• Documents that establish the scope of work
• A plan to schedule project meetings and calls
• A process to share resources and access

**Discovery Phase**

The discovery phase is dedicated to gathering requirements, conducting research, and working toward a deeper understanding of your business needs and data-collection strategies.

The following table describes key activities that take place during this phase:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Purpose/Description</th>
<th>Suggested Participants</th>
</tr>
</thead>
</table>
| Requirements and goal setting | • Develop plans for tag management and data collection  
                               | • Develop plans that meet customer needs, goals, and expectations              | Business teams                  |
| Evaluate data             | • Determine how to collect your data and the sources of that data  
                               | • Discover sources of your first-party, second-party, and third-party data   | Business and technical teams    |
| Find destinations         | Discover if the client sends data to other ad servers, DSPs, networks, or exchanges | Business teams                  |
| Breakout sessions         | Refine business requirements and needs                                              | Business teams                  |
| Follow-up communication   | Regular communication for follow-up and development purposes                       | Business and technical teams    |

Deliverables for this phase can include:

• A completed first-party, second-party, and third-party data collection strategy
• A completed CRM or data warehouse ingestion plan
• Defined audience-segmentation requirements
• A completed data taxonomy
• A developed third-party data-integration plan

**Build, Test, and Train Phase**

During the build, test, and train phase, you will review the data collection strategy and prototype with a designated Partner Solutions lead.

Your data collection strategy will undergo end-to-end QA testing. Partner Solutions will track discovered bugs and coordinate problem resolutions with our systems engineers. Customer training can start in parallel with these other efforts.

The following table describes key activities that take place during this phase:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Purpose/Description</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepare a data collection strategy</td>
<td>Work with Adobe technical teams to build a data-collection plan that satisfies your business requirements</td>
<td>Business and technical teams</td>
</tr>
</tbody>
</table>
Participants | Purpose/Description | Activity
--- | --- | ---
Technical teams | Test the proposed solution in a staging environment and perform cross-browser testing | Deploy and test code
Technical teams | Examine and communicate results, resolve bugs, and re-test | Verify functionality and resolve bugs
Business teams | Provide education and understanding about Audience Manager features, tools, and reports | User training

Deliverables for this phase can include:

- A completed and accepted data-collection plan
- End-to-end QA testing
- Basic instruction on Audience Manager user interface features
- Acceptance and sign-off

Launch, Support, and Optimize Phase

During the launch, support, and optimize phase, your data-collection and prototyped implementation moves from development to a live, production environment. We’ll continue training on product familiarization and strategies that can help increase your ROI through data-driven optimization.

The following table describes key activities that take place during this phase:

| Activity | Purpose/Description | Participants
--- | --- | ---
Data analysis and optimization | Analyze data trends and provide recommendations for optimization | Business teams
Create traits and segments | Create real traits and segments for data collection:
- Create real traits and segments
- Discuss segment-creation strategies
- Consider and review use cases | Business teams
Further training | Continue to build understanding and familiarity with product features, tools, and reports | Business teams
Follow-up communications | Regularly scheduled communication to keep abreast of your user experience with Audience Manager | Business and technical teams

Tasks for this phase can include:

- Generating and interpreting report data
- Understanding custom reports
- How to get product support
- Responding to or soliciting feature requests, bugs, and user feedback
- Deepening familiarity with Audience Manager features and reports
Code Implementation

Though the deployment process may seem complex, the code implementation is as simple as adding a few lines of JavaScript adjacent to the closing \</body\> tag of your website.

Deployment

The Audience Manager code snippet calls Akamai to download the business rules set up previously in the user interface. Furthermore, client browsers cache this information, which helps reduce page and server load times. Our code and data collection methodology is designed to maintain the user experience across your inventory.

Participants

Partner Solutions can work directly with your technical teams to help deploy code, address final concerns, and fulfill other requirements.

Post-Implementation Support

Our collaborative efforts don’t stop with final deployment. After implementation is complete, our Account Management team takes over.

Account managers provide continuing support and consultation services after the product implementation process is complete. You can expect to have regular meetings with your account manager. These meetings ensure that you get the maximum amount of use and value from Audience Manager.

Contact us here for more information and to get started with Audience Manager.

Implement the Audience Management Module

Add the Audience Management Module to Adobe Analytics AppMeasurement to forward Analytics data to Audience Manager instead of having the Audience Manager Data Integration Library (DIL) code send a pixel from the page.

Contents:

- Prerequisites
- Implementation
- Code Elements Defined
- Results: Data Forwarding to Audience Manager

Prerequisites

In addition to implementing the code described in this document, you must also:

• Implement the Experience Cloud ID Service.
• Enable Server Side Forwarding for report suites in the Adobe Analytics Admin Console.

Implementation

To implement the Audience Management Module:

1. Download AppMeasurement using the Analytics Code Manager (requires version 1.5 or later).
2. Update your AppMeasurement code to the version included in the downloaded zip file.
3. Copy all of the code from AppMeasurement_Module_AudienceManagement.js from the zip file. Paste it into the appMeasurement.js file just above the text, "DO NOT ALTER ANYTHING BELOW THIS LINE."
4. Add the this code, `s.loadModule("AudienceManagement");`, just above the `AppMeasurement_Module_AudienceManagement.js` code you just added in the previous step.

5. Update and copy the code below and add it to the `doPlugins` function in your `AppMeasurement.js` file.

```javascript
s.AudienceManagement.setup({
  "partner":"partner name",
  "containerNSID":0,
  "uuidCookie": {
    "name":"aam_uuid",
    "days":30
  }
});
```

💡 **Tip:** The `audienceManagement.setup` function shares parameters with the Audience Manager DIL.create function, which you can configure in this code. For more information about these parameters, see DIL create.

### Code Elements Defined

The following table defines important variables in the code sample.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>partner</td>
<td>Required. This is a partner name assigned to you by Adobe. It is sometimes referred to as your &quot;partner ID&quot; or &quot;partner subdomain.&quot;</td>
</tr>
<tr>
<td></td>
<td>Contact your Adobe consultant or Customer Care if you don't know your partner name.</td>
</tr>
<tr>
<td>containerNSID</td>
<td>Required. Most customers can just set &quot;containerNSID&quot;:0. However, if your company needs to customize ID syncs with a different container, you can specify that container ID here.</td>
</tr>
<tr>
<td>uuidCookie</td>
<td>Optional. This configuration lets you set an Adobe cookie in the first-party domain. This cookie contains the UUID.</td>
</tr>
</tbody>
</table>

### Results: Data Forwarding to Audience Manager

Your Analytics implementation sends data to Audience Manager after you have:

- Enabled server-side forwarding (talk to your consultant about this feature).
- Implemented the ID service.
- Installed the Audience Management Module.

This process sends data to Audience Manager:

- On page view calls.
- From tracked links.
- From video milestone and heartbeat video views.

💡 **Note:** The variables sent to Audience Manager from Analytics use special prefixes. You need understand and take these prefixes into account when creating Audience Manager traits. For more information on these prefixes, see Prefix Requirements for Key Variables.
Integrate Audience Manager With Target

This integration lets you send Audience Manager segments to Target.

An Audience Manager - Target integration requires:

• The *Experience Cloud service*. If you’re not using this service, see the *implementation guides* to get started.
• Profiles and Audiences. If you’re not provisioned for Profiles and Audiences, complete the form on the *Experience Cloud Integrations page* or contact your consultant to get started.

All of your Audience Manager segments will appear in Target shortly after you complete these steps in the implementation process. Look in **Audiences > Audience List** to see your Audience Manager segments in Target.

---

Media Data Integration

You can capture data from media campaigns using pixel calls to Audience Manager (often called pixeling the creative) or by ingesting log files.
Actionable Log Files

**Actionable Log Files** allow you to capture media data from Google DCM log files and use the data to create traits in Audience Manager. Capture impressions, clicks, and conversions from ad servers as traits without having to use pixel calls.

**Purpose**

**Getting Started**

Working with Actionable Log Files

**Actionable Signals**

**Use Cases**

Note: The text styles (monospaced text, italics, brackets [], (), etc.) in this document indicate code elements and options. See Style Conventions for Code and Text Elements for more information.

Purpose

**Actionable Log Files** streamline the way you capture impressions, clicks, and conversions from ad servers. Use this information for user segmentation without having to manually pixel media to send campaign attributes to Audience Manager.

Getting Started

To get started with **Actionable Log Files**, and to use our **Audience Optimization Reports**, you need to import DCM log data into Audience Manager. See Import DCM Data Files Into Audience Manager and contact your Audience Manager consultant.

If you are already importing DCM log data into Audience Manager, ask your Audience Manager consultant or **Customer Care** to enable **Actionable Log Files** for you.

Note:

**Actionable Log Files** work only with Google DCM log files.

Working with Actionable Log Files

With **Actionable Log Files**, the information from DCM logs is captured in Audience Manager the same way that you would capture data from real-time website interactions. Audience Manager connects to your Google Cloud storage, parses the information from DCM logs, and sends the log data as actionable signals to our **Data Collection Servers**.

You still need to set up rule-based traits to capture the actionable signals. See how to set up rule-based traits either in the **Audience Manager UI** or using our **Bulk Management Tools**. Scroll down to the **Actionable Signals** section for a list of all the keys you can use in rule-based traits.

For an average-sized DCM log file of 2 million lines, any traits created from actionable signals are realized within approximately one hour after we process the logs.

Important: We recommend implementing **Actionable Log Files** instead of **Pixel Calls**. We discourage the use of both options, as this leads to an increase in frequency counts for traits.
**Actionable Signals**

Signals are the *smallest data units* in Audience Manager. **Actionable Log Files** allow you to capture advertiser, business unit, creative, and campaign values in impression events, click events, and conversion events as signals from DCM logs.

Remember, in order to use this information for audience creation and segmentation, you need to set up the rule-based traits yourself. The table lists the actionable signals from DCM log files:

<table>
<thead>
<tr>
<th>Signal</th>
<th>Description</th>
<th>Example Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>d_event</td>
<td>Indicates the event type from DCM. Accepted values:</td>
<td>imp, click, conv</td>
</tr>
<tr>
<td></td>
<td>• d_event = imp for impressions.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• d_event = click for clicks.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• d_event = conv for conversions.</td>
<td></td>
</tr>
<tr>
<td>d_conversion</td>
<td>Available only for conversion events. Represents the numerical ID for the</td>
<td>24122</td>
</tr>
<tr>
<td></td>
<td>conversion activity in DCM. This field maps to the Activity ID from DCM.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Tip:</strong> You can capture multiple or specific conversion activities from</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DCM. Create traits *using d_conversion = activity ID for each conversion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>activity from DCM.</td>
<td></td>
</tr>
<tr>
<td>d_conversionType</td>
<td>Available only for conversion events. This field maps to the Conversion ID</td>
<td>0,1,2</td>
</tr>
<tr>
<td></td>
<td>in DCM. Indicates the activity preceding the user conversion from DCM.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accepted values are:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 1 for post-click conversions.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 2 for post-impression conversions.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 0 for un-matched conversions. The conversion cannot be matched to a</td>
<td></td>
</tr>
<tr>
<td></td>
<td>previous activity.</td>
<td></td>
</tr>
<tr>
<td>d_adsr0c</td>
<td>Advertiser ID. This field maps to the Advertiser Group ID from DCM.</td>
<td>134243</td>
</tr>
<tr>
<td>d_bu</td>
<td>Business Unit ID. This field maps to the Advertiser ID from DCM.</td>
<td>563332</td>
</tr>
<tr>
<td>d_campaign</td>
<td>The Campaign ID provided by DCM.</td>
<td>7892520</td>
</tr>
<tr>
<td>d_creative</td>
<td>The Creative ID provided by DCM.</td>
<td>224221</td>
</tr>
</tbody>
</table>
Signal | Description | Example Value
--- | --- | ---
``d_src`` | The ID of the data source you use to capture DCM data. See [How to Create a Data Source](#). | 743 |

The signals described in the table are captured in Audience Manager like a real-time HTTP call. The example call below contains information on a conversion event from DCM. Calls do not necessarily have to include all the signals in the example call.

```
```

**Note:**

The event timestamp provided in the DCM logs will be honored and passed to the Data Collection Servers.

- If a timestamp isn’t available for a data row in the DCM log file, we use the time of the HTTP call as the event timestamp.
- If the data row in the DCM log file contains a malformed timestamp, we ignore the entire row.

**Use Cases**

One benefit of implementing [Actionable Log Files](#) is the option to apply recency and frequency controls to any rule-based traits that contain actionable signals. This allows you, for example, to frequency cap the number of times a user is shown a particular creative, within a media campaign. Other use cases include:

**Retarget Users**

Retarget users who saw creative 123 but didn’t click or convert and show them creative 456. Do this:

1. Create a trait to capture users who saw the creative. Let’s say you name the trait Creative Trait 123. Use the trait rule:
   
   ```
   d_creative == 123 AND d_event == imp
   ```

2. Create a trait to capture users who click or convert. Let’s say you name this one Click and Converter. Use the trait rule:
   
   ```
   d_event == click OR d_event==conv
   ```

3. Create a segment to populate with users who saw creative 123 but didn’t click or convert. Name it Retarget Users and use the segment rule:
   
   ```
   Creative Trait 123 AND NOT Click and Converter
   ```

4. Map the segment Retarget Users to a destination and target users in the destination with creative 456.

**Use DCM Floodlight Activity in the Audience Optimization Reports or in Audience Lab**

Floodlight tags enable advertisers to track user conversions. With [Actionable Log Files](#), you can track the DCM conversions in the Audience Optimization Reports or in Audience Lab:

1. Create a trait and use the following trait rule to capture a conversion from the ad server logs:
   
   ```
   d_event == conv AND d_conversion == 123
   ```

When creating the trait in the Audience Manager UI, select Conversion as the Event Type.
2. Once you have created the trait, the conversion will begin to be reported against in the Audience Optimization reports and in Audience Lab.

**Capturing Campaign Impression Data via Pixel Calls**

One approach for sending media data to Audience Manager uses ad server macros to send campaign attributes to Audience Manager.

This methodology is often referred to as “pixeling the creative.” Those data points are dynamically inserted into the Audience Manager pixel code by the third-party ad server macros, which are used to map and report all impressions and clicks based on the key reporting attributes of the campaign. The aggregated data provides a unified view of campaign performance, helps identify custom conversion paths, and helps customers improve the sequence of ad server events that lead to conversions.

Contents:

- **Event Call Syntax**
- **Supported Key-Value Pairs**

![](https://example.com)

*Note: The text styles (monospaced text, italics, brackets [], (), etc.) indicate code elements and options. See [Style Conventions for Code and Text Elements](#) for more information.*

**Event Call Syntax**

The event call collects impression and conversion data and sends it to the Audience Manager data collection servers (DCS). This process relies on third-party ad servers that place the call in the creative to control what content gets inserted into the code. The third-party ad servers (for example, DFA) can place this code within each ad impression. Furthermore, an ad call does not use JavaScript or employ frame-busting techniques to access publisher data outside of the ad tag.

Event calls consist of key-value pairs that use the following syntax:

```plaintext
http://clientname.demdex.net/event?d_event=imp&d_src=datasource_id&d_site=siteID&d_creative=creative_id&d_adgroup=adgroup_id&d_placement=placement_id&d_campaign=campaign_id&d_cid=(GAID|IDFA)%01_DPUUID&d_bust=cache_buster_value
```

In the key-value pair, the value variable is an ID or macro inserted by the ad server. When the ad tag loads, that %macro% gets replaced with the required, corresponding values. This call does not return a response.

**Supported Key-Value Pairs**

Impression event calls accept data formed into key-value pairs. The following table lists and describes the keys used to hold these variables. Many of these are required if you want to capture and analyze data in the Audience Optimization Reports.

<table>
<thead>
<tr>
<th>Key</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>d_adgroup</td>
<td>Numeric ad group ID from the ad server. Optional.</td>
</tr>
<tr>
<td>d_adsrc</td>
<td>Data source ID or integration code for your advertiser. Required for Audience Optimization reports.</td>
</tr>
<tr>
<td>Key</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>d_bu</td>
<td>Data source ID or integration code for your business unit. Required for <strong>Audience Optimization</strong> reports.</td>
</tr>
<tr>
<td>d_bust</td>
<td>Cache-busting value. Audience Manager automatically sends cache-control headers that are honored by most browsers and proxies. If you want to perform additional cache busting, include this parameter in an event call, followed by a random string. Optional.</td>
</tr>
<tr>
<td>d_campaign</td>
<td>Numeric campaign ID from the ad server. Required for <strong>Audience Optimization</strong> reports.</td>
</tr>
</tbody>
</table>
| d_cid       | In this context, `d_cid` instantiates a key-value pair that lets you associate a mobile device type to a unique user ID (DPUUID). A fixed ID determines the mobile device type. The value, which is the user ID, can vary. Separate the key-value pair with `%01`, which is a non-printing control character. This parameter accepts the following keys:  
  • 20914: Identifies an Android (GAID) device. For example, `d_cid = 20914 %01 1234` says that user 1234 is associated with an Android device.  
  • 20915: Identifies an iOS (IDFA) device. For example, `d_cid = 20915 %01 5678` says that user 5678 is associated with an iOS device. Optional. |
| d_creative  | Numeric creative ID from the ad server. Required for **Audience Optimization** reports.                                                       |
| d_event=imp | Identifies an event call as an impression event. Required.                                                                                   |
| d_exch      | Source ID for the inventory exchange that served the ad (e.g., Appnexus, Right Media, Openx, etc.). Optional.                                  |
| d_io        | Insertion order ID. Optional.                                                                                                               |
| d_placement | Numeric placement ID from the ad server. Optional.                                                                                           |
| d_site      | Numeric site ID from the ad server. Required for **Audience Optimization** reports.                                                          |
Capturing Campaign Click Data via Pixel Calls

Click tracking enables measurement of visitor engagement throughout your campaign, as it records click-based activity for third-party creatives. Similar to impressions collection, an event call is sent to the Audience Manager data collection servers (DCS) for processing. The visitor is then redirected to the intended web address.

Requirements

Click tracking calls require the following parameters:

* `d_event=click`: A key-value pair that identifies an event call as a click event.
* `d_rd=redirect URL`: A key-value pair that contains an encoded redirect URL.

In addition, the call can contain key-value pairs that can be used for trait qualification or to provide data and metadata for other reports.

Request Sample


Response

The response redirects the browser to the URL specified in the `d_rd` parameter. The response string can include values generated by any of the supported macros listed below.

Based on the above example, the browser is redirected to the following URL:

http://adobe.com/callback?creative=123

Supported Macros

Click events support the macros listed in the following table. A macro is a small unit of self contained code that activates when the ad tag loads for campaign and user tracking. The macros will be passed along with the destination URL, as long as they are marked with the following format: `@macro%`. Some keys do not have macros and accept a hard coded ID value instead. Keys that accept hard coded values are required if you want to analyze data in the Audience Optimization Reports.
<table>
<thead>
<tr>
<th>Key</th>
<th>Macro</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>d_adgroup</td>
<td>%d_adgroup%</td>
<td>Numeric ad group ID from the ad server. Required.</td>
</tr>
<tr>
<td>d_adsrch</td>
<td>No macro.</td>
<td><strong>Data source</strong> ID or integration code for your advertiser. Required for <strong>Audience Optimization</strong> reports.</td>
</tr>
<tr>
<td></td>
<td>%d_adsrch%</td>
<td>Accepts a hard coded ID value.</td>
</tr>
<tr>
<td>d_campaign</td>
<td>%d_campaign%</td>
<td>Numeric campaign ID from the ad server. Required for <strong>Audience Optimization</strong> reports.</td>
</tr>
<tr>
<td>d_creative</td>
<td>%d_creative%</td>
<td>Numeric creative ID from the ad server. Required.</td>
</tr>
<tr>
<td>d_dpid</td>
<td>%d_dpid%</td>
<td>Data provider ID. Often used with d_dpuuid to link a data provider ID to a user ID. Optional.</td>
</tr>
<tr>
<td>d_dpuuid</td>
<td>%d_dpuuid%</td>
<td>Unique user ID supplied by the data provider. Often used with d_dpid to link a user ID to a data provider ID. Optional.</td>
</tr>
<tr>
<td>d_exch</td>
<td>No macro.</td>
<td>Source ID for the inventory exchange that served the ad (e.g., Appnexus, Right Media, Openx, etc.). Optional, but required for <strong>Audience Optimization</strong> reports</td>
</tr>
<tr>
<td></td>
<td>%d_exch%</td>
<td>Accepts a hard coded ID value.</td>
</tr>
<tr>
<td>d_io</td>
<td>No macro.</td>
<td>Insertion order ID. Required for Advertising Analytics reports. Optional.</td>
</tr>
<tr>
<td></td>
<td>%d_io%</td>
<td>Accepts a hard coded ID value.</td>
</tr>
<tr>
<td>d_mid</td>
<td>%d_mid%</td>
<td>Experience Cloud ID (MID). For more information about the MID, see <em>Cookies and the Experience Cloud ID</em>. Optional.</td>
</tr>
<tr>
<td>d_placement</td>
<td>%d_placement%</td>
<td>Numeric placement ID from the ad server. Optional.</td>
</tr>
<tr>
<td>Key</td>
<td>Macro</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>-----------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>d_region</td>
<td>%d_region%</td>
<td>The numeric region ID for the DCS cluster that services a request. For more information about the DCS, see Data Collection Components. Optional.</td>
</tr>
<tr>
<td>r_rand</td>
<td>%r_rand%</td>
<td>Random number used for cache busting. Optional.</td>
</tr>
<tr>
<td>d_site</td>
<td>%d_site%</td>
<td>Numeric site ID from the ad server. Optional.</td>
</tr>
<tr>
<td>d_src</td>
<td>%d_src%</td>
<td>DPID of the source from where Audience Manager pulls the metadata. Required.</td>
</tr>
<tr>
<td>d_tactic</td>
<td>No macro.</td>
<td>A tactic ID. Optional.</td>
</tr>
<tr>
<td>d_uuid</td>
<td>%d_uuid%</td>
<td>Specify the ID of the visitor directly in the URL instead of relying on Demdex cookie. Optional.</td>
</tr>
<tr>
<td>d_vert</td>
<td>No macro.</td>
<td>ID for an industry vertical or category. Optional, but required for Advertising Analytics reports.</td>
</tr>
</tbody>
</table>

### Macros Example

This example demonstrates passing the creative, adgroup, and placement macros. It assumes the values for each parameter are passed in the non-redirect portion of the click-tracking call.

```
creative=1235
campaign=4709
adgroup=3408
placement=1001
src=203
```

### Request

```
```

### Response
Based on the above example, the browser is redirected to the following URL:

http://adobe.com/callback?creative=1235&campaign=4709&adgroup=3408&placement=1001

**Delivery Performance Report: Log File Recommendations**

Guidelines to help improve log file ingestion and processing times.

Create and format your **Delivery Performance** report log files according to these recommendations.

This topic contains the following information:

- Prerequisite Information to Provide to Adobe
- Data/File Formatting
- Commonly Used Dimensions

### Prerequisite Information to Provide to Adobe

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>File Access</strong></td>
<td>We strongly recommend that you work with Adobe to set up an Amazon S3 bucket.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> Audience Manager uses Amazon S3 to store data. Rather than send us data via FTP, deliver the logs to an S3 directory instead. We can process data directly from this location. Your Partner Solutions manager can help you get access to S3. For more information, see Amazon S3: About.</td>
</tr>
<tr>
<td><strong>Listing of Preferred Dimensions</strong></td>
<td>Provide the exact dimensions you request to be used in your various reports. Also specify how that data will be accessed (for example, match tables, lookup files, API, and so forth).</td>
</tr>
<tr>
<td></td>
<td>If providing metadata files, provide the mappings of metadata fields to dimensions.</td>
</tr>
<tr>
<td></td>
<td>Contact your Partner Solutions manager if you require custom dimensions.</td>
</tr>
<tr>
<td></td>
<td>If providing API information, provide exact references to the following:</td>
</tr>
<tr>
<td></td>
<td>• Service names</td>
</tr>
<tr>
<td></td>
<td>• Object names</td>
</tr>
<tr>
<td></td>
<td>• Field names</td>
</tr>
<tr>
<td></td>
<td>• Endpoints</td>
</tr>
<tr>
<td></td>
<td>• Method names</td>
</tr>
<tr>
<td></td>
<td>• Authentication methodology</td>
</tr>
<tr>
<td></td>
<td>• Throttling/rate limiting, if necessary</td>
</tr>
<tr>
<td></td>
<td>• Mapping of file fields to endpoints</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Reporting Requirement</strong></th>
<th>List your exact reporting requirements and necessary dimensions for each report.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>For more information, see:</td>
</tr>
<tr>
<td></td>
<td>• DFP Premium</td>
</tr>
<tr>
<td></td>
<td>• DFP</td>
</tr>
<tr>
<td></td>
<td>• DFA</td>
</tr>
</tbody>
</table>
### Preferred Ad Server

The most popular ad servers that we currently use include DFP version 2 (Google DoubleClick for Publishers), DFA (Google DoubleClick for Advertisers), MM (MediaMath), FreeWheel, and OAS (Open Ad Server).

Using one of these ad servers greatly reduces initial set-up time. Contact your Partner Solutions manager for other configurations.

---

### Data/File Formatting

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>File Name</strong></td>
<td>Include your Audience Manager client ID (the DPID) in the file name.</td>
</tr>
<tr>
<td><strong>Date/Time Stamps</strong></td>
<td>Add a timestamp to the file name. We recommend that you use UNIX UTC seconds by default.</td>
</tr>
<tr>
<td><strong>Time Zone</strong></td>
<td>Audience Manager uses UTC. We recommend that you send data in UTC.</td>
</tr>
<tr>
<td><strong>File Content</strong></td>
<td>Ensure that your file content conforms to the following specifications:</td>
</tr>
<tr>
<td></td>
<td>• Separate impression, click, and conversion data into individual files.</td>
</tr>
<tr>
<td></td>
<td>• Remove metadata (non-ID data) from the logs. Store that information in separate lookup tables. See <a href="#">Improve Log File Processing Times with Lookup Tables</a>.</td>
</tr>
<tr>
<td></td>
<td>• Fix the schema to ensure that each record contains the same number of delimited columns, even when blank or null values are returned.</td>
</tr>
<tr>
<td></td>
<td>• No special characters in fields (newline, etc.).</td>
</tr>
<tr>
<td></td>
<td>• No delimiter characters in the fields.</td>
</tr>
<tr>
<td><strong>File Size</strong></td>
<td>Keep files small. It's easier to import several small files in parallel than it is to process one big file. As a general rule, more files and smaller files are better than one or two really large files. As best practice, we recommend a 100 MB maximum uncompressed file size. The uncompressed file should not be larger than 5 GB.</td>
</tr>
<tr>
<td><strong>Send Compressed Files</strong></td>
<td>Send compressed files with Amazon S3. We recommend using gzip.</td>
</tr>
<tr>
<td><strong>Use AAM UUID</strong></td>
<td>Use the 38-digit <a href="#">AAM UUID</a> as the join ID.</td>
</tr>
<tr>
<td><strong>Send Incremental Data</strong></td>
<td>Send incremental data only, ideally one set of files per hour.</td>
</tr>
<tr>
<td></td>
<td>Audience Manager will only begin processing one day's data when the first hour of the next day's data has been delivered.</td>
</tr>
</tbody>
</table>
Recommendation | Description
--- | ---
 | Audience Manager cannot begin populating files for a new day until the previous day's files have been processed.

**Field Delimiter**

Specify the field delimiter that you will be using in your files. Binary delimiters are preferred.

---

**Commonly Used Dimensions**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertiser</td>
<td>Name of advertiser.</td>
<td>AMERICAN PRODUCTS</td>
</tr>
<tr>
<td>Ad</td>
<td>A placeholder for multiple creatives of a particular size.</td>
<td>Fitness</td>
</tr>
<tr>
<td>Campaign</td>
<td>A set of related ads that are served during a specified flight.</td>
<td>Teen Party Season 3 Premiere</td>
</tr>
<tr>
<td>Order</td>
<td></td>
<td>23919_NEWS 889 (DELORIAN MOTORS LTD) PREROLL - JUL 22-DEC 29 2013</td>
</tr>
<tr>
<td>Lineitem</td>
<td></td>
<td>1580745-1_Today's Parent - ROS - DISPLAY - BB + LB</td>
</tr>
<tr>
<td>Site</td>
<td>A property where a given ad ran.</td>
<td>Comedy Mobile (comedy.mb)</td>
</tr>
<tr>
<td>Strategy</td>
<td></td>
<td>Wrestling_Weekly_Tomorrow_7.25</td>
</tr>
<tr>
<td>Creative</td>
<td>The image file or assets that are displayed to the user.</td>
<td>Bio.Broadcast(Homepage)-160x600</td>
</tr>
<tr>
<td>Keyval</td>
<td></td>
<td>video_id=294869</td>
</tr>
<tr>
<td>Placement</td>
<td>Creative size and delivery scope.</td>
<td>Core_Travel_HotelChecker_ROS__728x90</td>
</tr>
</tbody>
</table>

**DFP Premium**

Information that you need to provide to Adobe when using DoubleClick for Publishers Premium and Audience Manager.

This topic contains the following information:

- *Log File Access Information*
- *Default Dimensions*
- *UserID Values*

**Log File Access Information**

Provide Adobe with the following information:

- Your Google Storage access key
- Your Google Storage secret key
- The Google Storage bucket name, for example gdfp-xxxx
• The field delimiter used for the Google Storage log files
• The version of the desired DFP API that you want to use
• Your DFP API username and password
• Your DFP API network code

Default Dimensions

The dimensions that Adobe uses are defined by DFP. For more information, see the Google DoubleClick Developers site.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>DFP Service</th>
<th>DFP Object</th>
<th>DFP Field Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ad</td>
<td>InventoryService</td>
<td>AdUnit</td>
<td>name</td>
</tr>
<tr>
<td>Advertiser</td>
<td>CompanyService</td>
<td>Company</td>
<td>name</td>
</tr>
<tr>
<td>Creative</td>
<td>CreativeService</td>
<td>Creative</td>
<td>name, size</td>
</tr>
<tr>
<td>Order</td>
<td>OrderService</td>
<td>Order</td>
<td>name, po_number</td>
</tr>
<tr>
<td>LineItem</td>
<td>LineItemService</td>
<td>LineItem</td>
<td>name</td>
</tr>
</tbody>
</table>

If you want to use different dimensions, please provide us with the appropriate DFP service, object, and field name information for each dimension.

UserID Values

Specify whether you will be using the Audience Manager UserID or your own UserID. If you are using your own UserID, please provide Adobe with the following information:
• Sample UserID values
• Field containing the UserID
• Delimiters used in that field
• The key used as the identifier for the UserID value

DFP

Information that you need to provide to Adobe when using DoubleClick for Publishers and Audience Manager.

💡 Note: We strongly recommend that you use DFP Premium rather than DFP, described below.

This topic contains the following information:
• Log File Access Information
• Default Dimensions
• UserID Values

Log File Access Information

Provide Adobe with the following information:
• The hostname of the FTP server
• Your FTP username and password
• The name of the FTP server directory that contains the dimension file
• The delimiters used in the log files

Default Dimensions

• Ad
• Advertiser
• Creative
• Zone
• Site
• Order
• Keyvalue

If you want to use different dimensions, provide us with the log files containing the appropriate dimension IDs and dimension names.

UserID Values

Specify whether you will be using the Audience Manager UserID or your own UserID. If you are using your own UserID, please provide Adobe with the following information:

• Sample UserID values
• Field containing the UserID
• Delimiters used in that field
• The key used as the identifier for the UserID value

DFA

Information that you need to provide to Adobe when using DoubleClick for Advertisers and Audience Manager. This section contains the following information:

• Log File Access Information
• Default Dimensions

Log File Access Information

Provide Adobe with the following information:

• The version of the desired DFA API that you want to use
• Your DFA API username and password
• The desired protocol that you want to use to access the DFA API: HTTP or HTTPS.

Default Dimensions

The dimensions that Adobe uses are defined by DFA. For more information, see the *DoubleClick For Advertisers Developer* site.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>DFA Service</th>
<th>DFA Object</th>
<th>DFA Field Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertiser</td>
<td>advertiser</td>
<td>Advertiser</td>
<td>name</td>
</tr>
</tbody>
</table>
If you want to use different dimensions, please provide us with the appropriate DFA service, object, and field name information for each dimension.

### MediaMath

Information that you need to provide to Adobe when using MediaMath and Audience Manager.

This topic contains the following information:

- Log File Access Information
- Default Dimensions
- UserID Values

### Log File Access Information

MediaMath will contact Adobe for the appropriate access to the appropriate Amazon S3 bucket.

### Default Dimensions

- Advertiser
- Campaign
- Strategy

If you want to use different dimensions, provide us with the log files containing the appropriate dimension IDs and dimension names.

### UserID Values

Specify whether you will be using the Audience Manager UserID or your own UserID. If you are using your own UserID, please provide Adobe with the following information:

- Sample UserID values
- Field containing the UserID
- Delimiters used in that field
- The key used as the identifier for the UserID value

### 24/7 Open AdStream

Information that you need to provide to Adobe when using 24/7 Open AdSteam and Audience Manager.

This topic contains the following information:

- Log File Access Information

<table>
<thead>
<tr>
<th>Dimension</th>
<th>DFA Service</th>
<th>DFA Object</th>
<th>DFA Field Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creative</td>
<td>creative</td>
<td>CreativeBase</td>
<td>name</td>
</tr>
<tr>
<td>Creative Size</td>
<td>size</td>
<td>Size</td>
<td>sizeId</td>
</tr>
<tr>
<td>Campaign</td>
<td>campaign</td>
<td>Campaign</td>
<td>name</td>
</tr>
<tr>
<td>Placement</td>
<td>placement</td>
<td>Placement</td>
<td>name</td>
</tr>
<tr>
<td>Strategy</td>
<td>strategy</td>
<td>PlacementStrategy</td>
<td>name</td>
</tr>
<tr>
<td>Site</td>
<td>site</td>
<td>Site</td>
<td>name</td>
</tr>
</tbody>
</table>
Log File Access Information

Provide Adobe with the following information:

• The hostname of the FTP server
• Your FTP username and password
• The filenames of the different logs files you will be sending to Adobe
• The delimiters used in the log files

Default Dimensions

• Advertiser
• Campaign
• Creative

If you want to use different dimensions, provide us with the log files containing the appropriate dimension IDs and dimension names.

UserID Values

Specify whether you will be using the Audience Manager UserID or your own UserID. If you are using your own UserID, please provide Adobe with the following information:

• Sample UserID values
• Field containing the UserID
• Delimiters used in that field
• The key used as the identifier for the UserID value

Event Type Definitions

24/7 Open AdStream log files use the following event types:

<table>
<thead>
<tr>
<th>Event Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 (zero, not capital O)</td>
<td>Impression (no flag)</td>
</tr>
<tr>
<td>c</td>
<td>Indicates caller was a click-through</td>
</tr>
<tr>
<td>n</td>
<td>Indicates a new user that is neither a robot nor a click-through</td>
</tr>
<tr>
<td>p</td>
<td>Page view. It is shown for MJX tags regardless of the number of positions, even one. It is shown in the first request, and in rapid sequence for coordinated requests.</td>
</tr>
<tr>
<td>r</td>
<td>Indicates caller is a robot</td>
</tr>
</tbody>
</table>

When combining these flags, the following rules apply:

• "c" is always alone unless preceded by "r"
• "p" is always preceded by one of the following:
  • r
  • n
  • 0 (zero)
Please provide Adobe the correct combinations of event types to impressions, clicks, and so forth.

**FreeWheel**
Information that you need to provide to Adobe when using FreeWheel and Audience Manager.

This topic contains the following information:
- Log File Access Information
- Default Dimensions
- UserID Values

**Log File Access Information**
Provide Adobe with the following information:
- The hostname of the FTP server
- Your FTP username and password
- The delimiters used in the log files

**Default Dimensions**
- Advertiser
- Ad
- Campaign
- Creative
- Order
- PO Number
- Site

If you want to use different dimensions, provide us with the log files containing the appropriate dimension IDs and dimension names.

