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Experience Cloud ID Service

The Experience Cloud ID Service (ID service) provides a universal, persistent ID that identifies your visitors across all the solutions in the Experience Cloud. It can replace ID generation code for services such as Analytics, Audience Manager, Target, and other Experience Cloud solutions or features.

Getting Started

- Overview
- Requirements for the Experience Cloud ID Service
- Implementation with Dynamic Tag Management

Experience Cloud ID Javascript Libraries

JavaScript for the Experience Cloud ID service is located at:
https://github.com/Adobe-Marketing-Cloud/id-service/releases

New or Featured Items

- Opt-in Service
- getVisitorValues
- FAQs
- isCoopSafe
- idSyncContainerID

Release Notes

Version 4.0 February 12, 2019 release includes the Opt-in Service used to identify if you can place a cookie on a user's device or browser when visiting your site.

The January 18, 2018 release includes the 3.0.0 JavaScript update, and updates to API methods. See disableIdSyncs and disableThirdPartyCookies.

- See the latest Experience Cloud Release Notes for new features and fixes.
- See the previous release notes for older releases.

Experience Cloud Resources

- Adobe Privacy Center
- Adobe Experience Cloud
- Adobe Training and Tutorials
- Product Documentation Home
Overview

The role of the Experience Cloud ID service in the Adobe Experience Cloud.

The Experience Cloud ID Service: A Foundational Element of Core Services

The Experience Cloud ID service enables the common identification framework for the Experience Cloud Core Services, solutions, and customer attributes and audiences in the People core service. It works by assigning a unique, persistent ID to a site visitor. When your organization implements the ID service, this ID lets you identify the same site visitor and their data in different Experience Cloud solutions.

With an Experience Cloud Visitor ID (MID)  Without an Experience Cloud Visitor ID (MID)

Also, the ID service can replace the different solution-specific IDs (e.g., Analytics AID). And, through the Customer IDs and Authentication States functionality, the ID service lets you pass in your own customer IDs to the Experience Cloud. Keep in mind, however, that the ID service only works with the solutions you're already subscribed to. It won't provide access to other products if you're not signed up for them.

Going forward, the ID service is an integral component of many current and future Experience Cloud features, enhancements, and services. Currently, the ID service supports Analytics, Audience Manager, and Target. And, it is required if you want to participate in the Adobe Experience Cloud Device Co-op. If you have not implemented the ID service, now is the time to start considering a migration strategy. For more information about the importance and role of the ID service, see Why the Experience Cloud ID Service Should be on Your Radar.

Feature Summary

To sum up, the ID service:

• Creates a common key or ID which can be used to link profiles and identities.
• Uniquely identifies a device across multiple solutions.
• Sets a first-party cookie in customer’s domain to ensure tracking on same domain. See Experience Cloud.
• Receives aliases and ID mappings from Experience Cloud customers and partners.
• Manages ID synchronization within the Experience Cloud.
• Supports ID synchronization with different third-parties across the ad tech ecosystem.
ID Service Requirements
Your solution and other Adobe code libraries must meet these requirements before you can use the ID service.

Cookies and the Experience Cloud ID Service

The ID service uses your organization ID, the Experience Cloud AMCV cookie, and a demdex cookie to create and store unique, persistent identifiers for your site visitors. These cookies let the ID service track visitors across your different domains and enable data sharing among different Experience Cloud solutions.

Understanding ID Service cookies
The ID service relies on the AMCV, AMCVS, and demdex cookies to function properly. These cookies are just files that store data used by the ID service. These ID service cookies are not dangerous, malicious, or different from other first- or third-party cookies stored by a website or service in a browser, following the same rules that govern other first- and third-party cookies. Refer to the following sections below for more information about cookies used by the ID service.

What the ID Service cookies can do
• Set and store a unique ID for your site visitors (the MID).
• Persist this unique ID so the ID service can collect and share data with other Experience Cloud solutions.
• Track users across your domains. However, this requires that you own those other domains and have ID service code deployed on them.

What the ID Service cookies cannot do
• Store, transmit, or execute computer viruses.
• Access or store personally identifiable information (PII) like your email address.
• Control computer hardware or software.
• Make computers unstable or cause performance problems.
• Track users on sites that do not use the ID service.

AMCV cookie
The following attributes of the cookie set by the ID service.

Name
The AMCV cookie name follows the syntax AMCV_<variable name>@AdobeOrg. In the name, the <variable name> elements are placeholders for part of your Experience Cloud organization ID. This ID is passed in to the DCS by the Visitor.getInstance function in the ID service code.

A fully formed cookie name would look similar to this:
AMCV_1FD6776A524453CC0A490D44%40AdobeOrg

Contents
The AMCV cookie contains the Experience Cloud visitor ID or MID. The MID is stored in a key-value pair that follows this syntax, mid|<Experience Cloud ID>.

A fully formed key-value pair would look similar to this:
mid|2026567315898041972273508975303663573

This persistent identifier enables cross-solution data sharing.
Domain
The AMCV cookie is set in the first-party domain of a browser. This means it is set in the domain of the site currently visited by a user. As such, ID service code and other Experience Cloud code libraries can read the MID stored in the AMCV cookie.

However, because the AMCV cookie is set in the first-party domain, it cannot be used to track and identify users across different domains. Instead, the ID service relies on the organization ID and the demdex ID to return the correct MID when a site visitor navigates to a different domain.

AMCVS cookie
Name
The AMCVS cookie name follows the syntax `AMCVS_#####@AdobeOrg`. In the name, the `#####` elements are placeholders for part of your Experience Cloud organization ID. This ID is passed in to the DCS by the `Visitor.getInstance` function in the ID service code.

A fully formed cookie name would look similar to this:

```
AMCVS_1FD6776A524453CC0A490D44%40AdobeOrg
```

Contents
The AMCVS cookie serves as a flag indicating that the session has been initialized. Its value is always `1` and discontinues when the session has ended.

Domain
The AMCVS cookie is set in the first-party domain of a browser. This means it is set in the domain of the site currently visited by a user.
Demdex cookie

The following table lists and defines some important attributes of the demdex cookie.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>The cookie name is &quot;demdex.&quot;</td>
</tr>
<tr>
<td>Contents</td>
<td>The demdex cookie contains the demdex ID, which is generated by the DCS.</td>
</tr>
<tr>
<td>Domain</td>
<td>The demdex cookie is set in the third-party, demdex.net domain in the browser. This domain is separate from the site currently visited by a user.</td>
</tr>
</tbody>
</table>

Unlike the first-party, AMCV cookie, the demdex cookie and ID persists across different domains. The demdex ID and your organization ID are the common values that allows the ID service to return and identify a site visitor with the right visitor ID.

For related information, see *Understanding Calls to the Demdex Domain.*
s_ecid cookie

The following table lists and defines some important attributes of the s_ecid cookie.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Stored</td>
<td>Contains a copy of the Experience Cloud ID (ECID) or MID. The MID is stored in a key-value pair that follows this syntax, s_ecid=MCMID</td>
</tr>
<tr>
<td>Expiration</td>
<td>2 years</td>
</tr>
<tr>
<td>Usage</td>
<td>This cookie is set by the customer's domain after the AMCV cookie is set by the client. The purpose of this cookie is to allow persistent ID tracking in the 1^st^ party state and is used as a reference ID if the AMCV cookie has expired. Check AMCV cookie here for more details.</td>
</tr>
<tr>
<td>Location</td>
<td>CNAME customers only. Not applicable for 3^rd^party scenarios. Cookie is stored on your domain, the same domain used by CNAME and your Analytics image request.</td>
</tr>
<tr>
<td>Size</td>
<td>45 bytes</td>
</tr>
</tbody>
</table>

Generating the Experience Cloud ID

The Experience Cloud ID (MID) is derived mathematically from your organization ID and the demdex ID. As long as these IDs remain constant, generating the right MID for a specific user is simply a math problem. With the same organization ID and demdex ID you get the same MID value every time. This allows the ID service to track visitors across domains that you control and have configured with ID service code.

The ID service starts to create a MID as your page loads. During this process, code provided by the visitorAPI.js code library sends your organization ID in an event call to the ID service. The ID service creates and returns the MID and a demdex ID in the AMCV and demdex cookies respectively.

Next steps

See How the Experience Cloud ID Service requests and sets IDs.

How the Experience Cloud ID Service requests and sets IDs

An overview of the ID request and response process. These examples cover ID assignment on individual sites, across different sites, and for sites managed by different Experience Cloud customers with their own organization IDs.

💡 Note: If you’re not familiar with how the Experience Cloud ID service creates the visitor ID, take a moment to review Experience Cloud.

Tip: See also our ID service video on cross-domain tracking.

Requesting a Experience Cloud ID

The following examples demonstrate how the ID service requests and receives the Experience Cloud visitor ID. These examples use two fictitious companies, the Food Company and the Sports Company, to demonstrate data flows for ID requests and responses. Each company has a unique Experience Cloud organization ID and has implemented the ID service code on all of their sites. These use cases represent data flows for a generic ID service implementation without Analytics, legacy IDs, or browsers that block third-party cookies.
First request

In this example, a new visitor comes to the pizza site managed by the Food Company. The Food Company has ID service code on the pizza website. When the pizza site loads, the ID service code checks for the AMCV cookie in the pizza domain.

• If the AMCV cookie is set, the site visitor has a Experience Cloud ID. In this case, the cookie tracks the visitor and shares data with other Experience Cloud solutions.
• If the AMCV cookie is not set, the ID service code calls a regional data collection server (DCS) at dpm.demdex.net/id (see also, Understanding Calls to the Demdex Domain). The call includes the organization ID for the Food Company. The organization ID is set in the `Visitor.getInstance` function of the ID service code.

First response

In the response, the DCS returns the Experience Cloud ID (MID) and the demdex cookie. The ID service code writes the MID value to the AMCV cookie. For example, say the DCS returns a MID value of 1234. It would be stored the AMCV cookie as `mid|1234` and set in the first-party, pizza domain. The demdex cookie also contains a unique ID (let’s call it 5678). This cookie is set in the third-party, demdex.net domain, which is separate from the pizza domain.
As you'll see in the next example, the demdex ID and organization ID allows the ID service to create and return the correct MID when our visitor moves to another site belonging to the Food Company.

**Cross-site request and response**

In this example, our Food Company visitor navigates to the tacos site from the pizza site. The Food Company has ID service code on the tacos website. The visitor has never been to the tacos website.

Given these conditions, there is no AMCV cookie on the tacos site. And, the ID service can't use the AMCV cookie set on the pizza site because that it is specific to the pizza domain. As a result, the ID service must call the DCS to check for and request a visitor ID. In this case, the DCS call includes the Food Company's organization ID and the demdex ID. And remember, the demdex ID is picked up from the pizza site and stored as a third-party cookie under the demdex.net domain.

After the DCS receives the organization ID and the demdex ID, it creates and returns the correct MID for our site visitor. Because the MID is derived mathematically from the organization ID and the demdex ID, the AMCV cookie contains the MID value, \( mid = 1234 \).
ID requests from other sites

In this example, our visitor leaves the Food Company sites and navigates to the soccer site owned by the Sports Company. When the visitor comes to the soccer site, the ID checking and request process works the same way as described in the previous examples. However, because the Sports Company has its own organization ID, the ID service returns a different MID. The new MID is unique to the domains controlled by the Sports Company and lets that enterprise track and share visitor data across solutions in the Experience Cloud. The demdex ID remains the same for this visitor because it's contained in a third-party cookie and persists across different domains.

Understanding ID synchronization and match rates

An overview of ID synchronization processes and match rates in the Experience Cloud ID service, including Adobe Media Optimizer and the ID service.
ID synchronization and match rates

ID synchronization matches IDs assigned by the ID service to IDs assigned to site visitors by our customers. For example, say the ID service has assigned a visitor ID 1234. Another platform knows this visitor by ID 4321. The ID service maps these IDs together during the synchronization process. The results add new data points to what our customers know about their site visitors. And, if the ID service can’t match an ID, it creates a new one and uses that ID for future synchronization.

Match rates measure and validate the effectiveness of the ID synchronization process. High match rates suggest that a particular service will be more effective and provide access to a larger online audience than a service with low match rates. Comparing match rates is a quantifiable way to evaluate different integrated ad tech platforms.

Ensuring high match rates

To generate high match rates, it is important to set up the ID service properly (see the standard implementation guide). A proper implementation helps ensure high match rates because lets the ID service set the cookies it requires to function and synchronize IDs with enabled data partners. However, factors such as slow Internet connections, data collection from mobile devices or wireless networks can affect how well the ID service collects, synchronizes, and matches IDs. These client-side variables are beyond the control of the ID service or Adobe.

ID synchronization process described

The ID service synchronizes IDs in real-time. This process works in the browser instead of through a server-to-server data transfer. The following table describes the steps in the ID synchronization process.

Step 1: Load page
When a visitor comes to your site and loads a page, the `Visitor.getInstance` function makes a CORS or JSON-P call to the ID service. The ID service responds with a cookie that includes the visitor's Experience Cloud ID (MID). The MID is a unique ID assigned to each site visitor. See also, *Cookies and the Experience Cloud ID Service*.

**Step 2: Load iFrame**

While the page body is loading, the ID service loads an iFrame called the *Destination Publishing iFrame*. The *Destination Publishing iFrame* loads in a domain separate from the parent page. This design helps ensure page performance and improves security because the iFrame:

- Loads asynchronously in relation to parent page. This means the parent page can load independently from the *Destination Publishing iFrame*. Loading the iFrame and loading ID sync pixels from within the iFrame won't affect the parent page or the user experience.
- Loads as fast as possible. If this is too fast, you can load the iFrame after the window load event (not recommended). See `idSyncAttachIframeOnWindowLoad` for details.
- Prevents code in the iFrame from gaining access to or affecting the parent page.

See also, *How the Experience Cloud ID Service requests and sets IDs*.

**Step 3: Fire ID syncs**

The ID sync is a URL that is fired in the Destination Publishing iFrame. As shown in this generic example, an ID sync URL contains a partner's ID synchronization endpoint and a redirect URL, which is a redirect back to Adobe that includes their ID.

```text
```

See also, *ID Synchronization for Inbound Data Transfers*.

**Step 4: Store IDs**

Synchronized IDs are stored on the *edge and core data servers*.

**Sync services manages ID synchronization**

The term *Sync Services* refers to internal Experience Cloud technologies responsible for ID synchronization. This service is enabled by default. To disable it, add an optional variable to the ID service `Visitor.getInstance` function.

Sync Services matches different Experience Cloud IDs such as:

- Third-party Experience Cloud cookie IDs to first-party Experience Cloud IDs.
- First-party Experience Cloud cookie IDs to Adobe Media Optimizer (AMO) IDs.
- Third-party Experience Cloud cookie IDs to third-party data provider and targeting platform IDs. This includes services and platforms such as data providers, demand and/or supply-side platforms, ad networks, exchanges, etc.
- First-party Experience Cloud cookie IDs to cross-device partner IDs.

**ID synchronization with Adobe Media Optimizer**

Adobe Media Optimizer is an exception to the iFrame-based ID synchronization process. Because Media Optimizer is a trusted domain, ID syncs take place from the parent page rather than in the *Destination Publishing iFrame*. During synchronization, the ID service calls Media Optimizer at `cm.eversttech.net`, which is a legacy domain name used by Media Optimizer prior to its acquisition by Adobe. Sending data to Media Optimizer helps improve match rates and is automatic for ID service customers using version 2.0 (or higher). See also, *Media Optimizer Cookies*. 
Implementation guides

Instructions and code samples for standard and non-standard implementations of the Experience Cloud ID service.

⚠️ **Important:** Be sure to read and understand the ID service requirements before getting started with these procedures.

## Standard implementation

A standard implementation uses Dynamic Tag Manager (DTM) to help you get started with the ID service and integrate it with other Experience Cloud solutions. We strongly recommend that you use DTM when implementing the ID service. To get started, see Implementation with Dynamic Tag Management.

## Non-standard implementations

These procedures and code samples can help you set up the Experience Cloud ID service in a manual, or non-standard manner. Please note that these implementations are often technically challenging and complex. They can require scarce engineering resources on your part or consume contracted support time with your Adobe consultant.

💡 **Tip:** As an alternative, we recommend using DTM to implement the ID service. DTM streamlines the implementation workflow and automatically ensures the correct code placement and sequencing. Additionally, DTM puts you on the recommended implementation path for the ID service and subsequent integrations with other Experience Cloud solutions.

## Implement with Launch

Launch, by Adobe is the primary tool used to set up, deploy, and integrate the Experience Cloud ID service with your other Experience Cloud solutions.

### About Launch

**Launch, by Adobe** is the next-generation of the Adobe tag-management capability that is built into the Adobe Experience Cloud. Launch enables clients to:

- Deploy client-side web products using integrations called extensions
- Consistently capture, define, manage, and share data between marketing and advertising products from other vendors and from Adobe
- Launch is an advanced JavaScript delivery system that evaluates conditions and executed actions to efficiently and effectively deploy client-side libraries and products. It provides a highly scalable approach to managing and building extensions, together with a robust set of APIs for programmatic interaction with the Adobe Experience Cloud.

## Implementation with Dynamic Tag Management

Older implementations use Dynamic Tag Management (DTM) to set up, deploy, and integrate the Experience Cloud ID service with your other Experience Cloud solutions.
Note: Currently, Launch, by Adobe is the preferred and recommended implementation tool because it helps simplify complex tag management tasks and automates code placement beyond the capabilities of DTM. See Implement with Launch.

Dynamic Tag Management and the ID Service

Dynamic Tag Management lets you configure, deploy, and manage your ID service instance and related Experience Cloud solution integrations. DTM helps simplify the implementation process because it is deeply integrated with the ID service and other Experience Cloud solutions. Simply add and configure the Experience Cloud ID tool and specify information, such as:

- Experience Cloud Organization ID (automatically populated if linked to the Experience Cloud)
- Analytics tracking server (secure and non-secure)
- Experience Cloud server (for first-party tracking servers)

DTM is available at no charge to any Experience Cloud customer.

Getting started with DTM

DTM is a simple yet powerful tool. If you're not already using it, we strongly encourage you to do so. See the DTM documentation and DTM Jump Start videos to get started with this service. For instructions on how to set up the ID service with DTM, see the information and procedures in the sections below.

Implement the Experience Cloud ID Service for Analytics

These instructions are for Analytics customers who want to use the Experience Cloud ID service and do not use Dynamic Tag Management (DTM). However, we strongly recommend that you use DTM to implement the ID service. DTM streamlines the implementation workflow and automatically ensures the correct code placement and sequencing.

Important:

- Read the requirements before you begin.
- Configure and test this code in a development environment before implementing it in production.

Follow these steps to implement the ID Service for Adobe Analytics:

1. Download the ID Service code
2. Add the Visitor.getInstance function to the ID Service Code
3. Add your Experience Cloud Organization ID to Visitor.getInstance
4. Add your tracking servers to Visitor.getInstance
5. Update your AppMeasurement.js or s_code.js file
6. Add Visitor API code to the page
7. (Optional) Configure a grace period
8. Test and deploy ID Service code

Step 1: Download the ID Service code

The ID Service requires the VisitorAPI.js code library. To download this code library:

1. Go to Admin > Code Manager.
2. In Code Manager, click either JavaScript (New) or JavaScript (Legacy).

   This downloads compressed code libraries.
3. Decompress the code file and open the VisitorAPI.js file.

Step 2. Add the Visitor.getInstance function to the ID Service Code

⚠️ Important:

• Previous versions of the ID service API placed this function in a different location and required a different syntax. If you are migrating from a version prior to version 1.4, note the new placement and syntax documented here.

• Code in ALL CAPS is a placeholder for actual values. Replace this text with your Organization ID, tracking server URL, or other named value.

Part 1: Copy the Visitor.getInstance function below

```javascript
var visitor = Visitor.getInstance("INSERT-MARKETING-CLOUD-ORGANIZATION-ID-HERE", {
    trackingServer: "INSERT-TRACKING-SERVER-HERE", // same as s.trackingServer
    trackingServerSecure: "INSERT-SECURE-TRACKING-SERVER-HERE", // same as s.trackingServerSecure
    marketingCloudServer: "INSERT-TRACKING-SERVER-HERE",
    marketingCloudServerSecure: "INSERT-SECURE-TRACKING-SERVER-HERE" // same as s.trackingServerSecure
});
```

Part 2: Add function code to the VisitorAPI.js file

Place the Visitor.getInstance function at the end of the file after the code block. Your edited file should look like this:

```javascript
/*
------------ DO NOT ALTER ANYTHING BELOW THIS LINE -----------
Version and copyright section
*/

// Visitor API code library section

// Put Visitor.getInstance at the end of the file, after the code library

var visitor = Visitor.getInstance("INSERT-MARKETING-CLOUD-ORGANIZATION-ID-HERE", {
    trackingServer: "INSERT-TRACKING-SERVER-HERE", // same as s.trackingServer
    trackingServerSecure: "INSERT-SECURE-TRACKING-SERVER-HERE", // same as s.trackingServerSecure
    marketingCloudServer: "INSERT-TRACKING-SERVER-HERE",
    marketingCloudServerSecure: "INSERT-SECURE-TRACKING-SERVER-HERE" // same as s.trackingServerSecure
});
```

Step 3: Add your Experience Cloud Organization ID to Visitor.getInstance

In the Visitor.getInstance function, replace INSERT-MARKETING-CLOUD-ORGANIZATION ID-HERE with your Experience Cloud organization ID. If you do not know your organization ID, you can find it on the Experience Cloud administration page. See also, Administration - Core Services. Your edited function could look similar to the example below.
var visitor = Visitor.getInstance("1234567ABC@AdobeOrg", { ...}

⚠️ **Important:** Do not change the case of the characters in your organization ID. The ID is case-sensitive and must be used exactly as provided.

**Step 4: Add your tracking servers to Visitor.getInstance**

Tracking servers are used for Analytics data collection.

**Part 1: Find your tracking server URLs**

Check your `s_code.js` or `AppMeasurement.js` files to find the tracking server URLs. You'll want the URLs specified by these variables:

* `s.trackingServer`
* `s.trackingServerSecure`

**Part 2: Set tracking server variables**

To determine which tracking server variables to use:

1. Answer the questions in the decision matrix below. Use the variables that correspond to your answers.
2. Replace the tracking server placeholders with your tracking server URLs.
3. Remove unused tracking server and Experience Cloud server variables from the code.

💡 **Note:** When used, match the Experience Cloud server URLs to their corresponding tracking server URLs like this:

* Experience Cloud server URL = tracking server URL
* Experience Cloud server secure URL = tracking server secure URL

If you're not sure how to find your tracking server see the FAQ and Correctly Populate the trackingServer and trackingServerSecure variables.

**Step 5: Update your AppMeasurement.js or s_code.js file**

Add this function to your `AppMeasurement.js` or `s_code.js` file:

```
s.visitor = Visitor.getInstance("INSERT-MARKETING-CLOUD-ORGANIZATION ID-HERE");
```

Place the code in the same section that contains configurations such as `linkInternalFilters`, `charSet`, `trackDownloads`, etc.
(Optional but recommended) Create a Custom Prop

Set a custom prop in AppMeasurement.js or s_code.js to measure coverage. Add this custom prop to the `doPlugins` function of your AppMeasurement.js or s_code.js files:

```javascript
// prop1 is used as an example only. Choose any available prop.
s.prop1 = (typeof(Visitor) != "undefined" ? "VisitorAPI Present" : "VisitorAPI Missing");
```

**Step 6: Add Visitor API code to the page**

Place the VisitorAPI.js file within the `<head>` tags on each page. When you the VisitorAPI.js file to your page:

- Put it at the beginning of the `<head>` section to it appears before other solution tags.
- It must execute before AppMeasurement and the code for other Experience Cloud solutions.

Move this code into production after testing and verification.

**Step 7: (Optional) Configure a grace period**

If any of these use cases apply to your situation, ask Customer Care to set up a temporary grace period. Grace periods can run for up to 180-days. You can renew a grace period if required.

**Partial Implementation**

You need a grace period if you have some pages that use the ID service and some pages that do not, and they all report into the same Analytics report suite. This is common if you have a global report suite that reports across domains.

Discontinue the grace period after the ID service is deployed on all your web pages that report into the same report suite.

**s_vi Cookie Requirements**

You need a grace period if you require new visitors to have an s_vi cookie after migrating to the ID service. This is common if your implementation reads the s_vi cookie and stores it in a variable.

Discontinue the grace period after your implementation can capture the MID instead of reading the s_vi cookie.

See, [Cookies and the Experience Cloud ID Service](#).

You need a grace period if you send data to an internal system from a Clickstream data feed and that processes uses the visid_high and visid_low columns.

Discontinue the grace period after your data ingestion process can use the post_visid_high and post_visid_low columns.

See, [Clickstream Data Column Reference](#).

**Clickstream Data Ingestion**

**Step 8: Test and deploy ID Service code**

You can test and deploy as follows.

**Test and verify**

To test your ID service implementation, check for the:

- **AMCV cookie** in the domain where your page is hosted.
- MID value in the Analytics image request with the **Adobe debugger tool**.
See, *Test and verify the Experience Cloud ID Service.*

**Deploy code**

Deploy your code after it passes testing.

If you enabled a grace period in *Step 7*:

- Ensure the Analytics ID (AID) and MID are in the image request.
- Remember to disable the grace period once you meet the criteria for discontinuation.

### Implement the Experience Cloud ID Service for Target

These instructions are for Target customers who want to use the Experience Cloud ID service and do not use [Dynamic Tag Management](https://www.adobe.com/products/dtm.html) (DTM). However, we strongly recommend that you use DTM to implement the ID service. DTM streamlines the implementation workflow and automatically ensures the correct code placement and sequencing.

**Important:**

- *Read the requirements before you begin.*
- *Configure and test this code in a development environment before implementing it in production.*

#### Step 1: Get the ID Service code

The **ID Service** requires the **VisitorAPI.js** code library. Contact **Customer Care** to get this code.

#### Step 2: Add the Visitor.getInstance function to the ID Service code

**Part 1: Copy the Visitor.getInstance function below**

```javascript
var visitor = Visitor.getInstance("INSERT-MARKETING-CLOUD-ORGANIZATION ID-HERE");
```

**Part 2: Add function code to the VisitorAPI.js file**

Place the `Visitor.getInstance` function at the end of the file after the code block. Your edited file should look like this:

```javascript
/*
********** DO NOT ALTER ANYTHING BELOW THIS LINE **********
Version and copyright section
*/

// Visitor API code library section

// Put Visitor.getInstance at the end of the file, after the code library

var visitor = Visitor.getInstance("INSERT-MARKETING-CLOUD-ORGANIZATION ID-HERE");
```

#### Step 3: Add your Experience Cloud Organization ID to Visitor.getInstance

In the `Visitor.getInstance` function, replace `INSERT-MARKETING-CLOUD-ORGANIZATION ID-HERE` with your Experience Cloud organization ID. If you do not know your organization ID, you can find it on the Experience Cloud administration page. See also, *Administration - Core Services.* Your edited function could look similar to the example below.

```javascript
var visitor = Visitor.getInstance("1234567ABC@AdobeOrg");
```
Important: Do not change the case of the characters in your organization ID. The ID is case-sensitive and must be used exactly as provided.

Step 4: Add Visitor API code to the page
Deploy the VisitorAPI.js file to your site in the <head> tags before the reference to the mbox.js file. The Experience Cloud ID service must execute before the first Target network call is generated. Move this code into production after testing and verification.

Step 5: Test and deploy ID Service code
You can test and deploy as follows.

Test and verify
To test your ID service implementation:
• Check for the AMCV cookie in the domain where your page is hosted.
• Verify mboxMCGVID appears in your Target request and that it contains the Experience Cloud ID (MID).
See Cookies and the Experience Cloud ID Service for information about the AMCV cookie and the MID.

Deploy
Deploy your code after it passes testing.

Implement the Experience Cloud ID Service for Analytics and Audience Manager

These instructions are for Analytics and Audience Manager customers who want to use the Experience Cloud ID service and do not use Dynamic Tag Management (DTM). However, we strongly recommend that you use DTM to implement the ID service. DTM streamlines the implementation workflow and automatically ensures the correct code placement and sequencing.

Important:
• Read the requirements before you begin.
• This procedure requires AppMeasurement. Customers using s_code cannot complete this procedure.
• Configure and test this code in a development environment before implementing it in production.

Step 1: Plan for server-side forwarding
In addition to the steps described here, customers who use Analytics and Audience Manager should migrate to server-side forwarding. Server-side forwarding lets you remove DIL (Audience Manager's data collection code) and replace it with the Audience Management Module. See the server-side forwarding documentation for more information.

Migrating to server-side forwarding requires planning and coordination. This process involves external changes to your site code and internal steps that Adobe must take to provision your account. In fact, many of these migration procedures need to happen in parallel and get released together. Your implementation path should follow this sequence of events:

1. Work with your Analytics and Audience Manager contacts to plan your ID service and server-side forwarding migration. Make selecting a tracking server an important part of this plan.
2. Get provisioned for Profiles & Audiences. Complete the form on the integrations and provisioning site to get started.

3. Implement the ID service and the Audience Management Module simultaneously. To work properly, the Audience Management Module (server-side forwarding) and the ID service must be released for the same set of pages and at the same time.

Step 2: Download the ID Service code

The ID Service requires the VisitorAPI.js code library. To download this code library:

1. Go to Admin > Code Manager.
2. In Code Manager, click either JavaScript (New) or JavaScript (Legacy). This downloads compressed code libraries.
3. Decompress the code file and open the VisitorAPI.js file.

Step 3: Add the Visitor.getInstance function to the ID Service code

⚠️ Important:

- Previous versions of the ID service API placed this function in a different location and required a different syntax. If you are migrating from a version prior to version 1.4, note the new placement and syntax documented here.
- Code in ALL CAPS is a placeholder for actual values. Replace this text with your Organization ID, tracking server URL, or other named value.

Part 1: Copy the Visitor.getInstance function below

```javascript
var visitor = Visitor.getInstance("INSERT-MARKETING-CLOUD-ORGANIZATION ID-HERE", {
    trackingServer: "INSERT-TRACKING-SERVER-HERE", // same as s.trackingServer
    trackingServerSecure: "INSERT-SECURE-TRACKING-SERVER-HERE", // same as s.trackingServerSecure
    // To enable CNAME support, add the following configuration variables
    // If you are not using CNAME, DO NOT include these variables
    marketingCloudServer: "INSERT-TRACKING-SERVER-HERE",
    marketingCloudServerSecure: "INSERT-SECURE-TRACKING-SERVER-HERE" // same as s.trackingServerSecure
});
```

Part 2: Add function code to the Visitor API.js file

Place the Visitor.getInstance function at the end of the file after the code block. Your edited file should look like this:

```javascript
/*
============= DO NOT ALTER ANYTHING BELOW THIS LINE =============
Version and copyright section
*/

// Visitor API code library section

// Put visitor.getInstance at the end of the file, after the code library

var visitor = Visitor.getInstance("INSERT-MARKETING-CLOUD-ORGANIZATION ID-HERE", {
    trackingServer: "INSERT-TRACKING-SERVER-HERE", // same as s.trackingServer
    trackingServerSecure: "INSERT-SECURE-TRACKING-SERVER-HERE", // same as s.trackingServerSecure
    // To enable CNAME support, add the following configuration variables
    // If you are not using CNAME, DO NOT include these variables
```
Step 4: Add your Experience Cloud Organization ID to Visitor.getInstance

In the `Visitor.getInstance` function, replace `INSERT-MARKETING-CLOUD-ORGANIZATION ID-HERE` with your Experience Cloud organization ID. If you do not know your organization ID, you can find it on the Experience Cloud administration page. Your edited function could look similar to the example below.

```javascript
var visitor = Visitor.getInstance("1234567ABC@AdobeOrg", { ...}
```

**Important:** Do not change the case of the characters in your organization ID. The ID is case-sensitive and must be used exactly as provided.

Step 5: Add your tracking servers to Visitor.getInstance

Analytics uses tracking servers for data collection.

Part 1: Find your tracking server URLs

Check your `s_code.js` or `AppMeasurement.js` files to find the tracking server URLs. You'll want the URLs specified by these variables:

- `s.trackingServer`  
- `s.trackingServerSecure`

Part 2: Set tracking server variables

To determine which tracking server variables to use:

1. Answer the questions in the decision matrix below. Use the variables that correspond to your answers.
2. Replace the tracking server placeholders with your tracking server URLs.
3. Remove unused tracking server and Experience Cloud server variables from the code.

---

💡 **Note:** When used, match the Experience Cloud server URLs to their corresponding tracking server URLs like this:

- Experience Cloud server URL = tracking server URL
- Experience Cloud server secure URL = tracking server secure URL
If you’re not sure how to find your tracking server see the FAQ and Correctly Populate the trackingServer and trackingServerSecure variables.

**Step 6: Update your AppMeasurement.js file**

This step requires AppMeasurement. You cannot continue if you’re still using s_code.

Add the Visitor.getInstance function shown below to your AppMeasurement.js file. Place it in the section that contains configurations such as linkInternalFilters, charSet, trackDownloads, etc.:

```javascript
s.visitor = Visitor.getInstance("INSERT-MARKETING-CLOUD-ORGANIZATION ID-HERE");
```

**Important:** At this point, you should remove the Audience Manager DIL code and replace it with the Audience Management Module. See Implement Server-Side Forwarding for instructions.

**(Optional, but recommended) Create a custom prop**

Set a custom prop in AppMeasurement.js to measure coverage. Add this custom prop to the doPlugins function of your AppMeasurement.js file:

```javascript
// prop1 is used as an example only. Choose any available prop.
s.prop1 = (typeof(Visitor) != "undefined" ? "VisitorAPI Present" : "VisitorAPI Missing");
```

**Step 7: Add visitor API code to the page**

Place the VisitorAPI.js file within the `<head>` tags on each page. When you the VisitorAPI.js file to your page:

- Put it at the beginning of the `<head>` section to it appears before other solution tags.
- It must execute before AppMeasurement and the code for other Experience Cloud solutions.

**Step 8: (Optional) Configure a grace period**

If any of these use cases apply to your situation, ask Customer Care to set up a temporary grace period. Grace periods can run for up to 180-days. You can renew a grace period if required.

**Partial Implementation**

You need a grace period if you have some pages that use the ID service and some pages that do not, and they all report into the same Analytics report suite. This is common if you have a global report suite that reports across domains.

Discontinue the grace period after the ID service is deployed on all your web pages that report into the same report suite.

**s_vi Cookie Requirements**

You need a grace period if you require new visitors to have an s_vi cookie after migrating to the ID service. This is common if your implementation reads the s_vi cookie and stores it in a variable.

Discontinue the grace period after your implementation can capture the MID instead of reading the s_vi cookie.

See also, Cookies and the Experience Cloud ID Service.

**Clickstream Data Integration**

You need a grace period if you send data to an internal system from a Clickstream data feed and that processes uses the visid_high and visid_low columns.
Discontinue the grace period after your data ingestion process can use the `post_visid_high` and `post_visid_low` columns.

See also, *Clickstream Data Column Reference*.

**Step 9: Test and deploy ID Service code**

You can test and deploy as follows.

**Test and verify**

To test your ID service implementation, check for the:

- **AMCV cookie** in the domain where your pages is hosted.
- MID value in the Analytics image request with the *Adobe debugger*.
- See also, *Test and verify the Experience Cloud ID Service*.

To verify server-side forwarding, see *How to Verify your Server-Side Forwarding Implementation*.

**Deploy**

Deploy your code after it passes testing.

If you enabled a grace period:

- Ensure the Analytics ID (AID) and MID are in the image request.
- Remember to disable the grace period once you meet the criteria for discontinuation.

**Implement the Experience Cloud ID Service for Analytics, Audience Manager, and Target**

These instructions are for Analytics, Audience Manager, and Target customers who want to use the Experience Cloud ID service and do not use *Dynamic Tag Management* (DTM). However, we strongly recommend that you use DTM to implement the ID service. DTM streamlines the implementation workflow and automatically ensures the correct code placement and sequencing.

**Important:** Read the ID service requirements before you begin and note the following requirements that are specific to this implementation:

- Customers using `s_code` cannot complete this procedure. Upgrade to `mbox code v61` to complete this procedure.
- Configure and test this code in a development environment before you implement it in production.

**Step 1: Plan for server-side forwarding**

In addition to the steps described here, customers who use Analytics and Audience Manager should migrate to server-side forwarding. Server-side forwarding lets you remove DIL (Audience Manager’s data collection code) and replace it with the *Audience Management Module*. See the *server-side forwarding documentation* for more information.

Migrating to server-side forwarding requires planning and coordination. This process involves external changes to your site code and internal steps that Adobe must take to provision your account. In fact, many of these migration procedures need to happen in parallel and get released together. Your implementation path should follow this sequence of events:
1. Work with your Analytics and Audience Manager contacts to plan your ID service and server-side forwarding migration. Make selecting a tracking server an important part of this plan.

2. Get provisioned for Profiles & Audiences. Complete the form on the integrations and provisioning site to get started.

3. Implement the ID service and the Audience Management Module simultaneously. To work properly, the Audience Management Module (server-side forwarding) and the ID service must be released for the same set of pages and at the same time.

Step 2: Download the ID Service code

The ID Service requires the VisitorAPI.js code library. To download this code library:

1. Go to Admin > Code Manager.
2. In Code Manager, click either JavaScript (New) or JavaScript (Legacy). This downloads compressed code libraries.
3. Decompress the code file and open the VisitorAPI.js file.

Step 3: Add the Visitor.getInstance function to the ID Service code

**Important:**

- Previous versions of the ID service API placed this function in a different location and required a different syntax. If you are migrating from a version prior to version 1.4, note the new placement and syntax documented here.

- Code in ALL CAPS is a placeholder for actual values. Replace this text with your Organization ID, tracking server URL, or other named value.

Part 1: Copy the Visitor.getInstance function below

```javascript
var visitor = Visitor.getInstance("INSERT-MARKETING-CLOUD-ORGANIZATION ID-HERE", {
  trackingServer: "INSERT-TRACKING-SERVER-HERE", // same as s.trackingServer
  trackingServerSecure: "INSERT-SECURE-TRACKING-SERVER-HERE", // same as s.trackingServerSecure
  // To enable CNAME support, add the following configuration variables
  // If you are not using CNAME, DO NOT include these variables
  marketingCloudServer: "INSERT-TRACKING-SERVER-HERE",
  marketingCloudServerSecure: "INSERT-SECURE-TRACKING-SERVER-HERE" // same as s.trackingServerSecure
});
```

Part 2: Add function code to the Visitor API.js file

Place the Visitor.getInstance function at the end of the file after the code block. Your edited file should look like this:

```javascript
/*
========== DO NOT ALTER ANYTHING BELOW THIS LINE ==========
Version and copyright section
*/

// Visitor API code library section

// Put Visitor.getInstance at the end of the file, after the code library

var visitor = Visitor.getInstance("INSERT-MARKETING-CLOUD-ORGANIZATION ID-HERE", {
  trackingServer: "INSERT-TRACKING-SERVER-HERE", // same as s.trackingServer
  trackingServerSecure: "INSERT-SECURE-TRACKING-SERVER-HERE", // same as s.trackingServerSecure
});
```
Step 4: Add your Experience Cloud Organization ID to Visitor.getInstance

In the `Visitor.getInstance` function, replace `INSERT-MARKETING-CLOUD-ORGANIZATION ID-HERE` with your Experience Cloud organization ID. If you do not know your organization ID, you can find it on the Experience Cloud administration page. Your edited function could look similar to the example below.

```javascript
var visitor = Visitor.getInstance("1234567ABC@AdobeOrg", { ...}
```

⚠️ **Important:** Do not change the case of the characters in your organization ID. The ID is case-sensitive and must be used exactly as provided.