**UserID Values**
Specify whether you will be using the Audience Manager UserID or your own UserID. If you are using your own UserID, please provide Adobe with the following information:
- Sample UserID values
- Field containing the UserID
- Delimiters used in that field
- The key used as the identifier for the UserID value

**Import DCM Data Files Into Audience Manager**
Set up a Google group to bring your DoubleClick Campaign Manager (DCM) data files into Audience Manager. The content in this section summarizes the integration process and provides you with links to DCM resources to help you get started.

**Integration summary**
DCM is Google's replacement for DoubleClick for Advertisers (DFA). Similar to DFA, DCM customers can import, view, and work with their data in Audience Manager. But, Audience Manager cannot directly access and import your Data Transfer and Match Table files. To import these files, the burden of effort lies with the customer. However,
the set up procedure is well documented in the DoubleClick Campaign Manager Help. Also, you can review the steps listed below to get started.

⚠️ **Caution:** DCM data files contain data for all your advertisers or clients. If you need to omit specific clients, then you must edit the files before making them available to Audience Manager.

### Data transfer frequency and availability

Audience Manager checks for and transfers data once each day. Data is usually available in Audience Manager after 24-hours.

### Steps

1. **Create a group.**
   Groups control access to your DCM data. Eventually, you'll invite and add Audience Manager to this group.

2. **Verify your Google Cloud Storage status.**
   Google Cloud Storage contains the data bucket that holds your Data Transfer and Match Tables. You'll need to setup a bucket or make sure your new group has access to an existing data storage bucket.

3. **Get a data file URL.**
   Work with your DCM Account Manager or Platform Solutions Consultant. They will provide you with a URL to your data files. And, Google might change the format for bucket and file names in future releases. Again, work with your DCM Account Manager to make sure you're using the right formats.

4. **Set bucket permissions.**
   The Cloud Storage Manager lets you control data sharing and bucket access. Give your group read access to the bucket that contains your Data Transfer and Match Table files.

5. **Set up data sharing.**
   Shared DCM user IDs are encrypted to protect privacy. Encryption adds 2 columns to the end of your Data Transfer file, PartnerId1 and PartnerId2. These columns contain encoded user IDs specific to each company that receives these files. As an authorized third-party, Audience Manager can receive DCM data, but cannot decode the IDs. However, on the Audience Manager side, we know how the encoded IDs match our IDs. This means we can match and synchronize users with confidence and accuracy. Note, you cannot import DCM files into Audience Manager if you're already sharing data with 2 other third-party partners.

6. **Invite Audience Manager to join the group.**
   After you create a group and give it access to a data bucket, invite Audience Manager to join the group. Send an invitation email to DFA-AAM@adobe.com. Be sure to include the data file URL from step 3. Our internal teams will work with you to verify access after accepting the invitation.

7. **Set up two data sources for DCM data in the Audience Manager User Interface.**
   Name the data sources Advertiser Analytics: DCM Platform and Advertiser Analytics: AAM+DCM Platform. In the Create Data Sources workflow, set the ID type to Cookie. Share the IDs of the two new data sources with our internal teams.

8. **You can easily create traits from the DCM files you import into Audience Manager.** See Actionable Log Files and ask your Audience Manager consultant or Customer Care to enable the feature for you.

### Pre-Submission Data Integration Checklist

Information that you should gather before requesting report setup from your Audience Manager Account Manager. As best practice, you should print and complete this checklist to help ensure that your setup is completed as quickly and efficiently as possible.
### Pre-Submission Data Integration Checklist

**Integration Type:** Specify your desired integration type:

- DoubleClick for Publishers Premium (DFP Premium)
- DoubleClick for Publishers (DFP)
- DoubleClick for Advertisers (DFA)
- MediaMath (MM)
- 24/7 Open Adstream
- FreeWheel

**Data Source Name and ID:** Specify your data source name and ID:

**File Delivery Mechanism:** Specify your desired file delivery mechanism:

- Amazon S3 (preferred)
- SFTP
- Google Storage
- Pixeling Creative

**Metadata Delivery Mechanism:** Specify your desired metadata delivery mechanism for dimensions:

- [ ] Flat file
  - Delivery mechanism:
    - [ ] API
      - API endpoint:
      - API method (SOAP or REST):
      - API access credentials:
      - Throttling limit (max requests per second/minute):
      - API documentation:

**Dimensions and Mappings:** Specify the necessary dimensions and the corresponding input data field mappings:

- Advertiser:
- Ad:
- Campaign:
- Order:
- Lineitem:
- Site:
- Strategy:
- Creative
- Keyval:
- Placement:

For more information, see *Commonly Used Dimensions*.

**Metrics:** Specify the necessary metrics:
### Pre-Submission Data Integration Checklist

<table>
<thead>
<tr>
<th>Ad Server/Demand-Side-Platform</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impressions</td>
</tr>
<tr>
<td>Clicks</td>
</tr>
<tr>
<td>Conversions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Email Service Providers (ESP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sends</td>
</tr>
<tr>
<td>Opens</td>
</tr>
<tr>
<td>Clicks</td>
</tr>
<tr>
<td>Conversions</td>
</tr>
</tbody>
</table>

**UserID Type**: Specify the UserID type:

- Audience Manager UserID:
- Data provider UserID:

**UserID Syntax and Containing Name Field**: Specify your UserID syntax and containing field name:

- Syntax and name:

  For example, u=24757051475150277921078323837696047435

**Time Zone**: Specify your desired time zone (UTC preferred):

- Time Zone:

---

### OAS as an Audience Manager Destination

Set up Open Ad Server as a destination and send Audience Manager data to that platform.

### OAS Destination Requirements

Standards for code placement, supported key-value formats, reports, and the type of segment data sent to OAS.

This destination type requires the following:

- **DIL**: Data Integration Library code should be deployed on your inventory. DIL helps eliminate the need to write special code for data collection, integration, reading cookie values, and recovering page data.

- **get_aamCookie Function**: Code that captures the Audience Manager user ID and cookie data. Place this code on the top of the page or inside the `<head>` codeblock.

- **Send Delivery Logs to Audience Manager**: If you want a segment delivery report (optional), provide Audience Manager with a daily log that contains impression-level delivery data. The data can be in a raw format, but each record must contain the Audience Manager UUID. Audience Manager can pick up or receive these via FTP.

### Cookie Format and Key-Value Data

Audience Manager can send segment data to a browser cookie as follows:
• Single keys \( x=1 \& x=2 \).
• Multiple keys \( x=1 \& x=2 \& y=3 \& y=4 \).
• Serialized values \( x=1,2,3 \).
• A standard value delimiter used to separate individual key-value pairs.

Only Qualified Segments are Sent to OAS

The amount data passed in to OAS depends on how many segments a particular user qualifies for. For example, say you set up 100 Audience Management segments. If a site visitor qualifies for five of them, then only those five segments get sent to OAS (not all 100).

Create an OAS Destination

Create a cookie-based destination for OAS in Audience Manager.

In Audience Manager, a destination is any other system (ad server, DSP, ad network, etc.) that you want to share data with. Destination Builder provides the tools that let you create and manage these data delivery processes. Audience Manager destination features are located in Manage Data > Destinations. To get started, click Add New Destination and follow the steps below.

Step 1: Basic Information

To complete the Basic Information section:

1. Name the destination.
2. Select "Cookie" from the Type drop-down list.
3. Click Save and move on to the Configuration and Segment Mappings sections.

Step 2: Configuration Information

To complete the Configuration section:

1. **Cookie Name**: Provide a short, descriptive name for your cookie.
2. **Cookie Domain**: Leave blank to set a cookie in the domain of the user's current page. If you want to specify a domain, prefix the name with a period like this, .mydomain.com.
3. Choose a key option in the Data Format section.
4. If your keys use data with serialized values, select the **Serialize** control and specify the serial delimiter (the character that separates the serialized values).
5. Click Save and expand the Segment Mappings section.

Step 3: Segment Mappings

To add a segment to a cookie destination:

1. **Find segments**: The Segment Mappings section provides two search tools to help locate segments. To find a segment:
   - Option 1: Start typing a segment name in the search field. The field updates automatically based on the text. Click Add once you find the segment you want to use.
   - Option 2: Click Browse All Segments to open a window that lets you browse for segments by name or storage location. Click Add Selected Segments when done.
2. **Add Mappings**: In the mappings pop, enter the segment ID in the mappings field and click Save.
3. Click Done.
OAS Setup

Modify OAS settings to work with Audience Manager segment data.

To set up OAS

• Install DIL code across your site.
• Create OAS as a cookie destination in Audience Manager.
• Place the `get_aamCookie` function at the top of the page, ideally within the `<head>` codeblock. The `get_aamCookie` code is available [here](#).
• Modify your ad tag to call the `get_aamCookie` function and include the cookie name you provided when setting up the OAS destination. For example, if you named the cookie `test_cookie`, then the ad tag should call `get_aamCookie` and reference the cookie name. Your ad tag could look similar example below.

```html
<a href= "http://client.adserver.net/?" + get_aamCookie('test_cookie') + 
"&etc&u=" + get_aamCookie('aam_uuid')
```

Remember to include the `u=` variable. It holds the actual unique user ID (UUID) passed in during an ad call.

OpenX as an Audience Manager Destination

Set up OpenX as a destination and send Audience Manager segment data to that platform.

💡 **Note:** For onsite ad server targeting only.

OpenX Destination Requirements

Standards for code placement, supported key-value formats, reports, and the type of segment data sent to OpenX. Review the following before setting up OpenX as an Audience Manager destination:

• **DIL:** Data Integration Library code should be deployed on your site. DIL helps eliminate the need to write special code for data collection, integration, reading cookie values, and recovering page data.
• **`get_aamCookie` Function:** Code that captures the Audience Manager user ID and cookie data. Place this code on the top of the page or inside the `<head>` codeblock.
• **Send Delivery Logs to Audience Manager:** If you want a segment delivery report (optional), provide Audience Manager with a daily log that contains impression-level delivery data. The data can be in a raw format, but each record must contain the Audience Manager UUID. Audience Manager can pick up or receive these via FTP.

Key-Value Data: Format Requirements

Audience Manager sends data in the form of key-value pairs. Create key-value pairs according to the following specifications:

• Preface keys with `c.` (e.g., `c.color` or `c.price`).
• Separate serialized values attached to a single key with a comma (e.g., `c.color = red, green, blue`).
• Separate multiple key-value pairs with an ampersand (e.g., `c.color=red & c.price = 100 & c.condition = new`).
• Key names should not contain special characters like accent and punctuation marks or other symbols.

Only Qualified Segments are Sent to OpenX
The amount data passed in to OpenX depends on how many segments a particular user qualifies for. For example, say you set up 100 Audience Management segments. If a site visitor qualifies for five of them, then only those five segments get sent to OpenX (not all 100).

Create an OpenX Destination

Create a cookie-based destination for OpenX in Audience Management.

In Audience Manager, a destination is any other system (ad server, DSP, ad network, etc.) that you want to share data with. Destination Builder provides the tools that let you create and manage these data delivery processes. Audience Manager destination features are located in Manage Data > Destinations. To get started, click Add New Destination and follow the steps below.

Step 1: Basic Information

To complete the Basic Information section:

1. Name the destination.
2. Select "Cookie" from the Type drop-down list.
3. Click Next and move on to the Configuration and Segment Mappings sections.

Step 2: Configuration Information

To complete the Configuration section:

1. Cookie Name: Provide a short, descriptive name for your cookie.
2. Cookie Domain: Leave blank to set a cookie in the domain of the user's current page. If you want to specify a domain, prefix the name with a period like this, .mydomain.com.
3. Choose a key option in the Data Format section.
4. If your keys use data with serialized values, select the Serialize control and specify the serial delimiter (the character that separates the serialized values).
5. Click Save and expand the Segment Mappings section.

Step 3: Segment Mappings

To add a segment to a cookie destination:

1. Find segments: The Segment Mappings section provides two search tools to help locate segments. To find a segment:
   • Option 1: Start typing a segment name in the search field. The field updates automatically based on the text. Click Add once you find the segment you want to use.
   • Option 2: Click Browse All Segments to open a window that lets you browse for segments by name or storage location. Click Add Selected Segments when done.
2. Add Mappings: In the mappings pop, enter the segment ID in the mappings field and click Save.
3. Click Done.

OpenX Setup

Modify OpenX settings to work with Audience Manager segment data.

To set up OpenX

• Install DIL code across your site.
• Create OpenX as a cookie destination in Audience Manager.
• Place the `get_aamCookie` function at the top of the page, ideally within the `<head>` codeblock. The `get_aamCookie` code is available here.

• Modify your ad tag to call the `get_aamCookie` function and include the cookie name you provided when setting up the OpenX destination. For example, if you named the cookie `test_cookie`, then the ad tag should call `get_aamCookie` and reference the cookie name. Your ad tag could look similar example below.

```html
<a href= "http://client.adserver.net/?" + get_aamCookie('test_cookie') + 
"&etc&xid=" + get_aamCookie('aam_uuid')
```

Remember to include `xid=` . It holds the actual unique user ID (UUID) passed in during an ad call.

The fully formed ad call could look similar to this:

```text
http://client.adserver.net/?c.key1=val1&c.key2=val2&etc xid =3286487458745343
```

### Receiving Audience Data

Receive audience data from Audience Manager.

### ID Synchronization for Outbound Data Transfers

Describes the syntax and parameters used in the initial HTTP call to synchronize user IDs between Audience Manager and a third-party data provider. Contact your Adobe Audience Manager consultant before attempting your first ID synchronization.

#### Purpose of ID Synchronization

ID synchronization is the first step in the outbound, asynchronous data transfer process. In this step, Audience Manager and the vendor compare and match IDs for their respective site visitors. For example, an Audience Manager customer may know a user by ID 123. However, your data partner could identify this user with ID 456. The synchronization process allows Audience Manager and a data vendor to reconcile these different IDs and identify users in their respective systems. Once complete, Audience Manager and the third-party data provider should have corresponding IDs for each unique user seen on our networks.

#### URL Syntax

In an ID exchange, a properly formatted URL string should look like this:

```text
http://dpm.demdex.net/ibs:dpid=<VENDOR_ID>&dpuuid=<VENDOR_UUID>&redir=<REDIRECT_URL>
```

#### URL Parameters

The URL for your inbound ID synchronization call should contain variables described in the table below.

> **Note:** Replace italicized content with actual parameter values.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>&lt;VENDOR_ID&gt;</code></td>
<td>Unique ID for the data provider (assigned by Audience Manager).</td>
</tr>
<tr>
<td><code>&lt;VENDOR_UUID&gt;</code></td>
<td>Unique user ID.</td>
</tr>
<tr>
<td><code>&lt;REDIRECT_URL&gt;</code></td>
<td>An encoded URL redirect with the macro <code>${DD_UUID}</code> embedded within it.</td>
</tr>
</tbody>
</table>

> **Note:** Added only when the data provider initiates the call.
Real-Time Outbound Data Transfers

The outbound real-time data transfer process returns user data as a series of JSON objects passed in with a POST method.

Recommendations

To use this method, we recommend that your data partner:

- Accepts data in JSON format.
- Provides a URL that can be used by the POST call to return data.
- Accepts secure HTTPS data transfers. Audience Manager will not send this file with the unsecure HTTP protocol.

Frequency

This data transfer method can send data in near real-time as users qualify for segments. Additionally, this method can send batches of offline or onboarded data as frequently as every 24-hours.

Required Responses

By default, the recipient server must return the 200 OK code to indicate successful receipt. Other codes will be interpreted as failures. This response is expected within 3000 milliseconds. In response to a failure, Audience Manager will make 1 retry attempt only.

Parameters

The following table defines the elements in the returned JSON data file.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProcessTime</td>
<td>DateTime</td>
<td>Time when the request was executed.</td>
</tr>
<tr>
<td>User_DPID</td>
<td>Integer</td>
<td>An ID that indicates if the file contains Android or iOS IDs. Uses the</td>
</tr>
<tr>
<td></td>
<td></td>
<td>following ID values:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Android IDs (GAID): 20914</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- iOS IDs (IDFA): 20915</td>
</tr>
<tr>
<td>Client_ID</td>
<td>String</td>
<td>Client ID used by the system you’re sending data to.</td>
</tr>
<tr>
<td>AAM_Destination_ID</td>
<td>Integer</td>
<td>The ID assigned to you by your destination partner.</td>
</tr>
<tr>
<td>User_count</td>
<td>Integer</td>
<td>Total number of users in the POST request.</td>
</tr>
<tr>
<td>Users</td>
<td>Array</td>
<td>An array of user objects.</td>
</tr>
<tr>
<td>AAM_UUID</td>
<td>String</td>
<td>The Audience Manager UUID.</td>
</tr>
<tr>
<td>DataPartner_UUID</td>
<td>String</td>
<td>Data partner UUID. Leave blank if your data partner does not have a UUID.</td>
</tr>
</tbody>
</table>
The Audience Manager region ID where we've seen this device. For instance, if the device had some activity in Paris (Europe), the region ID would be 6. See [DCS Region IDs, Locations, and Host Names](#).

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAM_Regions</td>
<td>Array</td>
<td>The Audience Manager region ID where we've seen this device. For instance, if the device had some activity in Paris (Europe), the region ID would be 6. See <a href="#">DCS Region IDs, Locations, and Host Names</a>.</td>
</tr>
<tr>
<td>Segments</td>
<td>Array</td>
<td>An array of segment objects.</td>
</tr>
<tr>
<td>Segment_ID</td>
<td>Integer</td>
<td>The segment ID destination mapping.</td>
</tr>
</tbody>
</table>
| Status        | Integer   | Defines the status of a user in the segment. Accepts the following:

- 1: Active (default)
- 0: Inactive, opted-out, or unsegmented.

Users are unsegmented when they are:

- Removed from a segment based on the segment rule.
- Removed from a segment based on the segment's time-to-live interval.
- Moved to an inactive state if they have not been seen for the last 120-days.

All partner IDs that are synced to an Audience Manager ID will receive the "Status": "0" flag when a user is unsegmented. |
| DateTime      | DateTime  | Time that a site visitor qualified for the trait. |

### Security

You can secure your real-time outbound data transfer process by [encrypting HTTP requests](#) with private keys or by having Audience Manager authenticate through the [OAuth 2.0](#) protocol.

### Code Sample

A real-time data response can look similar to the following:

```json
{
  "User_DPID": "12345",
  "Client_ID": "74323",
  "AAM_Destination_Id": "423",
  "User_count": "2",
  "Users": [{
    "AAM_UUID": "19393572368547369350319949416899715727",
    "DataPartner_UUID": "4250948725049857",
    "Segments": [{
      "Segment_ID": "14356",
      "Status": "1",
      "DateTime": "Wed Jul 27 16:17:22 UTC 2016"
    },
    { "Segment_ID": "12176",
      "Status": "0",
      "DateTime": "Wed Jul 27 16:17:22 UTC 2016"
    }
  ]
},
{
  "AAM_UUID": "0578240750487542456854736923319946899715232",
  "DataPartner_UUID": "4250948725049857",
  "Segments": [{
    "Segment_ID": "14356",
    "Status": "1",
    "DateTime": "Wed Jul 27 16:17:22 UTC 2016"
  },
  { "Segment_ID": "12176",
    "Status": "0",
    "DateTime": "Wed Jul 27 16:17:22 UTC 2016"
  }
]}
}
```
Digitally Signed HTTP Requests

**Audience Manager** requires the HTTP server-to-server requests to be digitally signed for validity. This document describes how you can encrypt HTTP requests with private keys.

**Overview**

Using a private key provided by you and shared with Audience Manager, we can digitally sign the HTTP requests that are sent between **IRIS** and your HTTP server. This ensures:

- **Authenticity**: only the sender that has the private key (IRIS) can send valid HTTP(S) messages to the partner.
- **Message integrity**: with this approach, even on HTTP, you are protected from a man in the middle attack where the messages get distorted.

IRIS has built-in support to rotate the keys with zero downtime, as shown in the [Rotating the private key](#) section below.

**Information you need to provide**

For an HTTP real-time server-to-server destination, contact your Audience Manager consultant and specify:

- The key used to sign the request.
- The name of the HTTP header that will hold the generated signature (X-Signature in the example header below).
- Optional: the type of hash used for the signature (md5, sha1, sha256).

```
* Connected to partner.website.com (127.0.0.1) port 80 (#0)
> POST /webpage HTTP/1.1
> Host: partner.host.com
> Accept: */*
> Content-Type: application/json
> Content-Length: 20
> X-Signature: wxa2ByMWhhP328EvHQsV1OD5jTc=

POST message content
```

**How it works**

1. IRIS creates the HTTP message to be sent to the partner.
2. IRIS creates a signature based on the HTTP message and the private key communicated by the partner.
3. IRIS sends the HTTP(S) request to the partner. This message contains the signature and the actual message, as seen in the example above.
4. The partner server receives the HTTP(S) request. It reads the message body and the signature received from IRIS.
5. Based on the message body received and the private key, the partner server recalculates the signature. See the [How to calculate the signature](#) section just below on how to achieve this.
6. Compare the signature created on the partner server (receiver) with the one received from IRIS (sender).

7. If the signatures match, then the **authenticity** and **message integrity** have been validated. Only the sender, who has the private key, can send a valid signature (authenticity). Moreover, a man in the middle can't modify the message and generate a new valid signature, since they don't have the private key (message integrity).

---

**How to calculate the signature**

HMAC (Hash-based message authentication code) is the method used by IRIS for message signing. Implementations and libraries are available basically in every programming language. HMAC has no known extension attacks. See an example in Java below:

```java
// Message to be signed.
// For GET type HTTP destinations, the message used for signing will be the REQUEST_PATH + QUERY_STRING
// For POST type HTTP destinations, the message used for signing will be the REQUEST_BODY.
// String getData = "/from-aam-s2s?sids=1,2,3";
String postData = "POST message content";
// Algorithm used. Currently supported: HmacSHA1, HmacSHA256, HmacMD5.
String algorithm = "HmacSHA1";
// Private key shared between the partner and Adobe Audience Manager.
String key = "sample_partner_private_key";

// Perform signing.
SecretKeySpec signingKey = new SecretKeySpec(key.getBytes(), algorithm);
Mac mac = Mac.getInstance(algorithm);
mac.init(signingKey);
byte[] result = mac.doFinal(postData.getBytes());
```

### Rotating the private key

For security reasons, it's recommended to periodically rotate the private key. It is up to you to decide the private key and the rotation period. In order to achieve the key rotation with zero downtime, IRIS supports adding multiple signature headers. One header will contain the signature generated with the old key, another header will contain the signature generated using the new private key. See below the steps in detail:

1. Partner communicates the new private key to Adobe Audience Manager.
2. IRIS will start sending two signature headers (one using the old key, the other one using the new key).
3. Once you start receiving both headers, you can choose to discard the old key and only look at the new signature.
4. The old key is removed from Audience Manager and IRIS only sends the new signature header. The keys have been rotated.

### Data used for signing

For GET type destinations, the message used for signing will be the `REQUEST_PATH + QUERY STRING` (e.g. `/from-aam-s2s?sids=1,2,3`). IRIS does not take into account the hostname or HTTP headers - these can be modified / misconfigured along the path or reported incorrectly.

For POST type destinations, the message used for signing is the `REQUEST BODY`. Again, headers or other request parameters are ignored.

### OAuth 2.0 Integration for Real-Time Outbound Transfers

When publishing segments to the partner destination via a realtime server-to-server integration, Audience Manager can be set up to authenticate using OAuth2.0 when making the requests. This presents the ability to issue authenticated requests from Audience Manager to your endpoint.

### Authentication Flow

The Adobe Audience Manager OAuth 2.0 authentication implementation is based on the Client Credentials grant flow and follows these steps:

1. You must provide us with:
   - The OAuth 2.0 endpoint that generates the authentication token.
   - The credentials used to generate a token;
2. An Audience Manager consultant sets up the destination using the information you provided.
3. Once a segment is mapped to this destination, our real-time data transfer system, IRIS, makes a POST request to the token endpoint to exchange the credentials for a bearer token.
4. For each segment publishing request to the partner endpoint, IRIS uses the bearer token to authenticate.
Requirements

As an Audience Manager partner, the following endpoints are needed to receive authenticated requests:

**Endpoint 1 used by IRIS to obtain a bearer token**

This endpoint will accept the credentials provided at step 1 and generate a bearer token which will be used on subsequent requests.

- The endpoint must accept **HTTP POST requests**.
- The endpoint must accept and look at the Authorization header. The value for this header will be: Basic <credentials_provided_by_partner>.
- The endpoint must look at the Content-type header and validate that its value is application/x-www-form-urlencoded ; charset=UTF-8.
- The body of the request will be grant_type=client_credentials.

**Example request made by Audience Manager to the partner endpoint in order to obtain a bearer token**

```
POST /oauth2/token HTTP/1.1
Host: api.partner.com
User-Agent: Adobe Audience Manager Iris
Authorization: Basic zq2LO01CcYGr0D55nXiN8pEz97eCpVHAoMF8pAgCntXAzxp5uRV7DTAE2qtPLjhMQwrEX3O6MV4S
Content-Type: application/x-www-form-urlencoded;charset=UTF-8
Content-Length: 29
Accept-Encoding: gzip
grant_type=client_credentials
```

**Example response from the partner endpoint:**

```
HTTP/1.1 200 OK
Status: 200 OK
Content-Type: application/json; charset=utf-8
Content-Encoding: gzip
Content-Length: 121

{"token_type":"bearer","access_token":"glIbBVohK8d86alDEnllPWi6IpjZvJC6kwBRuuawts6YMkw4tZkt84rEZYU2ZKHCQP3nT7PnzQPP10yV"}
```
Endpoint 2 used by IRIS to publish segments using the bearer token

Audience Manager sends data to this endpoint in near real-time as users qualify for segments. Additionally, this method can send batches of offline or onboarded data as frequently as every 12 hours.

The bearer token generated by endpoint 1 is used to issue requests to this endpoint. The Audience Manager real-time data transfer system, IRIS, constructs a normal HTTPS request and includes an Authorization token header. The value for this header will be: Bearer <bearer token from step 1>.

Example response from the partner endpoint:

```plaintext
GET /segments/aam HTTP/1.1
Host: api.partner.com
User-Agent: Adobe Audience Manager Iris
Authorization: Bearer glIbBVohK8d86a1DEn11PW16Ipj2vJC6kwBRuuawts6YMkw4t2kt84rE2YU2ZHCQP3TT7PnzCQPI0yY
Content-Type: application/json
Accept-Encoding: gzip

{
  "User_DPID": "12345",
  "Client_ID": "74323",
  "AAM_Destination_Id": "423",
  "User_count": "2",
  "Users": [{
    "AAM_UUID": "19393572368547369350319949416899715727",
    "DataPartner_UUID": "4250948725049857",
    "Segments": [{
      "Segment_ID": "14356",
      "Status": "1",
      "DateTime": "Wed Jul 27 16:17:22 UTC 2016"
    }
  ]
}
}
```

Note: This request contains a standard payload (request content).

Important considerations

Tokens are passwords

The credentials presented by the partner and the tokens obtained by Audience Manager when authenticating using the OAuth2.0 flow, are sensitive information and must not be shared to third parties.

SSL is required

SSL must be used in order to maintain a secure authentication process. All requests, including the ones used to obtain and use the tokens must use HTTPS endpoints.

Batch Outbound Data Transfers

Audience Manager sends batch data to third-party content providers according to these specifications.

Outbound Data File Name: Syntax and Examples

Describes the required fields, syntax, and conventions used to name an outbound data file.

Note: The style elements (monospaced text, italics, brackets [ ] ( ), etc.) in this document indicate code elements and options. See Style Conventions for Code and Text Elements for more information.
Syntax and File Name Elements

Outbound file names contain the following required and optional elements:

```
SYNC-TYPE_DID_MASTER-DPID_{PID-ALIAS}_SYNC-MODE_TIMESTAMP[-SPLIT_NUMBER].sync[.gz]
```

Parameters

The table defines the elements in an outbound data file name.

<table>
<thead>
<tr>
<th>File Name Element</th>
<th>Description</th>
</tr>
</thead>
</table>
| **SYNC-TYPE**     | Refers to the data transfer methods. Transfer methods include:  
|                   | • FTP - Transfer using SFTP  
|                   | • Amazon S3 - Transfer to Amazon AWS |
| **DID**           | Destination ID.  
|                   | In Audience Manager, a destination is the instance of the integration where you can map your targetable segments. Customers can have multiple destinations, depending on the business requirement. |
| **MASTER-DPID**   | Data-provider or data source ID. This ID identifies the type of User ID present in the file content. Most common User ID keys are:  
|                   | • 20914 - Google Advertiser ID (raw, unhashed)  
|                   | • 20915 - Apple ID for Advertisers (raw, unhashed)  
|                   | • Vendor ID - 3rd party user IDs (web/cookie) |
| **PID-ALIAS**     | The customer identifier from the 3rd party platform. |
| **SYNC-MODE**     | Sync mode is a macro placeholder that adds a label to the file name based on synchronization type. Synchronization types include full and incremental. They’ll appear in the file name as iter or full.  
|                   | • iter: Indicates an “iterative” or incremental synchronization. An incremental file contains only new data collected since the last synchronization.  
|                   | • full: Indicates a “full” synchronization. A fully synchronized file contains old data and any new data collected since the last synchronization. |
| **TIMESTAMP**     | A 13-digit UNIX timestamp in milliseconds, in the UTC time zone. |
| **[-SPLIT_NUMBER]** | An integer. Identifies part of a file that's been split into multiple parts to improve processing times. The number indicates which part of the original file the data belongs to.  
<p>|                   | The original file will not have any split number. The first split file will start with 1. See examples below. |</p>
<table>
<thead>
<tr>
<th>File Name Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>.gz (optional)</td>
<td>GZIP compression.</td>
</tr>
</tbody>
</table>

**File Name Examples**

**Scenario 1:** files sent over to Amazon S3 location, with PID-ALIAS="XYZCustomer" and with Google Advertiser IDs in the file content.

*E.g. incremental files:*

- S3_1234_20914_XYZCustomer_iter_1486140844000.sync.gz
- S3_1234_20914_XYZCustomer_iter_1486140844000-1.sync.gz
- S3_1234_20914_XYZCustomer_iter_1486140844000-10.sync.gz

*E.g. full files:*

- S3_1234_20914_XYZCustomer_full_1486140844000.sync.gz
- S3_1234_20914_XYZCustomer_full_1486140844000-1.sync.gz

**Scenario 2:** files sent over to FTP location, without PID-ALIAS and with Apple Advertiser IDs in the file content:

*E.g. incremental files:*

- ftp_1234_20915_iter_1486140843000.sync.gz
- ftp_1234_20915_iter_1486140843000-1.sync.gz

*E.g. full files:*

- ftp_1234_20915_full_1486140843000.sync.gz
- ftp_1234_20915_full_1486140843000-1.sync.gz

**Scenario 3:** Files sent over to FTP location, with PID-ALIAS="XYZCustomer" and with 3rd party User ID in the file content (Vendor ID=45454):

*E.g. incremental files:*

- ftp_1234_45454_XYZCustomer_iter_1486140843000.sync.gz
- ftp_1234_45454_XYZCustomer_iter_1486140843000-1.sync.gz
- ftp_1234_45454_XYZCustomer_iter_1486140843000-10.sync.gz

*E.g. full files:*

- ftp_1234_45454_XYZCustomer_full_1486140843200.sync.gz
- ftp_1234_45454_XYZCustomer_full_1486140843200-1.sync.gz

**Outbound Data File Contents: Syntax and Parameters**

Describes the required fields, syntax, and conventions used to organize information in an outbound data file. Format your data according to these specifications.
Note: The style elements (monospace text, italics, brackets [], (), etc.) in this document indicate code elements and options. See Style Conventions for Code and Text Elements for more information.

**Syntax**

Fields in the data file appear in this order:

`UUID <SPACE> SEGMENT_1, SEGMENT_2 <SPACE> REMOVED_SEGMENT_1, ...`

**Parameters**

The table lists variables that define the contents of a data file.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>UUID</code></td>
<td>A unique user ID assigned by Audience Manager.</td>
</tr>
<tr>
<td><code>&lt;SPACE&gt;</code></td>
<td>Separate the UUID and segment data with a space.</td>
</tr>
<tr>
<td><code>SEGMENT_N</code></td>
<td>The segment ID that a visitor belongs to. Separate multiple segments with a comma.</td>
</tr>
<tr>
<td><code>REMOVED_SEGMENT_N</code></td>
<td>The segment ID from which the user was disqualified. Separate multiple segments with a comma. With a full synchronization, you can ignore the removed segments because the data file will contain the complete list of current segments for the user. Usually, you want to know about segments a user belongs to rather than those they've been removed from. See also Outbound Data File Name: Syntax and Examples.</td>
</tr>
</tbody>
</table>

**Example: Basic File Format**

A properly formatted data file could look similar to the following sample. This file entry indicates a user qualifies for segments 24, 26, and 27. As required, a space separates the UUID and segment IDs. Another space separates the sets of segment IDs. In this example, a user belongs to segments 24, 26, and 27. They've been removed from segments 25 and 28.

```
59767559181262060060278870901087098252  24,26,27  25,28
```

**Outbound Hadoop Sequence Files**

Export data from Audience Manager into your own Hadoop instance using a native binary Hadoop Sequence File format (SEQ).

- **Advantages**
- **File Name Format**
- **File Contents: Sample Line and Parameters**
- **Start using SEQ files**

**Advantages**

In addition to text files, the Hadoop ecosystem provides support for Hadoop Sequence Files (SEQ). Hadoop SEQ files are flat file structures which consist of serialized key-value pairs, in a binary format. The advantages of using binary SEQ files over text files are:

- Binary SEQ files are more compact than text files.
• Binary SEQ files can be split and processed in parallel.
• In text files, each line needs to be parsed. Binary SEQ files do not have this limitation.

**File Name Format**

**File Name Elements**

Outbound binary Hadoop SEQ file names contain the following required and optional elements:

*Note: The style elements (monospace text, italics, brackets [], (), etc.) in this document indicate code elements and options. See Style Conventions for Code and Text Elements for more information.*

**SYNC-TYPE**

Refers to the data transfer methods. Transfer methods include:

- FTP - Transfer using SFTP
- Amazon S3 - Transfer to Amazon AWS

**DID**

Destination ID.

In Audience Manager, a destination is the instance of the integration where you can map your targetable segments. Customers can have multiple destinations, depending on the business requirement.

**MASTER-DPID**

Data-provider or data source ID. This ID identifies the type of User ID present in the file content. Most common User ID keys are:

- 20914 - Google Advertiser ID (raw, unhashed)
- 20915 - Apple ID for Advertisers (raw, unhashed)
- Vendor ID - 3rd party user IDs (web/cookie)

**PID-ALIAS**

Optional. The customer identifier from the 3rd party platform.

**SYNC-MODE**

Sync mode is a macro placeholder that adds a label to the file name based on synchronization type. Synchronization types include full and incremental. They'll appear in the file name as `iter` or `full`.

- `iter`: Indicates an "iterative" or incremental synchronization. An incremental file contains only new data collected since the last synchronization.
- `full`: Indicates a "full" synchronization. A fully synchronized file contains old data and any new data collected since the last synchronization.

**TIMESTAMP**

A 13-digit UNIX timestamp in milliseconds, in the UTC time zone.
<table>
<thead>
<tr>
<th>File Name Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>['-SPLIT_NUMBER']</td>
<td>Optional. An integer. Identifies part of a file that's been split into multiple parts to improve processing times. The number indicates which part of the original file the data belongs to. The original file will not have any split number. The first split file will start with 1. See examples below.</td>
</tr>
<tr>
<td>.seq</td>
<td>Identifies the file as a Hadoop Sequence File</td>
</tr>
</tbody>
</table>

**File Name Examples**

Files sent over to Amazon S3 location, with PID-ALIAS="XYZCustomer" and with Google Advertiser IDs in the file content.

<table>
<thead>
<tr>
<th>File Type</th>
<th>Example</th>
</tr>
</thead>
</table>
| Incremental   | S3_1234_20914_XYZCustomer_iter_1486140844000.sync.seq  
S3_1234_20914_XYZCustomer_iter_1486140844000-1.sync.seq  
S3_1234_20914_XYZCustomer_iter_1486140844000-10.sync.seq |
| Full          | S3_1234_20914_XYZCustomer_full_1486140844000.sync.seq  
S3_1234_20914_XYZCustomer_full_1486140844000-1.sync.seq  
S3_1234_20914_XYZCustomer_full_1486140844000-10.sync.seq |

**File Contents: Sample Line and Parameters**

This section describes the fields, syntax, and conventions used to organize information in a Hadoop Sequence File.

**Example: Basic File Format**

A properly formatted line in a SEQ file could look similar to the sample below. This file entry indicates that user 00131685864660975100567715905662003423 qualified for segments 872123, 856456 and 853789 at the time expressed in UNIX timestamp 1491187665. The \N fields represent empty placeholders and have no significance for the file transfer.

```
00131685864660975100567715905662003423    \N    et:outbound    \N    872123,856456,853789    1491187665    1491187665    1491187665    \N    \N    \N    \N    \N    \N    \N    \N    \N    \N    0    \N    00131685864660975100567715905662003423    0
```

**Start using SEQ files**

There is no UI control in the Audience Manager interface to enable Outbound SEQ file transfers. Talk to your Audience Manager consultant or Customer Care to set up Outbound SEQ file transfers.
Transfer-Control Files for Log File Transfers

Transfer-control (.info) files provide metadata information about file transfers so that partners can verify that Audience Manager handled file transfers correctly.

Audience Manager sends a transfer-control file to a partner with every file transfer. Due to the multi-thread nature of the FTP publisher, the transfer-control file might be sent before the actual files are finished transferring.

The metadata in the .info file lets partners:

• Determine when a full transfer cycle is complete (the total number of files in the sequence have been delivered)
• Determine whether any given file in the sequence is complete/correct (by examining the size of the file in bytes and the total number of lines)
• Validate the number of rows in raw files verses the number of rows after the files have been loaded in the database on the receiving end (size of file in lines)

File Naming Conventions

The transfer-control file has the same name as the root of the batch/sequence with a .info file extension.

For example, if the first file in the sequence were named: ftp_12345_67890_full_1500727351632-1.sync, the control file would be named ftp_12345_67890_iter_1500727351632.info.

File Format

```json
{
  Files: [
    {
      FileByteSize: 293029329,
      FileLineCount: 36893908,
      FileName: "ftp_12345_67890_full_1500727351632-1.sync.gz",
      FileSequenceNumber: 1,
      md5: "983g634be2ad5263c6a6c4958bf61d9f"
    },
    {
      FileByteSize: 293039238,
      FileLineCount: 36895184,
      FileName: "ftp_12345_67890_full_1500727351632-2.sync.gz",
      FileSequenceNumber: 2,
      md5: "6sn9907c8e78cfd78409622e7b55a984"
    },
    {
      FileByteSize: 293050833,
      FileLineCount: 36896787,
      FileName: "ftp_12345_67890_full_1500727351632-3.sync.gz",
      FileSequenceNumber: 3,
      md5: "7cdfb8e74cd6ec1jy6ve121ccb4a962"
    },
    {
      FileByteSize: 218425764,
      FileLineCount: 27498226,
      FileName: "ftp_12345_67890_full_1500727351632-4.sync.gz",
      FileSequenceNumber: 4,
      md5: "7hs53149f8a2444457g968f04cbbdee5"
  ],
  Totals: {
    FileName: "ftp_12345_67890_full_1500727351632.sync",
    TotalByteSize: 1097545164,
    TotalNumberFiles: 4,
    TotalNumberLines: 138184105
  }
}
```
Notes:
The batch total numbers are exclusive of the `.info` file itself. That is, the totals do not include the `.info` file, its byte size, or its line count.

Byte sizes of files and line counts are inclusive of any header and spacer (blank) lines/rows. In order to get the count of actual data lines/rows, subtract headers.

Total lines in batch and total byte size are inclusive of any header and space rows.

Outbound Template Macros
Lists the macros you can use to create outbound templates. These include file name macros, header macros, and content macros.

Contents:

- File Name and File Header Macros
- Content Macros

File Name and File Header Macros
The table lists and describes the macros you can use in the file name and to define header fields. For code samples, see Outbound Macro Examples.

<table>
<thead>
<tr>
<th>Macro</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASCII_SOH</td>
<td>A non-printing ASCII character. It indicates the start of a row or a section of content. It can also be used to separate data columns in a file.</td>
</tr>
<tr>
<td>DPID</td>
<td>Data provider ID.</td>
</tr>
<tr>
<td>MASTER_DPID</td>
<td>User ID Key Data Provider ID.</td>
</tr>
<tr>
<td>ORDER_ID</td>
<td>Order / destination ID.</td>
</tr>
<tr>
<td>PIDALIAS</td>
<td>An alias for an order / destination ID.</td>
</tr>
<tr>
<td></td>
<td>The alias is set in the admin UI.</td>
</tr>
<tr>
<td>SYNC_MODE</td>
<td>Indicates synchronization type and includes:</td>
</tr>
<tr>
<td></td>
<td>• <code>full</code>: Full synchronization.</td>
</tr>
<tr>
<td></td>
<td>• <code>iter</code>: Incremental synchronization.</td>
</tr>
<tr>
<td>SYNC_TYPE</td>
<td>Indicates data transfer method and includes:</td>
</tr>
<tr>
<td></td>
<td>• <code>ftp</code></td>
</tr>
<tr>
<td></td>
<td>• <code>http</code></td>
</tr>
<tr>
<td></td>
<td>• <code>s3</code></td>
</tr>
<tr>
<td>Macro</td>
<td>Description</td>
</tr>
<tr>
<td>------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>TAB</td>
<td>Used as a separator, this macro inserts a tab between fields.</td>
</tr>
<tr>
<td>TIMESTAMP</td>
<td>A 10-digit, UTC, Unix timestamp. It can also be formatted as <code>&lt;TIMESTAMP; format=&quot;YYYYMMDDhhmmss&quot;&gt;</code> following Java date/timestamp formatting rules.</td>
</tr>
</tbody>
</table>

### Content Macros

Macros used to format the contents of a data file. For code samples, see [Outbound Macro Examples](#).

<table>
<thead>
<tr>
<th>Macro</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLOSE CURLY BRACKET</td>
<td>Inserts a close curly bracket } character.</td>
</tr>
<tr>
<td>DP_UUID</td>
<td><em>Data Provider Unique User Identifier.</em> This is the ID for the data partner you send data to in an outbound file.</td>
</tr>
<tr>
<td>DP_UUID LIST</td>
<td>Returns a list that contains multiple IDs for a data partner. This is useful if you have a large organization with multiple subdivisions or other organizational groups you're allowed to share data with. This macro returns a list of the IDs for those subordinate groups.</td>
</tr>
<tr>
<td>DPID</td>
<td>Data provider ID.</td>
</tr>
<tr>
<td>DPUUIDS</td>
<td>The output of this macro maps the data provider ID (DPID) to related unique user IDs (DPUUID). This macro must have a formatting string to control its output. Sample output would look similar to the following: &quot;dpids=dpid1,dpid2,...,dpidn</td>
</tr>
<tr>
<td>if(SEGMENT_LIST &amp;&amp; REMOVED_SEGMENT_LIST) endif</td>
<td>This combination of macros creates a conditional statement that lists the segments users belong to and have been removed from. It returns an empty string if both conditions are not met or there's no data.</td>
</tr>
<tr>
<td>MCID</td>
<td>Adobe Experience Cloud ID.</td>
</tr>
<tr>
<td>OPEN CURLY BRACKET</td>
<td>Inserts an open curly bracket { character.</td>
</tr>
<tr>
<td>OPT_OUT</td>
<td>Deprecated. Do not use.</td>
</tr>
<tr>
<td>Macro</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ORDER_ID</td>
<td>Order or destination ID.</td>
</tr>
<tr>
<td>OUTPUT_ATTRIBUTE_TYPE</td>
<td>Deprecated. Do not use.</td>
</tr>
<tr>
<td>OUTPUT_ATTRIBUTE_VALUE</td>
<td>Returns 1 as a static, hardcoded value.</td>
</tr>
<tr>
<td>PID</td>
<td>Partner ID.</td>
</tr>
<tr>
<td>PIDALIAS</td>
<td>An alias for an order / destination ID.</td>
</tr>
<tr>
<td></td>
<td>The alias is set in the admin UI.</td>
</tr>
<tr>
<td>REMOVED_SEGMENT_LIST</td>
<td>Returns a list of segments, if any, that have been removed.</td>
</tr>
<tr>
<td>SEGMENT_LIST</td>
<td>Returns a list of segments in a list. Accepts the following optional arguments:</td>
</tr>
<tr>
<td></td>
<td>• segmentId: Segment ID. Deprecated. Use sid.</td>
</tr>
<tr>
<td></td>
<td>• csegid: Customer segment ID. Deprecated. Use sid.</td>
</tr>
<tr>
<td></td>
<td>• sid: Segment ID</td>
</tr>
<tr>
<td></td>
<td>• type: Returns 5, a static, hardcoded value that identifies data as segment data.</td>
</tr>
<tr>
<td></td>
<td>• alias: Deprecated. Do not use.</td>
</tr>
<tr>
<td></td>
<td>• lastUpdateTime: A Unix time stamp that indicates the last time a segment was realized.</td>
</tr>
<tr>
<td></td>
<td>Put these variables in curly brackets after the macro. For example, this code separates results with a pipe &quot;</td>
</tr>
<tr>
<td></td>
<td>&lt;SEGMENT_LIST:{seg</td>
</tr>
<tr>
<td>SET_ATTRIBUTES</td>
<td>Returns 1, as a static, hardcoded value.</td>
</tr>
<tr>
<td>SYNC_MODE</td>
<td>Indicates synchronization type and includes:</td>
</tr>
<tr>
<td></td>
<td>• full: Full synchronization.</td>
</tr>
<tr>
<td></td>
<td>• iter: Incremental synchronization.</td>
</tr>
<tr>
<td>SYNC_TYPE</td>
<td>Indicates data transfer method and includes:</td>
</tr>
<tr>
<td></td>
<td>• ftp</td>
</tr>
<tr>
<td></td>
<td>• http</td>
</tr>
<tr>
<td></td>
<td>• s3</td>
</tr>
<tr>
<td>TAB</td>
<td>Used as a separator, this macro inserts a tab between fields.</td>
</tr>
<tr>
<td>TRAIT_LIST</td>
<td>Returns a list of traits. Accepts the following optional arguments:</td>
</tr>
<tr>
<td>Macro</td>
<td>Description</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>type</td>
<td>Identifies trait types by numeric ID. Returns:</td>
</tr>
<tr>
<td></td>
<td>• 10 which identifies a DPM trait (offline, onboarded by an inbound job).</td>
</tr>
<tr>
<td></td>
<td>• 3 which identifies a rules-based trait (realtime, onboarded through the DCS).</td>
</tr>
<tr>
<td>traitId</td>
<td>trait ID.</td>
</tr>
<tr>
<td>lastRealized</td>
<td>The last time the trait was realized. Unix time stamp.</td>
</tr>
<tr>
<td>UUID</td>
<td>Audience Manager user ID.</td>
</tr>
</tbody>
</table>

### Outbound Macro Examples

Examples of how some of the common macros are used to create outbound file templates.

**Contents:**

- *File Name Macros*
- *Header Row Macros*
- *File Content Macros*

**Note:** In the tables, **boldface** type identifies each macro with its related output. For the format examples, the `< >` symbols have been added to help visually separate each macro.

### File Name Macros

For a list of available macros and definitions, see *Outbound Template Macros*.

<table>
<thead>
<tr>
<th>Macro</th>
<th>Format and Output Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPID</td>
<td><strong>Format:</strong> <code>&lt;SYNC_TYPE&gt;_&lt;ORDER_ID&gt;_&lt;DPID&gt;_&lt;SYNC_MODE&gt;_&lt;TIMESTAMP&gt;.sync</code></td>
</tr>
<tr>
<td></td>
<td><strong>Output:</strong> <code>ftp_215_888_iter_1449756724.sync</code></td>
</tr>
</tbody>
</table>

| MASTER_DPID    | **Format:** `<SYNC_TYPE>_<ORDER_ID>_<DPID>_<MASTER_DPID>_<SYNC_MODE>_<TIMESTAMP>.sync`  |
|                | **Output:** `ftp_215_888_20915_iter_1449756724.sync`  |

| ORDER_ID       | **Format:** `<SYNC_TYPE>_<ORDER_ID>_<DPID>_<SYNC_MODE>_<TIMESTAMP>.sync`  |
|                | **Output:** `ftp_215_888_iter_1449756724.sync`  |

<p>| SYNC_MODE      | <strong>Format:</strong> <code>&lt;SYNC_TYPE&gt;_&lt;ORDER_ID&gt;_&lt;DPID&gt;_&lt;SYNC_MODE&gt;_&lt;TIMESTAMP&gt;.sync</code>  |
|                | <strong>Output:</strong>  |</p>
<table>
<thead>
<tr>
<th>Macro</th>
<th>Format and Output Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Full: ftp_215_888_full_1449756724.sync</td>
</tr>
<tr>
<td></td>
<td>• Incremental: ftp_215_888_iter_1449756724.sync</td>
</tr>
<tr>
<td>SYNC_TYPE</td>
<td>Format: &lt;SYNC_TYPE&gt;<em>&lt;ORDER_ID&gt;</em>&lt;DPID&gt;<em>&lt;SYNC_MODE&gt;</em>&lt;TIMESTAMP&gt;.sync</td>
</tr>
<tr>
<td></td>
<td>Output:</td>
</tr>
<tr>
<td></td>
<td>• FTP: ftp_215_888_iter_1449756724.sync</td>
</tr>
<tr>
<td></td>
<td>• HTTP: http_215_888_iter_1449756724.sync</td>
</tr>
<tr>
<td></td>
<td>• S3: s3_215_888_iter_1449756724.sync</td>
</tr>
<tr>
<td>TIMESTAMP</td>
<td>Format: &lt;SYNC_TYPE&gt;<em>&lt;ORDER_ID&gt;</em>&lt;DPID&gt;<em>&lt;SYNC_MODE&gt;</em>&lt;TIMESTAMP&gt;<em>&lt;admin&gt;</em>.sync</td>
</tr>
<tr>
<td></td>
<td>Output: ftp_215_888_iter_1449756724.sync</td>
</tr>
</tbody>
</table>

**Header Row Macros**

For a list of available macros and definitions, see *Outbound Template Macros*.

<table>
<thead>
<tr>
<th>Macro</th>
<th>Format and Output Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAB</td>
<td>Format: &lt;ORDER_ID&gt;&lt;TAB&gt;&lt;SYNC_TYPE&gt;</td>
</tr>
<tr>
<td></td>
<td>Output: 888 full.sync</td>
</tr>
<tr>
<td></td>
<td>In the output, the non-printing tab character separates each element.</td>
</tr>
</tbody>
</table>

**File Content Macros**

For a list of available macros and definitions, see *Outbound Template Macros*.

<table>
<thead>
<tr>
<th>Macro</th>
<th>Format and Output Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP_UUID</td>
<td>Format: &lt;DP_UUID&gt;&lt;DP_UUID_LIST;separator=TAB&gt;</td>
</tr>
<tr>
<td></td>
<td>Output: 123456 UUID1 UUID2 UUID3</td>
</tr>
<tr>
<td>DP_UUID_LIST</td>
<td>Format: &lt;DP_UUID&gt;&lt;DP_UUID_LIST;separator=TAB&gt;</td>
</tr>
<tr>
<td></td>
<td>Output: 123456 UUID1 UUID2 UUID3</td>
</tr>
<tr>
<td>DPUUIDS</td>
<td>See the separate section below.</td>
</tr>
<tr>
<td>REMOVED_SEGMENT_LIST</td>
<td>Format: &lt;DP_UUID&gt;&lt;REMOVED_SEGMENT_LIST;separator=&quot; &quot;&gt;</td>
</tr>
<tr>
<td></td>
<td>Output: 123456 105955 101183 101180 101179</td>
</tr>
<tr>
<td>SEGMENT_LIST</td>
<td>Format: &lt;DP_UUID&gt;&lt;SEGMENT_LIST;separator=&quot; &quot;&gt;</td>
</tr>
<tr>
<td>Macro</td>
<td>Format and Output Examples</td>
</tr>
<tr>
<td>-------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>if(SEGMENT_LIST &amp; REMOVED_SEGMENT_LIST)endif</td>
<td>Output: 123456 105955 101183 101180 101179</td>
</tr>
<tr>
<td>SET_ATTRIBUTES</td>
<td>Format: &lt;DP_UUID&gt;&lt;TAB&gt;&lt;DP_UUID_LIST;separator=</td>
</tr>
<tr>
<td>Output: 1159 0008800857968365374151629750971733500 17t0aj01b120hp 1 0 5,103714,1,1344114661000&amp;5,103713,1,1343250661000</td>
<td></td>
</tr>
<tr>
<td>TAB</td>
<td>Format: &lt;DP_UUID&gt;&lt;TAB&gt;&lt;DP_UUID_LIST;separator=</td>
</tr>
<tr>
<td>Output: 123456 UUID1 UUID2 UUID3</td>
<td></td>
</tr>
<tr>
<td>In the output, the non-printing tab character separates each element.</td>
<td></td>
</tr>
<tr>
<td>TRAIT_LIST</td>
<td>Format: &lt;PID&gt;&lt;TAB&gt;&lt;DP_UUID&gt;&lt;TAB&gt;&lt;SET_ATTRIBUTES&gt;&lt;TAB&gt;&lt;TRAIT_LIST;separator=&quot;</td>
</tr>
<tr>
<td>Output: 1131 12345 1 123</td>
<td>456</td>
</tr>
<tr>
<td><strong>DPUUID Examples</strong></td>
<td></td>
</tr>
<tr>
<td>To help you understand how the DPUUID macro outputs data, lets assume we have 2 DPIDs mapped to DPUUIDs as shown below:</td>
<td></td>
</tr>
<tr>
<td>• DPID 1111 maps to DPUUIDs AAAAA (timestamp = 1) and BBBBB (timestamp = 2).</td>
<td></td>
</tr>
<tr>
<td>• DPID 2222 maps to DPUUID CCCCC.</td>
<td></td>
</tr>
<tr>
<td>Given these conditions, the following table enumerates some possible format strings and their output.</td>
<td></td>
</tr>
<tr>
<td>Mapping Condition</td>
<td>Macro Format</td>
</tr>
<tr>
<td>--------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Return all mappings for a single DPID</td>
<td>`&lt;DPUIIDS; format=&quot;dpids=1111</td>
</tr>
<tr>
<td>Return a maximum of 1 mapping for all DPIDs</td>
<td>`&lt;DPUIIDS; format=&quot;dpids=1111,2222</td>
</tr>
<tr>
<td>Return a maximum of 2 mappings for a single DPID</td>
<td>`&lt;DPUIIDS; format=&quot;dpids=2222</td>
</tr>
</tbody>
</table>

**Outbound Template Macros**

**Sending Audience Data**

Send audience data from other sources to Audience Manager.

**Real-Time Inbound Data Integration**

Information about the Real-Time Audience Manager integration.

**Real-Time Data Transfer Process Described**

A general overview of how Audience Manager performs real-time data transfers with a third-party content provider.

**Real-Time Data Transfers**

Real-time data transfers send and receive segment IDs as a user visits or takes action on your site. Typically, synchronous data transfers are useful when you need to qualify or segment users right away, as they navigate through your inventory.

**Data Integration Steps**

The real-time data integration process works as follows:

1. A user visits a customer's site that contains Audience Manager code.
2. Audience Manager loads an iframe and makes a call to our Data Collection Server (DCS).
3. The DCS calls the third-party server (in real time) to check if the vendor has any segment information about the user.
4. The content provider returns segment information about that user to Audience Manager.
5. Audience Manager receives this segment information and makes it available for targeting and building new traits and segments.
Technical Specifications for Inbound, Real-Time Data Transfers

Third-party content providers can expect to exchange data with Audience Manager according to these technical specifications. A real-time (synchronous) integration transfers data in near-real time as a user visits or takes actions on your site. Technical, engineering, or development teams should use this material to help set up real-time data transfers with Audience Manager.

Pixel-based Data Transfers

Simple pixels (that can be used to qualify users for traits) perform real-time data transfers. The Audience Manager interface lets clients create any number of pixels on a self-service basis. Pixel strings consist of simple IDs or key-value pairs.

To enable inbound data transfers, the vendor and client would:

1. Determine which traits you wish the vendor or partner to fire.
2. Get the pixel for the trait. In the traits list screen, hover over the **Actions** column and click the **Get trait URL** symbol for the desired trait.
3. Provide the URL to the vendor or partner.

Examples

This basic event call sends trait ID 1234 to Audience Manager.
You can serialize trait IDs in an event call to help reduce HTTP traffic from the page. Append additional trait IDs to the URL string as shown in the following example:

http://something.demdex.net/event?d_sid=1234,5678,9876,5432

**Real-Time Inbound Data Ingestion**

The real-time inbound data ingestion process uses a series of HTTP requests from a user's browser to pass in data to Audience Manager.

Inbound data should be formatted as key-value pairs called signals. Typically, each signal is mapped to a segment created or managed through the user interface or API.

**URL String Parameters and Syntax**

The URL for an inbound data transfer should contain the variables described below. Remember to **create traits** and a **folder structure** in the Audience Manager UI before setting up real-time data transfers.

💡 **Note:** Replace italicized content with actual parameter values.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;KEY&gt;</td>
<td>A unique identifier in a key-value pair (e.g., gender, color, price).</td>
</tr>
<tr>
<td>&lt;VAL&gt;</td>
<td>A variable that belongs to the data set defined by the key (e.g., gender=male, color=green, price=100)</td>
</tr>
</tbody>
</table>

**URL Syntax**

During a real-time inbound data ingestion process, a properly formatted URL string uses the following syntax:

http://client.demdex.net/event?KEY1=VALA&KEY2=VALB&KEY3=VALC

**Batch Data Transfer Process Described**

A general overview of how Audience Manager performs an asynchronous batch data exchange with a third-party vendor.

**Batch Data Integration**

The batch data integration process saves visitor information on our servers and synchronizes that material with data sent by a provider at regular intervals. The asynchronous data transfer process is useful when:

- Immediate data transfers are not required.
- Collecting data to build a large pool of segmented users.
- You want to reduce data discrepancies and HTTP calls from the browser.
**Data Integration Steps**

1. A user visits a customer site.
2. Audience Manager and the third-party data provider assign the visitor a unique ID (usually with a cookie).
3. Audience Manager calls the third-party data provider to match visitor IDs.
4. A scheduled request, usually on a daily interval, exchanges visitor segment data between Audience Manager and your third-party data provider.
5. Whenever an inbound Server-to-Server file is processed, a receipt is sent via email to partner solutions and, if configured, to the partner. For more information, see *Sample Message to Partners after Inbound Processing.*

**Send Batch Data to Audience Manager Overview**

An overview for technical and non-technical customers who want to bring data from other systems (offline) into Audience Manager.

**Advantages**

You can make data from other systems available in Audience Manager. Our system can help you unlock value and leverage user data that you’ve collected previously. This includes information about purchases, customer surveys, registration data, CRM databases, etc. While each integration presents its own challenges, they all share these common steps. Review this material to help reduce the effort required to bring your offline data online.
Step 1: Synchronize User IDs

During synchronization, Audience Manager assigns unique IDs to clients and their users. These IDs are known as the Data Provider ID (DPID) and Unique User ID (UUID), respectively. Audience Manager uses the DPID and UUID to identify users and qualify them for traits, segments, audience groups, and for reporting. Additionally, our data collection code (DIL) looks for these IDs to capture visitor data from your website. When this step is complete, Audience Manager and your offline repository should contain corresponding IDs for each user record.

Important considerations about this step:

• **Client ID placement:** Audience Manager needs to know where your client ID appears on your website (e.g., is it stored in a cookie, an Analytics variable, in page code, etc.).

• **Exclude PII:** User IDs must not contain personally identifiable information (PII).

• **Case and content sensitivity:** During a real-time data sync, user IDs captured from your site by Audience Manager must correspond to IDs passed in from your offline repository. For example, if offline records hold information about User123, but your site renders that ID as USER123, Audience Manager sees these as different visitors. As a result, online information for this visitor cannot be associated with the corresponding records in your offline database. IDs must match exactly.

See *ID Synchronization for Inbound Data Transfers*.

Step 2: Data File Format

File names and content follow strict guidelines. You must name and organize data files according to these specifications in this guide. See:

• Amazon S3 Name and File Size Requirements for Inbound Data Files
• FTP Name and File Size Requirements for Inbound Data Files
• Inbound Data File Contents: Syntax, Invalid Characters, Variables, and Examples

Online Data is Available for Offline Marketing Efforts

When you bring offline data online, you can still use this information for offline campaigns. To do this, Audience Manager exports trait and segment information to an FTP or Amazon S3 location of your choice. Contact your Partner Solutions manager for additional information or assistance.

Environments

Audience Manager provides the following environments for file drop-off:

<table>
<thead>
<tr>
<th>Environment</th>
<th>Service</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>FTP</td>
<td>ftp-in.demdex.com</td>
</tr>
<tr>
<td></td>
<td>S3</td>
<td>demdex-s2s-clients</td>
</tr>
<tr>
<td>Beta</td>
<td>FTP</td>
<td>sandbox-ftp-in.demdex.com</td>
</tr>
<tr>
<td>Environment</td>
<td>S3</td>
<td>demdex-s2s-clients-sandbox-us-east-1</td>
</tr>
</tbody>
</table>

Further Technical Reading
Systems engineers, developers, or technical/implementation teams should review Real-Time Inbound Data Integration and Batch Data Transfer Process Described. These sections provide details about transfer protocols, file content, and file name requirements.

**Technical Specifications for Inbound Batch Data Transfers**

Third-party content providers should format and send data to Audience Manager according to these specifications. For a list of frequently asked questions about onboarding an offline CRM database into Audience Manager, see Inbound Customer Data Ingestion FAQ.

**ID Synchronization for Inbound Data Transfers**

Describes the syntax and parameters used in the initial HTTP call to synchronize user IDs between a vendor and Audience Manager. ID synchronization can begin after you send your data taxonomy to Audience Manager.

ID synchronization is the first step in the inbound, asynchronous data transfer process. In this step, Audience Manager and the vendor compare and match IDs for their respective site visitors. For example, an Audience Manager customer may know a user by ID 123. However, your data partner could identify this user with ID 456. The synchronization process allows Audience Manager and a data vendor to reconcile these different IDs and identify users in their respective systems. Once complete, Audience Manager and your third-party partner should have corresponding IDs for each unique user seen on our networks.

You can use the following methods to get your data into Audience Manager:

- ID Synchronization HTTP Request
- Declared ID Event
- ID Synchronization From an Email Embedded Image

**ID Synchronization HTTP Request**

In an ID exchange, a properly formatted URL string should look like this:

```
http://dpm.demdex.net/ibs:dpid=<VENDOR_ID>&dpuuid=<VENDOR_UUID>&redir=<REDIRECT_URL>
```

The URL for your inbound ID synchronization call should contain variables described in the table below.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>&lt;VENDOR_ID&gt;</code></td>
<td>Unique ID for the content provider (assigned by Audience Manager).</td>
</tr>
<tr>
<td><code>&lt;VENDOR_UUID&gt;</code></td>
<td>URL (Percent) Encoded representation of your Unique User ID. In addition to</td>
</tr>
<tr>
<td></td>
<td>encoding reserved ASCII characters, any non-ASCII characters should be percent</td>
</tr>
<tr>
<td></td>
<td>encoded based on the UTF-8 character encoding table.</td>
</tr>
<tr>
<td></td>
<td>For more information, see the <a href="#">URL Encode/Decode Online</a> website.</td>
</tr>
<tr>
<td><code>&lt;REDIRECT_URL&gt;</code></td>
<td>An encoded URL redirect with the macro <code>$(DD_UUID)</code> embedded within it.</td>
</tr>
</tbody>
</table>

💡 **Note:** Replace italicized content with actual parameter values.
Declared ID Event

For more information, see *Declared IDs*.

ID Synchronization From an Email Embedded Image

The format for matching IDs via an email image is the same as shown above. Note, however, that images in an email must be enabled for this to work. This can affect ID synchronization via email because most mail systems disable images by default.

Name and Content Requirements for ID Synchronization Files

Describes the required fields, syntax, and naming conventions used for file-based ID synchronization. Name and organize your file contents according to these specifications.

Contents:

- File Name Syntax and Examples
- File Content Syntax and Examples
- Synchronization Matches DPUUIDs to UUIDs
- Other Format Requirements

*Note:* The text styles (monospaced text, italics, brackets [], (), etc.) in this document indicate code elements and options. See *Style Conventions for Code and Text Elements* for more information.

File Name Syntax and Examples

ID file names contain the following required and optional elements:

```
adobe_id_MASTERDPID_DPID[_DPID_DPID]_TIMESTAMP.sync[SPLIT_NUMBER][.gz]
```

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>adobe_id</td>
<td>A static prefix that identifies the file as an ID file.</td>
</tr>
<tr>
<td>MASTERDPID</td>
<td>The master data provider ID is the parent ID of the DPIDs in the file name. Also, the first user ID in the data file corresponds to the master ID. The subsequent DPIDs are other identifiers that belong to the master. Synchronization maps DPIDs in the file name to UUIDs in the file.</td>
</tr>
<tr>
<td>DPID</td>
<td>Data provider IDs. These IDs represent entities or data sources associated with the master DPID. Synchronization maps DPIDs in the file name to UUIDs in the file. The number of DPIDs in the file name must match the number of UUIDs in the data file. For example, say your file name contains a master DPID and 3 DPIDs. Your data file must include 4 corresponding columns of UUIDs, formatted as described in the file content section below.</td>
</tr>
<tr>
<td>timestamp</td>
<td>A 10-digit, UNIX timestamp in seconds. The timestamp helps make each file name unique.</td>
</tr>
</tbody>
</table>
Parameter | Description
--- | ---
.sync | Indicates a normal, full synchronization.
.SPLIT_NUMBER | An integer. Used when you split large files into multiple smaller files. This helps improve processing times. The number indicates which part of the original file you’re sending in. See the file name examples below.
.gz | Specifies that your file is compressed with optional gzip compression.

File Name Examples

The following examples show properly formatted file names. Your file names could look similar.

```
adobe_id_111_222_333_444_1454442149.sync
adobe_id_123_898_456_1454442149.sync.1.gz
adobe_id_123_898_456_1454442149.sync.2.gz
```

File Content Syntax and Examples

The contents of an ID file include the following elements:

```
UUID <tab> UUID <tab> UUID <tab> UUID
```

The file contains user IDs (UUID). In each row, separate the IDs with a tab. The following example shows a properly formatted ID file. Your contents could look similar.

```
abc123 def456 ghi789 xyz987
```

Synchronization Matches DPUUIDs to UUIDs

The purpose of an ID sync file is to sync the **DPUUIDs** from your own Data Sources with Audience Manager UUIDs. Synchronization maps the DPUUIDs from the master DPID and its related DPIDs to the Audience Manager UUIDs. Where you put the IDs in the file name and body determines how these identifiers are mapped to each other. For example, take the two sample files shown here:

- **File 1:** adobe_id_0_12345_1476312152.sync
- **File 2:** adobe_id_12345_67890_1476312876.sync

Given the sample name and contents, the IDs map together like this:

**File 1** ([Download sample file](#))

<table>
<thead>
<tr>
<th>DPID 0 = Adobe Audience Manager UUIDs</th>
<th>DPID 12345</th>
</tr>
</thead>
<tbody>
<tr>
<td>68079982765673198504052656074456196039</td>
<td>XYZ3017D_2kzkTOXkFYlAgwbajoqWRCqkJlTTrj6E4hJaMR38</td>
</tr>
<tr>
<td>67412682083411995725538770443620307584</td>
<td>XYZ3017BBR4DAFJWM6D4Gb4IN_T5jke_f7rdEcoqNSlwWwA7hI70</td>
</tr>
<tr>
<td>89159024796760343733111707646026765593</td>
<td>XYZ3017PryPfldhClkEE-qE034Ll-53Jde0tCYclwdo0A2OIM</td>
</tr>
<tr>
<td>66552757407517449462805881945288602094</td>
<td>XYZ3017QvBddD-bLJS28DPixqUltmllBx3_556tQJMLuregJU2M</td>
</tr>
<tr>
<td>66184778222667870903738139438735041506</td>
<td>XYZ3017q9r60kuHPOca_Ek-btCN2ku1HyValJe0rd412TzyCMw</td>
</tr>
</tbody>
</table>
Step 1: the ID sync process will sync the DPUUIDs from DPID 12345 with the Audience Manager UUIDs in the left column. Note that the DPID "0" in the file name represents Audience Manager UUIDs.

**File 2 (Download sample file)**

<table>
<thead>
<tr>
<th>DPID 12345</th>
<th>DPID 67890</th>
</tr>
</thead>
<tbody>
<tr>
<td>XYZ3017D_2kzhTOXkFYIAgwbaqoqWRcqlX-I-Tlrj6E4njmAMR38</td>
<td>4598060374</td>
</tr>
<tr>
<td>XYZ3017BBR4DAFJWM6D4Gb4IN_T5jk_f7rdEoqNs9wfnA7h70</td>
<td>4581274262</td>
</tr>
<tr>
<td>XYZ3017PrY8zthkEE-gEO34LI-53Jd0uCYclwdoA2OlM</td>
<td>4392434426</td>
</tr>
<tr>
<td>XYZ3017QvBddD-bLJS28DPxiqUHmlBxE3_55bQJMLwregI2M</td>
<td>2351382994</td>
</tr>
<tr>
<td>XYZ3017q9t60kuHPOca_Ek-btCN2ku1HyVaUe0rd12TzbyCMw</td>
<td>4601584763</td>
</tr>
</tbody>
</table>

Step 2: the DPUUIDs from DPID 12345 have been synced in step 1 with the Audience Manager UUIDs. What this ID sync will do is sync the DPUUIDs from DPID 67890 with the Audience Manager UUIDs from step 1.

**Other Format Requirements**

- User IDs cannot
  - Have tabs in the ID itself. Tabs are used only to separate individual IDs in the data file.
  - Contain personally identifiable information (PII).
  - Use URL encoding. Pass in unencoded IDs only.
  - Any rows that end with tabs or spaces will not be processed or realized. As a rule, make sure you keep the end of the rows clear.

**Amazon S3 Name and File Size Requirements for Inbound Data Files**

Describes the required fields, syntax, naming conventions and file sizes you need to follow when sending data to Audience Manager. Set the names and sizes of your files according to these specifications when you send data to an Audience Manager / Amazon S3 directory.

Contents:

- File Name Syntax
- File Name Examples
- Accepted File Sizes

💡 **Note:** The text styles (monospaced text, italics, brackets [], (), etc.) in this document indicate code elements and options. See *Style Conventions for Code and Text Elements* for more information.

**File Name Syntax**

S3 file names contain the following required and optional elements:

- **S3 prefix:** `s3n://AWS_directory/partner_name/date=yyyy-mm-dd/`
- **File name elements:**
  - `ftp_dpm_DPID[[_DPID_TARGET_DATA_OWNER]_TIMESTAMP(.sync|.overwrite)[.SPLIT_NUMBER][.gz]]`
Note: Audience Manager only processes ASCII and UTF-8 encoded files.

Name Elements

The table defines the elements in an S3 file name.