Step 5: Add your tracking servers to Visitor.getInstance

Analytics uses tracking servers for data collection.

**Part 1: Find your tracking server URLs**

Check your `s_code.js` or `AppMeasurement.js` files to find the tracking server URLs. You'll want the URLs specified by these variables:

- `s.trackingServer`
- `s.trackingServerSecure`

**Part 2: Set tracking server variables**

To determine which tracking server variables to use:

1. Answer the questions in the decision matrix below. Use the variables that correspond to your answers.
2. Replace the tracking server placeholders with your tracking server URLs.
3. Remove unused tracking server and Experience Cloud server variables from the code.

💡 **Note:** When used, match the Experience Cloud server URLs to their corresponding tracking server URLs like this:

- Experience Cloud server URL = tracking server URL
- Experience Cloud server secure URL = tracking server secure URL
If you’re not sure how to find your tracking server see the FAQ and Correctly Populate the trackingServer and trackingServerSecure variables.

Step 6: Update your AppMeasurement.js file

This step requires AppMeasurement. You cannot continue if you’re still using s_code.

Add the Visitor.getInstance function shown below to your AppMeasurement.js file. Place it in the section that contains configurations such as linkInternalFilters, charSet, trackDownloads, etc.:

```javascript
s.visitor = Visitor.getInstance("INSERT-MARKETING-CLOUD-ORGANIZATION ID-HERE");
```

⚠️ **Important:** At this point, you should remove the Audience Manager DIL code and replace it with the Audience Management Module. See Implement Server-Side Forwarding for instructions.

(Optional, but recommended) Create a custom prop

Set a custom prop in AppMeasurement.js to measure coverage. Add this custom prop to the doPlugins function of your AppMeasurement.js file:

```javascript
// prop1 is used as an example only. Choose any available prop.
s.prop1 = (typeof(Visitor) != "undefined" ? "VisitorAPI Present" : "VisitorAPI Missing");
```

Step 7: Add Visitor API code to the page

Place the VisitorAPI.js file within the `<head>` tags on each page. When you the VisitorAPI.js file to your page:

• Put it at the beginning of the `<head>` section to it appears before other solution tags.
• It must execute before AppMeasurement and the code for other Experience Cloud solutions.

Step 8: (Optional) Configure a grace period

If any of these use cases apply to your situation, ask Customer Care to set up a temporary grace period. Grace periods can run for up to 180-days. You can renew a grace period if required.

Partial Implementation

You need a grace period if you have some pages that use the ID service and some pages that do not, and they all report into the same Analytics report suite. This is common if you have a global report suite that reports across domains.

Discontinue the grace period after the ID service is deployed on all your web pages that report into the same report suite.

s_vi Cookie Requirements

You need a grace period if you require new visitors to have an s_vi cookie after migrating to the ID service. This is common if your implementation reads the s_vi cookie and stores it in a variable.

Discontinue the grace period after your implementation can capture the MID instead of reading the s_vi cookie.

See also, Cookies and the Experience Cloud ID Service.

Clickstream Data Integration

You need a grace period if you send data to an internal system from a Clickstream data feed and that processes uses the visid_high and visid_low columns.
Discontinue the grace period after your data ingestion process can use the `post_visid_high` and `post_visid_low` columns.

See also, *Clickstream Data Column Reference*.

**Step 9: Test and verify**

The Experience Cloud solutions in this implementation return IDs in the form of key-value pairs. Each solution uses different keys (e.g., the Analytics SDID vs the Target `mboxMCSDID`) to hold the same ID. To test your implementation, load your pages in a development environment. Use your browser console or software that monitors HTTP requests and responses to check the IDs listed below. The ID service has been implemented correctly when the key-value pairs listed below return the same ID values.

💡 **Tip:** You can use the Adobe Debugger or the Charles HTTP proxy to check for these solution-specific IDs. However, you should feel free to use whatever tool or debugger works best for you.

**All solutions**

Check for the:

- *AMCV cookie* in the domain where you page is hosted.
- Experience Cloud ID (MID) with the Adobe debugger or your preferred debugging tool.

For additional checks that help you determine if the ID service is working properly, see *Test and verify the Experience Cloud ID Service*.

**Analytics**

Check for the SDID identifier in the JavaScript request. The Analytics SDID should match the Target `mboxMCSDID`.

If your tests return an AID, that indicates either of the following:

- You’re a returning visitor in the process of migrating legacy Analytics IDs.
- You have a grace period enabled.

When you see an AID, check its value against the Target `mboxMCAVID`. These values are identical when the ID service has been implemented correctly.

**Audience Manager**

To test server-side forwarding, see:

- *How to Determine if Your Account is Ready to Receive Forwarded Data*
- *How to Determine if Your Account is not Ready to Receive Forwarded Data*

**Target**

Check for the:

- `mboxMCGVID`
- `mboxMCSDID` (The `mboxMCSDID` should match the Analytics SDID.)

If your tests return an `mboxMCAVID`, that indicates either of the following:

- You’re a returning visitor in the process of migrating legacy Analytics IDs.
- You have a grace period enabled.

When you see an `mboxMCAVID`, check its value against the Analytics AID. These values are identical when the ID service has been implemented correctly.
Deployment

Step 10: Deploy

Deploy your code after it passes testing.

If you enabled a grace period:

• Ensure the Analytics ID (AID) and MID are in the image request.
• Remember to disable the grace period once you meet the criteria for discontinuation.

Using the ID Service with A4T and a server-side implementation of Target

These instructions are for A4T customers with mixed server- and client-side implementations of Target, Analytics, and the ID service. Customers who need to run the ID service in a NodeJS or Rhino environment should also review this information. This instance of the ID service uses a shortened version the VisitorAPI.js code library, which you download and install from Node Package Manager (NPM). Review this section for installation instructions and other configuration requirements.

Introduction

A4T (and other customers) can use this version of the ID service when they need to:

• Render web page content on their servers and pass it to a browser for final display.
• Make server-side Target calls.
• Make client-side (in-browser) calls to Analytics.
• Synchronize separate Target and Analytics IDs to determine if a visitor seen by one solution is the same person as seen by the other solution.

Code download and provided interfaces

See the ID service NPM repository to download the server-side code package and review the interfaces included in the current build.

Workflow

The diagram and sections below describe what happens, and what you need to configure, in each step of the server-side implementation process.
Step 1: Request page

Server-side activity begins when a visitor makes an HTTP request to load a web page. During this step, your server receives this request and checks for the AMCV cookie. The AMCV cookie contains the visitor’s Experience Cloud ID (MID).

Step 2: Generate ID Service payload

Next, you need to make a server-side payload request to the ID service. A payload request:

- Passes the AMCV cookie to the ID service.
- Requests data that is required by Target and Analytics in subsequent steps described below.

Note: This method requests a single mbox from Target. If you need to request multiple mboxes in a single call, see generateBatchPayload.

Your payload request should look like following code sample. In the code sample, the visitor.setCustomerIDs function is optional. See Customer IDs and Authentication States for more information.

```javascript
// Import the ID service server package
var Visitor = require("@adobe-mcid/visitor-js-server");
```
var visitor = new Visitor("Insert Experience Cloud ID here");

visitor.setCustomerIDs({
  userid:
    id:"1234",
    authState: Visitor.AuthState.UNKNOWN /*AuthState is a static property of the Visitor class */
});

//Parse the visitor’s HTTP request for the AMCV cookie
var cookies = cookie.parse(req.headers.cookie || "");
var amcvCookie = cookies[visitor.getCookieName()]; //Visitor API that returns the cookie name.

//Generate the payload request pass your mbox name and the AMCV cookie if present
var visitorPayload = visitor.generatePayload({
  mboxName: "bottom-banner-mbox",
  amcvCookie: amcvCookie
});

The ID service returns the payload in a JSON object similar to the following example. Payload data is required by Target.

```json
{
  "marketingCloudVisitorId": "02111696918527575543455026275721941645",
  "mboxParameters": {
    "mboxAAMB": "abcd1234",
    "mboxMCGLH": "9",
    "mboxMCSDID": "56BE026543F7E211-1CC51BCAAEB88F0D2",
    "vst.userid.id": "1234567890",
    "vst.userid.authState": 0
  }
}
```

If your visitor doesn’t have an AMCV cookie, the payload omits these key-value pairs:

- marketingCloudvisitorId
- mboxAAMB
- mboxMCGLH

**Step 3: Add payload to the Target call**

After your server receives payload data from the ID service, you need to instantiate additional code to merge it with data passed in to Target. The final JSON object passed to Target would look similar to this:

```json
{
  "mbox": "target-global-mbox",
  "marketingCloudVisitorId": "02111696918527575543455026275721941645",
  "requestLocation": {
    "pageURL": "http://www.domain.com/test/demo.html",
    "host": "localhost:3000"
  },
  "mboxParameters": {
    "mboxAAMB": "abcd1234",
    "mboxMCGLH": "9",
    "mboxMCSDID": "56BE026543F7E211-1CC51BCAAEB88F0D2",
    "vst.userid.id": "1234567890",
    "vst.userid.authState": 0
  }
}
```
Step 4: Get server state for the ID Service

Server state data contains information about work that's been done on the server. The client-side ID service code requires this information. Customers who have implemented the ID service through Dynamic Tag Manager (DTM) can configure DTM to pass server state data through that tool. If you've set up the ID service through a non-standard process, you will need to return server state with your own code. The client-side ID service and Analytics code passes state data to Adobe when the page loads.

Get server state via DTM

If you have implemented the ID service with DTM, you need to add code to your page and specify a name-value pair in the DTM settings.

Page Code

Add this code to the `<head>` tag of your HTML page:

```javascript
//Get server state
var serverState = visitor.getState();
Response.send("...
...<head>
  <script>
    //Add 'serverState' as a stringified JSON global variable.
    "var serverState = " + JSON.stringify(serverState) + ";"
  </script>
  <script src = "DTM script (satellite JS)">  
  </script>
</head>
...```

DTM Settings

Add these as name-value pairs to the General > Settings section of your ID service instance:

- **Name:** serverState
- **Value:** `%serverState%

⚠️ **Important:** The value name must match the variable name you set for `serverState` in your page code.

Your configured settings should look like this:

![Settings](image)

See also, *Experience Cloud ID Service Settings for DTM.*

Get server state without DTM
If you have a non-standard implementation of the ID service, you must configure this code to run on your server while it assembles the requested page:

```javascript
//Get server state
var serverState = visitor.getState();
Response.send(""
...
<head>
<script src="VisitorAPI.js"></script>
<script>
    var visitor = Visitor.getInstance(orgID, {
        serverState: serverState
    ...
</script>
</head>
```

### Step 5: Serve a page and return Experience Cloud data

At this point, the web server sends page content to the visitor's browser. From this point on, the browser (not the server) makes all the remaining ID service and Analytics calls. For example, in the browser:

- The ID service receives state data from the server and passes the SDID to AppMeasurement.
- AppMeasurement sends data about the page hit to Analytics, including the SDID.
- Analytics and Target compare SDIDs for this visitor. With an identical SDID, Target and Analytics stitch the server-side call and the client-side call together. At this point, both solutions now recognize this visitor as the same person.

### Direct integration with the Experience Cloud ID Service

This implementation lets customers use the ID service on devices that cannot accept or work with our JavaScript or SDK code. This includes devices such as gaming consoles, smart TVs, or other Internet-enabled appliances. Refer to this section for syntax, code samples, and definitions.

Contents:

- Syntax
- Sample request
- Sample response
- Request and response parameters defined

### Syntax

Devices that cannot use the VisitorAPI.js or SDK code libraries can make calls directly to the data collection servers (DCS) used by the ID service. To do this, you would call `dpm.demdex.net` and format your request as shown below. Italic indicates a variable placeholder.

```
https://dpm.demdex.net/id?d_mid=Marketing Cloud ID&d_orgId=organization ID&
    d_cid=DPID%01DPUUID%01authentication state ID&dcs_region=region ID&
    d_cb=optional callback function&d_blob=encrypted metadata&d_ver=2
```
In this syntax example, the d_ prefix identifies the key-value pairs in the call as a system-level variable. You can pass quite a few d_ parameters to the ID service, but stay focused on the key-value pairs as shown in the code above. For more information about other variables, see Supported Attributes for DCS API calls.

The ID service supports HTTP and HTTPS calls. Use HTTPS to pass data from a secure page.

**Sample request**

Your request could look similar to the sample shown below. Long variables have been shortened.

```plaintext
https://dpm.demdex.net/id?id_mid=12345&d_orgid=ABC98765&
d_cid=123%014567%012&dcs_region=6&d_blob=wxyz5432&d_ver=2
```

**Sample response**

The ID service returns data in a JSON object as shown below. Your response may be different.