<table>
<thead>
<tr>
<th>Name Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AWS_directory</strong></td>
<td>The path to and name of your Amazon S3 bucket. Contact your Account Manager for your S3 directory name, path, and credentials.</td>
</tr>
<tr>
<td><strong>date=yyyy-mm-dd</strong></td>
<td>A timestamp (based on UTC time) of when you send the files to your S3 bucket.</td>
</tr>
<tr>
<td><strong>DPID</strong></td>
<td>The Data Provider ID (DPID) is an identifier that tells Audience Manager if a data file contains your own user IDs or Android or iOS IDs. Accepts the following options:</td>
</tr>
<tr>
<td><strong>Data Partner ID</strong></td>
<td>This is a unique ID Audience Manager assigns to your company or organization. Use this assigned ID in a file name when sending in data that contains your own user IDs. For example, ...ftp_dpm_21_123456789.sync tells Audience Manager that a partner with ID 21 sent the file and it contains user IDs assigned by that partner.</td>
</tr>
<tr>
<td><strong>Android IDs (GAID)</strong></td>
<td>Use ID 20914 as the DPID in a data file name if the file contains Android IDs. When you use ID 20914 as the DPID, you still need to identify your company to Audience Manager. This means the file name must use the <strong>_DPID_TARGET_DATA_OWNER</strong> parameter to hold your company ID. For example, say you're passing in files with Android IDs and your Data Provider ID is 21. In this case, the file name would look like ...ftp_dpm_20914_21_123456789.sync. This tells Audience Manager the file contains Android IDs and is from a partner identified by ID 21.</td>
</tr>
<tr>
<td><strong>iOS IDs (IDFA)</strong></td>
<td>Use ID 20915 as the DPID in a data file name if the file contains iOS IDs. When you use ID 20915 as the DPID, you still need to identify your company to Audience Manager. This means the file name must use the <strong>_DPID_TARGET_DATA_OWNER</strong> parameter to hold your company ID. For example, say you're passing in files with Android IDs and your Data Provider ID is 21. In this case, the file name would look like ...ftp_dpm_20915_21_123456789.sync. This tells Audience Manager the file contains iOS IDs and is from a partner identified by ID 21.</td>
</tr>
</tbody>
</table>

Note: Do not mix ID types in your data files. For example, if your file name includes the Android identifier, don’t put iOS IDs or your own IDs in the data file.

See also the **_DPID_TARGET_DATA_OWNER** entry below.
<table>
<thead>
<tr>
<th>Name Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>DPID_TARGET_DATA_OWNER</em></td>
<td>A placeholder for an ID. For example, you could set it to your Audience Manager ID if you set the DPID to a data source ID or an Android or iOS ID. This lets Audience Manager link the file data back to your organization.</td>
</tr>
<tr>
<td></td>
<td>For example:</td>
</tr>
<tr>
<td></td>
<td>• ...ftp_dpm_33_21_1234567890.sync shows a partner with ID 21 has sent in data from a data source that uses ID 33.</td>
</tr>
<tr>
<td></td>
<td>• ...ftp_dpm_20914_21_1234567890.sync shows a partner with ID 21 has sent in data that contains Android IDs.</td>
</tr>
<tr>
<td></td>
<td>• ...ftp_dpm_20915_21_1234567890.sync shows a partner with ID 21 has sent in data that contains iOS IDs.</td>
</tr>
<tr>
<td>partner_name</td>
<td>The company or organization name you use in Audience Manager.</td>
</tr>
<tr>
<td>TIMESTAMP</td>
<td>A 10-digit, UTC UNIX timestamp in seconds. The timestamp helps make each file name unique.</td>
</tr>
<tr>
<td>(.sync</td>
<td>.overwrite)</td>
</tr>
<tr>
<td></td>
<td>• sync: Normal scenario when third-party data providers send traits on a per-user basis to be added or removed in the Audience Manager system.</td>
</tr>
<tr>
<td></td>
<td>• overwrite: Lets data providers send a list of traits on a per-user basis that should overwrite all of this user's existing third-party traits for this data provider in the Audience Manager. You do not need to include all of your users in an overwrite file. Include only those users that you want to change.</td>
</tr>
<tr>
<td>[SPLIT_NUMBER]</td>
<td>An integer. Used when you split large files into multiple parts to improve processing times. The number indicates which part of the original file you’re sending in.</td>
</tr>
<tr>
<td></td>
<td>For efficient file processing, split your data files as indicated:</td>
</tr>
<tr>
<td></td>
<td>• Uncompressed: 1 GB</td>
</tr>
<tr>
<td></td>
<td>• Compressed: 200-300 MB</td>
</tr>
<tr>
<td></td>
<td>See the first 2 file name examples below.</td>
</tr>
<tr>
<td>[.gz]</td>
<td>When sending files to Amazon S3, use gzip compression only. When compressed, these files get the .gz extension. Do not use .zip compression. Compressed files must be 1 GB or smaller. If your files files are larger, please talk to Customer Care. Although Audience Manager can handle large files, we may be able to help you reduce the size of your files and make data transfers more efficient. See File Compression for Inbound Data Transfer Files.</td>
</tr>
</tbody>
</table>

File Name Examples
The following examples show properly formatted file names. Your file names could look similar.
You can download the sample file if you want additional examples. This file has been saved with the .overwrite file extension. Open it with a simple text editor.

**Accepted File Sizes**

Consider the figures below for fastest/earliest processing of your files as well as for file size limitations when you send data to an Audience Manager / Amazon S3 directory.

<table>
<thead>
<tr>
<th>File Type</th>
<th>Optimal Size</th>
<th>Maximum Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressed</td>
<td>200-300 MB</td>
<td>1 GB</td>
</tr>
<tr>
<td>Uncompressed</td>
<td>1 GB</td>
<td>5 GB</td>
</tr>
</tbody>
</table>

*Note:* The inbound data validation process will mark empty files as invalid and will not process them.

**FTP Name and File Size Requirements for Inbound Data Files**

Describes the required fields, syntax, naming conventions and file sizes you need to follow when sending data to Audience Manager. Set the names and sizes of your files according to these specifications when you send data to an Audience Manager FTP directory.

Contents:

- *File Name Syntax*
- *File Name Examples*
- *Accepted File Sizes*

*Note:* The text styles (monospaced text, italics, brackets [], (), etc.) in this document indicate code elements and options. See Style Conventions for Code and Text Elements for more information.

**File Name Syntax**

FTP file names contain the following required and optional elements:

```
ftp_dpm_DPID[ _DPID_TARGET_DATA_OWNER]_TIMESTAMP(sync|overwrite)[.SPLIT_NUMBER][.gz|.tar|.tgz|.zip]
```

*Note:* Audience Manager only processes ASCII and UTF-8 encoded files.

**Name Elements**

The table defines the elements in an FTP file name.
<table>
<thead>
<tr>
<th>File Name Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DPID</strong></td>
<td>An ID that tells Audience Manager if a data file contains your own user IDs or Android or iOS IDs. Accepts the following options:</td>
</tr>
<tr>
<td></td>
<td>• <strong>Data Partner ID</strong>: This is a unique ID Audience Manager assigns to your company or organization. Use this assigned ID in a file name when sending in data that contains your own user IDs. For example, ...ftp_dpm_21_123456789.sync tells Audience Manager that a partner with ID 21 sent the file and it contains user IDs assigned by that partner.</td>
</tr>
<tr>
<td></td>
<td>• <strong>Android IDs (GAID)</strong>: Use ID 20914 in a data file name if it contains Android ID. For example, ...ftp_dpm_20914_123456789.sync tells Audience Manager that the data file contains Android IDs only.</td>
</tr>
<tr>
<td></td>
<td>• <strong>iOS IDs (IDFA)</strong>: Use ID 20915 in a data file name if it contains iOS IDs. For example, ...ftp_dpm_20915_123456789.sync tells Audience Manager that the data file contains iOS IDs only.</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong>: Do not mix ID types in your data files. For example, if your file name includes the Android identifier, don't put iOS IDs or your own IDs in the data file.</td>
</tr>
<tr>
<td><strong>_DPID_TARGET_DATA_OWNER</strong></td>
<td>A placeholder for an ID. For example, you could set it to your Audience Manager ID if you set the DPID to a data source ID or an Android or iOS ID. This lets Audience Manager link the file data back to your organization.</td>
</tr>
<tr>
<td></td>
<td>For example:</td>
</tr>
<tr>
<td></td>
<td>• ...ftp_dpm_33_21_1234567890.sync shows a partner with ID 21 has sent in data from a data source that uses ID 33.</td>
</tr>
<tr>
<td></td>
<td>• ...ftp_dpm_20914_21_1234567890.sync shows a partner with ID 21 has sent in data that contains Android IDs.</td>
</tr>
<tr>
<td></td>
<td>• ...ftp_dpm_20915_21_1234567890.sync shows a partner with ID 21 has sent in data that contains iOS IDs.</td>
</tr>
<tr>
<td>(.sync</td>
<td>.overwrite)</td>
</tr>
<tr>
<td></td>
<td>• <strong>sync</strong>: Normal scenario when third-party data providers send traits on a per-user basis to be added or removed in the Audience Manager system.</td>
</tr>
<tr>
<td></td>
<td>• <strong>overwrite</strong>: Lets customers and data providers send a list of traits on a per-user basis that should overwrite all of this user's existing traits for a given data source in Audience Manager. You do not need to include all of your users in an overwrite file. Include only those users that you want to change. Traits that are not assigned to the target data source will not be erased.</td>
</tr>
<tr>
<td>ftp_dpm_</td>
<td>The path to and name of your Audience Manager FTP directory. Contact your Account Manager for the FTP directory and credentials.</td>
</tr>
</tbody>
</table>
An integer. Used when you split large files into multiple parts to improve processing times. The number indicates which part of the original file you're sending in. For efficient file processing, split your data files as indicated:

- Uncompressed: 1 GB
- Compressed: 200-300 MB

See the first 2 file name examples below.

A 10-digit, UTC UNIX timestamp in seconds. The timestamp helps make each file name unique.

Allowed compression options for an FTP file name. If you use one of these options, make sure the file name has the proper extension.

Compressed files must be 1 GB or smaller. If your files files are larger, please talk to Customer Care. Although Audience Manager can handle large files, we may be able to help you reduce the size of your files and make data transfers more efficient. See File Compression for Inbound Data Transfer Files.

The following examples show properly formatted file names. Your file names could look similar.

ftp_dpm_478_1366545717.sync.1.gz
ftp_dpm_478_1366545717.sync.2.gz
ftp_dpm_478_1366545717.sync.zip
ftp_dpm_478_1366545717.sync.tgz
ftp_dpm_478_1366545717.overwrite

Download the sample file if you need additional examples. This file is saved with the .overwrite file extension. Open it with a simple text editor.

Consider the figures below for fastest/earliest processing of your files as well as for file size limitations when you send data to an Audience Manager / FTP directory.

<table>
<thead>
<tr>
<th>File Type</th>
<th>Optimal Size</th>
<th>Maximum Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressed</td>
<td>200-300 MB</td>
<td>1 GB</td>
</tr>
<tr>
<td>Uncompressed</td>
<td>1 GB</td>
<td>5 GB</td>
</tr>
</tbody>
</table>

Inbound Data File Contents: Syntax, Invalid Characters, Variables, and Examples

Required fields, syntax, and rules you should follow when formatting an inbound trait data file.
Contents:

- File Content Syntax
- File Variables Defined
- Invalid Characters in Trait IDs, User IDs and Key-Value Pairs
- Formatting Trait IDs
- Data File Examples
- Examples Matrix

File Content Syntax

Fields in the inbound data file must appear in the order shown below. In this example, the < > symbols have been added to help separate each element visually. You do not need to include these in your data file.

<user ID><TAB><trait ID>,<trait ID>,<trait ID>,...

💡 Note: We have a limit of 200 lines we can process for each user ID sent in the inbound data file. For example, if you send 300 lines for a user ID, the first 200 lines are kept and the additional 100 lines are discarded.

File Variables Defined

The table lists and defines the variables used in a properly formatted inbound data file. *Italics* indicates a variable placeholder.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
</table>
| **User ID**  | A User ID can be:  
• A unique user ID assigned by Audience Manager *(Audience Manager UUID)*.  
• A unique user ID assigned in your CRM system *(DPUUID, in Audience Manager)*.  
• A mobile Android or iOS device ID in its original, unmodified form as exposed by the mobile operating system.  
For mobile IDs:  
• IDFA format: IDs must be upper case and not hashed. For example, 6D92078A-8246-4BA4-AE5B-76104861E7DC  
• Android format: IDs must be lower case and not hashed. For example, 97987bca-ae59-4c7d-94ba-ee4f19ab8c21 |
| **TAB**      | Separate the User ID and trait IDs with a single tab delimiter. |
| **trait ID** | The Audience Manager trait ID. We ask that you include *only onboarded traits* in inbound data files. We do not process any other trait types in the inbound data transfer.  
💡 Note: *The Trait ID can be found by using the GET method that returns details about all your traits. For more information, see Trait API Methods.* |
## Formatting Trait IDs

The following table describes the prefixes that identify trait names or IDs in an inbound data file. See the *sample files* for examples.

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>d_sid=</td>
<td>The d_sid prefix tells our system that the ID is an Audience Manager trait ID. This is the same ID that's shown in the user interface. You can also return trait IDs with the API GET method. See <em>Trait API Methods</em>.</td>
</tr>
<tr>
<td>d_unsid=</td>
<td>Data prefixed with d_unsid removes users from that trait. The d_unsid prefix is ignored in an overwrite file. The d_unsid prefix tells our system that the ID is an Audience Manager trait ID. This is the same ID that's shown in the user interface. You can also return trait IDs with the API GET method. See <em>Trait API Methods</em>.</td>
</tr>
</tbody>
</table>
| ic=      | *Trait rules* let you set criteria for trait qualification. If you format a trait rule as ic == trait ID, you can send in traits in a simple comma formatted list. For example, say you create these 3 trait rules:  

```plaintext
  ic == "123"
  ic == "456"
  ic == "789"
```

These traits are associated with the ic key. This lets you create a simpler trait list in the data file. And, you do not need to include the ic prefix. As a result, the contents of your data file could look like this:  

```plaintext
  user ID <TAB> 123,456,789
```

| Key-value pairs | Trait data can be formatted as key-value pairs using alphanumeric strings. There are several ways of formatting key-value pairs, as shown below:  

* key = value  
* "key" = value  
* key = "value"  
* "key" = "value"  

"age"="32", "gender"=m, model = "pickup truck", product = tablet are all examples of correctly formatted key-value pairs. |

## Invalid Characters in Trait IDs, User IDs and Key-Value Pairs

### Trait IDs

Trait IDs consist only of numerical characters. We ask that you include *only onboarded traits* in inbound data files. We do not process any other trait types in the inbound data transfer.
### User IDs

<table>
<thead>
<tr>
<th>ID Type</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPUUID</td>
<td><em>Do not use an encoded colon (%3A) or unencoded colon (:) symbol in DPUUIDs.</em></td>
</tr>
<tr>
<td>Mobile iOS (IDFA) or Android device ID</td>
<td>Mobile device IDs must be strictly formatted as shown here:</td>
</tr>
<tr>
<td></td>
<td>• IDFA format: IDs must be upper case and not hashed. For example,</td>
</tr>
<tr>
<td></td>
<td>6D92078A-8246-4BA4-AE5B-76104861E7DC</td>
</tr>
<tr>
<td></td>
<td>• Android format: IDs must be lower case and not hashed. For example,</td>
</tr>
<tr>
<td></td>
<td>97987bca-ae59-4c7d-94ba-ee4f19ab8c21</td>
</tr>
</tbody>
</table>

### Key-Value Pairs

Improperly formatted value names in a key-value pair also cause problems. Follow these rules when creating or naming the value in a key-value pair:

<table>
<thead>
<tr>
<th>Character</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quote character (&quot;)</td>
<td>Be careful when using the quote sign (&quot; ) in the value part of key-value pairs. The quote character must be escaped by using a double quote. Any of the examples below are accepted:</td>
</tr>
<tr>
<td></td>
<td>• d _city = &quot;New York&quot; or &quot;San Francisco&quot;</td>
</tr>
<tr>
<td></td>
<td>• &quot;d _city&quot; = &quot;New York&quot; or &quot;San Francisco&quot;</td>
</tr>
<tr>
<td>Dash character (-)</td>
<td>We ignore dash signs at the start of keys. For example, -product = camera is interpreted as product = camera.</td>
</tr>
<tr>
<td>TAB</td>
<td><em>Do not use TAB instead of empty values in key-value pairs. Only use TAB to separate variables in the inbound data file.</em></td>
</tr>
<tr>
<td>\n, \t</td>
<td>Do not use the new line or tab characters (\n, \t) in keys or in values.</td>
</tr>
</tbody>
</table>

### Data File Examples

<table>
<thead>
<tr>
<th>Data File Format</th>
<th>Description and Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>With d_sid or d_unsid</td>
<td>This data file shows a user qualified for traits 24, 26, 27 and has been removed from trait 28 and 29.</td>
</tr>
<tr>
<td></td>
<td>59767559181262060060278870901087098252</td>
</tr>
<tr>
<td></td>
<td>d_sid=24,d_sid=26,d_sid=27,d_unsid=28,d_unsid=29</td>
</tr>
</tbody>
</table>
### Data File Format

<table>
<thead>
<tr>
<th>Description and Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Note:</strong></td>
</tr>
<tr>
<td>Instead of using <code>d_unsid</code>, you can also remove traits from user profiles by using the following syntax:</td>
</tr>
<tr>
<td>59767559181262060060278870901087098252 28:0, 29:0</td>
</tr>
<tr>
<td>59767559181262060060278870901087098252 28:-1, 29:-1</td>
</tr>
</tbody>
</table>

- **With ** `ic==`:
  - These traits have been added to a trait rule with the `ic` prefix. As such, you can add them to the data file separated by commas as shown. A tab separates the UUID and the trait IDs. The `ic` prefix is not required in the file.

  **Numeric IDs**
  **Numeric IDs**
  DBwFoc3dhfMNCF Bh2M4F92kJEXMNnRDh2PXvnI1 30608,50354,50338,50352,30626

  **String IDs**
  **String IDs**
  DBwFoc3dhfMNCF Bh2M4F92kJEXMNnRDh2PXvnI1 ic=52,ic=55

- **With key-value pairs**:
  - This file data uses key-value pairs to pass in data to Audience Manager.

  59767559181262060060278870901087098252
  “gender”=”female”, “luxury_shopper”=”yes”

*Download* the sample data file if you need additional examples. The download file has a `.overwrite` file extension. You can open it with a simple text editor.

### Examples Matrix

The chart below shows examples of the correct way to format your Inbound files, depending on the *type of IDs* and the method by which you want to add traits to profiles.

<table>
<thead>
<tr>
<th>ID Type / Operation</th>
<th>Use <code>d_sid</code> to add traits to a user profile</th>
<th>Use <code>d_unsid</code> to remove traits from a user profile</th>
<th>Send in key-value pairs to add traits to a user profile</th>
<th>Use the <code>ic</code> prefix to add traits to a user profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audience Manager UUID</td>
<td>Example 1</td>
<td>Example 2</td>
<td>Example 3</td>
<td>Example 4</td>
</tr>
<tr>
<td>Google Advertising ID for Android Devices</td>
<td>Example 5</td>
<td>Example 6</td>
<td>Example 7</td>
<td>Example 8</td>
</tr>
<tr>
<td>Apple IDFA for iOS devices</td>
<td>Example 9</td>
<td>Example 10</td>
<td>Example 11</td>
<td>Example 12</td>
</tr>
<tr>
<td>Your own CRM ID (DPUUID)</td>
<td>Example 13</td>
<td>Example 14</td>
<td>Example 15</td>
<td>Example 16</td>
</tr>
</tbody>
</table>
Example 1
Use trait IDs to send trait qualification information for Audience Manager UUIDs.

59767559181262060060278870901087098252 <TAB> d_sid=24, d_sid=26, d_sid=27

Example 2
Use trait IDs to send trait disqualification information for Audience Manager UUIDs.

59767559181262060060278870901087098252 <TAB> d_unsid=24, d_unsid=26, d_unsid=27

or

59767559181262060060278870901087098252 <TAB> 24:0, 26:0, 27:0

or

59767559181262060060278870901087098252 <TAB> 24:-1, 26:-1, 27:-1

Example 3
Send in key-value pairs to add trait qualification information for Audience Manager UUIDs.

59767559181262060060278870901087098252 <TAB> product = tablet

or

59767559181262060060278870901087098252 <TAB> "product" = "tablet" or "phone"

Example 4
Use the ic prefix to send trait qualification information for Audience Manager UUIDs.

59767559181262060060278870901087098252 <TAB> 30608,50354,50338,50352,30626

or

59767559181262060060278870901087098252 <TAB> ic=52,ic=55

Example 5
Use trait IDs to send trait qualification information for Android devices.

e4fe9bde-caa0-47b6-908d-ffba3fa184f2 <TAB> d_sid=24, d_sid=25, d_sid=26

Example 6
Use trait IDs to send trait disqualification information for Android devices.

e4fe9bde-caa0-47b6-908d-ffba3fa184f2 <TAB> d_unsid=24, d_unsid=25, d_unsid=26

or

e4fe9bde-caa0-47b6-908d-ffba3fa184f2 <TAB> 24:0, 26:0, 27:0

or

e4fe9bde-caa0-47b6-908d-ffba3fa184f2 <TAB> 24:-1, 26:-1, 27:-1

Example 7
Send in key-value pairs to add trait qualification information for Android devices.

e4fe9bde-caa0-47b6-908d-ffba3fa184f2 <TAB> product = tablet

or

e4fe9bde-caa0-47b6-908d-ffba3fa184f2 <TAB> "product" = "tablet" or "phone"
**Example 8**
Use the ic prefix to send trait qualification information for Android devices.

```
30608,50354,50338,50352,30626
```

or

```
e4fe9bde-caa0-47b6-908d-ffba3fa184f2 ic=52,ic=55
```

**Example 9**
Use trait IDs to send trait qualification information for iOS devices.

```
6D92078A-8246-4BA4-AE5B-76104861E7DC d_sid=24, d_sid=25, d_sid=26
```

**Example 10**
Use trait IDs to send trait disqualification information for iOS devices.

```
6D92078A-8246-4BA4-AE5B-76104861E7DC d_unsid=24, d_unsid=25, d_unsid=26
```

or

```
6D92078A-8246-4BA4-AE5B-76104861E7DC 24:0, 26:0, 27:0
```

or

```
6D92078A-8246-4BA4-AE5B-76104861E7DC 24:-1, 26:-1, 27:-1
```

**Example 11**
Send in key-value pairs to add trait qualification information for iOS devices.

```
6D92078A-8246-4BA4-AE5B-76104861E7DC product = tablet
```

or

```
6D92078A-8246-4BA4-AE5B-76104861E7DC "product" = "tablet" or "phone"
```

**Example 12**
Use the ic prefix to send trait qualification information for iOS devices.

```
30608,50354,50338,50352,30626
```

or

```
e4fe9bde-caa0-47b6-908d-ffba3fa184f2 ic=52,ic=55
```

**Example 13**
Use trait IDs to send trait qualification information for DPUUIDs.

```
DBwFoc3dhfMNCFBh2M4F92kJEXMnRDh2PXvnIl d_sid=24, d_sid=25, d_sid=26
```

**Example 14**
Use trait IDs to send trait disqualification information for DPUUIDs.

```
DBwFoc3dhfMNCFBh2M4F92kJEXMnRDh2PXvnIl d_unsid=24, d_unsid=25, d_unsid=26
```

or

```
DBwFoc3dhfMNCFBh2M4F92kJEXMnRDh2PXvnIl 24:0, 26:0, 27:0
```

or

```
DBwFoc3dhfMNCFBh2M4F92kJEXMnRDh2PXvnIl 24:-1, 26:-1, 27:-1
```
Example 15
Send in key-value pairs to add trait qualification information for DPUUIDs.

```
DBwFoc3dhfMNCFBh2M4F9zkjEXMnnRdh2PXvnI1 <TAB> product = tablet
```

or

```
DBwFoc3dhfMNCFBh2M4F9zkjEXMnnRdh2PXvnI1 <TAB> "product" = "tablet" or "phone"
```

Example 16
Use the ic prefix to send trait qualification information for DPUUIDs.

```
DBwFoc3dhfMNCFBh2M4F9zkjEXMnnRdh2PXvnI1 <TAB> 30608,50354,50338,50352,30626
```

or

```
DBwFoc3dhfMNCFBh2M4F9zkjEXMnnRdh2PXvnI1 <TAB> ic=52,ic=55
```

File Compression for Inbound Data Transfer Files

As an option, you can compress data files when sending them to Audience Manager. Audience Manager supports the following file compression types for inbound, asynchronous data transfers:

- tar (.tar)
- gzip (.gz)
- tar and gzip (.tgz and .tar.gz)
- zip (.zip)

Audience Manager also supports uncompressed files.

Amazon S3 Compression

For delivery to Amazon S3, you must use .gz or uncompressed files. Compressed files must be 1 GB or smaller. If the files are larger, please discuss the file and transfer process with Customer Care. Although Audience Manager can handle very large files, there may be ways to reduce the file size or make transfer of data more efficient.

⚠️ Important: Your FTP client must use binary mode to transfer compressed or encrypted files. Compressed or encrypted files sent in ASCII mode will corrupt the data transfer file.

Best Practices

- Files should be gzip compressed (and have a .gz file extension.)
- The maximum compressed file size for a .gz compressed file is 1 GB.
- Optimal split sizes, for fastest/earliest processing of your files, is approximately 1 GB uncompressed or 200-300 MB compressed.
- Amazon S3 imposes its own, 5 GB file size limit on uploaded files.

File PGP Encryption for Inbound Data Types

As an option, you can encrypt data files with PGP encryption when sending them to Audience Manager.

1. Download the Audience Manager public key
2. Import the public key to your trusted store.
   For example, if you use GPG, the command could be similar to the following:
   
   `gpg --import adobe_pgp.pub`
3. Validate that the key has been imported correctly by running the following command:
gpg --list-keys

You should see a message similar to the following:

<table>
<thead>
<tr>
<th>Type</th>
<th>Fingerprint</th>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>pub</td>
<td>4096R/8496CE32</td>
<td>2013-11-01</td>
<td>Adobe AudienceManager</td>
</tr>
<tr>
<td>sub</td>
<td>4096R/E3F2A363</td>
<td>2013-11-01</td>
<td></td>
</tr>
</tbody>
</table>

4. Encrypt the inbound data using the following command:

```bash
gpg --recipient "Adobe AudienceManager" --cipher-algo AES --output $output.gpg --encrypt $inbound
```

All encrypted data must use `.pgp` or `.gpg` as the file extension (e.g. `ftp_dpm_100_123456789.sync.pgp` or `ftp_dpm_100_123456789.overwrite.gpg`).

💡 Note: Audience Manager supports only the Advanced Encryption Standard (AES) data-encryption algorithm. Audience Manager supports any key size.

Sample Message to Partners after Inbound Processing

Whenever an inbound Server-to-Server file is processed, a receipt is sent via email to partner solutions and, if configured, to the partner.

The following example is a sample email message. The table below the message describes the various lines in the message.

```
From: s2s-delivery-receipt-demdex@demdex.com
Subject: SFTP Server-To-Server Processing Result:

Dear Adobe Partner: (ID:7)

We have received your SFTP file delivery.

File name:

```bash
s3n://<bucket_name>/2013-05-17/ftp_dpm_7_901_1368806402.sync
s3n://<bucket_name>/2013-05-16/ftp_dpm_7_901_1368655202.sync
s3n://<bucket_name>/2013-05-17/ftp_dpm_7_901_1368784804.sync
s3n://<bucket_name>/2013-05-17/ftp_dpm_7_901_1368806403.sync
s3n://<bucket_name>/2013-05-17/ftp_dpm_7_901_1368784802.sync
s3n://<bucket_name>/2013-05-17/ftp_dpm_7_901_1368784803.sync
s3n://<bucket_name>/2013-05-17/ftp_dpm_7_901_1368806404.sync
```

Records received: 40669900
Invalid lines: 7
Invalid UUIDs: 112
Failed UUID lookup: 0
Records without traits: 26730823
```
Records processed: 40669900
Succeeded: 13938958
User without new traits: 26730823
Total signals: 91887926
Total unused signals: 660348376
Total realized traits: 258086908
Total new traits: 258086908
Total removed traits: 0
Total skipped duplicated users: 0
Job start time: 2013-05-17 18:07:49
Job end time: 2013-05-17 18:45:02

The following table contains rows corresponding to lines in the received email message.

<table>
<thead>
<tr>
<th>Line</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>File name</td>
<td>List of all inbound files that Adobe received for this partner that were processed together. In the previous sample email message, the partner ID is 7 and the data owner ID is 901. The tail number (1,2,3...) is the split number added either by the customer or by the inbound distributor.</td>
</tr>
<tr>
<td>Records received</td>
<td>Total number of records Adobe received across all files. In most cases, this should be the total number of lines in inbound files.</td>
</tr>
<tr>
<td>Invalid lines</td>
<td>Number of lines that did not match the expected format. These lines were not recognizable by the inbound job.</td>
</tr>
<tr>
<td>Invalid UUIDs</td>
<td>Number of audience management UUIDs that did not match the expected 38-digit format. Or the audience management UUIDs are not numbers.</td>
</tr>
<tr>
<td>Failed UUID lookup:</td>
<td>Total number of users for whom audience management failed to find a matching UUID. These files have not been ID synced, so audience management cannot look up the UUID.</td>
</tr>
<tr>
<td>Records without traits</td>
<td>Number of records where none of the signals on the line maps to an audience management trait.</td>
</tr>
<tr>
<td>Records processed</td>
<td>Total number of records audience management processed. In most cases, this number should be the same as &quot;Records received.&quot;</td>
</tr>
</tbody>
</table>
Send Segments to a Google AdWords Remarketing List

This procedure requires an AdWords remarketing list, pixel code, and an Audience Manager URL destination. It is also known as a remarketing list for search ads (RLSA) integration. **Applies to paid search only.**

To set up an AdWords remarketing list as an Audience Manager URL destination:

1. In AdWords, *create a website re-marketing list.*
2. Copy the pixel code from the *dynamic remarketing tag.* Do not copy the code this example.

   Your pixel code / image request will look similar to this:

   ```html
   <img height="1" width="1" style="border-style:none;" alt=""
   src="/googleads.g.doubleclick.net/pagead/viewthroughconversion/xxxxxxxxx/?
   value=0&guid=ON&script=0"/>
   ```
3. Remove all the image and source metadata from the pixel code. Your edited code snippet should look similar to this:

```
//googleads.g.doubleclick.net/pagead/viewthroughconversion/xxxxxxxx/?
value=0&guid=ON&script=0
```

4. **Create a URL destination** or edit an existing destination.
5. In the **Segment Mappings** section of your URL destination, add the edited code to the **URL** and **Secure URL** boxes. Prefix the code with `http:` and `https:` in the **URL** and **Secure URL** boxes, respectively.

   **Important:** Replace encoded ampersands `&amp;` with un-encoded ampersands `&`

   **Unsecure URL code:**

   ```
   http://googleads.g.doubleclick.net/pagead/viewthroughconversion/xxxxxxxx/?
   value=0&guid=ON&script=0
   ```

   **Secure URL code:**

   ```
   https://googleads.g.doubleclick.net/pagead/viewthroughconversion/xxxxxxxx/?
   value=0&guid=ON&script=0
   ```

6. Click **Save**.

   **Note:** If you're working with multiple segments, get a new pixel for each segment you want to map to an AdWords destination. This ensures the data is applied to the appropriate remarketing list.

A completed mapping could look similar to this:
Reference

Contains technical documentation about system functionality, data integration, and help files.

Amazon S3: About

Information about Amazon Simple Storage Service (Amazon S3).

As best practice, we recommend using Amazon S3 instead of FTP as a method for getting files from and delivering files to partners. Amazon S3 provides a simple web services interface that can be used to store and retrieve any amount of data, at any time, from anywhere on the web.

The benefits of using Amazon S3 include:

- **Scalability:** Amazon S3 provides almost limitless scalability.
- **Reliability and Availability:** Amazon S3 provides high durability and high availability storage services.
- **Speed:** Amazon S3 allows fast data transfers.
- **Ease of Use:** Amazon S3 is very easy to use and to implement. Your implementation can be up and running in about an hour. Implementing a FTP directory takes much longer.
- **Multi-Part Uploads:** Large files can be uploaded quickly and efficiently as multi-part file uploads.
- **Security:** Amazon S3 provides strong security.
  - All directories are accessible only to the appropriate customer or client.
  - HTTPS protocol support for uploads and downloads. You should always use HTTPS when transferring files in Audience Manager.
  - Amazon S3 provides encryption-at-rest for encrypting outbound data files. We use the SSE-S3 encryption method, which allows encryption keys to be automatically generated and managed by Amazon S3.
- **Debug and Backup Support:** Amazon S3 allows Audience Manager to retain exact copies of files to make debugging or re-transfers easier.

For more information about Amazon S3, see the following resources:

- [Amazon Simple Storage Service (Amazon S3)](https://aws.amazon.com/s3/) on the Amazon Web Services website.
- [Get Started with Amazon Simple Storage Service](https://docs.aws.amazon.com/AmazonS3/latest/userguide/) on the AWS Documentation website.

Advertiser and Publisher Use Cases

Common advertiser and publisher use cases.

Advertiser Use Cases

A look at some common advertiser needs met by Adobe Audience Manager.

Create a Unified View of all Your Users

<table>
<thead>
<tr>
<th>Goal</th>
<th>Benefit</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create a single audience repository to unify customers or prospect data across display impressions, on-site acquisition data, site behavior, email initiatives, and promotions.</td>
<td>A unified customer data repository helps improve audience discovery, business planning, and provides in-depth understanding of audience segments.</td>
<td>For quarterly display media planning, highlight unique audience behaviors across prospect profiles and shift budget to a specific segment or inventory source.</td>
</tr>
<tr>
<td>Goal</td>
<td>Benefit</td>
<td>Example</td>
</tr>
<tr>
<td>------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>• Understand user attributes to help improve media buying efforts.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Create High Value Segments and Improve Reach with Look-alike Modeling

The *Models* documentation contains details about the Audience Manager algorithmic modeling process.

<table>
<thead>
<tr>
<th>Goal</th>
<th>Benefit</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Leverage site behavior, offline data, third-party data, campaign metrics to create valuable audience profiles. &lt;br&gt; • Model those segments against other data sources to increase reach.</td>
<td>• Identify new audiences with behaviors and profiles that mirror the original audience. &lt;br&gt; • Search against your own data and other third-party data that you have access to. This helps you find and identify the most influential data points for high-value audience profiles.</td>
<td>• Identify customers who make expensive purchases. &lt;br&gt; • Run an Audience Manager look-alike model to identify the most influential audience members in that segment. &lt;br&gt; • Target those segments to improve current display advertising or through on-site personalization via Test&amp;Target. &lt;br&gt; • Include the new data in future display campaigns through Test&amp;Target.</td>
</tr>
</tbody>
</table>

Retarget First-Party Data Through a Demand-side Platform (DSP)

<table>
<thead>
<tr>
<th>Goal</th>
<th>Benefit</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retarget visitors on advertiser or partner sites through a DSP to increase ad targeting effectiveness.</td>
<td>• Align analytics data points with display advertising. &lt;br&gt; • Reduction in wasted impressions (don't show impressions to current customers).</td>
<td>• Create a “Vacations - Searchers No Conversion” segment. &lt;br&gt; • Add a rule to exclude recent converters. &lt;br&gt; • Retarget through a DSP with a special offer and subsequent on-site personalization. &lt;br&gt; • Continue to show required content through Test&amp;Target.</td>
</tr>
</tbody>
</table>

Use Partner Data to Create Special Offers for Current Customers

<table>
<thead>
<tr>
<th>Goal</th>
<th>Benefit</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Offer customers special rates based on segment data from business partners.</td>
<td>• Improve offer management and conversion rates by taking advantage of data from strategic partners.</td>
<td>• Import partner data segments, combine them with your own, and offer relevant experiences with Test&amp;Target.</td>
</tr>
</tbody>
</table>
### Use CRM Data to Create Special Offers for Current Customers

<table>
<thead>
<tr>
<th>Goal</th>
<th>Benefit</th>
<th>Example</th>
</tr>
</thead>
</table>
| Integrate your separate data sets in Audience Manager to help manage customer offers based on seasonal or other purchasing behavior. | • Leverage Audience Manager's integration capabilities to support the use of offline data.  
• Increase conversion rates and loyalty by offering customers relevant creative experiences. | • In Audience Manager, create a segment for Fall vacation travelers.  
• In Test&Target, create a campaign to offer airline points for seasonal purchases.  
• Use Analytics to track customer activity through the conversion funnel. If a customer does not convert, retarget with email marketing. |

### Run Email Marketing with On-Site Behavioral and Current Customer Data

<table>
<thead>
<tr>
<th>Goal</th>
<th>Benefit</th>
<th>Example</th>
</tr>
</thead>
</table>
| Use Analytics search behavior to target email marketing messages. | • Align analytics data with marketing initiatives.  
• Combine Analytics data with customer data.  
• Improve collaborative offer management. | • Create a “Purchase Intenders - No Conversion” segment.  
• Target that segment with related emails.  
• Continue to offer content on-site through Test&Target. |

### Tailor the Visitor’s Purchase Path with Current Customer and Third-party Data

<table>
<thead>
<tr>
<th>Goal</th>
<th>Benefit</th>
<th>Example</th>
</tr>
</thead>
</table>
| Take advantage of existing and third-party visitor data to optimize and personalize a customer’s digital experience. | Personalized customer experience helps increase conversion rates. Presenting the right products, offers, and creative experiences can drive purchase activity and improve customer engagement or loyalty. | • In Audience Manager, ingest third-party segment data targeted to small business owners.  
• In Test&Target, create an on-site campaign that offers small business owners targeted messages and offers.  
• Track performance with Audience Manager reports. |
## Improve First-party Data Monetization

<table>
<thead>
<tr>
<th>Goal</th>
<th>Benefit</th>
<th>Example</th>
</tr>
</thead>
</table>
| Create and manage a single first-party data taxonomy for distribution across monetization platforms. | • Single point of management for first-party data.  
• Align Analytics data with audience segments. | • Work with first-party data in Analytics to create a travel enthusiasts segment.  
• Target and monetize that segment off-site through demand and sell-side platforms and trading desks. |

## Publisher Use Cases

A look at some common publisher needs met by Adobe Audience Manager.

### Unify View of User and Highlight Audience Insight

<table>
<thead>
<tr>
<th>Goal</th>
<th>Benefit</th>
<th>Example</th>
</tr>
</thead>
</table>
| Create a single audience repository that provides you with an overview of all your users and data points. This includes information like site behavior (potentially from Analytics), display impressions, offline registration databases, CRM databases, video consumption, email initiatives and promotions. | • Discover audiences, run smarter ad or sales campaigns, and manage customer insight.  
• Aggregate related customer insights across all your channels. | Empower your Ad Sales Research team to monetize publisher audience profiles, highlight "Do it yourself" enthusiasts as relevant for a forthcoming Home Depot campaign. |

### Create Advertising Audience Segments With First-Party Analytics Data

<table>
<thead>
<tr>
<th>Goal</th>
<th>Benefit</th>
<th>Example</th>
</tr>
</thead>
</table>
| Extract maximum value from first-party data to create actionable audience segments, package them, and sell these segments to advertisers looking for specific audiences. | Enhance revenue by monetizing audiences instead of content. | • Aggregate a first-party segment of "Tech Geeks" across a network of properties.  
• Include technical email newsletter registrants.  
• Monetize "Tech Geeks" as a premium product on the digital rate card for relevant advertisers. |

## Improve Personalized Site Content Delivery
## Present specific content to the user to help:

- Increase segment size, page views, and impressions.
- Create a more relevant experience for that site visitor.

**Benefit**

Audience Manager’s real-time analysis helps improve audience recognition, which enhances the on-site experience by delivering relevant, personalized content. This gives you the opportunity to add content personalization as a line item to your premium audience products.

**Example**

- Analytics provides first-party data about audience interest in travel content. Create a segment called “Travel Enthusiasts” based on this information.
- Integrate Audience Manager with a system like Adobe CQ to manage content personalization campaigns.
- Target the travel segment to an airline, hotel, or hospitality advertiser to help improve ad revenue generated by your inventory.

## Improve Off-site Reach Extension

This use case works with first-party, Analytics data sent to a demand-side platform (DSP).

### Goal

Extend audience-targeted buys to off-site inventory sources through a DSP.

### Benefit

Align analytics data points with on-site and off-site display advertising and monetize audience inventory in 'sold-out' situations.

### Example

- Create an "Income Tax Researchers" segment.
- Align on-site ad campaign sold to Turbo Tax with an off-site reach extension campaign through a DSP such as Adobe Media Optimizer.

## Create High Value Segments and Improve Reach with Look-alike Modeling

The *Models documentation* contains details about Audience Manager’s algorithmic modeling process.

### Goal

- Leverage site behavior, offline data, third-party data, campaign metrics to create valuable audience profiles.
- Model those segments against other data sources to increase reach.

### Benefit

- Identify new audiences with behaviors and profiles that mirror the original audience.
- Search against your own data and other third-party data that you have access to. This helps you find and identify the most influential data points for high-value audience profiles.

### Example

- Identify "Xbox gamers" in your customer database.
- Run a look-alike model to find and identify the most influential users in that segment.
- Target those segments to optimize on-site display advertising with Test&Target.

## Reach an Advertiser's Requested Demographics with First and Third-Party Data
Example Benefit Goal

- Combine first and third-party data to create more relevant, actionable audience segments.
- Package and sell enhanced segments to advertisers looking for specific demographics like age, gender, income, etc.
- Create the right kinds segments for ad sales for any campaign strategy.
- Improved monetization for digital ads.
- Identify the most valuable first-party data and improve that information with complimentary third-party data.
- Answer demo-targeted RFPs with ready-made, third-party audience segments aligned with your first-party data.
- Provide recommendations to the advertiser based on the historical segment performance.

<table>
<thead>
<tr>
<th>Goal</th>
<th>Benefit</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Combine first and third-party data to create more relevant, actionable audience segments.</td>
<td>• Improved monetization for digital ads.</td>
<td>• Answer demo-targeted RFPs with ready-made, third-party audience segments aligned with your first-party data.</td>
</tr>
<tr>
<td>• Package and sell enhanced segments to advertisers looking for specific demographics like age, gender, income, etc.</td>
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<td>• Provide recommendations to the advertiser based on the historical segment performance.</td>
</tr>
<tr>
<td>• Create the right kinds segments for ad sales for any campaign strategy.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Beta Environment**

The beta environment is for testing your Audience Manager implementation. Changes made in beta do not affect production data. Contact your Audience Manager Partner Solutions representative if you’re interested in using the beta environment.

**Update Schedule**

The beta environment is updated at the end of each month during off-peak hours.

**Endpoints**

<table>
<thead>
<tr>
<th>Service</th>
<th>URL/Hostname</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTP</td>
<td>sandbox-ftp-in.demdex.com</td>
</tr>
<tr>
<td>DCS</td>
<td><a href="https://dcs-beta.demdex.net/">https://dcs-beta.demdex.net/</a>...</td>
</tr>
<tr>
<td>UI</td>
<td><a href="https://bank-beta.demdex.com">https://bank-beta.demdex.com</a></td>
</tr>
<tr>
<td>API</td>
<td><a href="https://api-beta.demdex.com/">https://api-beta.demdex.com/</a>...</td>
</tr>
</tbody>
</table>

**Note:** The FTP is used for both inbound and outbound traffic, there is no dedicated FTP for outbound data.

**To access the DCS in the beta environment:**

1. Determine the load balancer’s endpoint IP addresses.
   
   Run the `dig` command to determine the IP address of the nearest load balancer. The `dig` command queries the Domain Name System and returns the name and IP addresses of the Audience Manager Data Collection Servers (DCS).
   
   ```
   dig dcs-beta.demdex.net
   
   dcs-sandbox-1754093861.us-east-1.elb.amazonaws.com. 60 IN A 52.87.15.51
   dcs-sandbox-1754093861.us-east-1.elb.amazonaws.com. 60 IN A 50.16.150.8
   dcs-sandbox-1754093861.us-east-1.elb.amazonaws.com. 60 IN A 52.2.228.100
   ```

2. Using one of the addresses in the above table, add a static DNS entry in the `/etc/hosts` file.
On Windows, modify `c:\WINDOWS\system32\drivers\etc\hosts`.

For example:

52.87.15.51 samplepartner.demdex.net

💡 Note: The addresses change occasionally, so you must keep your /etc/hosts file up to date.

Additionally, if you need to set up ID synchronization, you must add a similar entry for `dpm.demdex.net`.

52.87.15.51 dpm.demdex.net.

3. Make a DCS call, using the `curl` command. Curl is a tool to transfer data from or to a server, using one of many supported protocols.

For example:

`https://<domain>/event?product=camera`

4. Verify that your request was served by the beta DCS by looking for "sandbox" in the DCS response header.

For example:

```bash
curl -v http://dcs-beta.demdex.net/?event
[...]
< DCS: va6-sandbox-dcs-3.sandbox.demdex.com <release_number>
[...]
```

### Boolean Expressions in Trait and Segment Builder

This article explains how the Audience Manager trait and segment tools use the Boolean expressions AND, OR, and NOT.

#### Boolean Expressions

Boolean logic is a branch of algebra that uses a few basic expressions (or operators) to determine if a statement is true or false. The most common operators are AND, OR, and NOT. Combinations of these expressions help you make focused trait or segment qualification rules uniquely suited to your data requirements. The following illustration shows how basic Boolean expressions work.

- **Boolean AND, OR, and NOT**

  ![Boolean Logic Diagram](image)

  💡 Note: The **NOT** operator uses an implied "and" condition and is sometimes written as **AND NOT**.

#### How to Use Boolean Expressions in Trait and Segment Builder

You build trait and segment qualification rules with Boolean expressions. The table below describes general best practices for creating qualification criteria with AND, OR, and NOT.
To qualify

<table>
<thead>
<tr>
<th>Expression</th>
<th>Use it to create</th>
<th>To qualify</th>
</tr>
</thead>
<tbody>
<tr>
<td>AND</td>
<td>Narrow, focused audience qualification requirements.</td>
<td>Users <em>must</em> belong to all specified traits or segments.</td>
</tr>
<tr>
<td>OR</td>
<td>Broad, less focused audience qualification requirements.</td>
<td>Users <em>can</em> belong to any specified traits or segments.</td>
</tr>
<tr>
<td>NOT</td>
<td>Narrow, focused audience qualification requirements. Useful when there are multiple conditions that make defining audience qualification requirements difficult or inefficient. Occasionally, it is easier to validate against requirements that exclude rather than include.</td>
<td>Users <em>must not</em> belong to an excluded trait or segment.</td>
</tr>
</tbody>
</table>

**AND Use Case Example**

The AND operator is useful when you have easily enumerated trait membership requirements. For example, say you need to create an audience of “expensive camera shoppers.” With a pixel model, you would have to create and place pixels for cameras and a numeric price value on your page. By contrast, with traits you can apply Boolean operators to handle both conditions (cameras AND price). The result is efficient data collection with fewer HTTP calls, which, in turn, helps preserve the user experience on your site.

**OR Use Case Example**

The OR operator is useful when you want to create signals with broad audience qualification requirements. If you have several trait or segment qualification requirements, the OR operator will evaluate to true when your site visitors exhibit *any* of those characteristics. OR may be most useful when you want to rapidly create a broad audience of qualified site visitors.

**AND NOT Use Case Example**

The AND NOT operator is useful when it’s easier to define an audience by *exclusion* rather than *inclusion*. For example, say you’re having a sale and want to segment visitors into customers who look at full price items only. Rather than create a list of signals for all qualifying full or sale-price items, it may be easier qualify visitors if they have not seen a sale price item. This is administratively efficient because you usually have fewer sale price items compared to those offered at full price. With a Boolean NOT, visitors *must not* exhibit the sale signal to qualify for full-price audience membership. By contrast, AND NOT is the opposite of the AND use case, which showed how audience membership is determined by inclusion (i.e., the visitor qualified based on 2 explicitly stated signals).

**Bulk Management Tools**

The **Bulk Management Tools** let you create and manage multiple objects at once with single operation. You can use **Bulk Management Tools** to work with data sources, derived signals, destinations, folders, segments, and traits.

**Attention:** The **Bulk Management Tools** are not supported by Audience Manager. This tool is provided for convenience and as a courtesy only. For bulk changes, we recommend that you work with the **Audience Manager APIs** instead. **RBAC group permissions** assigned in the Audience Manager UI are honored in the **Bulk Management Tools**.
Overview
This feature uses an Excel spreadsheet with macros that make secure, authenticated calls to the Audience Manager APIs. The API provides the methods and services that let you make changes in bulk. You don't have to know how to code or work with our APIs to use it. The worksheet contains column headers and tabs that perform specific bulk change functions. To make bulk changes, all you do is add the pre-defined headers to specific worksheets, provide the information you want to change in bulk, and click an action button. The worksheet and the APIs do the rest of the work for you.

Getting Started With Bulk Management
Prerequisites, downloads, available operations, and authentication requirements.

⚠️ Attention: The Bulk Management Tools are not supported by Audience Manager. This tool is provided for convenience and as a courtesy only. For bulk changes, we recommend that you work with the Audience Manager APIs instead. RBAC group permissions assigned in the Audience Manager UI are honored in the Bulk Management Tools.

Prerequisites
To use the Bulk Management Tools, you need the following:
• Your Audience Manager user name and password. As a customer, you should already have these credentials.
• An API client ID and secret key. Your account manager can provide you with these.
• The Bulk Management Tools worksheet. Download the worksheet to get the latest version (v0.4.2).
• Excel running on Windows or in a Windows virtual machine running on OS X. 32-bit Windows is preferred.

Actions and operations
The Bulk Management Tools worksheet consists of action tabs, action buttons, and a Headers tab. The Headers tab contains the pre-formatted column headers used by the action tabs. The action tabs contain macros that perform your selected bulk operation. To perform a bulk operation, you copy a set of headers into the appropriate action tab, enter header data, and click an action button.

Open the spreadsheet and click an action button to get started.
The table below lists the operations you can perform and items you can manipulate with the **Bulk Management Tools** worksheets.

<table>
<thead>
<tr>
<th><strong>Actions</strong></th>
<th><strong>Objects</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulk actions appear in tabs at the bottom of the worksheet and include: • Requests • Update • Create • Estimate • Delete</td>
<td>The objects you can change in bulk are located under the <strong>Headers</strong> tab and include: • <em>Data sources</em> • <em>Derived signals</em> • <em>Destinations</em> • <em>Trait folders</em> and segment folders • <em>Segments</em> • <em>Traits</em></td>
</tr>
</tbody>
</table>
**Bulk operation example**

As an example, let's take a look at how to create multiple traits at one time. To create multiple traits in a bulk operation you would:

1. Click the **Headers** tab and copy all the labels under the **Create a Trait** option.
2. Click the **Create** tab and paste the labels starting in row 1, column A.
3. Provide information related to each column header and click **Create Traits**. This action prompts you to log on. Your bulk job runs after you successfully authenticate (see the **authentication requirements** below). Check the lower left corner of the worksheet for a job status notification.

*Note: When working with large requests, the worksheet might become unresponsive and appear to be inactive. In these cases, just leave it alone. The worksheet will become responsive when the bulk request is complete. If the worksheet does not respond for a long period of time, see the troubleshooting section.*

**Authentication requirements and options**

Bulk changes require authentication. When you select an action, the worksheet prompts you to log in. Because the worksheet makes API calls, you need to configure it to read your secret key. And, the **Domain** field lets you make bulk changes in a staging/test environment or against your live, production account.

*Reference*
Domain authentication gives you the option to test bulk requests or apply them directly to your production account. Making bulk changes to the test environment won’t affect your production account. Production changes are effective immediately. The Domain field accepts the following addresses, depending on the environment you want to work in:

- Testing: staging-api.demdex.com
- Production: api.demdex.com

**Bulk Requests**

A bulk request returns data you can use with the different headers in the Update, Create, Estimate, and Delete worksheets.

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The Request worksheet does not have its own set of column headers and you don't need to copy IDs to any of the columns. Instead, it returns data based on the action button you click in the toolbar. And, an optional reporting feature returns a frequency count for pixel fires and unique user count for several fixed time intervals.

To make bulk requests, open the Bulk Management Tools worksheet and:

1. Click the Request tab.
2. In the tool bar at the top of the worksheet, click a request button corresponding to the data you want to work with. You can request:
   - Data provider IDs
   - Derived signals
   - Destination mappings
   - Rule-based and on-boarded traits
   - Segments
   - Trait and segment folder IDs

The Audience Manager API writes bulk data back to the Request worksheet.

💡 **Note:** In your results, the createTime and updateTime columns return data in exponential notation. The underlying date/time stamps are recorded in UNIX UTC time. Currently, the worksheet cannot return date/time stamps in a readable format.

If your bulk update returns an error or fails, see Troubleshooting Tips for Bulk Management Tools.

**Bulk Updates**

A bulk update lets you edit multiple segments, traits, and segment or trait folders elements in a single operation. Follow these instructions to make bulk updates.

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To make bulk updates, open the **Bulk Management Tools** worksheet and:

1. Click the **Headers** tab and copy the update headers for the item you want to edit.
2. Click the **Update** tab.
3. Paste the update headers into the first row of the update worksheet. Note the following:
   - When updating a folder, all headers are required.
   - When updating segments or traits, you only need the segment ID (SID) and the header element that needs to be changed. Delete unused headers.
4. Paste or type the data you want to change into a corresponding column based on the header label.
5. In the worksheet toolbar, click an update button that matches the item you're updating. This action opens the **Account Information** dialog box.
6. Provide the required **log on information** and click **Submit**. The worksheet creates a **Results** column. The **Results** column returns the JSON response for a successful operation. See the **REST APIs** for examples.

Before entering data, your bulk update worksheet should look similar to the following:

If your bulk update returns an error or fails, see **Troubleshooting Tips for Bulk Management Tools**.
Bulk Create

Bulk create lets you construct multiple data sources, derived signals, segments, traits, and other items with a single operation. Follow these instructions to make a bulk creation request.

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: Do not mix object types in a bulk creation request. The headers for each object are unique and cannot be combined. Clear the worksheet and make a separate request for different items.

To create objects in bulk, open the **Bulk Management Tools** worksheet and:

1. Click the **Headers** tab and copy the create headers for the item you want to add.
2. Click the **Create** tab.
3. Paste the create headers into the first row of the update worksheet.
4. Paste or type the data you want to change into a corresponding column based on the header label.
5. In the worksheet toolbar, click the create button that matches the item you’re updating.
This action opens the **Account Information** dialog box.
6. Provide the required **log on information** and click **Submit**.

   The worksheet creates a **Results** column. The **Results** column returns the JSON response for a successful operation. See the **REST APIs** for examples.

Before entering data, your bulk create worksheet should look similar to the following example. Note, all the different create options are not shown here. This is included to help you understand what a completed worksheet could look like.

If your bulk update returns an error or fails, see **Troubleshooting Tips for Bulk Management Tools**.

Bulk Estimates

A bulk estimate returns segment size data based on segment rules. Follow these instructions to make a bulk estimate request.

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Manager APIs instead. RBAC group permissions assigned in the Audience Manager UI are honored in the Bulk Management Tools.

To make bulk updates, open the Bulk Management Tools worksheet and:

1. Click the Headers tab and copy the Estimate Segment Size header.
2. Click the Estimate tab.
3. Paste the estimate header into the first row of the estimate worksheet.
4. Paste or type the data you want to change into a corresponding column based on the header label.
5. In the worksheet toolbar, click the create button that matches the item you're updating. This action opens the Account Information dialog box.
6. Provide the required log on information and click Submit. This action creates a Response column in the worksheet that contains estimated segment size data.

Before entering data, your bulk estimate worksheet should look similar to the following:

If your bulk update returns an error or fails, see Troubleshooting Tips for Bulk Management Tools.

Bulk Delete

Bulk delete lets you remove multiple segments, traits, folders, derived signals, and destinations with a single operation. Follow these instructions to make a bulk delete request.

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Note: A bulk delete for destination mappings will fail if you have segments mapped to the destination. Remove your segments from that destination in the user interface before attempting to bulk delete destinations. Also, trait and segment folders must be empty before you can delete them.

To delete multiple items, open the Bulk Management Tools worksheet and:

1. Click the Headers tab and copy the create headers for the item you want to add.
2. Click the Delete tab.
3. Paste the delete headers into the first row of the update worksheet.
4. Paste or type the IDs for the objects you want to delete in the column below the header.
5. Provide the required log on information and click Submit.
   The worksheet creates a Results column. The Results column returns a message that indicates if the item has been deleted or an error message.

Before entering data, your bulk update worksheet should look similar to the following:

If your bulk update returns an error or fails, see Troubleshooting Tips for Bulk Management Tools.

Create or Update Trait Rules and Segment Rules

The create and update worksheets accept a traitRule header that lets you apply multiple rules in a single operation. Follow these instructions to make bulk rule requests.

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Working with trait rules

In your worksheet, the trait rule column returns and accepts rules that consist of Boolean expressions, comparison operators, and regular expressions. You can create rules with trait or segment builder in Audience Manager and copy them to your worksheet. Or, if you're familiar with rule syntax, you can write expressions directly in the worksheets.
Rule builder example
Let's take a look at an example that demonstrates how to use Segment Builder to create a rule you can to the bulk worksheet. However, this isn't a set of step-by-step instructions for those tools. Instead we're going to start with a simple rule that's already been created. For instructions about how to use the rule builders see Segment Builder and Trait Builder.

With the visual rule builder, we've created a segment rule with 3 traits and a Boolean AND operator.

Click Code View to get the text version of this rule.

**Tip:** Click Validate Expression to check your rule logic. This will help prevent you from uploading an invalid rule.

Paste the rule into the Bulk Management Tools worksheet and commit your changes to update segment rules in bulk.

Creating your own rules
You can write your own rules outside of Rule Builder. Before you start, be sure to read the documentation that covers things like operators, expression, and required variables. We recommend you review the following:

- Working With Comparison Operators In Trait Builder
- Order of Operations
- Prefix Requirements for Key Variables
- Sample Expressions With Boolean and Comparison Operators

Troubleshooting Tips for Bulk Management Tools
What to do when the worksheets return an error or your bulk request fails.
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Responding to error messages

Factors like heavy network traffic, server usage, and large data sets can cause a bulk request to fail or time out. If there is an issue, the worksheet stops writing data and displays an error message. When this happens, you should:

• Read the error message.
• Fix the problem.
• Delete all the rows that have been already updated.
• Try the bulk request again.

Long delays or unresponsive behavior

The following table lists some common problems you may encounter when making bulk requests with the worksheets. Try to fix these issues with the recommended solutions. If the recommended solutions do not resolve the problem, you should save your work, restart your computer, and try the request again without launching or working with other applications.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
</tr>
</thead>
</table>
| Long delays     | • **Turn off compatibility mode**: Check if you have other worksheets open in Excel's compatibility mode. Compatibility mode can increase runtimes. Close any spreadsheets you may have open in this mode and try your bulk request again.  
                     • **System resources**: Limited system resources contribute to long delays. Try closing all your other programs before making a bulk request. |
| No response     | If you click on an action button and nothing happens:                    |
|                 | • Make sure you have the right set of headers for the selection action.  |
|                 | • Make sure you're using the right worksheet for the copied headers.     |
|                 | • Check the position of the data you want to use in a bulk operation. All headers start in column A, row 1. All data goes in corresponding headers starting in column A, row 2 (immediately below the headers). |

Bulk Management Tools Glossary

Column header labels defined.

Attention: The Bulk Management Tools are not supported by Audience Manager. This tool is provided for convenience and as a courtesy only. For bulk changes, we recommend that you work with the Audience Manager APIs instead. RBAC group permissions assigned in the Audience Manager UI are honored in the Bulk Management Tools.
<table>
<thead>
<tr>
<th>Column header</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>dataSourceId</td>
<td>The ID of a data source you want to return or assign in bulk.</td>
</tr>
<tr>
<td>derivedSignalId</td>
<td>A derived signal ID.</td>
</tr>
<tr>
<td>description</td>
<td>A brief, informative description that you can give to an object.</td>
</tr>
<tr>
<td>destinationId</td>
<td>The ID of the destination you want to map or delete.</td>
</tr>
<tr>
<td>destinationMappingId</td>
<td>A special ID assigned to a segment when it is mapped to a destination.</td>
</tr>
<tr>
<td>folderId</td>
<td>The ID of your segment or trait folder.</td>
</tr>
<tr>
<td>name</td>
<td>The name of the object you're working with.</td>
</tr>
<tr>
<td>parentFolderId</td>
<td>The ID of a segment or trait folder that contains other folders.</td>
</tr>
<tr>
<td>sid</td>
<td>Segment ID.</td>
</tr>
<tr>
<td>sourceKey</td>
<td>Signals are bits of data passed in to Audience Manager based on user activity. These are transmitted as key-value pairs. The source key is a constant that does not change. It helps categorize the source value which can change. See Derived Signals.</td>
</tr>
<tr>
<td>sourceValue</td>
<td>The source value is a variable passed in as part a key-value pair.</td>
</tr>
<tr>
<td>startDate</td>
<td>Indicates when a segment can start to be sent to a destination. Uses yyyy-mm-dd format.</td>
</tr>
<tr>
<td>targetKey</td>
<td>The key used in the derived signal. See Derived Signals.</td>
</tr>
<tr>
<td>targetValue</td>
<td>The value passed in with a derived signal key. See Derived Signals.</td>
</tr>
<tr>
<td>traitAlias</td>
<td>An ID passed to a non-cookie based destination. For a cookie-based destination, this is the key in a key-value pair.</td>
</tr>
<tr>
<td>traitRule / segmentRule</td>
<td>The actual trait or segment rule used to collect data. A bulk request returns the rules created in Audience Manager with the trait rule builder or the segment rule builder. You can also use these tools to build rules and apply them in bulk when you update a segment or trait. See also, Create or Update Trait Rules and Segment Rules.</td>
</tr>
<tr>
<td>traitType</td>
<td>A string that identifies the trait type. Options include:</td>
</tr>
</tbody>
</table>
**Definition**

<table>
<thead>
<tr>
<th>Column header</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>RULE_BASED_TRAIT</td>
<td></td>
</tr>
<tr>
<td>ON_BOARDED_TRAIT</td>
<td></td>
</tr>
<tr>
<td>SEGMENT</td>
<td></td>
</tr>
<tr>
<td>url</td>
<td>Pixel fired by DIL when a user qualifies for a segment.</td>
</tr>
<tr>
<td>valueAlias</td>
<td>The key in a <em>key-value pair</em> passed to a cookie destination.</td>
</tr>
</tbody>
</table>

---

### CID Replaces DPID and DPUUID

Update your code to use `d_cid` or `d_cid_ic` instead of `d_dpid` and `d_dpuuid`. The DPID and DPUUID variables will continue to work, but you should consider them deprecated. This includes DPID and DPUUID variants without the `d_` prefix.

**Contents:**

- **DPID and DPUUID: A Review**
- **CID and CID_IC: About**
- **Important Considerations for Development Teams**

#### DPID and DPUUID: A Review

The DPID and the DPUUID are key-value pairs that contain a data provider ID and a user ID. These key-value pairs link provider IDs to user IDs. They send in data during event calls, for inbound synchronization events, and for ID calls. Without them, Audience Manager, and other services or features, would not have a way to match and synchronize IDs. These variables are sometimes expressed with or without the `d_` prefix as shown below. Note, in the code, *italics* indicates a variable placeholder.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Syntax</th>
</tr>
</thead>
</table>
| Data Provider ID (DPID) | *d_dpid=data provider ID*  
*dpid=data provider ID* |
| Data Provider Unique User ID (DPUUID) | *d_dpuuid=data provider unique user ID*  
*dpuuid=data provider unique user ID* |

These key-value pairs still work, but they are deprecated. You should update your code to use CID or CID_IC instead.

#### CID and CID_IC: About

The CID and CID_IC key-value pairs replace DPID and DPUUID. They provide the same functions as the DPID and DPUUID, but are more efficient because they include the data provider ID (or integration code) and user ID in a single key-value pair. In each key-value pair:

- The `=` symbol separates the key from its related values.
- The non-printing ASCII character `%01` separates the values.
\textit{d\_cid} and \textit{d\_cid\_ic} use the syntax shown below. Note, in the code, \textit{italics} indicates a variable placeholder.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Syntax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer ID (CID)</td>
<td>\textit{d_cid}=\textit{data provider ID}%01\textit{user ID}</td>
</tr>
<tr>
<td>Customer ID Integration Code (CID_IC)</td>
<td>\textit{d_cid_ic}=\textit{integration code}%01\textit{user ID}</td>
</tr>
</tbody>
</table>

An \textit{integration code} is an alternate ID you can use instead of the Data Source ID, assigned by Audience Manager. See \textit{Create a Data Source} if you need to configure an integration code.

See also, \textit{URL Variables and Syntax for Declared IDs}.

\textbf{Note:} You can use integration codes for your own data sources and for global \textit{shared data sources}, which you have access to. For example, you can use integration codes when working with mobile identifiers data sources. Use the following integration codes, exactly as specified below:

- \textit{DSID\_20914} for GAID, representing devices running the Android operating system.
- \textit{DSID\_20915} for IDFA, representing devices running the iOS operating system.

\textbf{Examples}

The following table provides examples by event type.

<table>
<thead>
<tr>
<th>Event Type</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Event</td>
<td>• \textit{New:} \ldots/event?d_cid=123%01987\ldots</td>
</tr>
<tr>
<td></td>
<td>• \textit{ Deprecated:} \ldots/event?d_dpid=123&amp;d_dpuuid=987\ldots</td>
</tr>
<tr>
<td>Inbound Synchronization (IBS)</td>
<td>• \textit{New:} \ldots/ibs:d_cid=123%01987\ldots</td>
</tr>
<tr>
<td></td>
<td>• \textit{Deprecated:} \ldots/ibs:d_dpid=123&amp;d_dpuuid=987\ldots</td>
</tr>
<tr>
<td>Generate Audience Manager UUID (ID)</td>
<td>• \textit{New:} \ldots/id?d_cid=123%01987\ldots</td>
</tr>
<tr>
<td></td>
<td>• \textit{Deprecated:} \ldots/id?d_dpid=123&amp;d_dpuuid=987\ldots</td>
</tr>
</tbody>
</table>

Each call can also include multiple \textit{d\_cid} and \textit{d\_cid\_ic} key value pairs like this:

\ldots?d\_cid=123\%01456&d\_cid=123\%01789&d\_cid\_ic=543\%01333\ldots

\textbf{Important Considerations for Development Teams}

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>URL encoding</td>
<td>Your development teams \textit{must} apply URL encoding to the following variables in the CID key-value pair:</td>
</tr>
<tr>
<td></td>
<td>• user ID (dpuuid)</td>
</tr>
<tr>
<td></td>
<td>• integration code</td>
</tr>
</tbody>
</table>
**Note:** You must URL encode the user ID and integration code before concatenating them into a string. This is because the ASCII character %01 that separates the two variables must not be captured in the URL encoding.

URL encoding assures that your user IDs and integration codes that contain reserved or unsafe characters such as, but not limited to, + or = are transmitted correctly to our servers.

Use the [ASCII encoding table](...) for reference.

Using integration codes for global shared data sources

You can use integration codes for your own data sources and for global shared data sources, which you have access to. For example, you can use integration codes when working with mobile identifiers data sources. Use the following integration codes, exactly as specified below:

- **DSID_20914** for GAID, representing devices running the Android operating system.
- **DSID_20915** for IDFA, representing devices running the iOS operating system.

### How Data Delivery and File Processing Times Affect Reports

Audience Manager receives a tremendous amount of data every day. This affects the amount of time it takes to process your data and generate report results. The content in this section describes how these time intervals affect your Audience Manager account. Also, the time frames and schedules described here are general guidelines only. These schedules do not constitute Service-Level Agreements (SLAs) or commitments related to data delivery. Adobe reserves the right to change the time frames and schedules at any time without notice.

#### Reporting Numbers

The following table lists and describes the time intervals in our general and real-time reports.

<table>
<thead>
<tr>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real-Time Data</td>
<td>Real-time numbers for today are for the hours 00:00 to 23:59:59 UTC from yesterday.</td>
</tr>
<tr>
<td>General Report Data</td>
<td>The data in the <a href="...">General Reports</a> depends on the successful completion of other job processes and the amount of data received for a particular day. Most of the time, General Report data should be updated by 18:00 UTC each day.</td>
</tr>
</tbody>
</table>
Inbound and Outbound File Transfers

Audience Manager processes and sends inbound and outbound Server-to-Server (S2S) file transfers according to the schedules described in this section. Given these schedules and the cut-off times, you might see discrepancies with new segments between real-time and total segment numbers.

<table>
<thead>
<tr>
<th>File Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inbound File Ingestion</td>
<td>File processing is executed twice per day. These procedures ingest data and prepare it for delivery. File delivery times vary because they are affected by the total amount of customer data that needs to be processed. You should expect a maximum latency of 48 hours between the moment the file is uploaded in Audience Manager and until the data is available for reporting and activation.</td>
</tr>
<tr>
<td>(offline data)</td>
<td></td>
</tr>
</tbody>
</table>

Outbound (Export) Files

File processing and delivery takes place once per day, at approximately 14:00 UTC. Keep in mind that processing and delivery are affected by the total number and size of these files. In some cases, there may be a delay in file processing for as long as 24-hours. When this happens, Audience Manager will send 2 files for a particular day instead of 1. We will notify our customers in the rare case where Audience Manager has to stop processing a file altogether. Given these conditions, it is difficult to estimate delivery times for outbound data.

To determine if you’ve received a complete set of files, check the timestamp and look for any missing days. This is a 13-digit, UNIX UTC timestamp that records the time when the file was created. See Real-Time Outbound Data Transfers.

Index of IDs in Audience Manager

Refer to this document for the complete list of Adobe Audience Manager IDs.

<table>
<thead>
<tr>
<th>ID</th>
<th>Name and Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>SID</td>
<td>Trait ID</td>
<td>289983</td>
</tr>
<tr>
<td></td>
<td>The Trait ID uniquely identifies traits in the Audience Manager environment. A Trait ID is assigned to each trait in the user interface (UI).</td>
<td></td>
</tr>
<tr>
<td>SID</td>
<td>Segment ID</td>
<td>4798574</td>
</tr>
<tr>
<td></td>
<td>The Segment ID uniquely identifies segments in the Audience Manager environment. A Segment ID is assigned to each segment in the UI.</td>
<td></td>
</tr>
<tr>
<td>ID</td>
<td>Name and Description</td>
<td>Example</td>
</tr>
<tr>
<td>---------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>------------------------------</td>
</tr>
</tbody>
</table>
| csegID  | **Legacy Segment ID**  
This ID uniquely identifies segments in the Audience Manager environment. A Legacy Segment ID is assigned to each segment in the UI. | 741232                       |
| destID  | **Destination ID**  
The Destination ID uniquely identifies destinations in the Audience Manager environment. An ID is assigned to each destination in the UI. | 2523                         |
| DPID    | **Data Source ID (also referred to as Data Provider ID)**  
The Data Source ID is a namespace for IDs or traits. An ID is assigned to each data source (data provider) in the UI. | 39217                        |
| DPUUID  | **Data Provider Unique User ID (also referred to as CRM ID)**  
A third-party ID. This is the ID by which you identify end users in your own CRM system. You can sync DPUUIDs with Audience Manager UUIDs and you can sync DPUUIDs from your different Data Sources (DPIDs) in the *ID synchronization process.* | 2132-3423vn-343fds-3432r     |
| CRM ID  | See DPUUID above.                                                                   | 2132-3423vn-343fds-3432r     |
| CID, CID_IC | **Customer ID, Customer ID Integration Code**  
The CID and CID_IC key-value pairs replace DPID and DPUUID. They provide the same functions as the DPID and DPUUID, but are more efficient because they include the data provider ID and user ID (or integration code) in a single key-value pair. | 81841%013ad2948b1570a7e408a7cfb7ff4879e4 |
| AAM UUID | **Audience Manager Unique User ID**  
A device ID that Audience Manager associates to each device it interacts with. The demdex cookie could be dropped for authenticated server-to-server requests. We recommend passing the d_uuid parameter for server-to-server calls. Audience Manager tries to save this ID as a cookie in the "demdex.net" 3rd party domain. | demdex=07955261652886032950143702505894272138 |
<table>
<thead>
<tr>
<th>ID</th>
<th>Name and Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>d_uuid</td>
<td><strong>Audience Manager Profile ID</strong></td>
<td>07955261652886032950143702505894272138</td>
</tr>
<tr>
<td></td>
<td>A parameter sent in HTTP requests. This represents the Audience Manager ID and it is the method by which a client application sends the Audience Manager ID. It is also the only way of sending the uuid for server-to-server integrations (cookies are not accepted).</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Organization ID</strong></td>
<td>5DC5123F5245B1D20A490D468AdobeOrg</td>
</tr>
<tr>
<td></td>
<td>This is the ID that a company is provided with upon signing up for the Experience Cloud.</td>
<td></td>
</tr>
<tr>
<td>PID</td>
<td><strong>Partner ID</strong></td>
<td>1352</td>
</tr>
<tr>
<td></td>
<td>Audience Manager associates an imsOrgId to a PID. The PID is a company's ID in Audience Manager.</td>
<td></td>
</tr>
<tr>
<td>MID</td>
<td><strong>Experience Cloud ID</strong></td>
<td>mid</td>
</tr>
<tr>
<td></td>
<td>The Experience Cloud ID (MID) is derived mathematically from your organization ID and the Audience Manager Unique User ID. The Experience Cloud ID enables data sharing and tracking among different solutions in the Experience Cloud. You can read more about the MID in the <em>Cookies and Experience Cloud ID</em> document.</td>
<td></td>
</tr>
<tr>
<td>DAID</td>
<td><strong>Device Advertising ID - IDFA - iOS devices</strong></td>
<td>AEBE52E7-03EE-455A-B3C4-E57283966239</td>
</tr>
<tr>
<td></td>
<td>• <strong>IDFA</strong> IDs are mobile device identifiers, provided by the device manufacturer. These IDs represent devices that run the iOS operating system.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The format consists of 32 <em>uppercase</em> hexadecimal digits, displayed in five groups and separated by hyphens, in the form 8-4-4-4-12, for a total of 36 characters.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Device Advertising ID - GAID - Android devices</strong></td>
<td>e4fe9bde-caa0-47b6-908d-ffba3fa184f2</td>
</tr>
<tr>
<td></td>
<td>• <strong>GAID</strong> IDs are mobile device identifiers, provided by the device manufacturer. These IDs represent devices that run the Android operating system.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The format consists of 32 <em>lowercase</em> hexadecimal digits, displayed in five groups and separated by hyphens, in the form 8-4-4-4-12, for a total of 36 characters.</td>
<td></td>
</tr>
</tbody>
</table>
Key-Value Pairs Explained

Defines and describes standard and serialized key-value pairs.