```javascript
{
  "d_mid":"12345",
  "dcs_region":"6",
  "id_sync_ttl":"604800",
  "d_blob":"wxyz5432"
}
```

**Request and response parameters defined**

### Request Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>dpm.demdex.net</td>
<td>A legacy domain controlled by Adobe. See Understanding Calls to the Demdex Domain.</td>
</tr>
<tr>
<td>d_mid</td>
<td>The Experience Cloud visitor ID. See Cookies and the Experience Cloud ID Service.</td>
</tr>
<tr>
<td>d_orgid</td>
<td>Your Experience Cloud Organization ID. For help with finding this ID see, Requirements for the Experience Cloud ID Service.</td>
</tr>
<tr>
<td>d_cid</td>
<td>An optional parameter that passes the Data Provider ID (DPID), the Unique User ID (DPUUID), and an authenticated state ID to the ID service. As shown in the code sample, separate the DPID and DPUUID with the non-printing control character, %01.</td>
</tr>
</tbody>
</table>

**DPID and DPUUID**

In the d_cid parameter, assign each related DPID and DPUUID combination to the same d_cid parameter. This lets you return multiple ID sets in a single request. Also, separate the DPID, DPUUID, and optional authentication flag with the non-printing control character, %01. In the examples below, the provider and user IDs are highlighted in **bold** text.

- Syntax: ```...d_cid=DPID%01DPUUID%01authentication state...```  
- Example: ```...d_cid=123%01456%011...```  

**Authentication State**
This is an optional ID in the `d_cid` parameter. Expressed as an integer, it identifies users according to their authentication status as shown below:

- 0 (Unknown)
- 1 (Authenticated)
- 2 (Logged out)

To specify an authentication state, you set this flag after the user ID (UUID) variable. Separate the UUID and authentication flag with the non-printing control character, `%01`. In the examples below, the authentication IDs are highlighted in **bold** text.

Syntax: `...d_cid=DPID%01DPUUID%01` **authentication state**

Examples:

- Unknown: `...d_cid=123%01456%01`...
- Authenticated: `...d_cid=123%01456%011`...
- Logged out: `...d_cid=123%01456%012`...

**dcs_region**  
The ID service is a geographically distributed and load-balanced system. The ID identifies the region of the data center handling the call. See *DCS Region IDs, Locations, and Host Names*.

**d_cb**  
(Optional) A callback parameter that lets you execute a JavaScript function in the request body.

**d_blob**  
An encrypted chunk of JavaScript metadata. Size constraints limit the blob to 512 bytes or less.

**d_ver**  
Required. This sets the API version number. Leave this set as `d_ver=2`.

---

### Response Parameters

Some response parameters are part of the request and have been defined in the section above.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>id_sync_ttl</strong></td>
<td>The re-synchronization interval, specified in seconds. The default interval is 604,800 seconds (7-days).</td>
</tr>
</tbody>
</table>

### Direct integration use cases

These examples cover 2 common use cases related to a direct integration and the Experience Cloud ID (MID). The MID is a unique, persistent ID for your site visitors.
Tip:
- Review and understand the code syntax and variables before diving into the use cases.
- For more information about the MID, see Cookies and the Experience Cloud ID Service.

Use case 1: I have a MID but want to pass my Visitor IDs and set an authentication state

<table>
<thead>
<tr>
<th>Use Case Element</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Conditions**   | This use case assumes you:  
|                  | • Have a MID for the site visitor. Let's call this ID 1234.  
|                  | • Know this visitor by your own unique ID. Let's call this ID 9876.  
|                  | • Want to link the MID (1234) to your own, unique ID (9876).  
|                  | • *Optional* Want to set an authentication status on this visitor. |

| **Actions**      | Given these conditions, make a call to the ID service that includes:  
|                  | • The MID (1234).  
|                  | • Your data provider ID. This is a unique ID assigned to your company. Let's call this ID 4444.  
|                  | • Your ID for the visitor (9876).  
|                  | • *Optional* A status ID to define the authentication state for this visitor.  
|                  | And, if you happen to have any of the other parameters listed in the direct integration guide (e.g., d_blob or dcs_region, etc.) it's ok to pass those in as well. |

| **Solution and code sample** | Format your call to the ID service like this:  
|                             | https://dpm.demdex.net/id?d_mid=1234&d_cid=4444%019876%011&d_ver=2  
|                             | Note how the sample call contains the:  
|                             | • MID: d_mid=1234  
|                             | • MID joined to your unique ID for the visitor: d_mid=1234&d_cid=4444%019876%011  
|                             | • Authentication state ID: ...d_cid=4444%019876%011 (hint: it's that last digit). |

Use case 2: I do not have a MID and need to generate one

<table>
<thead>
<tr>
<th>Use Case Element</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Conditions**   | This use case assumes you:  
|                  | • Do not have a MID for the site visitor.  
|                  | • Need to request a MID from the ID service.  
|                  | • Know your organization ID. Let's call this 5555. |

| **Actions**      | Given these conditions, make a call to the ID service that includes your Organization ID. |
Use Case Element | Description
--- | ---
And, if you happen to have any of the other parameters listed in the *direct integration guide* (e.g., d_blob or dcs_region, etc.) it’s ok to pass those in as well.

**Solution and code sample**
Format your call to the ID service like this:

https://dpm.demdex.net/id?d_orgid=5555&d_ver=2

Note how the sample call contains your Organization ID, d_orgid=5555. It would return a Experience Cloud ID for this visitor.

---

**Test and verify the Experience Cloud ID Service**

These instructions, tools, and procedures help you determine if the ID service is working properly. These tests apply to the ID service in general and for different ID service and Experience Cloud solution combinations.

**Before you begin**

Important information to know before you begin testing and verifying the ID Service.

**Browser environments**

When testing in a normal browser session, clear your browser cache before each test.

Alternatively, you can test the ID service in an anonymous or incognito browser session. In an anonymous session, you don’t need to clear your browser cookies or cache before each test.

**Tools**

The *Adobe debugger* and the *Charles HTTP proxy* can help you determine if the ID service has been configured to work properly with Analytics. The information in this section based on the results returned by the Adobe debugger and Charles. However, you should feel free to use whatever tool or debugger works best for you.

**Testing with the Adobe Debugger**

Your service integration is configured properly when you see a Experience Cloud ID (MID) in the Adobe debugger response. See *Cookies and the Experience Cloud ID Service* for more information about the MID.

To verify the status of the ID service with the Adobe *debugger*:

1. Clear your browser cookies or open an anonymous browsing session.
2. Load your test page that contains ID service code.
3. Open the Adobe debugger.
4. Check the results for a MID.

**Understanding Adobe Debugger results**

The MID is stored in a key-value pair that uses this syntax: MID=Experience Cloud ID. The debugger displays this information as shown below.

**Success**
The ID service has been implemented properly if you see a response that looks similar to this:

mid=20265673158980419722735089753036633573

If you’re an Analytics customer, you may see an Analytics ID (AID) in addition to the MID. This happens:
  • With some of your early/long-time site visitors.
  • If you have a grace period enabled.

Failure

Contact customer care if the debugger:
  • Does not return a MID.
  • Returns an error message that indicates your partner ID has not been provisioned.

Testing with the Charles HTTP proxy

To verify the status of the ID service with Charles:
1. Clear your browser cookies or open an anonymous browsing session.
2. Start Charles.
3. Load your test page that contains ID service code.
4. Check for the request and response calls and data described below.

Understanding Charles results

Refer to this section for information about where to look, and what to look for, when you use Charles to monitor HTTP calls.

Successful ID Service requests in Charles

Your ID service code is working properly when the Visitor.getInstance function makes a JavaScript call to dpm.demdex.net. A successful request includes your Organization ID. The Organization ID is passed as a key-value pair that uses this syntax: d_orgid=organization ID. Look for the dpm.demdex.net and the JavaScript calls under the Structure tab. Look for your Organization ID under the Request tab.

<table>
<thead>
<tr>
<th>Structure</th>
<th>Sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="http://dpm.demdex.net" alt="http://dpm.demdex.net" /></td>
<td><img src="http://dpm.demdex.net" alt="id" />?v=1.5.4&amp;d_rtb=js&amp;d_visid=12345&amp;d_rtb=js&amp;d_visid=2</td>
</tr>
</tbody>
</table>

Successful ID Service responses in Charles

Your account has been provisioned correctly for the ID service when the response from the Data Collection Servers (DCS) return a MID. The MID is returned as a key-value pair that uses this syntax: d_mid:visitor Experience Cloud ID. Look for the MID in the Response tab as shown below.
Failed ID Service responses in Charles

Your account has not been provisioned correctly if the MID is missing from the DCS response. An unsuccessful response returns an error code and message in the Response tab as shown below. Contact customer care if you see this error message in the DCS response.

For more information about error codes, see *DCS Error Codes, Messages, and Examples*.

Opt-in Service

The Opt-in service lets you set up protocols for the visitor to determine if you can set a cookie on the user’s device or browser when visiting your site.

The Opt-in service is an extension of the *Experience Cloud ID (ECID)* service, designed to let you control whether and which Experience Cloud solutions can create cookies on web pages for visitors prior to user consent. The Opt-in service also lets you set protocols to integrate with your Consent Management Platform (CMP) and existing systems as part of your larger design.

Using the Opt-in service, you can specify if a visitor can opt in to Adobe solutions at once, or present solutions in sequence for permissions. Once the approval process is complete and recorded by the customer, you can retrieve the CMP visitor approvals from all Adobe solutions.
The Opt-in service is implemented and configured easily using Adobe Launch with the Opt-in extension. It can also be implemented and configured using DTM.

See the Setting up Opt-in Service to get started.

💡 **Note:** The Opt-in service lets you set up a system to approve or deny the downloading of Adobe cookies only. It does not provide support for either gathering user consent preferences, nor is it a repository for preferences.

⚠️ **Important:** The contents of this document are not legal advice and are not meant to substitute for legal advice. Consult your company’s legal department for advice concerning consent and practices when setting up your opt in implementation.

**Opt-in across Experience Cloud Solutions**

Opt-in service is a tool to build a consent opt in workflow according to your own needs, allowing you to design a workflow to react (fire tags) before and after consent is given from the user or your consent controller.

The Opt-In service lets you set up consent management practices for Adobe solutions to:

- Indicate if consent gathering requirements apply in general for a user.
- Specify which solutions are permitted to generate cookies.
- Apply default preferences for any solution whose category is not explicitly consented to or declined by the user.
- Trigger custom response based on changes to a user’s consent settings, allowing you to persist or update the user’s settings.

Using the Opt-in services, you can configure your site to allow some cookies to be loaded with pre-consent prior to user choice. You can set Opt-in services for new customers to allow cookies to be loaded after the user consents or after a choice is made available. You can also store and retrieve opt in consent from your existing Consent Management Platform or simply store opt in permissions in a cookie.
Adobe solutions can then check if the tag is approved, subscribe to changes, and then retrieve all Opt-in customers. Opt-in service allows you to get permissions directly through the solution JavaScript libraries or through ECID if implemented.

**Setting up Opt-in Service**

Implement the Opt-in service as the single point of reference used by Experience Cloud solutions (referred to as Categories in Opt-in) to determine whether or not to create cookies on a visitor's device.

The Opt-in service is a JavaScript library bundled with *Experience Cloud ID (ECID)* and exists in Visitor JS in the global `adobe` object as the `adobe.optIn` object. The installed Opt-in service lets you specify if a visitor can opt-in to Adobe solutions at once, or to present solutions in sequence for permission for each. The Opt-in service consent management feature lets you implement with various configurations for your specific privacy requirements.

The Opt-in service lets you specify if a visitor can opt in to Adobe solutions at once, or to present solutions in sequence for permission for each. Once the approval process is complete and recorded by the customer, CMP visitor approvals can be retrieved by all Adobe solutions to respond with related consent calls.

**Prerequisites**

1. ECID version 4.0.
   
   *Download* the latest ECID release.

2. Supporting libraries:
   
   • ECID 4.0 or later
• AppMeasurement 2.11 or later
• DIL 9.0
• AT.js version 1.7.0
• AT.js Launch extension version 9.0
• For Analytics, App Measurement 2.11 with extension 1.6
• For Target, extension 0.9.1

3. Become well-versed in the consent management framework that you will be using with Opt-in and understand any additional prerequisites.

4. Your company’s privacy requirements will be specific to how you choose to stay compliant with GDPR. Be aware of which libraries your company privacy teams are okay with using in a pre-consent state.

If using Adobe Launch, take advantage of the Opt-in extension to configure Opt-in service.

**Opt-in categories**

A visitor's Opt-in preferences are relative to an Adobe Experience Cloud solution, where each solution is represented as a category. Categories are provided by the adobe.OptInCategories object where, for instance, the ECID component is referred to as adobe.OptInCategories.ECID. The following is the definition of adobe.OptInCategories:

Opt-in settings are maintained per category, where each Experience Cloud solution is represented by a category:

```javascript
adobe.OptInCategories = {
  AAM: "aam",
  TARGET: "target",
  ANALYTICS: "aa",
  ECID: "ecid",
};
```

The Opt-in service lets you set visitors' permission preferences per each Adobe solution used on your site. It includes a library to save a visitor's settings by approved category and supports a sequential flow, where the approval process receives "confirm" or "deny" preferences for each category one at a time. You can set solutions/categories to opt in as a whole or as individual solutions.

**Managing consent**

All Adobe solutions' client-side libraries depend on the Opt-in service and will not generate cookies unless the solution has been granted permission. Opt-in supports various approaches for providing and updating the consent settings for the current visitor. This section provides examples to set Opt-in service preferences. See the Opt-in API Reference for complete list of functions and parameters.

Opt-in service configurations are provided in the Visitor JS getInstance() function which instantiates the global adobe object. The following lists the Visitor JS **configuration settings** for Opt-in service.

**Example Opt-in configuration in initialization of the global Visitor object**

```javascript
// FORMAT: Object<adobe.OptInCategories enum: boolean>
var preOptInApprovalsConfig = {};
preOptInApprovals[adobe.OptInCategories.ANALYTICS] = true;

// FORMAT: Object<adobe.OptInCategories enum: boolean>
// If you are storing the OptIn permissions on your side (in a cookie you manage or in a CMP),
// you have to provide those permissions through the previousPermissions config.
// previousPermissions will overwrite preOptInApprovals.
var previousPermissionsConfig = {};
previousPermissionsConfig[adobe.OptInCategories.AAM] = true;
```
previousPermissionsConfig[adobe.OptInCategories.ANALYTICS] = false;

Visitor.getInstance("YOUR_ORG_ID", {
    "doesOptInApply": true, // NOTE: This can be a function that evaluates to true or false.
    "preOptInApprovals": preOptInApprovalsConfig,
    "previousPermissions": previousPermissionsConfig,
    "isOptInStorageEnabled": true
});

Handle changes to consent

At any time during a visitor’s experience on your site, they may set preferences for the first time or may change their preferences using your CMP. Once Visitor JS has been initialized with initial settings, the visitor’s permissions can be changed. See Changes to Consent parameters for a list of managing consent functions.

Opt-in workflows

Opt-in service supports a workflow where permissions can be collected over more than one request cycle and preferences are given one at a time. Using the following functions and providing true for shouldWaitForComplete, your solution is able to collect consent for one or a subset of the total categories, then collect consent for the next one or subset of categories. Beginning on the first call, the adobe.optIn.status property will be pending until adobe.optIn.complete() is called at the end of the flow. Once called, the status is set to complete.

adobe.optIn.approve(['AAM', 'ECID'], true);
adobe.optIn.deny(['ANALYTICS'], true);
adobe.optIn.complete();

See Workflow configuration settings.

Inspect your visitor’s Opt-in permissions

As your visitors make changes to their permissions, you will need insight into the resulting permissions to sync your consent store with changes made in Opt-in service. Inspect your visitor’s preferences using the permissions functions, for example:

fetchPermissions sample

optIn.fetchPermissions(function (permissions) {
    // Here you can check if your category has been approved or not.
    // We recommend using optIn.isApproved() to check for permissions because it abstracts out the details of knowing exactly how the permissions list looks like.
    if (adobe.optIn.isApproved(MY_CATEGORY) {
        sendBeacon(); // Or something
    }
});

OR: You can pass in shouldAutoSubscribe as true, your callback will be used to subscribe to all OptIn events going forward:

function callback() {
    if (adobe.optIn.isApproved(MY_CATEGORY) {
        sendBeacon(); // Or something
    }
}

optIn.fetchPermissions(callback, true);

See API documentation for more details on these and any functions, properties, or configurations mentioned in this document.
Storing visitor preferences

The Opt-in service provides an option for storing consent preferences suited to a dev environment or an environment where it is not feasible to use a CRM. Specifying the configuration property `isOptInStorageEnabled` as `true` triggers Opt-in service to create a cookie on the visitor's system within your domain.

The `adobe.optIn` object is stateless and provides no storage mechanism. It is intended instead that you manage Adobe consent settings in your existing Consent Management Platform (CMP) if it allows storing custom data. Or you can store visitor preferences in a cookie on the visitor's browser. You have two options for providing the user's preferences to Opt-in service:

- If your consent persistence solution, whether it be a CMP or a cookie on the visitor's browser, allows for timely retrieval of visitor preferences, you can provide those to the Opt-in service during Visitor initialization.
- However, if retrieval can be a lengthy process or is otherwise best served as an asynchronous process, you can use the service's `approve()` function to provide those settings once they are successfully loaded.

Validating Opt-in Service

Once you have enabled Opt-in on your website, use the validation methods to test that the service is working as expected using the developer tools in your browser.

*Use case 1: Enable Opt-in*

*Use case 2: Enable Opt-in and Storage*

*Use case 3: Enable Opt-in and preapprove Adobe Analytics*

Use case 1: Enable Opt-in

```javascript
Visitor.getInstance({
  {{YOUR_ORG_ID}}, {
    doesOptInApply: true
  });
```
Before loading the page, clear your cache and cookies.

In Chrome, right-click on the web page and select Inspect. As in the screenshot above, select the Network tab to view the requests made from the browser.

In the example above, we have the following Adobe JS tags installed on the page: ECID, AAM, Analytics and Target.

**How to prove that Opt-in is working as expected:**

You should not see any requests to Adobe servers:

- demdex.net/id
- demdex.net/event
- omtrdc.net/b/ss
- omtrdc.net/m2
- everesttech.net
Note: You might see a call to http://dpm.demdex.net/optOutStatus, which is a READ ONLY endpoint that is used to retrieve the visitor’s Opt-out status. This endpoint will not result in any third-party cookies being created, and will not collect any information from the page.

You should not see any cookies created by the Adobe tags: (AMCV_{YOUR_ORG_ID}, mbox, demdex, s_cc, s_sq, everest_g_v2, everest_session_v2)

In Chrome, go to the Application tab, expand the Cookies section under Storage, and select the domain name of your website:

Use case 2: Enable Opt-in and Storage

Visitor.getInstance({{YOUR_ORG_ID}}, {  
  doesOptInApply: true,
  isOptInStorageEnabled: true
});

The only difference in use case 2 is that you will see a new cookie that will contain the Opt-in permissions provided by your visitor: adobeujs-optin

Use case 3: Enable Opt-in and pre-approve Adobe Analytics

var preApproveAnalytics = {};
preApproveAnalytics[adobe.OptInCategories.ANALYTICS] = true;

Visitor.getInstance({{YOUR_ORG_ID}}, {  
  doesOptInApply: true,
  preOptInApprovals: preApproveAnalytics
});

Since Adobe Analytics is pre Opt-in approved, you will see requests in the Network tab to your tracking server:
and you will see Analytics cookies in the Application tab:
Use case 4: Enable Opt-in and IAB

Visitor.getInstance({YOUR_ORG_ID}, {
  doesOptInApply: true,
  isIabContext: true
});

How to view your current IAB consent on the page:

Open the developer tools and select the Console tab. Paste the following code snippet and press Enter:

```javascript
__cmp("getVendorConsents", null, function (vendorConsents) {
  console.log("Vendor Consent:", vendorConsents);
});
```

Here's an example output when purposes 1, 2, and 5 are approved, and the Audience Manager vendor ID is approved:

- demdex.net/id: The presence of this call proves that ECID has requested an ID from demdex.net
- demdex.net/event: The presence of this call proves that the DIL data collection call is working as expected.
- demdex.net/dest5.html: The presence of this call proves that ID Syncs are being triggered.
If one of the following is not valid, you will not see any requests to Adobe servers, and no Adobe cookies:

- Purposes 1, 2 OR 5 are not approved.
- The Audience Manager vendor ID is not approved.

**Configuring Opt-in with Launch**


**Configure an Opt-in scenario with Launch**

*Launch, by Adobe* makes it easy to configure and set up an opt in scenario with Adobe solutions. You can simplify gathering visitor opt-in consents for Experience Cloud solutions by enabling Analytics, Target, Audience Manager, and other or all select Experience Cloud solutions to opt in to your consent management system.
Configure the Experience Cloud ID extension

If the Experience Cloud ID extension is not yet installed, open your property, then click Extensions > Catalog, hover over the Experience Cloud ID extension and click Install.

To configure the extension, open the Extensions tab and hover over the extension. Then click Configure.

For additional reference information, see Opt-in Extension for Launch.
Configuring Opt-in with DTM

Enable Opt-in services using Dynamic Tag Management (DTM).
Set up Opt-in services using DTM.

Required:
• Upgrade to ECID 4.0.0 or later. See ECID Download.

Enter configuration fields in the General DTM page.
Opt-in Use Cases
Sample use cases and solutions to manage the Opt-in service.

Tips and Troubleshooting
• Visitor JS initialize is synchronous and executes during page load. If you are interfacing with a CMP or permissions persistence that has a high latency, it might be preferable to use the asynchronous functions described in Opt-in Setup.
• Opt-in is a per-domain implementation. It will not handle cross-domain implementations.
• In order to disable third-party calls for a specific library, you will need to configure that preference in each library separately.

Opt-in Scenarios
These use cases are example ideas for using Opt-in service.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Solutions</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analytics is okay to collect in pre-consent state but all other libraries can’t be loaded until consent is received</td>
<td>Use Opt-in to enable Analytics category in pre-consent state</td>
<td>Analytics uses the Analytics identifier rather than ECID in pre-consent collection. Once ECID is approved, a new identifier will be used and the visitor will receive an ECID that can be used for activation and integrations. Visitor fragmenting in pre-/post-consent state is expected.</td>
</tr>
<tr>
<td>First-party measurement is okay to collect in pre-consent state. All other types of data usage prevented until consent is received.</td>
<td>Use Opt-in to enable Analytics + ECID libraries in pre-consent state. Add the 'disablethirdpartycookies' config to ECID library to block 3rd party cookie + ID syncs in pre-consent state</td>
<td>Adobe Demdex call will trigger for ECID retrieval but no Demdex cookie, other third-party cookie or ID syncs will be present. Keeps consistent visitor in pre-/post-consent state for Analytics. Collection in pre-consent state will be tied to post-consent data collection.</td>
</tr>
<tr>
<td>First-party measurement plus targeting is acceptable in a pre-consent state. All other types of data usage prevented until consent is received.</td>
<td>Use Opt-in to enable Analytics + ECID + Target libraries in pre-consent state. Add the isablethirdpartycookies config to ECID library to block third-party cookie + ID syncs in</td>
<td>Adobe Demdex call will trigger for ECID retrieval but no Demdex cookie, other 3rd party cookie or ID syncs will be present. Keeps consistent visitor in pre-/post-consent state for first-party solutions.</td>
</tr>
</tbody>
</table>
### Impact Solutions

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Solutions</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>pre-consent state. Remove flag in post-consent state.</td>
<td></td>
<td>Collection in pre-consent state will be tied to post-consent data collection.</td>
</tr>
<tr>
<td>No cookies are allowed to be set in a pre-consent state</td>
<td>Use Opt-in to block all libraries from loading until consent is received</td>
<td>Implementation is as expected and all libraries, including ECID, will load in correct sequence in post-consent state. Data loss for customers who never give consent to be tracked.</td>
</tr>
</tbody>
</table>

### Opt-in Reference

API for the Opt-in library and configuration settings reference.

### Category Settings

Consent settings are provided to the Opt-in functions as categories:

```javascript
adobe.OptInCategories = {
  "AAM": "aam",
  "ANALYTICS": "aa",
  "ECID": "ecid",
  "TARGET": "target"
}
```

### Opt-in Configuration parameters

This section discusses using the API to configure Opt-in. Much of the configuration and implementation can be done using the *Launch extension*.

Opt-in configurations are provided in the Visitor JavaScript `getInstance()` function, which instantiates the global `adobe` object. The following lists the Visitor JS configurations related to Opt-in service.

- **`doesOptInApply (boolean or function that evaluates to a boolean)`**: If false, indicates visitors do not need to opt in. Results in Experience Cloud creating cookies regardless of categories opted in or out. This configuration holistically enables or disables Opt-in.

- **`preOptInApprovals (Object <adobe.OptInCategories enum: boolean>)`**: Define which categories are approved or denied when no preference has yet been set by the visitor, referred to as organization defaults.

- **`previousPermissions (Object<adobe.OptInCategories enum: boolean>)`**: The visitor's explicitly set preferences. The permissions in this config overwrite organization defaults (`previousPermissions` overwrites `preOptInApprovals`).

- **`isOptInStorageEnabled (boolean)`**: Enable Opt-in to store the permissions in a first-party cookie (within the current customer's domain) (Optional)

- **`optInCookiesDomain (string)`**
First-party domain or sub-domain to use for the Opt-in cookie (if `isOptInStorageEnabled` is true)

(Optional) `optInStorageExpiry` (integer)

Number of seconds to override the default expiry of 13 months

**Changes to Consent parameters**

At any time during their experience on your site, a visitor may set preferences for the first time or may change their preferences using your CMP. Once Visitor JS has been initialized with initial settings, the visitor’s permissions can be changed using the following functions:

```javascript
adobe.optIn.approve(categories, shouldWaitForComplete)
```

Function that approves, or opts the visitor in to all categories in a list. For more information on the `shouldWaitForComplete` parameter, see [Opt-in Workflow](#).