A key-value pair consists of two related data elements: A key, which is a constant that defines the data set (e.g., gender, color, price), and a value, which is a variable that belongs to the set (e.g., male/female, green, 100). Fully formed, a key-value pair could look like these:

- gender = male
- color = green
- price > 100

The following sections contain more information:

- **Standard and Serialized Key-Value Pairs**
- **Keys, Delimiters, and Separators**
- **Standard and Serialized Key-Value Elements**

Standard and Serialized Key-Value Pairs

Destinations accept key-value data in **standard** or **serialized** format. Standard formatting organizes data into separate key-value pairs. Each key is stated explicitly, even when used again to define a different value. By contrast, serialized formatting condenses multiple values into one set defined by a single key. Also, in a serialized pair, a special indicator is used to separate the values within the key-value set. Finally, standard and serialized key-values can contain single or multiple values. The following table provides examples of standard and serial key-value formats.

<table>
<thead>
<tr>
<th>Formatting</th>
<th>Single Key</th>
<th>Key-Value Pairs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>x=1&amp;x=2</td>
<td>x=1&amp;x=2&amp;y=3&amp;y=4</td>
</tr>
<tr>
<td>Serialized</td>
<td>x=1;2</td>
<td>x=1;2&amp;y=3;4</td>
</tr>
</tbody>
</table>

Keys, Delimiters, and Separators

When working with serialized data, you must specify the characters that separate values *within* and *between* the key-value pairs. Elements in key-value pairs are defined as follows:

- **Key**: A unique identifier in the key-value pair.
- **Value delimiter**: Separates individual key-value pairs.
- **Key-value separator**: Separates a key from the values within a key-value pair.
- **Serial separator**: Separates individual values within serialized key-value pairs.

Standard and Serialized Key-Value Elements

<table>
<thead>
<tr>
<th>Type</th>
<th>Example</th>
<th>Key</th>
<th>Key-Value Separator</th>
<th>Key-Value Delimiter</th>
<th>Serial Separator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single key</td>
<td>x=1&amp;x=2</td>
<td>x</td>
<td>=</td>
<td>&amp;</td>
<td>n/a</td>
</tr>
<tr>
<td>(standard)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Key-value pairs</td>
<td>x=1&amp;x=2&amp;y=3&amp;y=4</td>
<td>x, y</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(standard)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Password Requirements, Locked Accounts, and Forgotten Passwords

Audience Manager passwords expire every 30-days. Refer to this section for password requirements and how to recover a lost or forgotten password.

Password Requirements

To be valid, your Audience Manager password must meet the following requirements:

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>Passwords may be between 12 to 40 characters long.</td>
</tr>
<tr>
<td>Contents</td>
<td>Passwords must:</td>
</tr>
<tr>
<td></td>
<td>• Begin and end with an alphanumeric character.</td>
</tr>
<tr>
<td></td>
<td>• Contain at least 1 uppercase and lowercase character.</td>
</tr>
<tr>
<td></td>
<td>• Contain at least 1 number.</td>
</tr>
<tr>
<td></td>
<td>• Contain at least 1 special character (colons &quot;&quot;:&quot; excluded).</td>
</tr>
<tr>
<td></td>
<td>• Consist of Latin alphabet letters only.</td>
</tr>
<tr>
<td>Versions</td>
<td>Passwords must be different from your previous 12 passwords.</td>
</tr>
<tr>
<td>Prohibited Items</td>
<td>Passwords must not contain your:</td>
</tr>
<tr>
<td></td>
<td>• First name or last name.</td>
</tr>
<tr>
<td></td>
<td>• Email address.</td>
</tr>
<tr>
<td></td>
<td>• Adobe user ID.</td>
</tr>
</tbody>
</table>

For information about resetting your password, see *Edit Your Account Settings*.

Account Lockout

Accounts are locked after 5-failed log in attempts. Contact your company's Audience Manager administrator or a Partner Services representatives to unlock your account.

Lost/Forgotten Password

Click the *Forgot password* link from the login page to reset your password. You will receive an automated email with a temporary password that expires in 24 hours. Click the link in the email to access your account and reset your password.
Signals, Traits, and Segments

Describes the components of an Audience Manager segment, the expressions used to set audience qualification criteria, and how data is transmitted in an event call.

Composition and Purpose

Audience Manager data consists of signals, traits, segments, and related qualification rules. The data elements and rules combine to create segments. Segments organize site visitors into related groups. The following table defines the three principal components in an Audience Manager segment.

<table>
<thead>
<tr>
<th>Element</th>
<th>Consists of</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signal</td>
<td>Signals are the smallest data units in Audience Manager and are expressed as <em>key-value pairs</em>. <em>The key is a constant that defines a data set (e.g., gender, color, price).</em> <em>The value is a variable related to the constant (e.g., male/female, green, 100).</em> Comparison operators join the key-value pair and set the relationship between them.</td>
<td><em>product=camera</em>  <em>price&gt;1000</em>  <em>type=digital SLR</em></td>
</tr>
<tr>
<td>Trait</td>
<td>Combinations of one or more signals. Boolean expressions and comparison operators let you create trait qualification rules. Create precise qualification requirements with combinations of traits and trait groups.</td>
<td>From the available signals, you could create a &quot;High End Camera Browser&quot; rule expressed as:  <em>product=camera AND price&gt;1000</em></td>
</tr>
<tr>
<td>Segment</td>
<td>Users who share a set of common attributes and qualify for related traits. Boolean expressions, along with recency/frequency requirements, let you create segment qualification rules. Create precise qualification requirements with combinations of trait and segment rules.</td>
<td>From the available traits and signals, you could create a segment rule expressed as:  <em>(product=camera AND type=digital SLR) OR (price&gt;1000)</em></td>
</tr>
</tbody>
</table>

Build Traits and Segment Rules With Visual Tools and Code Editors

Clients manage traits and segments with visual tools and code editors in the Audience Manager user interface. The visual tools let you create rules using search features, pop-up options, dropdown menus, and drag and drop functionality. The code editors provide advanced users with a way to programmatically develop audience segmentation criteria.

Event Calls Send Data to Audience Manager
An event call sends data from your website to Audience Manager. The call contains signal, trait, and segment data in an HTTP request. The event itself is everything after the /event part of a URL string. As shown in the example below, this process requires only a single event call to pass in multiple variables to Audience Manager.

http://<domain>/event?product=camera&price>100

**Supported Browsers**

Lists the browsers supported by the Audience Manager user interface. Cookies and JavaScript must be enabled on all browsers.

Unless indicated otherwise, Audience Manager is supported on the latest versions of the following browsers.

• Chrome
• Edge
• Firefox
• Internet Explorer (version 11 or greater)

> **Note:** In January, 2016, Adobe ended support for Internet Explorer 9 and 10. You can continue to use earlier browser versions, but Adobe will not test against earlier versions and will not fix any issues with them. As a result, your browser experience may degrade over time and you run a security risk by using an obsolete browser version. Adobe recommends that you upgrade to a supported version.

• Safari

Other browsers may work, but are not supported by our technical and product teams. If you're having trouble working with Audience Manager, make sure you're using a current, updated, and supported browser.

**System Components**

A high-level tour of the major components and data flows in the Audience Manager system.

**Introduction**

This guide provides a basic overview of the main components that power Audience Manager. It is written for:

• Non-technical and technical readers.
• Current Audience Manager customers curious about how it all works.
• Potential Audience Manager customers who need to evaluate this system as part of a due diligence or request for proposal process.

This guide tries to strike a balance between general descriptions and a deep dive. However, some things are proprietary so we’re just not going there. After all, there's more to special sauce than just mayonnaise and ketchup. We need to keep the pickles a secret. As always, you can check with your Audience Manager consultant if you have any questions.
Key Components in the Audience Manager System

Audience Manager groups its systems and processes into four main categories: tag management, data collection, data organization, and data actionability.

The following illustration shows the main components and the underlying technology (hardware and software) that power Audience Manager. Although some processes perform specific functions and others have multi-purpose roles, all systems work together to help you manage tags, collect data, analyze performance, synchronize information with other systems, and take action on that information.

![Audience Manager Components](image)

Data Action Components

Data action components include Customer Data Feeds, the Data Collection Server, SFTP/S3/HTTP publishers, IRIS, and the Profile Cache Server.

Action components are systems and processes that let you move data in and out of Audience Manager and (for the lack of a better phrase) do things with it. These Audience Manager components include:

- **Customer Data Feeds (CDF)**
- **Data Collection Server (DCS)**
- **SFTP/S3**
- **IRIS**
- **Profile Cache Server (PCS)**

Customer Data Feeds (CDF)

CDF are files sent hourly to customers. These contain user IDs along with associated segment IDs, trait IDs, and other data. For more information, see **Customer Data Feed Overview**.
Data Collection Server (DCS)

See Data Collection Components.

SFTP/S3

The SFTP/S3 publishers receive synchronized ID data from the Outbound Feed Converter. When these files are ready, the SFTP/S3 publishers send this data to a destination specified by the client. These files contain synchronized ID data with a one-to-many mapping of Audience Manager user IDs (UUID) to:

- Device ID/data provider IDs (DPUUID)
- Qualified segment IDs
- Trait IDs

Audience Manager customers do not have access to features that directly control the SFTP/S3 publishers. Customers use this service indirectly when they create and send data to destinations. The SFTP/S3 system is, essentially, an automated job process that runs at scheduled intervals.

IRIS

In Greek mythology, Iris is a figure who travels and delivers messages rapidly. The IRIS system is a namesake that reflects the characteristics of this figure from the ancient world. In modern terms, IRIS is a low-latency, high-frequency cookie synchronization and data transfer service.

IRIS works with the same type of data as the SFTP/S3 system. However, IRIS is different because it sends data to destinations in real time rather than at set intervals. This is a separate system because the SFTP/S3 publishers can't send data to an HTTP destination and they're not designed for real-time data transfers.

There are no UI controls that let customers work directly with IRIS. Customers work with IRIS indirectly when they create and send data to destinations, and for other processes that require rapid data transfers.

Examples of IRIS services and features include:

- Providing rapid (within 30 seconds) synchronization for cookies and segments. It can synchronize the Audience Manager cookie, partner cookies, or both.
- Real-time data transfers. IRIS is responsible for sending real-time segment qualification events to a partner or other destination. This data is JSON-formatted and sent via an HTTP POST request.
- Bulk server-to-server data transfers: If you exchange large amounts of data with Audience Manager, IRIS is the system that your servers engage with to transfer data.
- Reliable infrastructure that works at scale and is fault tolerant. Systems that power IRIS include Amazon SQS, Amazon EC2, and Cassandra.

Sample data file

The following example contains real-time segment data from IRIS. Keep in mind this is sample data only. Each customer may have different formatting requirements so the contents can vary.

```json
{
  "ProcessTime": "Tue Jul 21 19:12:45 UTC 2015",
  "Client_ID": "111111",
  "AAM_Destination_Id": "22222",
  "User_count": "5",
  "Users": [
    {
      "AAM_UUID": "282720962029450916003643473479374071",
      "DataPartner_UUID": "CAESEFdv5pk\-Lurd8vL9Yfb3qFg",
      "Segments": [
        {
          "Segment_ID": "1200598",
          "Status": "1",
```
Profile Cache Server (PCS)

See Data Collection Components.

Data Collection Components

Data collection components include the Data Collection Servers, the DIL API, inbound server-to-server data transfers, and log files.

Audience Manager contains the following data-collection components:

- Data Collection Servers (DCS) and Profile Cache Servers (PCS)
- Data Integration Library (DIL)
- Inbound Server-to-Server
- Log Files
Data Collection Servers (DCS) and Profile Cache Servers (PCS)

The DCS and PCS work together and separately provide services related to trait realization, audience segmentation, and data storage.

Data Collection Servers (DCS) Function

In Audience Manager, the DCS:

• Receives and evaluates trait data from an event call. This includes information used for real-time segmentation and data passed in at scheduled intervals by server-to-server transfers.
• Segments users based on their realized traits and the qualification rules you create with Segment Builder.
• Creates and manages device IDs and authenticated profile IDs. This includes identifiers such as data provider IDs, user IDs, declared IDs, integration codes, etc.
• Checks the PCS for additional traits a user has already realized prior to a real-time event call. This lets the DCS qualify users based on real-time data and historical data.
• Writes log files and sends those to analytics systems for storage and processing.

DCS Manages Demand Through Global Server Load Balancing (GSLB)

The DCS is a geographically distributed and load-balanced system. This means Audience Manager can direct requests to and from a regional data center based on the geographic location of a site visitor. This strategy helps improve response times because a DCS response goes directly to a data center that contains information about that visitor. GSLB makes our system efficient because relevant data is cached in servers closest to the user.

In an event call, geographic location is captured in a key-value pair returned in a larger body of JSON data. This key-value pair is the "dcs_region":region ID parameter.

As a customer, you engage with the DCS indirectly through our data collection code. You can also work directly with the DCS through a set of APIs. See Data Collection Server (DCS) API Methods and Code.

Profile Cache Servers (PCS)

The PCS is a large database (basically, a huge server-side cookie). It stores data received for active users from server-to-server transfers and the DCS. PCS data consists of device IDs, authenticated profile IDs, and their associated traits. When the DCS receives a real time call, it checks the PCS for other traits a user may belong to
or qualify for. And, if a trait is added to a segment at a later time, those trait IDs are added to the PCS and users can qualify for that segment automatically, without a visit to a particular site or app. The PCS helps deepen Audience Manager’s understanding of your users because it can match and segment users in real time or behind the scenes with new and historic trait data. This behavior gives you a more complete and accurate picture of your users than from real-time qualifications alone.

There are no UI controls that lets our customers work directly with the PCS. Customer access to the PCS is indirect, through its role as a data store and data transfers. The PCS runs on Apache Cassandra.

**Purging inactive IDs from the PCS**

As indicated previously, the PCS stores trait IDs for active users. An active user is any user who has been seen by the edge data servers from any domain during the last 14-days. These calls to the PCS keep a user in an active state:

- `/event` calls
- `/ibs` calls (ID syncs)

The PCS flushes traits if they're inactive for 17-days. These traits aren't lost however. They're stored in Hadoop. If the user is seen again at another time, then Hadoop pushes all of their traits back to the PCS, typically within a 24-hour period.

**Other DCS/PCS Processes: Privacy Opt-out**

These server systems handle privacy and user opt-out requests. User cookie information is not collected in the log file if a user has opted out of data collection. For more information about our privacy policies see the Adobe Privacy Center.

**Data Integration Library (DIL)**

DIL is code you place on the page for data collection. See the DIL API for more information about available services and methods.

**Inbound Server-to-Server**

These are systems that receive data sent in by various server-to-server integrations with our clients. See the documentation on sending audience data for more information.

**Log Files**

The PCS creates and writes data to the log files. These are sent to other database systems for processing, reporting, and storage.

**Data Processing Components**

Data processing components include Hadoop, Snowflake, SOLR, and Tableau.

Audience Manager uses the following components to process data:

**Hadoop**

In Audience Manager, Hadoop is the master database that contains everything Audience Manager knows about a user. For example, when the Profile Cache Servers create log files that contain data about your users, it sends that data to Hadoop for storage. Other important Hadoop elements include:
- **Hive**: A data warehouse for Hadoop. *Hive* manages ad hoc queries to the data stored in Hadoop.
- **HBase**: A very large Hadoop database. It processes and manages inbound and outbound data, trait rules, algorithmic modeling information, and performs many other functions related to storing and moving data to different systems.

Customers do not have direct access to these systems. However, customers do work with them indirectly as these components store important data about their site visitors.

**Snowflake**

*Snowflake* is a massive cloud database. It provides data to many of the dashboard graphs and their related text boxes that display the % change for each item in the graph. If you use Audience Manager and look at the dashboard reports, you’re interacting with data provided by *Snowflake*.

![Figure 1: Sample Dashboard Graph Powered by Snowflake](image)

This is by no means a comprehensive list, but some common dashboard reports that *Snowflake* is responsible for include:

- **Daily Trait Variation Report**
- **Delivery and Performance Report**
- All the overlap reports (see the *Interactive Reports* section for information about each overlap report).
- **Unused Signals Report**
SOLR

*SOLR* is an open-source database and server system from Apache. It provides robust and fast search capabilities over our large data sets. As an Audience Manager customer, you can see SOLR in action when you build segments. It provides data to the **Estimated Historic Segment Size** report. SOLR is ideal for this role because of its speed. For example, SOLR is able to update the historic size data as you build rules and add new traits to a segment.

![Figure 2: Historic Segment Size Estimator Powered by SOLR](image)

**Tableau**

Audience Manager uses *Tableau* to display data in the **Interactive and Overlap Reports** and the **Audience Optimization Reports**. The interactive reports display performance and overlap data for traits and segments. Instead of using numbers arranged in columns and rows, they return data using different shapes, colors, and sizes. Additionally, you can choose individual or groups of data points and drill down into the report results for more details. These visualization techniques and report interactivity help make large amounts of numeric data easier to understand.

![Figure 3: Sample Report Powered by Tableau](image)

**Tag Management Components**

Audience Manager tag management components include the client portal, Adobe Tag Manager, DIL, Akamai, and the control database.
Audience Manager contains the following components:

- **Client Portal**
- **DIL/TIM Container**
- **Data Integration Library (DIL)**
- **Akamai**
- **Control Database**

**Client Portal**

The client portal is the primary user interface (UI) for tag and data management. Customers use the portal to work with tags, build traits and segments, set up destinations, and monitor campaign performance with reports.

**DIL/TIM Container**

The DIL container helps deploy Audience Manager data collection code to your website. TIM is the deprecated Tag Insertion Manager. It is no longer used by Audience Manager. Instead, you use Dynamic Tag Management to configure and generate container code that you place on pages in your inventory. The ATM container works with the Data Information Library (DIL) to collect data from your site and send it to Audience Manager.

**Data Integration Library (DIL)**

The Data Information Library (DIL) is a self-contained API module that collects data from your website. DIL helps eliminate the need to write special code for data collection, integration, reading cookie values, and recovering page data. DIL performs these actions automatically. Additionally, DIL is compact. It is a self-contained code library that helps reduce the amount of code required to collect information. Finally, DIL helps you integrate Audience Manager with other products in the Adobe Experience Cloud.

**Akamai**

Audience Manager uses Akamai to host and deliver container code from our own tag management platform known as TIM (Tag Insertion Manager). However, code deployment with TIM is being phased out in favor of Adobe Tag Management.

**Control Database**

The control database:

- Processes client input from the portal (for example, creating traits and destinations).
- Transmits data to Akamai, which includes data used to build the container template and destination publishing iFrame.
- Returns data for UI reporting systems.

**Platform Architecture: Data Flow Map**

This map contains the major Audience Manager systems. It visually represents how data flows into, out of, and among Audience Manager components.

**How to read this map**

In the map, the gray box contains Audience Manager systems. Some components are completely internal and others sit on the boundary between Audience Manager and the outside world. As an Audience Manager customer, internal components are often transparent or inaccessible. However, sometimes you may engage with these systems through...
the user interface or data integrations. Systems on the edge of the box collect and send data between Audience Manager and the outside world.

Colors define the type of data that flows in and out of Audience Manager. Green is client data, blue is customer data (people visiting your site), and orange is data used for reporting.

For system descriptions and summaries see the data action, collection, processing, and tag management sections.
Understanding the Edge Data Center

Audience Manager uses distributed, edge-computing topologies to meet the demands placed on our systems by external sources.
**Edge Data Center Basics**

Edge computing provides improved performance in response to diffuse, Internet-wide demand because the “edge” itself is a global boundary. This means Audience Manager dynamically places processing closest to the sources of demand and returns data by the shortest possible path. Edge computing helps maintain site performance, which, in turn, preserves the user experience on your website. The edge data center is a key gateway for moving data in and out of Audience Manager.

The Audience Manager edge data center includes:

- **Core Servers**: These are the main Audience Manager systems. They update and provide data to the edge servers.
- **Edge Servers**: Typically, these are application and/or web servers. They sit at the boundary between Audience Manager and the Internet. Edge servers, such as the DCS or Akamai systems, typically handle data and requests flowing into and out of Audience Manager.
- **Load Balancers**: Manage uneven computing/processing demands inherent in Internet applications. These balancers prevent clusters of servers from being overloaded while others remain idle.

The following diagram illustrates the Audience Manager edge data center environment.
Geographic Distribution and Load Balancing
See the DCS section in *Data Collection Components*.

### Style Conventions for Code and Text Elements

These elements identify code options and variables used throughout the help documentation. Generally, you would not include these symbols or style elements in your code or data files. They're visual indicators only.

<table>
<thead>
<tr>
<th>Convention</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>variable</strong></td>
<td>Variables appear in <em>italics</em>. Substitute the appropriate value for the variable name. For visual clarity, sometimes variables and other code elements appear between <code>&lt; &gt;</code> brackets. You do not need to use these symbols in your code.</td>
</tr>
<tr>
<td><code>[optional]</code></td>
<td>Items in square brackets are optional.</td>
</tr>
<tr>
<td>`(this</td>
<td>that)`</td>
</tr>
<tr>
<td><strong>literal</strong></td>
<td>Include text or code exactly as shown.</td>
</tr>
<tr>
<td><code>&lt; &gt;</code></td>
<td>Sometimes variables and other code elements appear between <code>&lt; &gt;</code> brackets. These are used to improve clarity in long code blocks. Unless specified, do not include these symbols in a data file name or its contents.</td>
</tr>
</tbody>
</table>

### Time Zones in Audience Manager

Audience Manager uses Coordinated Universal Time (UTC) across its entire UI.

Unless otherwise specified, all the dates and date ranges you can select in the Adobe Audience Manager UI are *Coordinated Universal Time (UTC)*. For example, in the *Create Destination* flow, when mapping segments to your destination, the start and end date you select are midnight UTC. The same applies for all the dates in Audience Manager.

### Understanding Calls to the Demdex Domain

Audience Manager and the Experience Cloud ID service make calls to and receive data from the `demdex.net` domain. This may seem like Adobe is working with an unusual third-party domain, but this is not the case. This section describes the elements in a `demdex.net` call.

<table>
<thead>
<tr>
<th>Call Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>demdex.net</td>
<td>This is a legacy domain controlled by Adobe. It reflects Audience Manager’s original, pre-acquisition name (<em>Demdex</em>). Adobe acquired <em>Demdex</em> in 2011 and re-branded the company as Audience Manager. It is difficult to change this domain because it is entwined</td>
</tr>
<tr>
<td>Call Element</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
</tr>
</tbody>
</table>
| dpm          | DPM is an abbreviation for *Data Provider Match*. It tells internal, Adobe systems that a call from Audience Manager or the *ID service* is passing in customer data for synchronization or requesting an ID. This is the most common *demdex.net* call you’ll see from Audience Manager or the *ID service*. DPM call basics:  
- **Audience Manager**: A DPM call from Audience Manager sends data to the *Data Collection Servers* and *Profile Cache Servers*. See *Data Collection Components*.  
- **ID service**: A DPM call from the *ID service* is a request for a visitor ID. See *Cookies and the Experience Cloud ID Service* and *How the Experience Cloud ID Service Requests and Sets IDs*.  

💡 **Note**: *ID service* customers can change the DPM prefix in the domain name. See *audienceManager Server and audienceManagerServerSecure*. |

**Visitor Authentication States in Audience Manager**

The visitor authentication status in Audience Manager determines if the new trait information is written to the visitor’s authenticated profile or to the device profile, where the data was collected from. Audience Manager handles the visitor ID authentication statuses `UNKNOWN` and `LOGGED_OUT` in event calls in the same way.

Beginning with Experience Cloud ID service v1.5+, the `setCustomerID` method includes the optional `AuthState` object. `AuthState` identifies visitors according to their *authentication status*. Audience Manager handles the realized traits differently, depending on the authentication status passed in the call and the *Profile Merge Rule* you use for segmentation.

Contents:

- **Authentication Status: UNKNOWN**
- **Authentication Status: AUTHENTICATED**
- **Authentication Status: LOGGED_OUT**
### Authentication Status: **UNKNOWN**

<table>
<thead>
<tr>
<th>Request value</th>
<th>Read information from the authenticated profile</th>
<th>Write new traits to the authenticated profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Yes, if the Authenticated Option Merge Rule = &quot;Last Authenticated Profiles&quot;.</td>
<td>No, the trait data is added to the device profile.</td>
</tr>
<tr>
<td></td>
<td>No, if the Authenticated Option Merge Rule = &quot;Current Authenticated Profiles&quot; or &quot;No Authenticated Profile&quot;.</td>
<td></td>
</tr>
</tbody>
</table>

Sample call (the request value corresponding to the authentication status is highlighted):

http://sample_customer.demdex.net/event?d_cid=123%01sample_id%010&d_sid=123456

### Authentication Status: **AUTHENTICATED**

<table>
<thead>
<tr>
<th>Request value</th>
<th>Read information from the authenticated profile</th>
<th>Write new traits to the authenticated profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Yes, if the Authenticated Option Merge Rule = &quot;Current Authenticated Profiles&quot; or &quot;Last Authenticated Profiles&quot;.</td>
<td>Yes, the trait data is added to the authenticated profile.</td>
</tr>
<tr>
<td></td>
<td>No, if the Authenticated Option Merge Rule = &quot;No Authenticated Profile&quot;.</td>
<td></td>
</tr>
</tbody>
</table>

Sample call (the request value corresponding to the authentication status is highlighted):

http://sample_customer.demdex.net/event?d_cid=123%01sample_id%011&d_sid=123456

### Authentication Status: **LOGGED_OUT**

<table>
<thead>
<tr>
<th>Request value</th>
<th>Read information from the authenticated profile</th>
<th>Write new traits to the authenticated profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Yes, if the Authenticated Option Merge Rule = &quot;Last Authenticated Profiles&quot;</td>
<td>No, the trait data is written to the device profile.</td>
</tr>
<tr>
<td></td>
<td>No, if the Authenticated Option Merge Rule = &quot;Current Authenticated Profiles&quot; or &quot;No Authenticated Profile&quot;</td>
<td></td>
</tr>
</tbody>
</table>

Sample call (the request value corresponding to the authentication status is highlighted):

http://sample_customer.demdex.net/event?d_cid=123%01sample_id%012&d_sid=123456

*Note: Audience Manager performs an ID synchronization between CID and UUID in all three cases.*
FAQs

Frequently asked questions about Audience Manager features, functions, and common issues.

API FAQ

Common API questions and issues.

The REST API documentation contains details about specific methods and code samples.

Why does DIL make event calls with GET and POST methods?

DIL passes data to Audience Manager with a GET or POST method based on the length of the query string of the event call. This behavior is built in to GET and POST methods by default. It is not specific to Audience Manager.

- DIL makes event calls with GET when a URL contains 2048 characters or less. A GET event call includes data in the URL as query string parameters, which are passed in as key-value pairs.
- DIL makes event calls with POST when a URL contains more than 2048 characters. A POST event call includes data in the body of the request. DIL puts data into key-value pairs and passes information as form data rather than in the URL query string.

Although each method passes data in a different way, this does not affect functionality. For example, with either method, Audience Manager still sends data to destinations, ID syncs works normally, and you can create traits from data signals.

What do the REST APIs allow me to do?

The REST APIs let you work programmatically with most Audience Management features and functions that are available in the user interface.

How do I obtain a REST API client ID and secret?

Contact your Partner Solutions representative to obtain API access credentials. Our APIs use OAuth 2.0 standards for token authentication, authorization, and renewal. See OAuth Authentication for more information.

Audience Lab FAQ

Frequently asked questions about the Audience Lab feature.

Do the test segments created in the test groups have different segment IDs? How do I map the IDs to different destinations?

Yes, the test segments have different segment IDs. For destinations with Auto-fill Destination Mapping or segments sent to Google, Audience Lab will handle the mapping values just like the destinations normally would.

Can the same conversion trait be associated with multiple test groups?

Yes, this is allowed. Think of a case of one test using a male segment associated to conversion X and one test using a female segment associated to conversion X. It doesn't matter that both tests are driving conversions since they are testing two different audiences.

Let's say a test group is using an authenticated profile for the test segment split. The authenticated profile is linked to 4 Audience Manager UUIDs. When the visitor exhibits a conversion trait from one of the four UUIDs, does Audience Lab count this as one or four conversions?

In this case, Audience Lab only counts one conversion.
What if the visitor from the case above first exhibits the conversion trait from one of the four UUIDs linked to their authenticated profile and then also exhibits the conversion trait from two other UUIDs linked to the authenticated profile? Does this case count as one or three conversions?

In this case, Audience Lab counts three conversions, one for each device that has exhibited the authentication trait.

Can a user have Segment: Read-Only access, yet also Audience Lab test segment creation access?

See Create Segment Test Groups for information on how to use Audience Lab with RBAC privileges.

## Customer Data Feed FAQ

Frequently asked questions about Customer Data Feed (CDF) files.

Contents:

- Amazon S3 Storage
- File Sizes
- Data Retention

### Amazon S3 Storage

Where is my CDF file stored on Amazon?

Your CDF file is stored in the aam-cdf root directory on an Amazon S3 server. This default bucket is managed by Audience Manager. See also Customer Data Feed File Naming Conventions.

Is my storage bucket secure?

Yes. Customers get access to their own storage space only. You will have read-only access to your storage bucket. You will not have write access.

Can I customize my storage bucket or store files in another directory?

No. Customization and alternate storage options are not available.

My directory is missing a file for particular hour. Where is it?

A missing file means Audience Manager was not able to process your CDF files for that hour. This usually happens when our servers get behind in processing CDF files. In this case, your file is not lost. It will appear in a later hourly directory after our system has a chance to catch up. See also, Customer Data Feed File Processing Notifications.

How do I know when my CDF files are ready?

See Customer Data Feed File Processing Notifications.

### File Sizes

What sort of file sizes should I expect? How big is an average CDF file?

It is difficult to estimate file sizes. And, each file can be a different size. Sizes will vary from hour to hour and day to day. If you're going receive CDF files, it helps to be prepared to manage a lot of data.

How many files will I receive?

Again, it is difficult to estimate this. However, if you're going receive CDF files it helps to be prepared to manage a lot of data.
Data Retention

How long do you store CDF files?
Data is deleted after 30-days.

Can I get CDF files retroactively or for previous days?
No. CDF files are generated for the present day only. We cannot generate files for days prior to your implementation.

Data Collection and Product Integration FAQ

Common data collection and integration questions and issues.

How can I differentiate inbound traffic from DCS traffic in DCS log file exports?
Traits onboarded via Inbound are populated by Inbound the same way they get populated by DCS. There are a few different ways to tell that traffic came from Inbound:

• Remote IP will be set to 68.67.173.18
• DomainID will be set to 5325
• Region will be set to 0

Can you provide me with a list of IP addresses I can white-list for dpm.demdex.net?
Unfortunately, we cannot. These IPs are assigned dynamically, by geographic region, through Amazon Web Services. As a result, Audience Manager does not control the range of IPs that can be assigned to this address.

Can you provide me with an IP address I can whitelist for your outbound FTP server?
Yes. The egress FTP IP address is 52.44.29.204.

What are the code placement and page load requirements for a DIL/Analytics Data Integration?
To bring Analytics data into Audience Manager, load DIL after the s_code module but before the s.t() function. For example, place your code, or make sure it loads, in this order:

1. Analytics s_code
2. Audience Manager DIL module
3. Analytics s.t() function

As a best practice, set up your Audience Manager-Analytics integration with either of these 2 methods:

• Put DIL directly in the s_code.
• Serve DIL and the s_code through Adobe Tag Manager.

See Data Integration Library (DIL) API.

Why are my Analytics variables missing from an Audience Manager event call?
This usually happens when:

• You serve DIL through a tag management system that loads it asynchronously with other code elements on the page.
• The s.t() function loads before DIL.

What versions of Analytics work with DIL?
You must use Analytics version 20.2 (or higher) and the Adobe AppMeasurement AS library version 3.5.2 (or higher) to work with DIL. If you don't know your Analytics or AppMeasurement version, check the Analytics call that gets made from the page. Version information shown below:

This customer uses Analytics version 24.4:
http://112.2o7.net/b/ss/.../1/H.24.4/...

This customer uses AppMeasurement version 3.5.2:
http://112.2o7.net/b/ss/.../0/FAS-3.5.2-AS3/...

**Can I collect page data if I'm not a Analytics Customer?**

Yes. The DIL module helps you collect page data even if you're not using Analytics. When set up properly, DIL can capture data from and about:

* Meta tags
* URLs and URL headers
* Search engine types
* Keywords

Additionally, clients can deploy a simple onsite object and populate it with key-value pairs that you want DIL to collect data on. This lets you add and remove specific audience data points on your site without any Audience Management updates. Work with your Partner Solutions representative to properly set this up and ensure the DIL module references the page object correctly.

**Can DIL collect data from Google Analytics?**

Yes. DIL can collect some Google Analytics (GA) elements and pass that data to Audience Manager. See:

* GA.submitUniversalAnalytics
* GA.init

**Can I get raw data from Audience Manager and how granular is it?**

Yes, Audience Manager can provide you with data collected for users we've seen on your inventory. This includes:

* The unique user ID (UUID) assigned by Audience Manager
* Trait and segment IDs
* Unused signals
* Time stamps
* Page URLs

**I want to collect data on one site and target users via a DFP on a different site. Do I need to deploy code on the other property if I don't want to collect data from that location?**

Yes. Audience Manager DIL code must be on the other site's page to target ads to a user. To target a user in the ad server, we need to send segment information to DFP before the creative loads. To do this, Audience Management code must be on the page where you want to target the user. The code identifies the user and sends that information to DFP. If Audience Manager code is absent from the target page, then we cannot send segments to DFP and target the user based on that data. Without DIL, Audience Manager cannot get segment information to DFP.

**What is the best third-party data provider?**

Each provider brings something unique to the table, so the answer depends on what you're looking for. We can enable overlap reporting (at no cost) to help you understand which provider may work best for you.
How does Audience Manager set cookies and pass variables to DFP?

Audience Manager sets 2 cookies: One sends segment variables to the DFP ad tag and the other sets our unique user ID (UUID), which is also read by DFP. Adding the UUID to the ad tag means we can do user-level reporting and audience discovery.

Can we send a DSP information about points in the conversion funnel reached by a user?

Yes. We can send funnel data, but the DSP must have the technical capability to use it. A DSP must confirm they can handle multiple segments. If they cannot, we may need to create specific segments to pull a user out of other segments based on their conversion progress (e.g., completed step 1 and 2 but not step 3). You may want to send this information to a DSP so they can retarget users, direct them to a specific landing page, or display specific creatives.

How can I confirm that data sent via FTP has been picked up by Audience Manager?

A file has been picked up when the extension changes from .sync to .processed. When this happens, the file is in the ingestion queue. Also, your account manager can confirm when a file has been uploaded.

I want to test the functionality of the DCS API. I am sending event calls like the one shown below. The calls contain Declared IDs and signals, which should realize some traits and segments I have already set up. Can I use the General Reports and Trend Reports to verify if the trait and segment populations are increasing?

http://apse2.demdex.net/event?d_rtbd=json&d_cid=123456%01abc123&c_events=placed-an-order

No, do not rely on the General Reports and Trend Reports in this case.

The reports compute populations based on the unauthenticated profile records (UUIDs) we see in the backend at the time the reports are generated.

On a first call to the DCS, the declared IDs are not linked to any UUID (i.e. no demdex cookie is present on the client side). The DCS will randomly generate a UUID and set a demdex cookie and pass it on in the response call, but it will not transmit the UUID to the backend.

💡 Note: The generated UUID will only be materialized in our backend data storage once the device on which the cookie is set will trigger further activity.

For this reason, the reports will not reflect the events triggered by the declared IDs in your call. We recommend you use UUID, MID or mobile device IDs in event test calls to the DCS. Then, you can verify the trait and segment realizations in the General Reports and in the Trend Reports.

See also, the Index of Audience Manager IDs.

Inbound Customer Data Ingestion FAQ

Frequently asked questions about bringing offline data into Audience Manager.

Can you summarize the onboarding process?

The onboarding process consists of 2 core components described in the Technical Specifications for Inbound Batch Data Transfers. These involve:

• ID synchronization
• Inbound Data File (.sync file or .overwrite file)

Below is a list of questions and answers you might find helpful after reviewing the documentation.
Can you summarize the deployment process?

We recommend the following:

• Work with your data provider to format the daily inbound data file according to Adobe specifications.
• Transfer a test data file to Adobe for format verification.
• Work with your Adobe consultant to produce a taxonomy suitable for interpreting the contents of the data file.
• In the staging/development environment, confirm that the ID sync is configured to properly pick up the data provider's visitor ID and transfer it to the Audience Manager servers in realtime.
• Deploy DIL/ID sync to production. The ID sync will already be configured as a module within the DIL code by your Adobe consultant.
• Transfer production data files to Audience Manager. Given the dependencies on ID sync mappings, it might make sense to begin transferring data up to one week after production-code deployment, although you can start transferring the data files as soon as code goes into production.

What FTP mode should I use to transfer compressed or encrypted files?

See File Compression for Inbound Data Transfer Files.

Can I upload an inbound data file (.sync or .overwrite file) before deploying Audience Manager code into production?

• If the data provider is configured to use Profile Link for cross-device targeting, the data available for targeting shortly after an ID sync identifies to the matching Audience Manager visitor ID.
• If the data provider is not configured to use the Profile Link feature, Audience Manager processes only the data for visitor IDs in the inbound data file that have been previously synced/matched back to an Audience Manager visitor ID.

Consider the following use cases in which the data provider is not configured to use Profile Merge:

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Case 1** | On Monday, a visitor identified in the CRM database as visitor ABC logs in, which initiates a client-side ID sync. Audience Manager stores the mapping of visitor ABC to Audience Manager visitor 123. On Tuesday, the CRM database transfers a data file (.sync) to the Audience Manager server with the following record:  

   ABC "gender"="male","luxury_shopper"="yes"

   In this case, Audience Manager:  
   • Recognizes visitor ABC from the stored ID sync mapping.  
   • Associates the traits male and luxury_shopper with the visitor 123 profile. |
| **Case 2** | On Monday, the CRM database pushes a data file (.sync) to the Audience Manager server with the following record:  

   DEF "gender"="female","wine_enthusiast"="yes" |
<table>
<thead>
<tr>
<th>Use Case</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Audience Manager does not have a record of this visitor (or an associated visitor ID) so this record is not processed. On Tuesday, visitor DEF logs in. This action initiates the first client-side ID sync for that visitor. This action maps visitor DEF to Audience Manager ID 456. However, this visitor does not have CRM data associated with their profile. As a result, Audience Manager does not go back and reprocess old files. On Wednesday, the CRM database pushes another data file to the Audience Manager server with the following record: <code>DEF &quot;gender&quot;=&quot;female&quot;,&quot;wine_enthusiast&quot;=&quot;yes&quot;,&quot;dma&quot;=&quot;paris&quot;</code> In this case, Audience Manager: • Recognizes visitor DEF from the stored ID sync mapping. • Associates the traits female, paris, and wine_enthusiast with the visitor 456 profile.</td>
</tr>
</tbody>
</table>

**What time of day should I transfer my file?**

Audience Manager checks for and processes files multiple times throughout the day. Upload your data whenever you're ready.

**How long does it take before data from an uploaded file is available for targeting?**

Data is available for targeting after 48 hours. Also, do not interpret the "successful upload" email as a statement that the data is available. This only means that Audience Manager has picked up the file and completed the first step of processing.

**How often should I send files and should these be full or incremental files?**

As a best practice, send an incremental file once per day for new visitors and for visitors whose data has changed. Many Audience Manager customers send a full file once per month. However, these file intervals and increments are flexible. You should send data in increments and at times that make sense for you.

**How long does Audience Manager keep my files on the server?**

FTP files are removed after they've been processed. S3 files are removed after 30-days. Files that cannot be processed due to format, syntax, or other errors are removed. See also, [Privacy and Data Retention FAQ](#).

**What's the difference between full and incremental files?**

- **Full:** A full file overwrites all of your existing visitor profiles and replaces them with the data in your file. Full files are identified by the `.overwrite` tag appended to the file name. You can use a .overwrite file to reset visitor traits or remove stale, obsolete traits.

  **Note:** The .overwrite files only overwrite Audience Manager profile data associated to this data provider. In other words, all Adobe Analytics data associated to the visitor remains intact after a .overwrite file has been processed.
- **Incremental**: An incremental file appends new data to your existing visitor profiles. Incremental files are identified by the `.sync` tag appended to the file name. Sending in an incremental file does not erase or overwrite existing profiles.

The following use cases demonstrate how these file types affect stored visitor profiles.

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Description</th>
</tr>
</thead>
</table>
| Incremental and Full | • Day 1  `.sync` file contents: `visitor123 = a, b, c`  
                      • Day 2  `.overwrite` file contents: `visitor123 = c, d, e`  
                      • Day 3 visitor profile ID 123 contains  `c, d, e` |
| Incremental Only   | • Day 1 `.sync` file contents: `visitor123 = a, b, c`  
                      • Day 2 `.sync` file contents: `visitor123 = c, d, e`  
                      • Day 3 visitor profile ID 123 contains  `a, b, c, d, e` |

For more information about full and incremental file types, see:
- [Amazon S3 Name and File Size Requirements for Inbound Data Files](#)
- [FTP Name and File Size Requirements for Inbound Data Files](#)

**What happens if I send in a file with IDs for visitors that have never performed the on-page ID sync?**

During processing, Audience Manager simply skips that record and moves on to the next. If a DPID (Data provider ID) is set up as a cross-device DPID, data that is ingested before an ID sync is saved and is available for use shortly after the ID sync occurs.

**What is the time stamp, what is it for, and can you provide an example?**

Time stamps are used for logging and record keeping. They are required by the syntax used for a properly formatted inbound file name. See:
- [Amazon S3 Name and File Size Requirements for Inbound Data Files](#)
- [FTP Name and File Size Requirements for Inbound Data Files](#)

**What is a Data Provider ID (DPID) and how do I get it?**

Your Adobe consultant will assign a three-digit or four-digit DPID to your particular data source. This ID is unique and does not change.

**How large can the daily data files be?**

See [File Compression for Inbound Data Transfer Files](#).

**Does Audience Manager support file compression?**

Yes, see:
- [File Compression for Inbound Data Transfer Files](#)
- [Amazon S3 Name and File Size Requirements for Inbound Data Files](#)
- [FTP Name and File Size Requirements for Inbound Data Files](#)

The primary key in my data source database is an email address. Is that considered personally identifiable information?
Yes. Audience Manager does not store email addresses in our database. Visitors should be assigned a random ID or a one-way-hashed version of the email address prior to initiating ID syncs.

Are the data file contents case-sensitive? How about the ID sync?

There are two basic components of a data file: A Unique User ID (UUID) and profile data, usually in the form of key-value pairs or codes. The UUID is case-sensitive. Generally, profile or key-value data is not case-sensitive.

Should I use FTP or Amazon S3 to transfer files?

As best practice, we recommend Amazon S3 because the process is simpler. Audience Manager transfers FTP files to S3 regardless, so the process is more streamlined if you drop the files on Amazon S3 yourself. What's more, customers uploading simultaneously to FTP share the FTP's bandwidth, so they should expect slower upload speeds. Amazon S3 is also replicated and distributed, so it is generally safer and more reliable than an FTP server. For more information, see Amazon S3: About.

Privacy and Data Retention FAQ

Answers to common privacy- and data-related questions or issues.

Contents:

Privacy FAQ

Data Retention FAQ

Privacy FAQ

Tip: Visit the Adobe Privacy Center for more information.

How does Audience Manager use cookies and what cookies does it set?

See Audience Manager Cookies.

Can Audience Manager clients in the US target users on EU properties?

Yes. Audience Manager works with clients who have international properties and inventory. The EU has strict privacy laws, but Audience Management has clients who use first-party data for audience targeting in Europe. Furthermore, many EU properties disclose that they collect data, which satisfies privacy laws. Audience Manager can support targeting to EU audiences, but it is your responsibility to comply with local privacy regulations.

Why does the IP address need to be removed from log files?

While still an open question in the US, regulators in Europe consider IP addresses as personally identifiable information (PII). As a result, companies that collect IP addresses in the EU are subject to strict data processing requirements. To support expansion into the EU, and help reduce compliance requirements for our customers, we remove IP addresses from log files. Also, this change addresses where we believe industry self-regulation and legally required regulations are moving within the United States. Removing IP addresses is a proactive change that will help Audience Manager (and our partners) comply with existing and future PII-related legislation.

Data Retention FAQ

The following table lists the retention times for different data types and storage systems.
Data Retention Period

<table>
<thead>
<tr>
<th>Data Type, Source, or Storage</th>
<th>Back-end servers</th>
<th>Edge servers</th>
<th>Raw logs</th>
<th>CRM-level profiles (authenticated profiles)</th>
<th>Mappings between synchronized IDs</th>
<th>Inbound data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>120-days.</td>
<td>14-days.</td>
<td>90-days (removed after 90-days of no activity).</td>
<td>Data is kept indefinitely, but customers can set an expiration period by setting a time-to-live interval on their traits.</td>
<td>Data is kept indefinitely.</td>
<td>This is inbound data you send to Audience Manager by FTP or directly to an Amazon S3 directory. See the <a href="#">Inbound Customer Data Ingestion FAQ</a>.</td>
</tr>
</tbody>
</table>

**Trait Qualification Data Retention**

The table below lists the retention options for trait qualifications.

<table>
<thead>
<tr>
<th>Trait Operation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delete a trait</td>
<td>Deleting a trait removes the trait qualification data from all the user profiles that had qualified for the trait in the past.</td>
</tr>
<tr>
<td>Trait limit reached</td>
<td>We impose a limit of 100,000 trait qualifications for each user profile. The limit applies to authenticated profiles and device profiles. If a user profile reaches this limit, we will delete the oldest trait qualifications, on a first-in, first-out basis. For more details, read our <a href="#">Trait Qualification Limit</a>.</td>
</tr>
</tbody>
</table>
Product Features and Functions FAQ

Common product and function-related questions and issues.

What is my Organization ID and how do I find it?

The Organization ID is a unique ID that identifies your organization to Audience Manager and the Adobe Experience Cloud. It consists of a case-sensitive, 24-character alphanumeric string followed by @AdobeOrg. For example, an Organization ID looks like this: 1FD6776A524453CC0A490D44@AdobeOrg. The Organization ID is used by Audience Manager's DIL API, the Experience Cloud ID service, and other Experience Cloud solutions. Users with Administrator permissions can find the Organization ID on the Adobe Admin Console. See the Administration - User Management FAQ.

Can I create traits or destinations in bulk?

Yes. See Bulk Management Tools.

Note: The Bulk Management Tools tools are not supported by Audience Manager. They're provided for convenience and as a courtesy only. For bulk changes, we recommend you work with the Audience Manager APIs instead.

Can Audience Manager reduce the need for third-party tags or pixels and improve page load times?

If Audience Manager is integrated with your third-party data partner, you can replace their pixels and tags with a server-to-server ID call to Audience Manager. In this case, Audience Manager would fire a single ID call the first time we see a user and synchronize that information with your third-party partner. This eliminates the need to make multiple pixels call from every page. Reducing pixel calls can improve page load times.

I've subscribed to a Data Feed. Where is that data stored?

Your Data Feed and all the traits contained in the feed appear as subfolders and traits in Audience Manager. Go to Manage Data > Traits and expand the 3rd-Party Data folder to view your traits or create segments and models with this data.

Profile Merge Rules and Device Graph FAQ

Answers to common Profile Merge Rule and device graph questions.

Contents:

- Device Graph Basics
- Device Graphs and Profile Merge Rules
- Segments, Device Graphs, and Profile Merge Rules
- Trait Frequency, Device Graphs, and Profile Merge Rules
- Reports, Device Graphs, and Profile Merge Rules

Device Graph Basics

What is a device graph?
A device graph is a set of ID mappings that defines groups of anonymous devices. It associates these devices to a person or household based on common elements in the signals collected from each device. These signals help identify devices at the individual or household level.

**What is an external device graph?**

An external device graph is any device graph in Audience Manager that has not been created exclusively from your own cross-device data sources. For example, when you create a Profile Merge Rule and choose the Co-op Device Graph or third-party device graph options, you're working with an external device graph. See Device Options.

**What are some common use cases for using an external device graph in a Profile Merge Rule?**

The main objective of using a device graph in a Profile Merge Rule is to evaluate and qualify multiple devices belonging to a single person or household for a specific segment. The segment itself may have multiple uses for example, targeting an audience of prospects with and ad served by a DSP or personalizing a customer's on-site experience via an on-site personalization platform. See External Device Graph Use Cases.

**Does Audience Manager provide global support for external device graphs?**

No. External device graphs are available in the United States and Canada only.

**How often does Audience Manager update external device graph data?**

Once a week.

**Device Graphs and Profile Merge Rules**

**How does Audience Manager use a device graph?**

In Audience Manager, device graphs appear as configuration options when you create a Profile Merge Rule. Through your Profile Merge Rules, these device graphs help Audience Manager:

- Merge multiple device profiles together. This creates a single superset of traits.
- Evaluate the trait superset for segment qualification (rather than evaluating each device profile individually).
- Add qualified devices to available segments.

**How many Profile Merge Rules can I create?**

Currently, you can create a maximum of 3 Profile Merge Rules.

**How many device profiles does Audience Manager merge and read when using a device graph in a Profile Merge Rule?**

When qualifying a device for a segment using a Profile Merge Rule, Audience Manager merges and reads the current device profile and a maximum of 3 additional device profiles linked by your selected device graph option.

**Which devices qualify for a segment when using a device graph in a Profile Merge Rule?**

The devices Audience Manager merges and reads are the same devices that are qualified for a segment.

💡 **Note:** For external device graphs, Audience Manager stores the mapping between devices at the platform level and selects 3 without evaluating their relationship to the devices seen in your instance of Audience Manager.

**Which devices can qualify for a segment using a Profile Merge Rule that contains a device graph?**
To qualify for a segment, devices must have been seen by Audience Manager on our edge data servers after the segment was created. Additionally, the edge servers:

• Store profile data for a maximum of 14-days.
• Delete a device profile if it has been inactive for more than 14-days. Note: This action only removes data from the edge. Other systems will retain records for longer time intervals. See the Privacy and Data Retention FAQ.
• Reset the 14-day interval if Audience Manager records any activity for that profile across the entire platform.

See also, Data Collection Components.

Where can Audience Manager send segments that have been qualified by a Profile Merge Rule that uses a device graph?

Audience Manager can send segments to a destination in batch files or in real-time. And, as noted in the FAQ entry above, To qualify for a segment, devices must have been seen by Audience Manager on our edge data servers after the segment was created.

Segments, Device Graphs, and Profile Merge Rules

How does Audience Manager un-segment a device when it is no longer qualified for a segment with a Profile Merge Rule that uses a device graph?

Currently, Audience Manager does not remove (unsegment) devices from segments with a Profile Merge Rule using a device graph. To help ensure that a device is properly qualified for segments using this type of Profile Merge Rule, avoid the following when you create segment qualification criteria:

• The Boolean value AND NOT to combine traits.
• The comparison operators < = (less than or equal to) when applying recency and frequency to traits.

As a workaround to this temporary issue, create simple segments which do not use these operators and apply the operators to unsegment users in the destination platform itself. For more information, see Profile Merge Rules and Device Unsegmentation Processes.

Related reference includes Boolean Expressions in Trait and Segment Builder and Working With Comparison Operators in Trait Builder.

If a destination can un-segment devices, will devices be removed from segments by Profile Merge Rules that use a device graph?

No. Currently, this is unsupported for Profile Merge Rules that use a device graph option (e.g., Profile Link, the Adobe device graph, and any other third-party device graph available to you as a device option). However, unsegmentation is supported by Profile Merge Rules that use the Current Device Profile option.

If I build a segment with a Profile Merge Rule that uses a device graph and the segment is using both real-time and on-boarded data, will my segment be updated as the on-boarded data changes?

No. Currently, Audience Manager evaluates segments with a Profile Merge Rule that uses a device graph in real-time only. Updates made to on-boarded traits after the segment has been evaluated will be used to qualify the segment when the device is next seen by our edge data servers. This assumes the device profile is still active in the edge servers and the on-boarded data has been made available to those systems. See also, the Privacy and Data Retention FAQ.

Do segment size estimates include devices that qualify for a segment based on connections provided by a Profile Merge Rule that uses a device graph option?
No. See the definitions for the Estimated Real-Time Population and Estimated Total Population in *Trait and Segment Population Data in Segment Builder*.

**Does Addressable Audiences include devices that qualify for a segment based on connections provided by a Profile Merge Rule that uses a device graph option?**

Yes.

**Trait Frequency, Device Graphs, and Profile Merge Rules**

**How does Audience Manager calculate trait frequency with a Profile Merge Rule that uses a device graph?**

The trait frequency is defined by the sum of the number of qualifications for a specific trait across multiple devices. To help you understand this, take a look at the following use case.

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Conditions** | • Device A and Device B are linked by a device graph.  
• You have a **Profile Merge Rule** that uses a device graph option.  
• A single segment (Segment 1) composed of a single trait (Trait 1), where Trait 1 has a frequency of 8. |
| **Actions** | Audience Manager reads and merges the device profiles for Device A and Device B. From this, we see the following:  
• Device A has qualified for Trait 1 three times. It has a frequency of 3 for Trait 1.  
• Device B has qualified for Trait 1 five times. It has a frequency of 5 for Trait 1. |
| **Results** | Audience Manager sums the frequency for Trait 1 and uses 8 (3 + 5 = 8) to decide segment qualification. Device A and Device B qualify for Segment 1 because it has a frequency of 8. |

**Reports, Device Graphs, and Profile Merge Rules**

**Can I see the number of devices that can be reached by a Profile Merge Rule that uses a device graph?**

Yes. Reports return data at the Profile Merge Rule level. Report data is updated daily. Data is based on the devices seen in your account, not those linked by a device graph. See *Report Metrics for Profile Merge Rules*.

**Can I see the number of devices qualified for a specific segment in real-time with Profile Merge Rules that use a device graph?**

Yes. The real-time population metric captures segment qualifications for the current device (the device seen in real-time) using the profiles from all of the devices linked by a device graph.

<table>
<thead>
<tr>
<th>Use Case Element</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Conditions** | Suppose we have:  
• Segment 1 built on these traits and qualification logic: Segment 1 = Trait A and Trait B and Trait C.  
• 3 device profiles: Device 1 (current device), Device 2 (device graph), Device 3 (device graph). |
<table>
<thead>
<tr>
<th>Use Case Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Actions</strong></td>
<td>Each available trait is associated with a device:</td>
</tr>
<tr>
<td></td>
<td>• Device 1 : Trait A</td>
</tr>
<tr>
<td></td>
<td>• Device 2 : Trait B</td>
</tr>
<tr>
<td></td>
<td>• Device 3 : Trait C</td>
</tr>
<tr>
<td><strong>Results</strong></td>
<td>Given the previous elements, the total population for Segment 1 is one.</td>
</tr>
<tr>
<td></td>
<td>In this case, the <strong>Profile Merge Rule</strong> uses all the devices and their traits to decide segment qualification. This means Devices 1, 2, and 3 qualify for Segment 1, but, as noted above, only Device 1 is included in the real-time segment population. This is because:</td>
</tr>
<tr>
<td></td>
<td>• Device 1 is the current device interacting with the Audience Manager Data Collection Servers (DCS) in real-time.</td>
</tr>
<tr>
<td></td>
<td>• Devices 2 and 3 are associated to Device 1 by a device graph but they are not interacting with the DCS at the same time as Device 1.</td>
</tr>
<tr>
<td></td>
<td>As a result, Devices 2 and 3 are not included in the real-time segment population metric.</td>
</tr>
</tbody>
</table>

Can I see the total number of devices qualified for a specific segment with a Profile Merge Rule that uses a device graph?

Yes. The total segment population metric includes the additional devices that have qualified for a segment based on the connections from a device graph.

<table>
<thead>
<tr>
<th>Use Case Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Conditions</strong></td>
<td>Suppose we have:</td>
</tr>
<tr>
<td></td>
<td>• Segment 1 built on these traits and qualification logic: Segment 1 = Trait A and Trait B and Trait C.</td>
</tr>
<tr>
<td></td>
<td>• 3 device profiles: Device 1 (current device), Device 2 (device graph), Device 3 (device graph).</td>
</tr>
<tr>
<td><strong>Associations</strong></td>
<td>Each available trait is associated with a device:</td>
</tr>
<tr>
<td></td>
<td>• Device 1 : Trait A</td>
</tr>
<tr>
<td></td>
<td>• Device 2 : Trait B</td>
</tr>
<tr>
<td></td>
<td>• Device 3 : Trait C</td>
</tr>
<tr>
<td><strong>Results</strong></td>
<td>Given the previous elements, the total population for Segment 1 is three (3).</td>
</tr>
<tr>
<td></td>
<td>In this case, the <strong>Profile Merge Rule</strong> uses all the devices and their traits to decide segment qualification. This means Devices 1, 2, and 3 qualify for Segment 1 and all three are included in the total population.</td>
</tr>
</tbody>
</table>
Reporting FAQ

Common reporting-related questions and issues.

For new onboarded traits, why does the Trait Graph sometimes display lower than expected numbers or 0?

Sometimes, after you upload traits, the Trait Graph doesn’t show any results or shows lower than expected numbers. This happens when the volume of data we receive is so great that the inbound processing job cannot finish ingesting this information until after the reporting deadline for that day. As a result, this data is sent to the reporting system late and won’t show up in the 1-day reporting interval which is used for plotting the Trait Graph. However, you can view this data in the 7, 14, 30, and 60-day report intervals in a Trend or General Report on the following day.

Some segments are missing from an Overlap report. Where are they?

To help reduce computational demand, these reports omit statistically insignificant data from the results. Your segments are not missing, they’re just dropped because they do not yield meaningful results or useful pools of users that you can target. See also:

- Data Sampling and Error Rates in Selected Audience Manager Reports
- Counting Unique Users in Overlap and General Reports.

If I run an email marketing campaign, how can I determine if redirected users come to my site from that campaign or from other sources?

Append a campaign-specific query string to the URL of the site section you want to monitor. Next, set up a trait rule to capture this variable. For example, if your URL passes in a campaign ID like this, www.test123.com/electronics?campaign=123, then create a trait rule to capture that data from the h_referer variable with a trait rule that looks for a header like h_referer = 'campaign=123').

What is the difference between real-time and total segment population counts?

- Real time: The number of unique users who are part of the segment and active on your properties during a set time period (i.e., Audience Manager must have recorded activity for that user for the specific period of time).
- Total segment population: An aggregation of all users who are currently classified in that segment.

I have a segment consisting of just one trait. When I look at Reporting metrics, their counts don’t match. Why is that?

See Trait and Segment Population Data in Segment Builder.

I Inbound a file and my Inbound receipt shows a high number of successfully processed records, but reporting shows much lower numbers. Why?

In the backend, onboarded data gets attached only to users that are still active in AAM (user must have had recent DCS activity in the past 120 days). Therefore, if you onboard data for users that have already expired in AAM, Inbound might tell you that a certain number of user records were onboarded, but if these users have not had any recent activity, this data is dropped when it reaches our User Profile Store and reporting will surface that.

Why are the trait uniques for my cross-device onboarded traits much higher than the total number of onboarded records?

If you onboard a file for a cross-device data provider keyed off the customer ID, Audience Manager performs a lookup to get all device IDs that are associated with each of the onboarded customer IDs. Audience Manager then assigns the onboarded traits to the device ID associated with the customer ID.
As an example, suppose you have onboarded 100 records. For each of these customer IDs, on average, AAM has associated three device IDs. As a result, the trait that was onboarded is assigned to 300 device IDs.

There are two reasons why a single cross-device customer ID can be associated with multiple device IDs:
• Users are logging in to the same cross-device account from multiple computers/browsers.
• Users are clearing their cookies. Note: “Abandoned” cookies are deleted after 120 days of user inactivity.

**Why are Total Trait Realizations for my onboarded traits always 0?**

Total Trait Realizations correspond to page loads. Total Trait Realizations provide the number of times that specific trait has fired in realtime. This number is calculated for rule-based traits only. Onboarded traits always show Total Trait Realizations as 0.

**Targeting FAQ**

Common targeting-related questions and issues.

**Where can I find a full list of third-party data providers supported by Audience Manager?**

See the [Adobe Exchange Marketplace](https://marketing.adobe.com/resources/content/resources/en/exchange/marketplace/audience.html) for a complete list of third-party data providers that Audience Manager supports.

**To target users I've never seen on my site with third-party data, should I use third-party data in Audience Manager or in a DSP?**

The answer depends on your goals. For example, if your campaign is designed to find new clients with third-party data, then work directly with a DSP. Remember, Audience Manager synchronizes data with a third-party data provider only when we see that user. If we have never seen a user before, our system will not have any information for that site visitor. For campaigns that only want to use third-party data to target users who have never visited any of your properties, then create those segments through the DSP.

**Can I market to individuals?**

Audience Manager lets you aggregate users and market to them based on shared attributes or traits. However, to comply with industry regulations, Audience Manager customers may not send personally identifiable information (PII) to our systems. As a result, you cannot use email addresses, individual names, physical addresses, etc. for targeting.

**How do I keep retargeting data secure?**

We recommend you use a server-to-server connection to exchange data with your preferred retargeting platform. Audience Manager exchanges data with most of the major DSPs through server-to-server connections. Server-to-server data transfers help prevent other actors from intercepting your data and re-selling that audience information.

**Is the Audience Manager unique user ID (UUID) tied to an ad server’s unique user ID by ID synching directly on the page?**

No. ID synchs are not made on the page for on-site publishers or servers. The Audience Manager UUID is inserted into the u= field of the ad server log files. This happens as segment gets passed in for targeting. The DIL code module performs this function. This is the same mechanism that allows us to map the server’s user ID to an Audience Manager user for segment performance reporting. However, if an ad server is present on site, then we synch IDs directly on the page.
Does Audience Manager count a user who logs on from different devices as one unique user or different unique users?

Declared ID Targeting helps Audience Manager identify a visitor across multiple devices with a single unique identifier. However, from a targeting or destination perspective, this is still 2 (or more) users because DSPs cannot reconcile those multiple IDs.

Can Audience Manager identify a user from display and mobile devices.

Yes. See Declared ID Targeting.

Can I score users with data collected online and retarget them based on this model score?

Yes. Audience Manager can provide data files to help you score users, but you must work with other vendors or software to analyze and rank this information. Send this data to Audience Manager in the form of key-value pairs. We can take this information and append it to existing user profiles. Contact your Partner Solutions representative to review this process.

What are the cookie deletion rates over a given 1 - 2 month period?

Cookie deletion is difficult to measure. Most cookie deletion comes from a few visitors who delete cookies frequently. However, most browser cookies are stable for at least 30 days, even though some may have a limited life. Some studies suggest upper-funnel targeting that is greater than 30 days would effectively eliminate 7% of the browser target audience over a 30-day period. As you know, 30 day campaigns for a given creative message are standard in the industry. From what we’ve seen, that 7% drop-off is accurate.

Cookie deletion has an adverse effect on reach and frequency calculations. As a result, we stress the value of behavioral data when trying to understand the true nature of consumer trends for display campaign planning. Our clients can leverage Audience Manager segment overlap reports, optimal impression frequency reports, and unique user trends over specific date ranges to be more scientific about campaign planning and optimal date ranges for running campaigns.

What is the expiration window for Audience Manager cookies?

The user interface lets you determine the cookie expiration interval. You can set cookies to expire after n number of days or never.

Does implementing a campaign creative in an event call cost us more?

It depends. Cost is based on unique users. If a campaign results in net new users, then yes, this will cost more. If your campaign reaches places where we’re already collecting data, then there’s no additional cost. If your campaign runs on related sites where there is significant overlap, there will be additional cost for the new unique users we see.
2017 Documentation Updates

A list of new or revised documentation released in 2017 and previous years. Includes minor updates to the Audience Manager documentation that might not be covered in the Experience Cloud release notes.

See the Experience Cloud Release Notes for changes to Audience Manager and other Experience Cloud solutions. See the Previous Years section for older release notes.

November, 2017

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trait Qualification Reference</td>
<td>Trait qualification, or trait realization is treated differently in Audience Manager, depending on trait type. This document details qualification particularities for each trait type.</td>
</tr>
<tr>
<td>Privacy and Data Retention FAQ</td>
<td>Added a section on Trait Qualification Data Retention.</td>
</tr>
<tr>
<td>Usage Limits</td>
<td>Added the total trait qualifications to the limits that we highlight here.</td>
</tr>
<tr>
<td>Inbound Data File Contents: Syntax, Invalid Characters, Variables, and Examples</td>
<td>Updated the accepted and forbidden characters in inbound data files. We also added a matrix table that shows examples of the correct way to format your inbound files, depending on the type of IDs you are importing and the method by which you want to add traits to profiles.</td>
</tr>
</tbody>
</table>

October, 2017

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCS Error Codes, Messages, and Examples</td>
<td>Returning new error codes 111, 309, 310.</td>
</tr>
<tr>
<td>Supported Attributes for DCS API Calls</td>
<td>Added d_{cts} as an optional parameter in the list of available keys for DCS requests. You must contact your Adobe Audience Manager consultant or Customer Care to enable it.</td>
</tr>
<tr>
<td>How Data Delivery and File Processing Times Affect Reports</td>
<td>Updated the data processing and delivery schedule for Outbound jobs.</td>
</tr>
<tr>
<td>DCS API Methods</td>
<td>You can send data to the DCS by using GET or POST methods. This document describes the syntax you must use, in each case.</td>
</tr>
<tr>
<td>Reporting FAQ</td>
<td>Total Trait Fires have been renamed to Total Trait Realizations in the Audience Manager user interface. We updated the FAQ to reflect this modification.</td>
</tr>
<tr>
<td>Configure an Analytics Destination</td>
<td>New content on how to send Audience Manager segments to Analytics.</td>
</tr>
</tbody>
</table>
## September, 2017

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Update Schedule for Algorithmic Models and Traits</strong></td>
<td>We updated the creation and update schedules for new or existing algorithmic models and traits.</td>
</tr>
<tr>
<td><strong>Data Collection and Product Integration FAQ</strong></td>
<td>Added a question on missing trait realizations, when sending event calls containing declared IDs to the DCS.</td>
</tr>
<tr>
<td><strong>Actionable Log Files</strong></td>
<td>Find out why Actionable Log Files is the recommended way of importing DCM log files into Audience Manager and learn how you can get started with the feature.</td>
</tr>
<tr>
<td><strong>Import DCM Data Files Into Audience Manager</strong></td>
<td>Added step 7, on what you need to do to enable Actionable Log Files after setting up the DCM data file import into Audience Manager.</td>
</tr>
<tr>
<td><strong>Working with Comparison Operators in Trait Builder</strong></td>
<td>Updated the comparison operators to correctly identify the ones that support regular expressions.</td>
</tr>
<tr>
<td><strong>Trait Details Page</strong></td>
<td>New content describes features on the trait details page, including the trait audit log.</td>
</tr>
<tr>
<td><strong>Integrate Audience Manager With Target</strong></td>
<td>New content describes how to send Audience Manager segments to Target.</td>
</tr>
<tr>
<td><strong>Data Privacy</strong></td>
<td>Revised content with new links to the Adobe Privacy Center.</td>
</tr>
<tr>
<td><strong>Declared ID Targeting</strong></td>
<td>Revised content.</td>
</tr>
</tbody>
</table>

## August, 2017

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How Data Delivery and File Processing Times Affect Reports</strong></td>
<td>Updated the time the General Reports data is available and the times the inbound file ingestion process starts each day.</td>
</tr>
<tr>
<td><strong>Data Collection Server (DCS) API Methods and Code</strong></td>
<td>Revised and reorganized DCS API content.</td>
</tr>
<tr>
<td><strong>isCoopSafe</strong></td>
<td>A new configuration to control how data is sent to the Experience Cloud Device Co-op.</td>
</tr>
<tr>
<td><strong>Profile Merge Rules and Device Graph FAQ</strong></td>
<td>Revised and updated answers related to Merge Rules created with device graph options.</td>
</tr>
<tr>
<td>July, 2017</td>
<td></td>
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<td>-------------------------------------------------</td>
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</tr>
<tr>
<td><strong>Topic</strong></td>
<td><strong>Description</strong></td>
</tr>
<tr>
<td><strong>CSV Files for Overlap Reports</strong></td>
<td>Revised to note that string data is enclosed in double-quotes &quot; &quot;.</td>
</tr>
<tr>
<td><strong>Profile Merge Rules and Device Graph FAQ</strong></td>
<td>Revised and updated to include information about unsegmentation and how device graphs affect merge rules and reporting.</td>
</tr>
<tr>
<td><strong>Profile Merge Rules and Device Un-Segmentation Processes</strong></td>
<td>New content that describes how unsegmentation works with Profile Merge Rules.</td>
</tr>
<tr>
<td><strong>Trait and Segment Population Data in Segment Builder</strong></td>
<td>Revised with new definitions that account for how Profile Merge Rules affect reporting numbers.</td>
</tr>
<tr>
<td><strong>Audience Marketplace for Data Buyers</strong></td>
<td>New and revised content for data feed subscription workflows.</td>
</tr>
<tr>
<td><strong>DCS Error Codes, Messages, and Examples</strong></td>
<td>Added new errors and text for error IDs 307 and 306.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>June, 2017</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Topic</strong></td>
<td><strong>Description</strong></td>
</tr>
<tr>
<td><strong>DCS Error Codes, Messages, and Examples</strong></td>
<td>Added the Profile Retrieval Errors 200, 201, 202 and 203.</td>
</tr>
<tr>
<td><strong>API Requirements and Recommendations</strong></td>
<td>Revised content and included new information about creating a generic, API-only user.</td>
</tr>
<tr>
<td><strong>Folder Traits</strong></td>
<td>A folder trait allows you to capture all the users and activities from its associated folder and any child folder.</td>
</tr>
<tr>
<td><strong>Folder Traits: About</strong></td>
<td>Folder traits let you automatically aggregate traits that reside within the same folder and all child folders into a targetable segment.</td>
</tr>
<tr>
<td><strong>Create a Folder Trait</strong></td>
<td>A folder trait is created automatically when you create a new folder in your taxonomy.</td>
</tr>
<tr>
<td><strong>Edit a Folder Trait</strong></td>
<td>The Edit workflow allows you to change the data source for folder traits.</td>
</tr>
<tr>
<td><strong>Delete a Folder Trait</strong></td>
<td>Delete a folder trait by deleting the storage folder that the trait belongs to.</td>
</tr>
<tr>
<td><strong>Trait Summary View</strong></td>
<td>Surfaces two new metrics in the Trait Summary View: Unique Trait Realizations and Total Trait Population.</td>
</tr>
<tr>
<td>Topic</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Usage Limits</strong></td>
<td>Added Folder limits and Folder Trait limits to the documentation.</td>
</tr>
<tr>
<td><strong>Run a General Report</strong></td>
<td>Updated to include the new metrics Unique Trait Realizations, Total Trait Realizations, Total Trait Population. We also added new day ranges to the reporting look-back window. You can now select a 1, 7, 14, 30, 60, 90-day range or lifetime.</td>
</tr>
<tr>
<td><strong>Run a Trend Report</strong></td>
<td>Updated to include the new metrics Unique Trait Realizations, Total Trait Realizations, Total Trait Population. We also added new day ranges to the reporting look-back window. You can now select a 1, 7, 14, 30, 60 or 90-day range.</td>
</tr>
<tr>
<td><strong>Trait and Segment Population Data in Segment Builder</strong></td>
<td>Changed a metric to <strong>Total Trait Population</strong> from <strong>Unique Trait Realizations</strong>.</td>
</tr>
<tr>
<td><strong>Remove Traits from a Segment</strong></td>
<td>Instructions about how to remove traits from a segment using <strong>Segment Builder</strong>.</td>
</tr>
<tr>
<td><strong>Data Feed Deactivation: Why It Happens and How to Respond</strong></td>
<td>Revised with more information about why feeds are deactivated and what you should do when this happens.</td>
</tr>
</tbody>
</table>