```javascript
adobe.optIn.deny(categories, shouldWaitForComplete)
```

Function that denies, or opts the visitor out of all categories specified.

```javascript
adobe.optIn.approveAll()
```

If your request for permission for your site to create is phrased such that a visitor blanket grants or denies permission for your site to create cookies, use `approveAll()` or `denyAll()`, relative to their response.

```javascript
adobe.optIn.denyAll()
```

If your request for permission for your site to create is phrased such that a visitor blanket grants or denies permission for your site to create cookies, use `approveAll()` or `denyAll()`, relative to the response.

**Opt-in Workflows parameters**

Opt-in supports a workflow where permissions can be collected over more than one request cycle, such as where preferences are given one at a time. Using the following functions and providing `true` for `shouldWaitForComplete` setting, your solution is able to collect consent for one solution or a subset of the total categories, then collect consent for the next one or subset of categories. Beginning on the first call, the `adobe.optIn.status` property will be pending until `adobe.optIn.complete()` is called at the end of the flow. Once called, the status is set to *Complete*.

```javascript
adobe.optIn.approve(categories, shouldWaitForComplete)
```

Function that approves, or opts the visitor in to all categories in a list.

```javascript
adobe.optIn.deny(categories, shouldWaitForComplete)
```

Function that denies, or opts the visitor out of all categories specified.

```javascript
adobe.optIn.complete()
```

Function that triggers the aggregation of the proceeding calls to approve() and deny() into one request to set a visitor’s preferences. When subscribing to Opt-in changes (see `adobe.optIn.fetchPermissions(callback, shouldAutoSubscribe)` below, your callback is triggered only when this function is called.

**Visitor Opt-in Permissions parameters**

Collect Opt-in permissions for a visitor at any time using one of the permissions functions:

```javascript
adobe.optIn.permissions
```
An object listing all Experience Cloud solutions, as categories, that have been granted or denied by the visitor.

`adobe.optIn.isApproved(categories)`

If all categories have been approved, this function will return true.

`adobe.optIn.fetchPermissions(callback, shouldAutoSubscribe)`

Retrieve the list of permissions asynchronously. The callback is called with the list of permissions, once the permissions granting / denying process is complete. Providing a value of `true` for `shouldAutoSubscribe` registers the callback for any Opt-in changes going forward.

**Properties of Opt-in Object**

The following are properties of `adobe.OptIn`:

**permissions**
An object listing all Experience Cloud solutions, as categories, that have been granted or denied by the visitor

Example: `{ aa: true, ecid: false, aam: true... }`

**status**
- pending
- changed
- complete

**doesOptInApply**
True or false, representing the configuration you provided in initialization

**isPending**
True or false, depending on status value. Opt-in reports true for this property for a visitor who has not yet explicitly accepted or denied permission

**isComplete**
True or false depending on status value. Opt-in might report a false for this property when a workflow-style consent has started but not completed.

**Methods of Opt-in object**

**approve(categories, shouldWaitForComplete)**

`categories`: One or more categories to approve. For example:

`adobe.optIn.approve([adobe.OptInCategories.AAM, adobe.OptInCategories.ECID])`

`shouldWaitForComplete`: (optional) boolean parameter, false by default. If you pass true, Opt-in does not complete the approval process until you call `adobe.optIn.complete()`. This process is similar to a workflow.

`adobe.optIn.approve(adobe.OptInCategories.ANALYTICS, true); adobe.optIn.approve(adobe.OptInCategories.ECID, true); adobe.optIn.complete()`

**deny(categories, shouldWaitForComplete)**

- Pass 1 or more categories to check if they are approved.
- If no categories passed in, ALL available categories are checked.
isApproved(categories)
Check if one or more categories is approved by the customer.

isPreApproved(categories)
Check if one or more categories were pre approved by the customer. (If they were passed in the preOptInApprovals config).

fetchPermissions(callback, shouldAutoSubscribe)
Async API to retrieve the list of permissions. The callback is called with the list of permissions, once the permissions granting / denying process is complete. shouldAutoSubscribe: A helper utility, will automatically subscribe this callback to all future events. Meaning the callback will get called every time an approval or denial trigger in Opt In. This way you are always updated, without subscribing to the events yourself.

Example

fetchPermissions

```
optIn.fetchPermissions(function (permissions) {
  // Here you can check if your category has been approved or not.
  // We recommend using `optIn.isApproved()` to check for permissions because it abstracts out the details of knowing exactly how the `permissions` list looks like.
  if (adobe.optIn.isApproved(MY_CATEGORY)) {
    sendBeacon(); // Or something
  }
});

// OR: You can pass in `shouldAutoSubscribe` as true, your callback will be used to subscribe to all OptIn events going forward:

function callback() {
  if (adobe.optIn.isApproved(MY_CATEGORY)) {
    sendBeacon(); // Or something
  }
}

optIn.fetchPermissions(callback, true);
```

complete():

💡 Note: Use only if you passed the shouldWaitForComplete parameter to approve or deny. This API completes the approval process. Example: adobe.optIn.complete().

approveAll():
Approves all existing Categories.

denyAll()
Deny all existing Categories.

Events of Opt-in object

complete:
Complete event triggers when the approval process has been completed. If you call approve/deny without passing `shouldWaitForComplete`, or `approveAll/denyAll`, this event triggers. Or, if you pass `shouldWaitForComplete`, this event triggers when `complete` is called.

**Example**

```javascript
adobe.optIn.on("complete", callback);
```

**(beta) Using Opt-in Services with IAB Framework**

Connect their Consent Management Platform (CMP) with Opt-in’s IAB plugin. Audience Manager customers using **IAB Transparency and Consent Framework (TCF)** can connect their Consent Management Platform (CMP) with Opt-in’s IAB plugin. Opt-in is a feature embedded within the ECID JavaScript library that can disable individual Adobe solution libraries depending on visitor preferences set within a CMP. When the IAB plugin is implemented with the ECID library, visitor preferences from your IAB compliant CMP are mapped automatically to Opt-in. These preferences will enable Audience Manager based libraries (DIL and ECID) and associated calls when consent is received.

On this page:

- Implement a CMP that supports IAB
- Enable the IAB plugin within your ECID Javascript Library
- Related Documentation

**Implement a CMP that supports IAB**

In order for Opt-In to integrate with the IAB consent, you need to complete the following:

1. Implement a CMP that supports IAB and is **registered as an IAB vendor** or develop an in-house CMP that implements the IAB spec, and register as a CMP with IAB Europe.
2. Define/Load the `__cmp` before loading the Adobe JS.

For more details, please read the *Interactive Advertising Bureau docs*.

**Enable the IAB plugin within your ECID Javascript Library**

💡 **Note:** Opt-in is only available in ECID 4.0+

Use Adobe Launch to implement both Opt-in and the IAB plugin for your site. Read the **documentation for the ECID Opt-in extension** to learn how to set up the Launch extension.

When enabling IAB for Opt-in manually, check to make sure the following settings are set to true within the Visitor object:

```javascript
Visitor.getInstance("YOUR_ORG_ID", { 
  doesOptInApply: true,
  isIabContext: true
});
```

Once settings are configured properly, ECID and DIL libraries will be enabled/disabled depending on consent criteria from the CMP and IAB framework.
Important:

Audience Manager needs consent for purposes 1, 2, and 5, plus vendor consent in order to deploy cookies and initiate or honor ID syncs. Read more about the IAB plugin in Audience Manager documentation here.

For more information on how to validate both Opt-in and the IAB plugin, check use case #4 in the validation guide.

Related Documentation

- IAB Transparency and Consent Framework (TCF) - For more information on the IAB standard
- Adobe Opt-In - For more information on Opt-In, a required component for consent management in Platform solutions
- IAB Transparency and Consent Framework (TCF) Support in Audience Manager
- Your Privacy Choices - Another privacy option at your users' disposal is the ability to opt out of all data collection using other global opt-out tools. Global Opt-Out takes precedence over the Opt-In and IAB verification
ID Service API

Properties, methods, and configurations that let you work programmatically with the Experience Cloud ID service.

💡 **Note:** The Experience Cloud ID Javascript Libraries have moved recently. The latest release of the ECID JS libraries can be found at https://github.com/Adobe-Marketing-Cloud/id-service/releases.

Configurations

Configure the ID service by passing these properties to the `Visitor.getInstance` static method.

**audienceManagerServer and audienceManagerServerSecure**

Change the default domain name used by calls to the Experience Cloud ID service to your own subdomain name with these configurations.

**Syntax:**

- `audienceManagerServer: "your subdomain name.demdex.net"`
- `audienceManagerServerSecure: "your subdomain name.demdex.net"`

**Purpose**

Normally, the Experience Cloud ID service makes calls to Adobe at `dpm.demdex.net`. Sometimes you may not want to make calls to this destination because it looks too generic or "third-party." To make the ID service call look more like a first-party call, use these configurations to add your Audience Manager subdomain name to `demdex.net` as shown below. For more information about the `dpm.demdex.net` call, see *Understanding Calls to the Demdex Domain*.

**Requirements**

These configurations require that you use:

- The Audience Manager subdomain name of record for your company. Verify or get this name from your consultant.
- The subdomain name associated with your **Organization ID**.
- **Both** configuration parameters with the same subdomain name.

**Code Sample**

In this example, let's say we have a media entertainment company that has expressed legal concerns with making calls to `dpm.demdex.net`. In Audience Manager, the company subdomain name of record is Music1. The following code sample demonstrates how to brand the ID service data call with this customer-specific subdomain name.

```javascript
//Instantiate Visitor
var visitor = Visitor.getInstance("Insert Experience Cloud Organization ID here", { ... 
    //Configure ID service call
    audienceManagerServer: "Music1.demdex.net",
    audienceManagerServerSecure: "Music1.demdex.net"
})
```

**cookieDomain**

Required for multi-part, top-level domains where either of the last two parts of the URL are greater than 2 characters.
Syntax: `cookieDomain: "URL"` (The www prefix is not required.)

Use Case

- **Required:** `www.example.com.uk`
- **Not required:** `www.example.co.uk`

Code Sample

```javascript
var visitor = Visitor.getInstance("Insert Experience Cloud organization ID here",{
    trackingServer: "Insert tracking server here here",  //Same as s.trackingServer
    trackingServerSecure: "Insert secure tracking server here",  //Same as s.trackingServerSecure

    //For CNAME support only. Exclude these variables if you're not using CNAME
    marketingCloudServer: "Insert tracking server here",
    marketingCloudServerSecure: "Insert secure tracking server here",

    //Function variable
    cookieDomain:"example.com.uk"
});
```

cookieLifetime

This variable lets you override the default lifetime interval for the AMCV cookie.

By default, Experience Cloud ID service cookies expire after 24-months. Set the time interval in seconds.

Syntax: `cookieLifetime: lifetime in seconds`

Code Sample

```javascript
var visitor = Visitor.getInstance("Insert Experience Cloud organization ID here",{
    trackingServer: "Insert tracking server here here",  //Same as s.trackingServer
    trackingServerSecure: "Insert secure tracking server here",  //Same as s.trackingServerSecure

    //For CNAME support only. Exclude these variables if you're not using CNAME
    marketingCloudServer: "Insert tracking server here",
    marketingCloudServerSecure: "Insert secure tracking server here",

    //Function variable. Example changes expiration period to 12-months.
    cookieLifetime:31536000
});
```

disableIdSyncs

An optional, Boolean flag that disables ID synchronization.

💡 **Note:** This configuration was `idSyncDisableSyncs` and renamed to `disableIdSyncs` in the January 18, 2018 release of v3.0.

Syntax: `disableIdSyncs: true|false` (default is `false`.)

Code Sample

```javascript
var visitor = Visitor.getInstance("Insert Experience Cloud organization ID here",{
    trackingServer: "Insert tracking server here here",  //Same as s.trackingServer
    trackingServerSecure: "Insert secure tracking server here",  //Same as s.trackingServerSecure

    //For CNAME support only. Exclude these variables if you're not using CNAME
    marketingCloudServer: "Insert tracking server here",
    marketingCloudServerSecure: "Insert secure tracking server here",

    });
```
disableThirdPartyCalls

An optional, Boolean flag that prevents the ID service from making calls to other domains.

Syntax: disableThirdPartyCalls: true|false  (default is false.)

When disableThirdPartyCalls: true, the ID service will not make calls to other domains.

Purpose

This variable is designed for customers who need:

• To prevent the ID service from making calls from their secure, authenticated pages.
• Site visitors to have a Experience Cloud ID (MID).
• Their other Experience Cloud solutions to work properly.

Implementation Strategy

Because other Experience Cloud solutions rely on the MID, the ID service calls Adobe to return and set this ID. If you need to stop the ID service from making calls from authenticated sections of your website, then let it make these required calls from pages that don't require authentication first. After your site visitor has a MID, then you can set disableThirdPartyCalls= true in the ID service code on the authenticated sections of your site. The assumption here is that most, if not all, of your customers will navigate to an authentication page before they get access to the secure parts of your site.

Code Sample

```javascript
var visitor = Visitor.getInstance ("Insert Experience Cloud organization ID here",{
    trackingServer: "Insert tracking server here here",  //Same as s.trackingServer
    trackingServerSecure: "Insert secure tracking server here",  //Same as s.trackingServerSecure

    //For CNAME support only. Exclude these variables if you're not using CNAME
    marketingCloudServer: "Insert tracking server here",
    marketingCloudServerSecure: "Insert secure tracking server here",

    //Function variable
    disableThirdPartyCalls: true
});
```

disableThirdPartyCookies

An optional, Boolean flag that prevents the Experience Cloud ID service from returning the third-party, demdex.net cookie.

💡 Note: This configuration was idSyncDisable3rdPartySyncing and renamed to disableThirdPartyCookies in the January 18, 2018 release of v3.0.

Syntax: disableThirdPartyCookies: true|false (default is false.) For VisitorAPI.js v1.5.3, or greater.

When disableThirdPartyCookies: true, the ID service does not return the third-party, demdex.net cookie (see Cookies and the Experience Cloud ID Service). If a site visitor already has this cookie in their browser, the ID service won't use it to create a new Experience Cloud ID (MID) or return an existing ID. Instead, the ID service creates a
new, random MID in the first-party cookie. Once enabled, you can collect data with the ID service and share it across different Experience Cloud solutions.

**Code Sample**

```javascript
var visitor = Visitor.getInstance("Insert Experience Cloud organization ID here",{
    trackingServer: "Insert tracking server here here",  //Same as s.trackingServer
    trackingServerSecure: "Insert secure tracking server here",  //Same as s.trackingServerSecure

    //For CNAME support only. Exclude these variables if you're not using CNAME
    marketingCloudServer: "Insert tracking server here",
    marketingCloudServerSecure: "Insert secure tracking server here",

    //Function variable
    disableThirdPartyCookies: true
});
```

**idSyncAttachIframeOnWindowLoad**

An optional, Boolean flag that controls how the Experience Cloud ID service loads the ID synchronization iFrame.

**Syntax:** `idSyncAttachIframeOnWindowLoad= true|false (default is false.)`

When `idSyncAttachIframeOnWindowLoad: true` the ID service loads the ID synchronization iFrame on window load. By default, the ID service loads the ID synchronization iFrame as fast as possible instead of on window load.

**Code Sample**

```javascript
var visitor = Visitor.getInstance("Insert Experience Cloud organization ID here",{
    trackingServer: "Insert tracking server here here",  //Same as s.trackingServer
    trackingServerSecure: "Insert secure tracking server here",  //Same as s.trackingServerSecure

    //For CNAME support only. Exclude these variables if you're not using CNAME
    marketingCloudServer: "Insert tracking server here",
    marketingCloudServerSecure: "Insert secure tracking server here",

    //Function variable. Example loads ID sync iFrame on window load instad of ASAP.
    idSyncAttachIframeOnWindowLoad: true
});
```

**idSyncContainerID**

This property sets the data source container ID that you want to use for ID syncs.

**Contents:**

- **Syntax and Code Sample**
- **What are Containers and When Would I Use This?**
- **Setting Container IDs When You Use DIL and VisitorAPI.js**

**Syntax and Code Sample**

**Syntax:** `idSyncContainerID:container ID value`

**Code Sample:**

```javascript
var visitor = Visitor.getInstance("Insert Experience Cloud organization ID here",{
    ...
    //Set container ID
});
```
What are Containers and When Would I Use This?

Containers

Containers are objects created by Audience Manager. Although they're not externally accessible, these container list all the data sources that:

• Are available to you, but not used, for ID syncing.
• Are being used for ID syncing.

Even if you're not an Audience Manager customer, your account will have these containers if you're exchanging IDs with different data sources on different pages across your domain. This is because Audience Manager provides the technology and back-end functionality that enables ID synchronization.

Use Cases

Depending on your situation, you may or may not need to add this configuration to your ID service code.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not needed</td>
<td>You do not need to use this configuration if:</td>
</tr>
<tr>
<td></td>
<td>• You use the ID service with any Experience Cloud solution and don't perform ID syncs with other data sources. In this case, your account has a default container with ID 0 and no action is required.</td>
</tr>
<tr>
<td></td>
<td>• All your data sources are in a single container.</td>
</tr>
<tr>
<td>Needed</td>
<td>You need to use this configuration when all of these conditions apply:</td>
</tr>
<tr>
<td></td>
<td>• You don't use Audience Manager.</td>
</tr>
<tr>
<td></td>
<td>• You need to synchronize IDs with other data sources that are organized by containers.</td>
</tr>
<tr>
<td></td>
<td>• You need to synchronize IDs with data sources in different containers on different pages across your domain.</td>
</tr>
</tbody>
</table>

Setting Container IDs When You Use DIL and VisitorAPI.js

If you have deployed DIL and VisitorAPI.js on the same page:

• Visitor ID service code takes precedence over DIL for ID syncs.
• Set the idSyncContainerID configuration in the ID service code only.

idSyncSSLUseAkamai

Specifies if the destination publishing template should use Akamai for HTTPS connections.

The idSyncSSLUseAkamai configuration is enabled on a per-partner basis.

Syntax: idSyncSSLUseAkamai: true

Code Sample

```javascript
//Call the ID service
```
isCoopSafe

An optional, Boolean configuration that determines if the ID service sends (or does not send) data to the Adobe Experience Cloud Device Co-op.

Contents:

Requirements
Use Cases
Syntax and Code Sample
Event Call POST Parameters
Post-Instantiation APIs

Requirements
To use isCoopSafe you must:

• Use ID service code version 2.4, 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 enabling 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 related 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 isCoopSafe to your ID service 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 isCoopSafe to your ID service 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 your ID service code instantiates:

```javascript
var visitor = Visitor.getInstance("Insert Experience Cloud organization ID here", {
    ...
    isCoopSafe: true
});
```

**Event Call POST Parameters**

Depending on the flag you set (`true` or `false`), the ID service translates `isCoopSafe` into these POST parameters and sends them to Adobe in an event call:

- `d_coop_safe=1`
- `d_coop_unsafe=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>
</tr>
</thead>
<tbody>
<tr>
<td><code>isCoopSafe: true</code></td>
<td><code>d_coop_safe=1</code></td>
</tr>
<tr>
<td></td>
<td>The Device Co-op can use visitor data to help build the device graph.</td>
</tr>
<tr>
<td><code>isCoopSafe: false</code></td>
<td><code>d_coop_unsafe=1</code></td>
</tr>
<tr>
<td></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>visitor.setAsCoopSafe();</code></td>
<td>Sets POST parameter <code>d_coop_safe=1</code> in all subsequent event calls.</td>
</tr>
<tr>
<td><code>visitor.setAsCoopUnsafe();</code></td>
<td>Sets POST parameter <code>d_coop_unsafe=1</code> in all subsequent event calls.</td>
</tr>
</tbody>
</table>
**loadTimeout**

Sets a timeout interval in milliseconds. Used to tell other solutions (e.g., Analytics, Audience Manager, Target, etc.) how long to wait for a response from the ID service.

**Syntax:** `loadTimeout: interval in milliseconds`

The default value is 30,000 milliseconds (30 seconds). We strongly recommend that you do not change the default value.

**Note:** Calls to the ID service are asynchronous in relation to other, non-Adobe code on the page. As a result, increasing or decreasing the timeout interval does not change the rate at which your page renders content. However, long timeout intervals may affect page load times as measured by common network monitoring tools, but rendering time is unaffected.

**Code Sample**

```javascript
var visitor = Visitor.getInstance("Insert Experience Cloud organization ID here", {
    trackingServer: "Insert tracking server here here", //Same as s.trackingServer
    trackingServerSecure: "Insert secure tracking server here", //Same as s.trackingServerSecure
    //For CNAME support only. Exclude these variables if you're not using CNAME
    marketingCloudServer: "Insert tracking server here",
    marketingCloudServerSecure: "Insert secure tracking server here",
    //Function variable. Example sets the timeout to 10,000 milliseconds (10 seconds).
    loadTimeout: 10000
});
```

**overwriteCrossDomainMCIDAndAID**

This property overwrites a visitor’s Experience Cloud and Analytics IDs as they navigate from one domain to a second domain. To overwrite an ID, you must own and have implemented the ID service on each domain. This code does not let you overwrite IDs on domains you do not control.

**Syntax:** `Visitor.overwriteCrossDomainMCIDAndAID: true|false` (default is `false`)

**Code Sample**

Your JavaScript code could look similar to the following example.

```javascript
//Call the ID service
var visitor = Visitor.getInstance("INSERT-MARKETING-CLOUD-ID-HERE", {
    ...
    //Set overwrite property
    overwriteCrossDomainMCIDAndAID: true
});
```

**Use Cases**

To track site visitors, the ID service writes a Experience Cloud ID (or MID) to a browser cookie. The following table lists and describes the common use cases where you might want to overwrite an existing MID set by the ID service in another domain.
<table>
<thead>
<tr>
<th>Use Case</th>
<th>Description</th>
</tr>
</thead>
</table>
| Identify visitors on different domain landing pages | Let's say you own Domains A and B. In this case you can set \( \text{Visitor.overwriteCrossDomainMCIDAndAID: true when:} \)  
\begin{itemize}  
  \item Each domain has a it's own landing page.  
  \item A visitor already has a cookie (and a MID) set from a previous visit to Domain B.  
  \item You want to consistently identify a visitor if they come to Domain B from Domain A.  
\end{itemize} |
| Identify visitors across landing and conversion pages | Let's say you own Domains A and B. In this case, you can set \( \text{Visitor.overwriteCrossDomainMCIDAndAID: true when:} \)  
\begin{itemize}  
  \item Domain A is a landing page.  
  \item Domain B is a separate conversion, booking, or other end-of-workflow page.  
  \item A visitor already has a cookie (and a MID) set from a previous visit to Domain B and you know these are less desirable client-side MIDs rather than server-side MIDs.  
  \item You want to consistently identify a visitor if they come to Domain B from Domain A.  
\end{itemize} |
| Identify visitors from mobile apps to web browsers | This use case is slightly different. It involves identifying users as they move from a mobile app to your website. In this case, your visitor already has a MID set locally by a mobile app and they have a different MID set in a cookie on your website. You can set \( \text{Visitor.overwriteCrossDomainMCIDAndAID: true} \) to overwrite the MID set in the browser cookie with the MID set by the mobile app. |

**resetBeforeVersion**

This configuration lets you clear orphaned or stale Experience Cloud IDs (ECIDs) based on the ID Service version being updated.

Providing your ID Service version as the value of the `resetBeforeVersion` variable will cause for outdated ECIDs to be cleared from client-side IDs.

Some conditions, such as session timeouts, could sometimes result in a client-side ID being generated without the ID Service successfully getting a server-side ID. When this happens, an orphan client-side ID is tracked by ID Service without the ability to be tracked across domains or properly sync with other solutions. The behavior compares the version in the current AMCV cookie with the value of `resetBeforeVersion`. If either the cookie doesn’t exist or the cookie’s version is less (older) than the latest released version of `resetBeforeVersion`, then the AMCV cookie is removed and the ID Service requests a fresh ECID.

For visitors who have third-party Demdex cookies on their browser, the ECID is checked to see if it was correctly generated using the UUID in the Demdex cookie. If that check proves true, then the new ECID will be the same, and the visitor will be considered new. If for some reason the ECID being cleared out was not generated using the Demdex cookie, or if there is no Demdex cookie, the visitor will receive a new ECID and will be considered new.

**Syntax:** `resetBeforeVersion = "3.3"`

**Code Sample**

```javascript
//Call the ID service
var visitor = Visitor.getInstance ("Insert Marketing Cloud organization ID here", { ...
```
//Same as s.trackingServer
trackingServer: "Insert tracking server here",

//Same as s.trackingServerSecure
trackingServerSecure: "Insert secure tracking server here",

//For CNAME support only. Exclude these variables if you're not using CNAME
marketingCloudServer: "Insert tracking server here",
marketingCloudServerSecure: "Insert secure tracking server here",

//Changing the version
resetBeforeVersion: "3.3"
});

sdidParamExpiry

This configuration lets you override the default Supplemental Data ID (SDID) expiration interval when passing that ID from one page to another using the appendSupplementalDataIDTo helper function. By default, the ID service code on the receiving page has 30 seconds to get the SDID from the URL sent by the referring page. If the ID service code on the receiving page can't retrieve the SDID in less than 30 seconds it requests a new SDID. This functionality is mainly for A4T customers who need to pass the SDID from one page to another and want control over this timeout interval.

Override the SDID Timeout

If you need to change the default SDID timeout, add sdidParamExpiry to the Visitor.getInstance function with the following syntax:

**Syntax:** sdidParamExpiry: time in seconds

**Code Sample**

When configured, your ID service code could look similar to this sample. This sample sets the SDID timeout to 15 seconds. This configuration works with the appendSupplementalDataIDTo helper method.

```javascript
var visitor = Visitor.getInstance("Insert Experience Cloud organization ID here", {...
    //Change the default SDID timeout to 15 seconds
    sdidParamExpiry: 15
});

//Call helper method to append SDID to the Page B URL from Page A
var pageB = "www.domain.com/pageB";
var pageBWithSdid = visitor.appendSupplementalDataIDTo(pageB, "67987653465787219");
```

secureCookie

An optional Boolean flag that adds a “Secure” attribute to the AMCV cookie.

This configuration attribute is available in the visitorAPI, version 3.3.0.

**Note:** The secureCookie configuration will not work on unsecured domains and could result in you not receiving the MID values for visits that use an unsecured protocol. The secureCookie configuration should be set to true only when you are sure that all pages and sub-domains are using a secure protocol at all times.

**Syntax:** secureCookie: true | false (default)

**Code Sample**

```javascript
var visitor = Visitor.getInstance("INSERT-MARKETING-CLOUD-ID-HERE", {...
//Set secure cookie property
secureCookie: true
});

useCORSOnly
An optional, Boolean flag that controls how the browser requests resources from the Experience Cloud ID service.

**Syntax:** useCORSOnly: true|false (default is false.)

**Overview**
When set to false, the browser performs resource checks with CORS or JSONP. However, the ID service 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, set useCORSOnly: true in the Visitor.getInstance function call.

**Important:** Set useCORSOnly: true if you have strict security requirements. You should only enable this mode if you're confident all of your visitors use browsers that support CORS. The user experience is unaffected by browsers that do not support CORS. However, browsers without CORS support cannot request resources or exchange data with the Adobe Experience Cloud.

**Code Sample**

```javascript
var visitor = Visitor.getInstance ("Insert Experience Cloud organization ID here", {
  trackingServer: "Insert tracking server here",  //Same as s.trackingServer
  trackingServerSecure: "Insert secure tracking server here",  //Same as s.trackingServerSecure

  //For CNAME support only. Exclude these variables if you're not using CNAME
  marketingCloudServer: "Insert tracking server here",
  marketingCloudServerSecure: "Insert secure tracking server here",

  //Function variable
  useCORSOnly: true
});
```

whitelistParentDomain and whitelistIframeDomains
These configurations let different instances of ID service code implemented in an iFrame and on the parent page communicate with each other. They're designed to help resolve problems with 2 specific use cases where you may or may not control the parent page/domain and you have ID service code loading in the iFrame of a domain that you do control. They are available in VisitorAPI.js code version 2.2, or higher.

**Contents:**
- Syntax
- Code Sample
- Use Cases
- Configuration Safety and Security
- Supported Visitor API Methods

**Syntax**
Both configuration elements are required when you use this code.
**Configuration Syntax** | **Description**
--- | ---
whitelistParentDomain: "Domain name of parent page" | Accepts a single domain name passed in as a string.
whitelistIframeDomains: ["iFrame domain","iFrame domain","iFrame domain"] | Accepts one or more iFrame domain names passed in as an array.

**Code Sample**

Your configured **ID service** code could look similar to this example.

```javascript
//Instantiate Visitor
var visitor = Visitor.getInstance("Insert Experience Cloud Organization ID here",{
  ...
  //Add parent page domain name and iFrame domain names
  whitelistParentDomain: "parentpageA.com",
  whitelistIframeDomains: ["iFrameDomain1.com","iFrameDomain2.com"],
  ...
});
```

**Use Cases**

These configurations help solve the problem of setting an ID service cookie and assigning a visitor ID when browsers block third-party cookies and if either of these conditions apply:

- You do or do not control the parent page/domain.
- ID service code is not installed on the parent page, but is implemented in an iFrame.

💡 **Tip:** You may also want to implement these configurations when you’re serving video in an iFrame with Video Heartbeat. Video Heartbeat needs an ID service ID (the MID) to work properly.

**Use Case 1: The Browser Blocks Third-Party Cookies and the ID Service is Implemented on the iFrame and Parent Page**

**Use Case Element** | **Description**
--- | ---
**Conditions** | This use case includes the following conditions:
- Company A implements the ID service on their home page.
- Company A implements the ID service in iFrame on their home page.
- Company A owns the parent page and the iFrame and have implemented the ID service in both places.
- A customer loads the parent page in a browser that blocks third-party cookies.

**Results** | Given these conditions, the ID service:
- Works properly on the parent page. It requests and sets the AMCV cookie and assigns a unique ID to the site visitor.
- Does not work in the iFrame. This is because the browser sees the iFrame as a third-party domain and prevents the ID service from setting the AMCV cookie.
<table>
<thead>
<tr>
<th>Use Case Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Solution</strong></td>
<td>Modify the ID service Visitor.getInstance function in the iFrame with these white list configurations. Specify the parent and child domains in the code. These configurations let the ID service code in the iFrame check the ID service code on the parent page for a visitor ID. If the ID service code in the iFrame doesn't receive a response parent page, these configurations generate a local visitor ID.</td>
</tr>
</tbody>
</table>

**Use Case 2: Requesting an ID from an iFrame embedded in a parent page you do not control or that does not use the ID service**

<table>
<thead>
<tr>
<th>Use Case Element</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Conditions**   | This use case includes the following conditions:  
  • Company A does not use the ID service.  
  • Company A loads an iFrame on the page. This iFrame is owned by Company B and loads in a separate domain than Company A.  
  • The browser blocks third-party cookies. |
| **Results**      | Given these conditions, the ID service:  
  • Does not work in the iFrame. This is because the browser sees the iFrame as a third-party domain and prevents the ID service from setting the AMCV cookie.  
  • Can't get a visitor ID from the parent page because Company A doesn't use this service. |
| **Solution**     | Modify the ID service Visitor.getInstance function in the iFrame with these white list configurations. Specify the parent and child domains in the code. These configurations let the ID service code in the iFrame check the ID service code on the parent page for a visitor ID. If the ID service code in the iFrame doesn't receive a response parent page, these configurations generate a local visitor ID. |

**Configuration Safety and Security**

You can implement these configurations safely because:

- The ID service implemented on parent domain and the iFrame domain must use the same organization ID. These white list configurations will not work when the organization IDs on the parent or in the iFrame are different.
- These configurations only communicate with the domain and iFrames specified in the code.
- The communication between the iFrame and the parent page follows a specific format. If the ID service on the parent page does not receive a request in the expected format this sharing process will fail.

**Supported Visitor API Methods**

The ID service supports a limited set of public API methods when you implement these white list configurations. The supported methods vary according to the use case scenarios described above.
<table>
<thead>
<tr>
<th>Use Case</th>
<th>Supported Methods</th>
</tr>
</thead>
</table>
| Case 1   | • getMarketingCloudID  
          | • getAudienceManagerLocationHint  
          | • getAudienceManagerBlob  
          | • getSupplementalDataID  
          | • getCustomerIDs |
| Case 2   | • getSupplementalDataID  
          | • getMarketingCloudVisitorID |

### Methods

Public methods that let you interact with the ID service.

**appendSupplementalDataIDTo**

This helper method lets you append the **Supplemental Data ID** (SDID) as a query string parameter to a redirect URL. This is useful when using A4T and you need to persist the SDID from one page to another and stitch those separate visits together. To use this function, you must have implemented the ID service with the same Organization ID on the source and destination domains.

Contents:

- Syntax and Code Sample
- Sample Output
- Syntax and Code Sample
- Changing the SDID Timeout with `sdidParamExpiry`

**Syntax and Code Sample**

**Syntax:** `appendSupplementalDataIDTo(URL, SDID)`

**Code Sample**

```javascript
var visitor = Visitor.getInstance("Insert Experience Cloud organization ID here",{
...
});

//Call helper method to append SDID to the Page B URL from Page A
var pageB = "www.domain.com/pageB";
var pageBWithSdid = visitor.appendSupplementalDataIDTo(pageB, "67987653465787219");
```

**Sample Output**

As shown below, the URL redirect contains the visitor's SDID, your Organization ID, and a UNIX timestamp in the call to the receiving page.

```
www.domain.com/pageB?adobe_mc_sdid=SDID=123|MCORGID=123456789@AdobeOrg|TS=1498569322
```
Changing the SDID Timeout with sdidParamExpiry

The `sdidParamExpiry` configuration lets you change the default SDID expiration interval when passing that ID from one page to another using the `appendSupplementalDataIDTo` helper function. By default, the ID service code on the receiving page has 30 seconds to get the SDID from the URL sent by the referring page. If the ID service code on the receiving page can't retrieve the SDID in less than 30 seconds it requests a new SDID. This functionality is mainly for A4T customers who need to pass the SDID from one page to another and want control over this timeout interval.

If you need to change the default SDID timeout, add `sdidParamExpiry` to the `Visitor.getInstance` function with the following syntax:

**Syntax:** `sdidParamExpiry: time in seconds`

**Code Sample**

When configured your ID service code could look similar to this sample. This sample sets the SDID timeout to 15 seconds.

```javascript
var visitor = Visitor.getInstance("Insert Experience Cloud organization ID here", {
...  //Change the default SDID timeout to 15 seconds
  sdidParamExpiry: 15
});
```

```javascript
//Call helper method to append SDID to the Page B URL from Page A
var pageB = "www.domain.com/pageB";
var pageBWithSdid = visitor.appendSupplementalDataIDTo(pageB, "67987653465787219");
```

appendVisitorIDsTo (Cross-Domain Tracking)

This function lets you share a visitor's Experience Cloud ID across domains when browsers block third-party cookies. To use this function, you must have implemented the ID service and own the source and destination domains. Available in VisitorAPI.js version 1.7.0 or higher.

Contents:

- Track Visitors Across Domains When Browsers Block Third-Party Cookies
- Append Visitor ID Code Sample
- Dynamic Tag Management (DTM) and SDK Support

Track Visitors Across Domains When Browsers Block Third-Party Cookies

ID service writes a first- and third-party cookie to the browser when a person visit your site (see Cookies and the Experience Cloud ID Service). The first-party cookie contains the MID, a unique ID for that visitor. The third-party cookie contains another ID used by the ID service to generate the MID. When a browser blocks this third-party cookie, the ID service cannot:

- Regenerate the unique ID for that site visitor when they navigate to another domain.
- Track visitors across different domains owned by your organization.

To help solve this problem, implement `Visitor.appendVisitorIDsTo(url)`. This property lets the ID service track site visitors across multiple domains even when their browsers block third-party cookies. It works like this:

- As a visitor browses to your other domains, the `Visitor.appendVisitorIDsTo(url)` appends the MID as a query parameter in the URL redirect from the original domain to the destination domain.
The ID service code on the destination domain extracts the MID from the URL instead of sending a request to Adobe for that visitor’s ID. This request includes the third-party cookie ID, which is not available in this case. The ID service code on the destination page uses the passed-in MID to track the visitor. See the code sample for details.

**Append Visitor ID Code Sample**

The following example can help you get started with `Visitor.appendVisitorIDsTo(url)`. When implemented properly, your JavaScript code could look similar to the following example.

```javascript
//Code on Domain A
var destinationURL = "www.destination.com";

//Call the ID service
var visitor = Visitor.getInstance(...);

//Append visitor IDs to the destination URL
var destinationURLWithVisitorIDs = visitor.appendVisitorIDsTo(destinationURL);

//Result of appendVisitorIDsTo includes destination URL, Experience Cloud ID (MCMID), and Analytics ID (MCAID)
//"www.destination.com?adobe_mc=MCMID=1234|MCAID=5678"

//Redirect to the destination
```

**Dynamic Tag Management (DTM) and SDK Support**

<table>
<thead>
<tr>
<th>Support for</th>
<th>See</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DTM</strong></td>
<td><em>Set the appendVisitorIDto Function in DTM</em></td>
</tr>
</tbody>
</table>
| **SDK**     | *Android ID Service Methods*  
|             | *iOS ID Service Methods* |

**callTimeOut Methods**

Call these ID service functions to determine the timeout status for a Experience Cloud ID service, Analytics, or Audience Manager ID request. Available in VisitorAPI.js version 1.7.0 or higher.

**Timeout Functions**

<table>
<thead>
<tr>
<th>Solution or Service</th>
<th>Function Syntax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience Cloud ID service</td>
<td><code>var variableName = visitor.MCIDCallTimedOut()</code></td>
</tr>
<tr>
<td>Analytics</td>
<td><code>var variableName = visitor.AnalyticsIDCallTimedOut()</code></td>
</tr>
<tr>
<td>Audience Manager</td>
<td><code>var variableName = visitor.AAMIDCallTimedOut()</code></td>
</tr>
</tbody>
</table>
Function Responses

<table>
<thead>
<tr>
<th>Response</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRUE</td>
<td>The ID service sent a request and the request timed out.</td>
</tr>
<tr>
<td>FALSE</td>
<td>The ID service sent a request and received a successful response from the server.</td>
</tr>
<tr>
<td>NULL</td>
<td>The ID service did not send a request.</td>
</tr>
</tbody>
</table>

ID Synchronization by URL or Data Source

The ID service functions `idSyncByURL` and `idSyncByDataSource` let you manually implement an ID sync in the Destination Publishing iFrame. These are available in VisitorAPI.js versions 1.10, or higher.