**May, 2017**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>File Compression for Inbound Data Transfer Files</strong></td>
<td>We increased the documented optimal and maximum file sizes for compressed files.</td>
</tr>
<tr>
<td><strong>FTP Name and File Size Requirements for Inbound Data Files</strong></td>
<td>We increased the documented optimal and maximum file sizes for compressed files.</td>
</tr>
<tr>
<td><strong>Amazon S3 Name and File Size Requirements for Inbound Data Files</strong></td>
<td>We increased the documented optimal and maximum file sizes for compressed files.</td>
</tr>
<tr>
<td><strong>Geotargeting With Platform-level Keys</strong></td>
<td>Updated the codes in the geolocation keys.</td>
</tr>
<tr>
<td><strong>Audience Lab Use Cases</strong></td>
<td>A new section in our documentation, highlighting several use cases for the <strong>Audience Lab</strong> feature.</td>
</tr>
<tr>
<td><strong>Compare Models in Audience Lab</strong></td>
<td>You can use several different types and sources of models in Audience Manager. <strong>Audience Lab</strong> offers an easy way to compare your customers' conversion rates, across your active models.</td>
</tr>
<tr>
<td>Topic</td>
<td>Description</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>Testing Creatives Across Destinations</strong></td>
<td>Use <strong>Audience Lab</strong> to measure the number of conversions a creative is driving across different destinations. This use case also allows you to measure the conversions of the creative against naturally occurring conversions.</td>
</tr>
<tr>
<td><strong>Profile Merge Rules and Device Graph FAQ</strong></td>
<td>Added a new FAQ to help answer common <strong>Profile Merge Rule</strong> and device graph questions.</td>
</tr>
<tr>
<td><strong>Understanding TraitWeight Models Summary View</strong></td>
<td>Revised content to account for the changed weighting model. The new model weights traits on a 0% to 100% scale rather than just on a 0 to 1 scale.</td>
</tr>
</tbody>
</table>

**April, 2017**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outbound Hadoop Sequence Files</strong></td>
<td>Export data from Audience Manager into your own Hadoop instance using a native binary Hadoop Sequence File format (SEQ).</td>
</tr>
<tr>
<td><strong>Receive Data From the DCS</strong></td>
<td>DCS HTTP response calls now contain the <strong>tid</strong> field. Use this field for debugging purposes in case of incidents.</td>
</tr>
<tr>
<td><strong>Send Batch Data to Audience Manager Overview</strong></td>
<td>Added information on the Production and Beta environment locations for the Amazon S3 service.</td>
</tr>
<tr>
<td><strong>Segment Performance Report</strong></td>
<td>Added a note, clarifying that 7-day and 30-day look-back periods are only available for Sunday <strong>Date Through</strong> dates.</td>
</tr>
<tr>
<td><strong>Unique User Reach</strong></td>
<td>Minor text revisions to improve clarity.</td>
</tr>
<tr>
<td><strong>Trend Analysis and Volume Analysis Reports</strong></td>
<td>Significant revisions include new information and a complete rewrite and reorganization of this documentation.</td>
</tr>
<tr>
<td><strong>Recency and Frequency</strong></td>
<td>Revised content to indicate the following:</td>
</tr>
<tr>
<td></td>
<td>• In a file name, an underscore separates the event type from the timestamp.</td>
</tr>
<tr>
<td></td>
<td>• Prior to upload, files must be gzip compressed and have a .gz file extension.</td>
</tr>
<tr>
<td><strong>Data Files for Audience Optimization Reports</strong></td>
<td>Revised content to include information about this redesigned UI feature.</td>
</tr>
<tr>
<td>Topic</td>
<td>Description</td>
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<tr>
<td>---------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Understanding Calls to the Demdex Domain</strong></td>
<td>Added a new doc on why Audience Manager makes calls to the demdex.net domain.</td>
</tr>
<tr>
<td><strong>Audience Manager Cookies</strong></td>
<td>Revised and updated with new information.</td>
</tr>
</tbody>
</table>

**March, 2017**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supported Attributes for DCS API Calls</strong></td>
<td>Updated the Key Variable Prefixes with _p, identifying private parameters in Audience Manager.</td>
</tr>
<tr>
<td><strong>Prefix Requirements for Key Variables</strong></td>
<td>Updated the Key Variable Prefixes with _p, identifying private parameters in Audience Manager.</td>
</tr>
<tr>
<td><strong>Create a Segment</strong></td>
<td>Added further search and filter capabilities to the <strong>Browse All Traits</strong> advanced search.</td>
</tr>
<tr>
<td><strong>Trait List View</strong></td>
<td>UI improvements to the way you can search and filter traits in the Traits Dashboard.</td>
</tr>
<tr>
<td><strong>Overlap Reports: Update Schedule and Minimum Segment Size</strong></td>
<td>Specified the cutoff time for segment creation as 12 AM Thursday UTC so that the users are included in the Overlap Reports for that particular week.</td>
</tr>
<tr>
<td><strong>Addressable Audiences</strong></td>
<td>Added information about prospecting and match rates.</td>
</tr>
<tr>
<td><strong>Addressable Audience Metrics</strong></td>
<td>Added more detail to metric definitions.</td>
</tr>
<tr>
<td><strong>Profile Link</strong></td>
<td>This section contains new and revised content to support the <strong>Profile Link</strong> and third-party device graph options.</td>
</tr>
</tbody>
</table>

**February, 2017**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DCS Error Codes, Messages, and Examples</strong></td>
<td>Added Integration Warnings to DCS Error Codes.</td>
</tr>
<tr>
<td><strong>Outbound Data File Name: Syntax and Examples</strong></td>
<td>Added optional file name element <code>PID-ALIAS</code> in the Outbound file.</td>
</tr>
<tr>
<td><strong>Segment Summary View</strong></td>
<td>Added 1, 14, 90-day and lifetime look-back periods for real-time and total segment population.</td>
</tr>
<tr>
<td>Topic</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Using DNS Prefetch with Different Experience Cloud Solutions</strong></td>
<td>Describes how to implement DNS prefetch to help reduce page load times.</td>
</tr>
<tr>
<td><strong>DIL create</strong></td>
<td>Revised description and added related links to the containerSNID property of DIL.create.</td>
</tr>
<tr>
<td><strong>Addressable Audience Metrics</strong></td>
<td>Revised and reorganized metric definitions.</td>
</tr>
<tr>
<td><strong>Audience Manager API Code Migration</strong></td>
<td>Revised with new content related to Swagger and migrated API methods.</td>
</tr>
<tr>
<td><strong>Folder API Methods</strong></td>
<td>Rewritten in Swagger and migrated to new site.</td>
</tr>
<tr>
<td><strong>Trait API Methods</strong></td>
<td>Rewritten in Swagger and migrated to new site.</td>
</tr>
</tbody>
</table>

January, 2017

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Usage Limits</strong></td>
<td>Added maximum audience size and advice on how to reduce it to usage limits documentation.</td>
</tr>
<tr>
<td><strong>Audience Optimization Reports</strong></td>
<td>Revised section to include new descriptions and images of updated reports.</td>
</tr>
<tr>
<td><strong>Name and Content Requirements for ID Synchronization Files</strong></td>
<td>Added ID sync sample files and added a more precise explanation around how the ID sync process works.</td>
</tr>
<tr>
<td><strong>Models Summary View</strong></td>
<td>Updated the models summary page to include available model details and controls.</td>
</tr>
<tr>
<td><strong>Index of IDs in Audience Manager</strong></td>
<td>Updated with the expected format for mobile device IDs (DAID) handled by Audience Manager.</td>
</tr>
<tr>
<td><strong>Amazon S3 Name and File Size Requirements for Inbound Data Files</strong></td>
<td>Added a note advising that the inbound data validation process will mark empty files as invalid and will not process them.</td>
</tr>
<tr>
<td><strong>Product Features and Functions FAQ</strong></td>
<td>Added new entry that describes the Experience Cloud Organization ID, including information on how to find it.</td>
</tr>
<tr>
<td>• <strong>Outbound Template Macros</strong></td>
<td>Updated to include the DPUUIDS macro.</td>
</tr>
<tr>
<td>• <strong>Outbound Macro Examples</strong></td>
<td></td>
</tr>
</tbody>
</table>
Previous Years

Links to Audience Manager release notes and documentation changes prior to 2017. For an archive of older changes at the Experience Cloud level, see the previous release notes.

2016 Documentation Updates

A list of new and revised Audience Manager documentation released in 2016. Includes minor updates or changes to the Audience Manager guide that might not be included in the Experience Cloud release notes.

December, 2016

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding TraitWeight</td>
<td>Documented an extra step in the algorithmic discovery process. This step explains the evolution of algorithmic traits over several data processing cycles.</td>
</tr>
<tr>
<td>Data Sampling and Error Rates in Selected Audience Manager Reports</td>
<td>Revised to include new information and for clarity and style.</td>
</tr>
<tr>
<td>Traffic DIL in Google Tag Manager (GTM)</td>
<td>After a Google update in May 2016, you can load DIL code in the custom HTML section of a tag. You no longer have to host the code remotely.</td>
</tr>
<tr>
<td>Data Collection and Product Integration FAQ</td>
<td>Includes a new entry about white-listing Audience Manager IP and FTP addresses.</td>
</tr>
<tr>
<td>Privacy and Data Retention FAQ</td>
<td>Updated and revised the original doc to include privacy content.</td>
</tr>
<tr>
<td>CSV Files for Overlap Reports</td>
<td>You can request a .csv file for an Overlap Report when that report reaches its 1-million record limit. Files are available for segment-to-segment, segment-to-trait, and trait-to-trait overlap reports.</td>
</tr>
<tr>
<td>GA.submitUniversalAnalytics</td>
<td>Documentation that describes a new DIL method that lets you send data to Audience Manager from Google’s Universal Analytics.</td>
</tr>
</tbody>
</table>

November, 2016

<table>
<thead>
<tr>
<th>Topic</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Visitor Authentication States in Audience Manager</td>
<td>Audience Manager handles the visitor ID authentication statuses UNKNOWN and LOGGED_OUT in the same way. The document provides more information on how we handle setCustomerID event calls.</td>
</tr>
<tr>
<td>CID Replaces DPID and DPUUID</td>
<td>You can now use Customer ID integration codes for mobile identifier data sources. Use the DSID_20914 CID_IC for Android devices and DSID_20915 CID_IC for iOS devices.</td>
</tr>
<tr>
<td>Index of IDs in Audience Manager</td>
<td>Refer to this document for a complete list of Audience Manager IDs.</td>
</tr>
</tbody>
</table>
## 2017 Documentation Updates

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Audience Lab FAQ</strong></td>
<td>Frequently asked questions about the Audience Lab feature.</td>
</tr>
<tr>
<td><strong>Date Ranges in Addressable Audiences and Destinations</strong></td>
<td>New content that describes how time intervals work for Addressable Audiences and Destinations.</td>
</tr>
<tr>
<td><strong>Addressable Audience Metrics</strong></td>
<td>Updated descriptions for new and revised report metrics.</td>
</tr>
<tr>
<td><strong>Destinations Home Page</strong></td>
<td>New content that describes features on the Destinations landing page.</td>
</tr>
</tbody>
</table>

### October, 2016

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OAuth 2.0 Integration for Real-Time Outbound Transfers</strong></td>
<td>Added the capability of securing your real-time outbound data transfer through the OAuth 2.0 protocol. Contact your Adobe Audience Manager consultant to get started.</td>
</tr>
<tr>
<td><strong>Algorithmic Models</strong></td>
<td>Changed title to Algorithmic Models from Models.</td>
</tr>
<tr>
<td><strong>Data Feed Deactivation: Why It Happens and How to Respond</strong></td>
<td>Fixed incorrect header names provided in the deactivation email attachment.</td>
</tr>
<tr>
<td><strong>Declared ID Variables</strong></td>
<td>Fixed broken link to ID service documentation.</td>
</tr>
<tr>
<td><strong>Import DCM Data Files Into Audience Manager</strong></td>
<td>Added note to remind customers to check their file format with their DCM account manager.</td>
</tr>
<tr>
<td><strong>GA.init</strong></td>
<td>Revised to note that GA.init() does not work with the latest version of Google's analytics code, analytics.js.</td>
</tr>
<tr>
<td><strong>Amazon S3: About</strong></td>
<td>Added encryption-at-rest for batch outbound data transfers.</td>
</tr>
<tr>
<td><strong>Profile Merge Rule Options Defined</strong></td>
<td>Revised to include more information about the Adobe Experience Cloud Device Co-op.</td>
</tr>
</tbody>
</table>

### September, 2016

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Privacy and Data Retention FAQ</strong></td>
<td>Modified the demdex cookie’s and the partner cookie’s time-to-live (TTL) value to 180 days to comply with French CNIL regulations.</td>
</tr>
<tr>
<td><strong>Cookies used in the Experience Cloud</strong></td>
<td>Modified the demdex cookie's and the partner cookie’s time-to-live (TTL) value to 180 days to comply with French CNIL regulations.</td>
</tr>
<tr>
<td>Topic</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Understanding the Data Integration Library (DIL)</strong></td>
<td>A general overview of the Data Information Library (DIL).</td>
</tr>
<tr>
<td><strong>Inbound Data File Contents: Syntax, Invalid Characters, Variables, and Examples</strong></td>
<td>Updated the invalid characters list in trait IDs for inbound data files.</td>
</tr>
<tr>
<td><strong>Addressable Audiences</strong></td>
<td>Minor revisions and reorganized content.</td>
</tr>
<tr>
<td><strong>Time Zones in Audience Manager</strong></td>
<td>Audience Manager uses Coordinated Universal Time (UTC) across its entire UI.</td>
</tr>
<tr>
<td><strong>Audience Manager API Code Migration</strong></td>
<td>Added links to Segment Test Group APIs &amp; Data Feed Request API.</td>
</tr>
</tbody>
</table>

### August, 2016

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><strong>Audience Lab</strong></td>
<td>Create mutually exclusive test segments in Segment Test Groups to compare and measure effectiveness of different destinations.</td>
</tr>
<tr>
<td><strong>DCS Error Codes, Messages, and Examples</strong></td>
<td>Added new customer-facing error codes to the index.</td>
</tr>
<tr>
<td><strong>Digitally Signed HTTP Requests</strong></td>
<td>A document explaining why and how to encrypt server-to-server HTTP requests.</td>
</tr>
<tr>
<td><strong>Device Targeting With Platform-level Keys</strong></td>
<td>Added a downloadable list of the most common device keys, according to Device Atlas measurements.</td>
</tr>
<tr>
<td><strong>DCS Error Codes, Messages, and Examples</strong></td>
<td>Added new customer-facing error codes to the index.</td>
</tr>
<tr>
<td><strong>secureDataCollection</strong></td>
<td>Control how DIL makes data collection calls with HTTP or HTTPS.</td>
</tr>
<tr>
<td><strong>API FAQ</strong></td>
<td>Updated content that explains why DIL uses <code>GET</code> and <code>POST</code> methods to send data in an event call.</td>
</tr>
<tr>
<td><strong>Real-Time Outbound Data Transfers</strong></td>
<td>Updated with additional requirements and information.</td>
</tr>
</tbody>
</table>
## July, 2016

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Onboarding Status Report: About</strong></td>
<td>Revised documentation for the UI redesign.</td>
</tr>
<tr>
<td><strong>Getting Started With Bulk Management</strong></td>
<td>A new bulk management template, v0.4.2 is available for download.</td>
</tr>
<tr>
<td><strong>Audience Optimization Reports</strong></td>
<td>Updated the <strong>Audience Optimization</strong> reports with Cross Channel Conversion, Role-Based Access Control, Conversion Groups, and the Reported Conversion Traits report.</td>
</tr>
<tr>
<td><strong>Cross Channel Conversion</strong></td>
<td>The <strong>Cross Channel Conversion</strong> option in the <strong>Audience Optimization</strong> reports allows you to attribute offline conversions to served online impressions or clicks.</td>
</tr>
<tr>
<td><strong>Reported Conversion Traits</strong></td>
<td>This report shows you all the traits labeled as conversion traits for a conversion group at a certain date.</td>
</tr>
<tr>
<td><strong>Geotargeting With Platform-level Keys</strong></td>
<td>Updated the keys list with the latest values.</td>
</tr>
<tr>
<td><strong>Device Targeting With Platform-level Keys</strong></td>
<td>A new document which describes the common platform-level key-value pairs you can use to target users with device-related variables across all properties in your Audience Manager account.</td>
</tr>
</tbody>
</table>

## June, 2016

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Server-Side Forwarding</td>
<td>Removed from Audience Manager documentation in September, 2017. Moved to Analytics documentation.</td>
</tr>
<tr>
<td><strong>Capturing Campaign Impression Data via Pixel Calls</strong></td>
<td>Updated to include passing mobile IDs with <code>d_cid</code>.</td>
</tr>
<tr>
<td><strong>Beta Environment</strong></td>
<td>Updated the DCS, UI and API hostnames.</td>
</tr>
<tr>
<td><strong>API URLs</strong></td>
<td>Updated the Beta environment hostname.</td>
</tr>
</tbody>
</table>

## April, 2016

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience Cloud Visitor ID Versions</td>
<td>Revised text for IDs 1 and 2.</td>
</tr>
<tr>
<td>Topic</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Profile Merge Rules Dashboard</strong></td>
<td>Revised to show new Merge Rule cards on the dashboard.</td>
</tr>
<tr>
<td><strong>Profile Merge Rule Options Defined</strong></td>
<td>Revised to include new report metrics.</td>
</tr>
<tr>
<td><strong>Report Metrics for Profile Merge Rules</strong></td>
<td>New documentation defines the report metrics and graphs for Profile Merge.</td>
</tr>
<tr>
<td><strong>Audience Manager Segments in Analytics</strong></td>
<td>Share Audience Manager segments with Analytics in real-time.</td>
</tr>
<tr>
<td><strong>Destinations</strong></td>
<td>Revisions introduce significant changes to the content and organization of the Destination docs. These changes are designed to reduce complexity and make the cookie and URL destination workflows more clear.</td>
</tr>
</tbody>
</table>

**March, 2016**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Working with Comparison Operators in Trait Builder</strong></td>
<td>Added a new named operator, Matcheswords. It let's you specify a matching word patterns without using a regular expression.</td>
</tr>
</tbody>
</table>

**February, 2016**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Deactivate a Subscriber's Data Feed</strong></td>
<td>Describes how Audience Marketplace data providers deactivate a subscriber's feed.</td>
</tr>
<tr>
<td><strong>Data Feed Deactivation: Why It Happens and How to Respond</strong></td>
<td>Describes what an Audience Marketplace data buyer can expect if a provider revokes access to a data feed.</td>
</tr>
<tr>
<td><strong>DCS Error Codes, Messages, and Examples</strong></td>
<td>Added error 172 for blocked cookies.</td>
</tr>
<tr>
<td><strong>Name and Content Requirements for ID Synchronization Files</strong></td>
<td>Revised content to improve clarity. New section about how the file names and file content IDs map to each other.</td>
</tr>
<tr>
<td><strong>Amazon S3 Name and File Size Requirements for Inbound Data Files</strong></td>
<td>Revised content to include syntax for Android and iOS codes in the file names.</td>
</tr>
<tr>
<td><strong>FTP Name and File Size Requirements for Inbound Data Files</strong></td>
<td></td>
</tr>
</tbody>
</table>
### January, 2016

<table>
<thead>
<tr>
<th>Topic</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>OAuth Authentication</strong></td>
<td>Added link for authorized and implicit authentication.</td>
</tr>
<tr>
<td><strong>Send Segments to a Google AdWords Remarketing List</strong></td>
<td>Instructions on how to send segment data to a Google AdWords remarketing list.</td>
</tr>
<tr>
<td><strong>Visitor Profile Viewer</strong></td>
<td>Added a note that says access to this feature requires admin permissions.</td>
</tr>
<tr>
<td><strong>DIL create</strong></td>
<td>Revised text for <code>declaredId</code>. Customer IDs must be passed in as un-encoded values only. Encoding IDs will create double-encoded identifiers.</td>
</tr>
<tr>
<td><strong>Making Server-to-Server DCS API Calls</strong></td>
<td>Revised text to include the <code>d_mid</code> variable.</td>
</tr>
<tr>
<td><strong>Supported Attributes for DCS API Calls</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Capturing Campaign Impression Data via Pixel Calls</strong></td>
<td>Added new key and macro entries for <code>d_mid</code> and <code>d_region</code>.</td>
</tr>
<tr>
<td><strong>Data Files for Audience Optimization Reports</strong></td>
<td>Added new description for <strong>Event Type</strong>.</td>
</tr>
<tr>
<td><strong>Understanding the Data Provider Billing Report</strong></td>
<td>New documentation that lists and defines the items in an <strong>Audience Marketplace</strong> billing report.</td>
</tr>
<tr>
<td></td>
<td>Updated text to describe the differences between 30-day totals for traits and segments.</td>
</tr>
<tr>
<td><strong>Understanding the Plan Details Page in Audience Marketplace</strong></td>
<td>New documentation that describes the plan information shown in a buyer's subscription details page.</td>
</tr>
</tbody>
</table>

### 2015 Documentation Updates

A list of new and revised Audience Manager documentation released in 2015. Includes minor updates or changes to the Audience Manager guide that might not be included in the Experience Cloud release notes.

#### November, 2015

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td><strong>Geotargeting With Platform-level Keys</strong></td>
<td>Updated with links to a downloadable list of region IDs.</td>
</tr>
<tr>
<td>Topic</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Password Requirements, Locked Accounts, and Forgotten Passwords</strong></td>
<td>Revised to include new password requirements.</td>
</tr>
<tr>
<td><strong>Billing and Impression Allocation for CPM Data Feeds</strong></td>
<td>Instructions on how to allocate impressions for different CPM Data Feeds.</td>
</tr>
<tr>
<td><strong>Billing and Impression Allocation for Flat Fee Data Feeds</strong></td>
<td>Instructions on how to allocate impressions for different flat fee Data Feeds.</td>
</tr>
<tr>
<td><strong>Usage Limits</strong></td>
<td>Audience Manager sets a maximum limit on the number of traits, segments, destinations, and algorithmic models you can create for an account.</td>
</tr>
<tr>
<td><strong>Discounts for Data Providers</strong></td>
<td>Discounts let data providers reduce the price of a data feed for selected buyers.</td>
</tr>
<tr>
<td><strong>Discounts for Data Buyers</strong></td>
<td>Buyers can request or subscribe to discounted data feeds.</td>
</tr>
</tbody>
</table>

**October, 2015**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CID Replaces DPID and DPUUID</strong></td>
<td>Update your code to use <code>d_cid</code> or <code>d_cid_ic</code> instead of <code>d_dpid</code> and <code>d_dpuuid</code>. The DPID and DPUUID variables will continue to work, but you should consider them deprecated. This includes DPID and DPUUID variants without the <code>d_</code> prefix.</td>
</tr>
<tr>
<td><strong>URL Variables and Syntax for Declared IDs</strong></td>
<td>Revised text to include the <code>d_cid</code> and <code>d_cid_ic</code> key-value pairs.</td>
</tr>
<tr>
<td><strong>Declared ID Targeting</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Private Data Feeds</strong></td>
<td>A private data feed is an option that lets providers limit buyer access to their data. Data providers and buyers should review this section for information about creating and subscribing to private data feeds.</td>
</tr>
<tr>
<td><strong>DCS Error Codes, Messages, and Examples</strong></td>
<td>A list and descriptions of error codes and messages returned by the DCS.</td>
</tr>
</tbody>
</table>
### September, 2015

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Data and Metadata Files for Audience Optimization Reports</strong></td>
<td>Format and content requirements for bringing data into the Audience Optimization reports.</td>
</tr>
<tr>
<td><strong>Capturing Campaign Impression Data via Pixel Calls</strong></td>
<td>Text revisions and updates. Also, included new key-value pairs required to use and see readable data names in the Advertising Analytics reports.</td>
</tr>
<tr>
<td><strong>Capturing Campaign Click Data via Pixel Calls</strong></td>
<td>Text revisions and updates. Also, included new key-value pairs required to use and see readable data names in the Advertising Analytics reports.</td>
</tr>
<tr>
<td><strong>Audience Optimization Reports</strong></td>
<td>Updated intro with requirement information.</td>
</tr>
</tbody>
</table>

### August, 2015

<table>
<thead>
<tr>
<th>Topic</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Bulk Management Tools</strong></td>
<td>The Bulk Management Tools let you create and manage multiple objects at once with single operation. You can use Bulk Management Tools to work with data sources, derived signals, destinations, folders, segments, and traits.</td>
</tr>
</tbody>
</table>
| **Implement the Audience Management Module**| The context data variable ended incorrectly with a dot instead of an underscore.  
  • Correct: c_contextData.*  
  • Incorrect: c_contextData_* |
<p>| <strong>Profile Merge Customer Enablement</strong>      | Analytics customers need to set an integration code when using the Master Marketing Profile and passing declared IDs through the Visitor ID service to Audience Manager. This document is deprecated and has been replaced by . |
| <strong>Reporting FAQ</strong>                          | A new FAQ entry explains why, sometimes, newly onboarded traits do not show up in the Trait Graph.                                      |
|                                            | Revised the description for estimated segment size.                                                                                       |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td><strong>System Components</strong></td>
<td>Updated text and new images that explain how various Audience Manager systems work and how data flows through our system.</td>
</tr>
</tbody>
</table>

**July, 2015**

<table>
<thead>
<tr>
<th>Topic</th>
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<tbody>
<tr>
<td>Documentation links and cross-references.</td>
<td>Updated obsolete links. Clicking a cross-reference should take you to the correct document instead of a redirect notification.</td>
</tr>
<tr>
<td><strong>Import DCM Data Files Into Audience Manager</strong></td>
<td>Bring your DoubleClick Campaign Manager data into Audience Manager.</td>
</tr>
<tr>
<td><strong>Data Collection Server (DCS) API Methods and Code</strong></td>
<td>Use DCS code as an API for real-time data transfers.</td>
</tr>
</tbody>
</table>

**June, 2015**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>The DIL <em>DIL create</em> method.</td>
<td>• Removed the optional parameter, <code>iframeAttachmentDelay</code>.</td>
</tr>
<tr>
<td></td>
<td>• Added a note to <code>declaredId</code> variable. When using the Visitor ID Service, set the ID with <code>setCustomerIDs</code> instead of DIL. See <em>Customer IDs and Authenticated States</em>.</td>
</tr>
</tbody>
</table>

**May, 2015**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Audience Marketplace</strong></td>
<td>Audience Marketplace lets data providers and buyers execute data deals in a self-service manner with minimum effort. It does this by providing specialized features that vary depending on your role as a data buyer or data seller.</td>
</tr>
<tr>
<td>Revisions:</td>
<td>• Simplified steps and directions for creating a group and assigning permissions.</td>
</tr>
<tr>
<td><em>Create Groups</em></td>
<td>• Added information about Wild Card Permissions and how to use them.</td>
</tr>
<tr>
<td><em>Understanding Wild Card Permissions</em></td>
<td></td>
</tr>
</tbody>
</table>
## April, 2015

<table>
<thead>
<tr>
<th>Topic</th>
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</thead>
</table>
| *Inbound Data File Contents: Syntax, Invalid Characters, Variables, and Examples* | Added following note:  
*Note:* Audience Manager does not support .zip files for inbound S3 buckets.                                                                 |
| *Reporting FAQ*                                            | Added a new FAQ that explains why Total Fires for onboarded traits always displays as 0.                                                                                                                |
| *Geotargeting With Platform-level Keys*                    | Added information about targeting in the United Kingdom and Netherlands Antilles.                                                                                                                          |

## March, 2015

<table>
<thead>
<tr>
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</thead>
</table>
| *Reporting FAQ*             | Added a new FAQ that explains why the number of successfully processed records might differ when comparing the Inbound receipt and reporting in AAM.  
Added a new FAQ that explains why the trait uniques for my cross-device onboarded traits are higher than the total number of onboarded records. |
| *System Components*         | Removed information about Talend.  
Removed information about Netezza and replaced it with information about RedShift.                                                                                                                      |
| *Data Retention*            | New topic.  
Changed to *Privacy and Data Retention FAQ* (12/2016).                                                                                                                                                |

## February, 2015

<table>
<thead>
<tr>
<th>Topic</th>
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</thead>
<tbody>
<tr>
<td><em>How Data Delivery and File Processing Times Affect Reports</em></td>
<td>Updated the times for daily inbound file ingestion and outbound file export.</td>
</tr>
</tbody>
</table>
| *Reports Dashboard*                                        | Added information explaining how the delta change is calculated depending on the chosen time frame.  
Added a note explaining how to investigate an unusually large delta change in unique visitors.                                                     |
### Recency and Frequency

Added the following information to the Limitations and Rules section:

- Frequency-capping expressions include all the users whose number of trait realizations is below a desired value.

  **For example:**
  
  \[
  \text{frequency}([1000T]) \leq 5
  \]

  This expression includes all users that have realized the trait with the ID "1000" fewer than five times, including users who have not realized the trait.

- When you need recency/frequency requirements to be less than a specific number of times or days, you must join that trait to another with an AND operator.

  **Using the above example, frequency}([1000T]) \leq 5, the expression becomes valid when joined with another trait.**

  **For example:**
  
  \[
  \text{frequency}([1000T]) \leq 5 \text{ AND isSiteVisitorTrait}
  \]

- For advertising frequency-capping use cases, you could create a segment rule similar to the following:

  \[
  (\text{frequency}([1000T] \leq 2D) \geq 5)\
  \]

  This expression includes all users that have realized the trait with the ID "1000" in the last 2 days more than five times.

  You can achieve the capping by sending this segment to the ad server and then include a NOT on the segment in the ad server. This approach achieves greater performance in Audience Manager, while still serving the same purpose for frequency capping.

---

### January, 2015

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Folder API Methods</strong></td>
<td>Changed the code sample to include the folder count property.</td>
</tr>
<tr>
<td><strong>Visitor Profile Viewer</strong></td>
<td>New topic.</td>
</tr>
<tr>
<td>Topic</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Inbound Customer Data Ingestion FAQ</td>
<td>Clarified the amount of time it takes for inbound data to be propagated to the edge. Significantly edited topic.</td>
</tr>
<tr>
<td>Reports Dashboard</td>
<td>New topic.</td>
</tr>
<tr>
<td>General Reports</td>
<td>Added section explaining how numbers in <strong>General Reports</strong> are generated.</td>
</tr>
<tr>
<td>siteCatalyst.init</td>
<td>Added an optional that excludes Personally Identifiable Information (PII).</td>
</tr>
<tr>
<td>Reporting FAQ</td>
<td>Added information explaining why there could be a difference between real-time segment population and the unique values.</td>
</tr>
<tr>
<td>Profile Merge Customer Enablement</td>
<td>Added additional step to explain how to add the use of Declared IDs to DIL and the Mobile SDK. This document has been deprecated and replaced by .</td>
</tr>
<tr>
<td>Inbound Data File Contents: Syntax, Invalid Characters, Variables, and Examples</td>
<td>Revised topic.</td>
</tr>
<tr>
<td>Profile Merge Architecture</td>
<td>Updated text and added illustrations. This document has been deprecated and replaced by <strong>Profile Link</strong>.</td>
</tr>
<tr>
<td>Recency and Frequency</td>
<td>Added bullet explaining that you can configure frequency requirements without configuring recency requirements by leaving recency blank.</td>
</tr>
<tr>
<td>Outbound Data File Contents: Syntax and Parameters</td>
<td>Added information about removed segments in outbound files.</td>
</tr>
<tr>
<td>Outbound Template Macros</td>
<td>Added new topic.</td>
</tr>
</tbody>
</table>
Help and Legal

Resources for customer care and legal issues related to the use of this product and documentation.

If There’s a Problem

Customer Care is prepared to help you solve any issues that might arise. Provide as much of this information as you can when contacting Customer Care. This will help the team understand and resolve your issue.

Basic Information

For technical issues or to log a bug, contact Customer Care.

• Telephone: 1-800-497-0335
  For toll-free numbers outside the United States, see our regional Customer Care contact numbers site. When asked to select an option for your product, press 4 to contact the Audience Manager team.

• Email: amsupport@adobe.com

Please have the following information ready before contacting us.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem Summary</td>
<td>Provide a brief, descriptive summary of the problem.</td>
</tr>
<tr>
<td>Account Information</td>
<td>Provide your:</td>
</tr>
<tr>
<td></td>
<td>• Company name.</td>
</tr>
<tr>
<td></td>
<td>• Audience Manager sub-domain (if known). The sub-domain is the URL of the domain that sends data collection events to Adobe (e.g., <a href="https://myCompany.demdex.net">https://myCompany.demdex.net</a>).</td>
</tr>
<tr>
<td>Steps to Reproduce</td>
<td>Include as much detail as possible, including any URLs needed to duplicate the problem as well as the expected result. Your description should contain enough detail that somebody unfamiliar with Audience Manager should be able to follow your steps or procedures and reproduce the problem.</td>
</tr>
<tr>
<td>Priority</td>
<td>Assign a priority to this issue. The priority range is from P1 (most important) to P4 (least important).</td>
</tr>
<tr>
<td>Business Impact</td>
<td>Describe how this issue affects your business. For example, is this issue causing revenue loss or rendering the product unusable? Have you been working around this issue?</td>
</tr>
<tr>
<td>Expectations</td>
<td>What do you expect to happen?</td>
</tr>
</tbody>
</table>
In Case of an Outage

If you suspect there is an outage, first check the Experience Cloud System Status page (http://status.adobe.com) This has a record of all outages, incidents and maintenance for Experience Cloud Solutions, including Audience Manager, and includes latest updates from our Tech Ops team. If you still require assistance, please ensure you know the following in addition to the information listed above when you contact Customer Care:

- Time outage started
- Explanation of what is occurring
- Scope
- Expectation of resolution (ETA, severity, and so on)

Contact and Legal Information

Information to help you contact Adobe and to understand the legal issues concerning your use of this product and documentation.

Help & Technical Support

The Adobe Experience Cloud Customer Care team is here to assist you and provides a number of mechanisms by which they can be engaged:

- Check the Experience Cloud help pages for advice, tips, and FAQs
- Ask us a quick question on Twitter @AdobeMktgCare
- Contact the Customer Care team directly
- Check availability and status of Experience Cloud Solutions

Service, Capability & Billing

Dependent on your solution configuration, some options described in this documentation might not be available to you. As each account is unique, please refer to your contract for pricing, due dates, terms, and conditions. If you would like to add to or otherwise change your service level, or if you have questions regarding your current service, please contact your Account Manager.

Legal

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