Contents:

*Syntax, Properties, and Macros*
*Sample Code and Output*

Syntax, Properties, and Macros

Syntax

<table>
<thead>
<tr>
<th>Code</th>
<th>Synchronizes User IDs</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>visitor.idSyncByURL();</code></td>
<td>Between different data partners and Audience Manager by using a custom ID sync URL.</td>
</tr>
<tr>
<td><code>visitor.idSyncByDataSource();</code></td>
<td>When you already know the DPID and DPUUID and want to send it to Audience Manager in the standard ID sync URL format.</td>
</tr>
</tbody>
</table>

Properties

The following table lists and defines the properties available to both functions.

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>dpid</code></td>
<td>String</td>
<td>Data provider ID assigned by Audience Manager.</td>
</tr>
<tr>
<td><code>dpuuid</code></td>
<td>String</td>
<td>The data provider's unique ID for the user.</td>
</tr>
<tr>
<td><code>minutesToLive</code></td>
<td>Number</td>
<td><em>(Optional)</em> Sets the cookie expiration time. Must be an integer. Default is 20160 minutes (14 days).</td>
</tr>
<tr>
<td><code>url</code></td>
<td>String</td>
<td>Destination URL.</td>
</tr>
</tbody>
</table>

Macros
Both functions accept 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 communication protocol (http or https).

### Sample Code and Output

Both functions return *Successfully queued* if successful. They return an error message string if not.

#### visitor.idSyncByURL

<table>
<thead>
<tr>
<th>Sample Code</th>
<th>Sample Output</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>//Instantiate Visitor</code>&lt;br&gt;<code>var visitor = Visitor.getInstance(&quot;MARKETING-CLOUD-ORG-ID-HERE&quot;, {});</code>&lt;br&gt;<code>// Fires url with macros replaced</code>&lt;br&gt;<code>visitor.idSyncByURL({</code>&lt;br&gt;<code>  </code>dpid: '24', // must be a string<code>&lt;br&gt;</code>  <code>url: </code>//su.addthis.com/red/usync?pid=16&amp;puid=%DID%&amp;url=%HTTP_PROTO%%3A%2F%2Fdpm.demdex.net%2Fibs%3Adpid%3D420%26dpuuid%3D%7B%7Buid%7D%7D<code>,</code>&lt;br&gt;<code>  </code>minutesToLive: 20160 // optional, defaults to 20160 minutes (14 days)<code>&lt;br&gt;</code>});`</td>
<td><code>http://su.addthis.com/red/usync?pid=16&amp;puid=28777806459181003670799219185178493848&amp;url=http%3A%2F%2Fdpm.demdex.net%2Fibs%3Adpid%3D420%26dpuuid%3D%7B%7Buid%7D%7D</code></td>
</tr>
</tbody>
</table>

#### visitor.idSyncByDataSource

<table>
<thead>
<tr>
<th>Sample Code</th>
<th>Sample Output</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>//Instantiate Visitor</code>&lt;br&gt;<code>var visitor = Visitor.getInstance(&quot;MARKETING-CLOUD-ORG-ID-HERE&quot;, {});</code>&lt;br&gt;<code>// Fires 'http://https: +</code>&lt;br&gt;<code>'//dpm.demdex.net/ibs:dpid=&lt;dpid&gt;&amp;dpuuid=&lt;dpuuid&gt;'</code>&lt;br&gt;<code>visitor.idSyncByDataSource({</code>&lt;br&gt;<code>  </code>dpid: '24', // must be a string<code>&lt;br&gt;</code>  <code>dpuuid: '98765', // must be a string</code>&lt;br&gt;<code>  </code>minutesToLive: 20160 // optional, defaults to 20160 minutes (14 days)<code>&lt;br&gt;</code>});`</td>
<td><code>http://dpm.demdex.net/ibs:dpid=24&amp;dpuuid=98765</code></td>
</tr>
</tbody>
</table>

#### getInstance

`getInstance` returns a visitor ID object for the specified Experience Cloud organization ID. This is required to initialize the visitor ID object provided to AppMeasurement through `s.visitor`.

**Syntax**

**JavaScript**

```javascript
```
To enable CNAME support, add the following configuration variables
If you are not using CNAME, DO NOT include these variables
marketingCloudServer: "INSERT-TRACKING-SERVER-HERE",
marketingCloudServerSecure: "INSERT-SECURE-TRACKING-SERVER-HERE" // same as
s.trackingServerSecure
);

Do not instantiate the Visitor function with var visitor = new Visitor.You must use the proper function call
noted here. Applies to VisitorAPI.js code library v3.0 or higher.

ActionScript / Flash
import com.adobe.mc.Visitor;
...
var visitor = Visitor.getInstance("INSERT-MARKETING-CLOUD-ORGANIZATION-ID-HERE", {
trackingServer: "INSERT-TRACKING-SERVER-HERE", // same as s.trackingServer
trackingServerSecure: "INSERT-SECURE-TRACKING-SERVER-HERE", // same as
s.trackingServerSecure
});

If getInstance doesn't find an existing instance, an new instance is created and returned. This is similar to the
s_gi() function in AppMeasurement.

Common Use
The Experience Cloud ID service API maintains a list of all instances created for each Adobe Experience Cloud
organization ID. If the application using the ID service API isn't passing around a reference to the instance, it can
find that instance by calling getInstance instead of creating a new one. This also provides support for multiple
instances for different organizations in the same web page or application.

This is useful for applications that don't have a clear init phase, but need to call into the ID service API in multiple
places. You can call getInstance in all of those places and the first to execute will create the instance. The existing
instance will be returned by subsequent calls.

getAnalyticsVisitorID
Returns the legacy Analytics ID (if any) that was stored in the s_vi cookie before the Experience Cloud ID service
was implemented. It returns an empty string if a visitor was never assigned an Analytics ID.

Syntax var analyticsID = visitor.getAnalyticsVisitorID()

Typically, this function is used with custom solutions that require reading the visitor ID. It is not used by a standard
implementation. getAnalyticsVisitorID also works with callback functions to read Analytics IDs and bring them
in to your system or application.

Sample Code
//callback function
var useAnalyticsVisitorID = function(id){
    //whatever your function does with the Experience Cloud ID
};

//get Analytics ID and pass it to the function
var analyticsID = visitor.getAnalyticsVisitorID(useAnalyticsVisitorID)
Tip: If you’re an Analytics customer, also check for and send the Analytics ID to your function. For example, you would want both identifiers when passing the visitor ID in a hidden form element to a server-side application that uses the data insertion API. In this case, you should collect and return the Experience Cloud and Analytics visitor IDs. See `getMarketingCloudVisitorID`.

The "aid" Parameter is a Legacy Value

The `aid` parameter appears in a query string under 2 different sets of conditions.

Case 1

You will see the `aid` parameter in a query string when:

- The Experience Cloud ID service is deployed correctly.
- The user visiting a site has a pre-existing Analytics ID stored in their `s_vi` cookie.

Case 2

You will see the `aid` parameter in a query string when your organization is using a grace period before fully implementing the ID service. If the user visiting your site is new, and you’re not using a grace period, the visitor will get the `mid` (Experience Cloud ID) parameter.

getCustomerIDs

getCustomerIDs returns any customer IDs set by the Experience Cloud ID service.

```javascript
var variable name = visitor.getCustomerIDs();
```

setCustomerIDs

setCustomerIDs sets 1 or more key-value pairs that define customer IDs and their authentication state.

**Syntax:** `visitor.setCustomerIDs()`

You can set single or multiple IDs as shown in the code sample below. See `Customer IDs and Authentication States` for more information and examples.

```
// Single ID with a single authentication state
visitor.setCustomerIDs({
  "userid":{
    "id":"67312378756723456",
    "authState":Visitor.AuthState.AUTHENTICATED
  }
});

// Multiple IDs with a single authentication state
visitor.setCustomerIDs({
  "userid":{
    "id":"67312378756723456",
    "authState":Visitor.AuthState.AUTHENTICATED
  },
  "puuid":"550e8400-e29b-41d4-a716-446655440000"
});
```

getMarketingCloudVisitorID

getMarketingCloudVisitorID returns the Experience Cloud visitor ID.

**Syntax:** `var variable name = visitor.getMarketingCloudVisitorID()`
This method typically used with custom solutions that require reading the visitor ID. It is not used by a standard implementation. getMarketingCloudVisitorID also works with callback functions to read Analytics IDs and bring them in to your system or application.

```
//callback function
var useMarketingCloudID = function(id){
    //whatever your function does with the Experience Cloud ID
};

//get the Experience Cloud ID and pass it to the function
var mcID = visitor.getMarketingCloudVisitorID(useMarketingCloudID)
```

**Tip:** If you're an Analytics customer, also check for and send the Analytics ID to your function. For example, you would want both identifiers when passing the visitor ID in a hidden form element to a server-side application that uses the data insertion API. In this case, you should collect and return the Experience Cloud and Analytics visitor IDs. See getAnalyticsVisitorID.

getLocationHint

Returns the Experience Cloud ID service region ID. A region ID (or location hint), is a numeric identifier for the geographic location of a particular ID service data center. You need the region ID in order to make server-side API calls to Audience Manager.

**Syntax:** var variable name = visitor.getLocationHint()

For a list of region IDs and corresponding locations, see DCS Region IDs, Locations, and Host Names.

**Code Sample**

The location hint function reads the region ID from the AMCV cookie. If the region ID is already set in the AMCV cookie, then the callback happens immediately. If the region ID is not set, the function will wait for a response from the server before passing the region ID to the callback. Your code could look similar to the following example.

```
//callback function
var callback = function (region ID here){
    //do whatever your function does with the region ID
};

//Get the region ID
visitor.getLocationHint(callback, true);
```

getVisitorValues

This is an asynchronous API that returns identifiers for Analytics, the ID service, data collection opt-out, geographic location, and metadata “blob” content by default. Also, you can control which IDs you want to return with the optional visitor.FIELDS enum.

**Contents:**

*Syntax*

*Use Case 1: Request the Default Data Set*

*Use Case 2: Request a Custom Data Set*

*Response Parameters Defined*
Syntax

This function uses the following syntax (italics represents a placeholder for a variable): var values = visitor.getVisitorValues (callback, [visitor.FIELDS.ID type, visitor.FIELDS.ID type]);

In the function parameters:

• callback represents your own callback code that receives the returned IDs.
• (Optional) visitor.FIELDS.ID type is an enum that lets you specify which ID values you want this function to return.

See the following use cases and definitions for more information.

Use Case 1: Request the Default Data Set

This code returns the standard data set. Your request and response could look similar to the following examples.

```javascript
//Call the ID service
var visitor = Visitor.getInstance("Insert Experience Cloud organization ID here", {...});

//Add your callback to the GET method to return IDs and data.
visitor.getVisitorValues(visitorIdsCallback);

//Formatted IDs in JSON response
{
  MCMID: 'mid-1234',
  MCOPTOUT: 'isoptedout-true',
  MCAID: 'aid-1234',
  MCAAMLH: 7,
  MCAAMB: 'hgfe54236786oygj'
}
```

Use Case 2: Request a Custom Data Set

This code uses an optional array to return a specific set of IDs using the visitor.FIELDS enum. In this case, we only want the visitor’s Experience Cloud ID (MCID) and Analytics ID (MCAID). Your request and response could look similar to the following examples.

```javascript
//Call the ID service
var visitor = Visitor.getInstance("Insert Experience Cloud organization ID here", {...});

// Add an optional array to specify which IDs you want to return.
visitor.getVisitorValues(visitorIdsCallback, [visitor.FIELDS.MCMID, visitor.FIELDS.MCAID]);

The customized sample response returns only those IDs specified in the request.

//Formatted IDs in JSON response
{
  MCMID: 'mid-1234',
  MCAID: 'aid-4321'
}
```

Response Parameters Defined

The following table lists and defines the response parameters. These are also all the values in the visitor.FIELDS enum. Note, this method returns and empty string if there are no values for a particular variable.

<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCAAMB</td>
<td>Encrypted Audience Manager metadata known as “the blob.”</td>
</tr>
</tbody>
</table>
### Value | Description
--- | ---
**MCAAMHL** | The data collection region ID. This is a numeric identifier for the geographic location of a particular ID service data center. See [DCS Region IDs, Locations, and Host Names](#) and `getLocationHint`.  
**MCAID** | The visitor's Analytics ID.  
**MCMID** | The visitor's Experience Cloud ID. See [Cookies and the Experience Cloud ID Service](#).  
**MCOPTOUT** | A flag that indicates if a visitor has opted out of data collection. Values include:  
- `'isoptedout-true'`: A visitor has opted out of data collection.  
- `'isoptedout-false'`: A visitor has not opted out of data collection.

### `isClientSideMarketingCloudVisitorID`

Call this ID service function to determine if the ID service generated a client-side, Experience Cloud visitor ID (MID). Available in VisitorAPI.js version 1.7.0 or higher.

**Syntax**

```javascript
var variableName = visitor.isClientSideMarketingCloudVisitorID()
```

The following table lists and describes the responses returned by this function.

<table>
<thead>
<tr>
<th>Response</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>true</code></td>
<td>The ID service could not or did not receive a MID from the Experience Cloud server. It created a MID locally, in the browser (client-side).</td>
</tr>
<tr>
<td><code>false</code></td>
<td>The ID service received a MID from the Experience Cloud server.</td>
</tr>
<tr>
<td><code>null</code></td>
<td>The ID service did not make a call to the Experience Cloud server.</td>
</tr>
</tbody>
</table>

### `resetState`

This function is designed mainly for A4T customers to help solve issues related to working with IDs on single page sites/screens or apps.

**Use cases**

As an A4T customer who uses the ID service, you may want to use the `visitor.resetState()` function when you need to:
• To pass a Supplemental Data ID (SDID), or any other ID, from one page or screen to another through a redirect. Normally, the ID service won’t pass this ID without this function.
• Use code that only updates specific sections of a page or app via Ajax calls and you want to track those actions. For example, say you have a page where clicking on an object only loads or changes a special section. In this case, the ID service can’t request a different ID unless the page is reloaded. However, with `visitor.resetState()`, you can request a new ID under these conditions.

See the code samples below.

**Syntax**

Syntax: `visitor.resetState(state);`

**Code samples**

Your ID service implementation affects how you would use this function. Refer to the table below for examples.

**Server-side implementation**

A server-side implementation is for A4T customers with mixed server- and client-side implementations of Target, Analytics, and the ID service. If you’ve set up the ID service with this method all you need to do is add `visitor.resetState()` to the page. Calls to the ID service will return a new ID and server state automatically.

**Non-standard implementation (with ID)**

If you’ve set up the ID service with a *non-standard implementation*, you need to configure a variable object to hold the SDID (or other IDs) you want to pass with `visitor.resetState()`. As shown below, this would include your organization ID and the ID you want to pass. Your code could look similar to the following example.

```javascript
//Instantiate server state variable
var serverState = {
    "Insert Experience Cloud organization ID here": { 
        //Specify the SDID or other ID
        supplementalDataIDCurrent: "1234",
        supplementalDataIDCurrentConsumed: { 
            "payload:top-center": false 
        } 
    } 
};

//Instantiate ID service
var visitor = Visitor.getInstance ("Insert Experience Cloud organization ID here", { 
    ... 
});

//Reset server state to pass the SDID
visitor.resetState(serverState);
```

**Non-standard implementation (without passing an ID)**

In this case, `visitor.resetState()` can be used to generate a new ID. This can be useful in a single-page app when a user navigates to a new screen without refreshing the page and you need a new ID.

```javascript
//Instantiate ID service
var visitor = Visitor.getInstance ("Insert Experience Cloud organization ID here", { 
    ... 
});

//Request a supplemental Data ID for consumer1 and consumer2:
var sdid1 = visitor.getSupplementalDataID("consumer1"); // sdid1: 1234
```

ID Service API
var sdid2 = visitor.getSupplementalDataID("consumer2"); // sdid2: 1234

// User navigates to a new screen in a single-page app, without refreshing the page.
// To reset the Supplemental Data ID internal, call resetState without passing any parameters.
// This way we will not be recycling the `1234` ID anymore. Instead Visitor will generate a new
// supplemental Data ID going forward.
visitor.resetState();

// Request a supplemental Data ID for consumer3 and consumer4:
var sdid1 = visitor.getSupplementalDataID("consumer3"); // sdid1: 5678
var sdid2 = visitor.getSupplementalDataID("consumer4"); // sdid2: 5678

**Dynamic Tag Manager (DTM)**

Currently, there is no DTM configuration path for `visitor.resetState()`. 
Reference

Information about other Experience Cloud ID service features and functions.

Analytics Reference

ID service features or functionality unique to Adobe Analytics.

Setting Analytics and Experience Cloud IDs

The Experience Cloud ID service replaces the legacy Analytics visitor ID methods.

After the ID service is implemented, this code executes before AppMeasurement. The ID service retrieves the Experience Cloud and Analytics IDs so these values are ready when AppMeasurement loads.

When AppMeasurement loads, the Experience Cloud and Analytics IDs values are requested from the ID service and are sent to data collection with each server call. Since the ID service determines the visitor ID and simply passes it to AppMeasurement, the ID service must be included and implemented on each page before your AppMeasurement JavaScript file.

Changes to the Analytics ID process

The primary change when migrating to the Experience Cloud ID service is that the ID cookie is set using JavaScript, instead of in the HTTP header that is returned from the data collection web server. To understand this change, the following sections describe how cookies are set using these two methods.

HTTP Header

An HTTP response from a web server sets cookies in a browser. This is how the s_vi cookie is set. The s_vi cookie identifies Analytics visitors. After a cookie is set, it is sent with all subsequent HTTP requests to that server.

When a request is sent to the Adobe data collection server, the header is checked for the s_vi cookie. If this cookie is in the request, it is used to identify the visitor. If the cookie is not in the request, the server generates a unique Experience Cloud ID, sets it as a cookie in the HTTP response header, and sends it back with the request. The cookie is stored in the browser and is sent back to the data collection server during subsequent visits the site. This enables the visitor to be identified across visits.

However, some browsers, such as Apple Safari, do not accept third-party cookies. These are cookies set in the browser from domains other than the current website. Additionally, Safari blocks cookies on third-party domains if a visitor has not been to that domain before. For example, if you are on mysite.com and your data collection server is mysite.omtrdc.net, the cookie that is returned in the HTTP header from mysite.omtrdc.net might be rejected by the browser.

To avoid this, many customers have implemented CNAME records for their data collection servers. This can be an effective part of a first-party cookie implementation strategy. If a CNAME record is configured to map a hostname on the customer’s domain to the data collection server (e.g., mapping metrics.mysite.com to mysite.omtrdc.net), the Experience Cloud ID cookie is stored because the data collection domain now matches the domain of the website. This increases the likelihood that the ID service cookie will be stored. However, this does introduce some overhead because you need to configure CNAME records and maintain SSL certificates for the data collection servers.

JavaScript
JavaScript can read and write cookies set in the first-party domain (the domain of the current website). The Experience Cloud ID service uses this method to set the `AMCV_###@AdobeOrg` cookie that contains all of the visitor IDs, so the domain of the tracking server no longer needs to match the domain of the website in order for the visitor ID cookie to be stored. In most circumstances this is the preferred way to set the ID service cookie because it eliminates the overhead of CNAME records and SSL certificates.

However, there are a few situations where setting the cookie in the HTTP header is beneficial for cross-domain tracking, which is described in *Data Collection CNAMEs and Cross-Domain Tracking*.

### Custom Analytics IDs

Setting a customer ID using `s.visitorID` is a method of identifying users in Analytics. However, integrations in which Analytics data is exported or imported using the ID Service will not function when a visitor is identified using `s.visitorID`.

This includes, but is not limited to, shared audiences, Analytics for Target (A4T), and Customer Attributes. For these integrations, setting a custom Analytics ID is not supported.

### Analytics Visitor ID Order

After you deploy the visitor ID service, there are five ways a visitor can be identified in Analytics (listed in the following table in order of preference):

<table>
<thead>
<tr>
<th>Order Used</th>
<th>Query Parameter (collection method)</th>
<th>Present When</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><code>vid (s.visitorID)</code></td>
<td><code>s.visitorID</code> is set</td>
</tr>
<tr>
<td>2</td>
<td><code>aid (s_vi cookie)</code></td>
<td>The visitor had an existing <code>s_vi</code> cookie before you deployed the Experience Cloud ID service, or you have a grace period configured.</td>
</tr>
<tr>
<td>3</td>
<td><code>mid (AMCV_ cookie set by Experience Cloud visitor ID service)</code></td>
<td>The visitor’s browser accepts first-party cookies</td>
</tr>
<tr>
<td>4</td>
<td><code>fid (fallback cookie on H.25.3 or newer, or AppMeasurement for JavaScript)</code></td>
<td>A browser doesn't accept third-party cookies and the Analytics tracking server is set up as a third-party tracking server.</td>
</tr>
<tr>
<td>5</td>
<td><code>IP Address, User Agent, Gateway IP Address</code></td>
<td>The visitor’s browser does not accept cookies.</td>
</tr>
</tbody>
</table>

*Note:* The `fid` is a legacy identifier and is not used if you’ve implemented the ID service on your site. In this case, the `fid` is not needed because the first-party, `AMCV cookie` makes it obsolete. It has been retained to support legacy code and for historic reasons.
In many scenarios you might see 2 or 3 different IDs on a call, but Analytics will use the first ID present from that list as the official Experience Cloud ID. For example, if you are setting a custom visitor ID (included in the "vid" query parameter), that ID will be used before other IDs that might be present on that same hit.

**Order of Operations for Analytics IDs**

After you deploy the visitor ID service, there are 5 ways a visitor can be identified in Analytics.

In many scenarios you might see 2 or 3 different IDs on a call, but Analytics will use the first ID present from that list as the official Experience Cloud ID. For example, if you are setting a custom visitor ID (included in the `vid` query parameter), that ID will be used before other IDs that might be present on that same hit. See *Setting Analytics and Experience Cloud IDs* for more information.

<table>
<thead>
<tr>
<th>Order Used</th>
<th>Query Parameter (collection method)</th>
<th>Present When</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td><code>vid (s.visitorID)</code></td>
<td>The <code>s.visitorID</code> is set.</td>
</tr>
<tr>
<td>2nd</td>
<td><code>aid (s_vi cookie)</code></td>
<td>The visitor had an existing <code>s_vi</code> cookie before you deployed the Experience Cloud ID service, or you have a grace period configured.</td>
</tr>
<tr>
<td>3rd</td>
<td><em>Experience Cloud ID (MID)</em></td>
<td>The visitor’s browser accepts first-party cookies. This is set by the AMCV cookie.</td>
</tr>
<tr>
<td>4th</td>
<td><code>fid (fallback cookie on H.25.3 or newer, or AppMeasurement for JavaScript)</code></td>
<td>A browser doesn’t accept third-party cookies and the Analytics tracking server is set up as a third-party tracking server. <em>Note:</em> The <code>fid</code> is a legacy identifier and is not used if you’ve implemented the ID service on your site. In this case, the <code>fid</code> is not needed because the first-party, AMCV cookie makes it obsolete. It has been retained to support legacy code and for historic reasons.</td>
</tr>
<tr>
<td>5th</td>
<td><code>IP Address, User Agent, Gateway IP Address</code></td>
<td>The visitor’s browser does not accept cookies.</td>
</tr>
</tbody>
</table>

**Experience Cloud ID Service Migration Decision Points**

Before deploying the Experience Cloud ID service, you should understand how this service affects visitor tracking on multiple domains and potential issues if you are collecting data with different methods or through JavaScript files.

Answers to the questions in this section help determine any additional migration steps you should take.

- If you have a data collection CNAME, do you have multiple domains?
- Do you have multiple Analytics JavaScript files, or are you tracking Flash applications or videos?
- Are you using unsupported data collection methods?
If you have a data collection CNAME, do you have multiple domains?

If you have multiple domains that send data to the same report suite, then we recommend data collection with a CNAME. This helps you track visitors across domains. If you are collecting data on a single domain, there is no advantage to maintaining a data collection CNAME.

<table>
<thead>
<tr>
<th>Collecting Data From</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple domains</td>
<td>If you are tracking visitors across multiple domains, and you also have a main entry site where customers can be identified before they visit other domains, then you should continue to use your data collection CNAME. See Data Collection CNAMES and Cross Domain Tracking for a detailed explanation. Note that you need to specify two additional tracking-server parameters, visitor.marketingCloudServer and visitor.marketingCloudServerSecure, to configure a CNAME with the ID service.</td>
</tr>
<tr>
<td>A single domain</td>
<td>Working with a single domain means you can migrate away from a data collection CNAME if you no longer wish to manage it. However, there’s no requirement to change if your CNAME is working. If you do remove the CNAME: • Make sure your new tracking server is RDC compliant. • Move from the CNAME to an RDC tracking server a few months in advance of your migration to the Experience Cloud ID service. • Do not use a *.2o7.net tracking server. • Contact Customer Care to set up a visitor migration. This helps ensure consistent visitor counts.</td>
</tr>
</tbody>
</table>

Do you have multiple Analytics JavaScript files, or are you tracking Flash applications or videos?

If you have multiple Analytics JavaScript files or Flash applications or videos across your site that send data to the same report suite, you should configure a grace period so that visitors continue to be identified by an Analytics ID while you roll out the Experience Cloud ID service.

<table>
<thead>
<tr>
<th>Data Collection With</th>
<th>Required Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Multiple Analytics Javascript files • Other Data collection methods</td>
<td>You should configure a visitor ID service grace period so that you can roll out the visitor ID service to each JavaScript file and other data collection libraries. See ID Service Grace Period.</td>
</tr>
<tr>
<td>A single Analytics JavaScript file</td>
<td>You can update your single JavaScript file to use the visitor ID service without a grace period.</td>
</tr>
</tbody>
</table>

Are you using unsupported data collection methods?

You might need to update the way you track links or migrate away from Silverlight.
### Data Collection Method | Required Actions
--- | ---
JavaScript and/or Flash | None. The Experience Cloud ID service supports these data collection methods.
Silverlight | You need to migrate away from Silverlight if visitors can access Silverlight content and other sections of your site that use the Experience Cloud ID service. Silverlight is not supported by the ID service.
If you are tracking a Silverlight-based video player, the vendor likely provides JavaScript APIs that you can use instead.
Hard-coded image tags | Update hard-coded links to use JavaScript.

## Experience Cloud ID Service Migration Scenarios

Contains server example configurations and the required migration steps.

**Contents:**

- **Single Web Property**
- *Multiple JavaScript Files, hard-coded image tags*
- *Multiple Web Properties, Multiple JavaScript Files and a Flash-based Video Player*

### Single Web Property

- **Customer:** Example Company Inc.
- **Experience Cloud enabled:** No
- **Web Properties:** example.com
- **Data collection servers:** metrics.example.com, smetrics.example.com
- **Analytics JavaScript file:** A single file for all site pages

First, this customer should get enabled for the Experience Cloud (see the [requirements](#)). And, because they have a single JavaScript file, this customer does not need a grace period. This customer will also set up visitor migration and then migrate away from their data collection CNAME, which is not necessary.

### Multiple JavaScript Files, hard-coded image tags

- **Customer:** Another Example Company Inc.
- **Experience Cloud enabled:** Yes
- **Web Properties:** anotherexample.com
- **Data collection servers:** anotherexampleco.112.2o7.net
- **Analytics JavaScript file:** Multiple JavaScript files. One file for their main site, another file for their support section that is maintained in a separate CMS.
- **Other data collection methods:** Hard-coded image tags on one site section

First, this customer should find their Adobe Experience Cloud Organization ID (see the [requirements](#)). Next, they should configure a migration grace period because they are using multiple JavaScript files. This customer will also set up visitor migration and then migrate from *.2o7.net to *.sc.omtrdc.net.

When this customer updates to the latest Analytics JavaScript code in preparation for the Experience Cloud ID service rollout, they will also update all hard-coded image tags to use JavaScript instead.
Multiple Web Properties, Multiple JavaScript Files and a Flash-based Video Player

- **Customer**: A Good Customer LLC
- **Experience Cloud enabled**: Yes
- **Web Properties**: mymainsite.com, myothersiteA.com, myothersiteB.com
- **Data collection servers**: metrics.mymainsite.com, smetrics.mymainsite.com
- **Analytics JavaScript file**: Multiple JavaScript files. One file for each web property.
- **Other data collection methods**: A Flash-based video player

First, this customer should find their Adobe Experience Cloud Organization ID (see the requirements). Next, they should configure a migration grace period because they are using multiple JavaScript files. This customer tracks visitors between their primary domain and their sub-domains, so they will continue to use their data collection CNAME with the visitor ID service.

When this customer updates to the latest Analytics JavaScript code in preparation for the Experience Cloud ID service rollout, they will also update their Flash-based video player to the latest version of AppMeasurement for Flash.

**Analytics and Experience Cloud ID Requests**

An overview of how the Experience Cloud ID service works with the legacy Analytics ID.

**Summary**

Historically, the Experience Cloud ID service has been integrated tightly into Adobe Analytics. It remains an integral part of Analytics but now performs important functions for other solutions and features in the Experience Cloud. Because of this historical legacy, checking for or writing an Analytics ID works a little differently than with the generic process described in *How the Experience Cloud ID Service requests and sets IDs*. For additional information on the order of operations for checking IDs, see *Setting Analytics and Experience Cloud IDs*.

**The AMCV Cookie is Not Set in the Browser**

If the Experience Cloud (AMCV) cookie is not present, then an ID service call to Adobe generates a response that varies depending on the presence or absence of a legacy Analytics ID. The legacy Analytics ID is stored in the s_vi cookie. The table below describes how IDs are written to the AMCV cookie based on the state of the s_vi cookie.

<table>
<thead>
<tr>
<th>s_vi Cookie Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>s_vi Cookie is Not Set</td>
<td>The ID service assigns visitors a Experience Cloud ID (MID). The MID identifies your visitors to Analytics and other Experience Cloud solutions.</td>
</tr>
<tr>
<td>s_vi Cookie is Set</td>
<td>When a site visitor with an s_vi cookie first encounters the Experience Cloud ID service, this service:</td>
</tr>
<tr>
<td></td>
<td>• Writes the Analytics ID stored in the s_vi cookie to the AMCV cookie. This is written as the Analytics ID (AID). This action <em>does not</em> affect your visitor counts. Analytics will continue to identify users with their legacy IDs.</td>
</tr>
<tr>
<td></td>
<td>• Writes the MID to the AMCV cookie. The MID identifies users across different solutions.</td>
</tr>
</tbody>
</table>
### s_vi Cookie Status

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Note:</strong> With a grace period, the data center response always includes a legacy ID that is stored in the s_vi cookie. During the grace period, the legacy ID is written to the AMCV cookie as the AID value.</td>
</tr>
</tbody>
</table>

**Note:** Users identified by the s_fid cookie will not have their legacy FID value migrated to the AMCV cookie. With an s_fid cookie, users will be migrated as if no s_vi cookie was present (see above) and appear as new visitors to your site. See Analytics Cookies for more information.

### The AMCV Cookie is Set in the Browser

If the AMCV cookie is present, Analytics will use the MID as the Analytics identifier if there is no legacy Analytics ID value in the cookie.

### Data Collection CNAMEs and Cross-Domain Tracking

If you have a main entry site where customers can be identified before they visit other domains, then a CNAME can enable cross-domain tracking in browsers that do not accept third-party cookies (such as Safari).

In browsers that accept third-party cookies, a cookie is set by the data collection servers during the request for a visitor ID. This cookie allows the visitor ID service to return the same Experience Cloud visitor ID on all domains that are configured using the same Experience Cloud Org ID.

In browsers that reject third-party cookies, a new Experience Cloud visitor ID is assigned for each domain.

The demdex.net cookie enables the visitor ID service to provide the same level of cross-domain tracking as the s_vi cookie in Analytics, where the cookie is accepted in some browsers and used across domains, but rejected by other browsers.

### Data Collection CNAMEs

When the Analytics cookie was set by the data collection server, many customers have configured data collection server CNAME records as part of a **first-party cookie implementation** to avoid issues with browsers that reject third-party cookies. This process configures your data collection server domain to match your website domain so the visitor ID cookie is set as a first-party cookie.

Since the visitor ID service sets the visitor cookie directly on the domain of the current website using JavaScript, this configuration is no longer needed to set first-party cookies.

Customers that have a single web property (a single domain) can migrate away from data collection CNAMEs and use their default data collection hostname instead (either omtrdc.net or 2o7.net).

However, there is an additional benefit to using a CNAME for data collection which allows you to track visitors between a main landing domain and other domains in browsers that do not accept third-party cookies. Customers that have multiple web properties (multiple domains) might benefit from maintaining a data collection CNAME. The following section explains how cross-domain visitor tracking works.
How CNAMEs enable cross-domain tracking

Due to the way first-party cookies can be used in a third-party context in Apple Safari and some other browsers, a CNAME let you track customers between a primary domain and additional domains that used the same tracking server.

For example, you have a primary site at mymainsite.com. You configured the following two CNAME records to point to your non-secure and secure data collection servers:

- metrics.mymainsite.com
- smetrics.mymainsite.com

When a user visits mymainsite.com, the ID service cookie is set by the data collection server. This is allowed since the domain of the data collection server matches the domain of the website, and is what is known as using a cookie in a "first-party context", or just a "first-party cookie".

If you are also using these same data collection servers on other sites (for example, myothersiteA.com, and myothersiteB.com), if a visitor later visits these sites, the cookie that was set during the visit to mymainsite.com is sent in the HTTP request to the data collection server (remember that browsers send all cookies for a domain with all HTTP requests to that domain, even if the domain doesn't match the domain of the current website). This is what is known as using a cookie in a "third-party context", or just a "third-party cookie", and it enables the same visitor ID to be used on these other domains.

Note that this functionality may be seen in all major browsers, even those such as Safari that block third party cookies by default. If a cookie has been used in a first-party context during the visit to mymainsite.com, Safari continues to use it in a third-party context (during the visit to the other domains). Be aware that if a visitor visits myothersiteA.com before visiting mymainsite.com, Safari will block the mymainsite.com cookie because it hasn't ever been used in a first-party context.

As a result, your collection domain should be a domain that people commonly visit in order for a visitor to be identified across domains. If there is no “common” domain to use for the data collection domain, there is no cross-domain benefit to maintaining a CNAME for the data collection domain. If the main entry site is not visited first, visitors are identified differently on the secondary site and main site.

Enable CNAME support with the Experience Cloud ID Service

Data collection server CNAME support is enabled by setting the visitor.marketingCloudServer and visitor.marketingCloudServerSecure variables.

Server-side Implementation Mixed with JavaScript

In some implementations, visitor IDs are passed from JavaScript to a server so that additional Analytics events (such as a purchase) can be sent by the server.

The ID service API provides the methods, getMarketingCloudVisitorID and getAnalyticsVisitorID, to retrieve the ID values that can then be passed to the server.

Make sure you check for both the Experience Cloud visitor ID and the Analytics visitor ID, and send both IDs (if present) to make sure any data sent is associated with the existing Analytics visitor profile.

Important: AppMeasurement for Java does not currently support the Experience Cloud ID service.
Data Insertion API
Include the Analytics visitor ID (if set) in the `<visitorID>` element.
Include the Experience Cloud visitor ID in the `<marketingCloudVisitorID>` element.
See Supported XML Tags.

AppMeasurement for Java
The Experience Cloud ID service is not currently supported by AppMeasurement for Java.

The ID Service Grace Period
If you have multiple JavaScript files that are sending data to the same report suite, or if you are using other technologies on your site such as Flash video measurement, we recommend configuring a grace period.

After you deploy the Experience Cloud ID service, new visitors no longer receive an Analytics visitor ID from your data collection server. If sections of your site have not yet implemented the Experience Cloud ID service, when visitors browse to these sections, the Experience Cloud ID is not recognized and visitors are assigned a legacy Analytics visitor ID. This can create duplicated visit counts and incorrect attribution.

For example, if the support section of your site is managed in a separate CMS, you might have a different Analytics JavaScript file for this section. If you deploy the visitor ID on your main site before you deploy the visitor ID service to the support site, new visitors will receive a legacy Analytics ID when they visit the support section, and visits that span both site sections will be reported as different visits.

Deploying the Experience Cloud ID service on sites that are using multiple JavaScript files or other technologies (such as Flash) can cause coordination issues since you need to enable the ID service on all portions of your site at the same time. By configuring a grace period, new visitors to continue to receive an Analytics visitor ID from the Experience Cloud ID service, so visitors can be consistently identified on sections of your site that have not been upgraded to use the ID service.

💡 Note: Grace period support requires version 1.3 or later of the Experience Cloud ID service.

Do I need a grace period?
If you have a single Analytics JavaScript file and are not using any other AppMeasurement libraries, then you do not need a grace period. You can make the update in the single JavaScript file and new visitors will be consistently identified using the marketing cloud ID during the visit.

If you have multiple JavaScript files that are sending data to the same report suite, or if you are using other technologies on your site such as Flash video measurement, we recommend configuring a grace period.

How can I enable a grace period?
Contact Customer Care.

Content Security Policies and the Experience Cloud ID Service
A Content Security Policy (CSP) is an HTTP header and security feature that gives browsers control over what type of resources are loaded on a Web page. Review this section if you use the ID service and have strict CSPs that use whitelists to accept resources from trusted domains. You will need to add the Adobe domains listed here to your CSP whitelists.
CSP Review

CSPs use the HTTP header `Content-Security-Policy` to control the type of resources a browser accepts or loads on a page. Applying a CSP can help you prevent:

- JavaScript files from loading if the source is unknown or not included in a whitelist.
- Cross-site scripting (XXS) attacks.
- Data injection attacks.
- Site defacement attacks.
- Malware distribution.

The use of CSPs is common and well-understood. It is not the purpose of this documentation to explain CSPs in detail (see the related information links below for more information). What is important is that you understand what Adobe domain names you should add to a CSP if you use these and have tight security policies. Adding these domains lets visitor browsers that access your site make those important calls to Experience Cloud resources that you use.

Experience Cloud Domains for Whitelisting

Add these domain names or URLs to your CSP for each list Experience Cloud solution or service that you use.

<table>
<thead>
<tr>
<th>Experience Cloud Solution or Service</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AppMeasurement</strong></td>
<td>Modify your CSP to include the following:</td>
</tr>
<tr>
<td></td>
<td>• *.2o7.net</td>
</tr>
<tr>
<td></td>
<td>• *.omtrdc.net</td>
</tr>
<tr>
<td><strong>Target</strong></td>
<td>Modify your CSP to include *.tt.omtrdc.net.</td>
</tr>
<tr>
<td><strong>Visitor ID Service</strong></td>
<td>Modify your CSP to include *.demdex.net.</td>
</tr>
<tr>
<td></td>
<td>Calls to the demdex.net domain are used to generate the Cookies and the Experience Cloud ID Service and for ID syncs. See also, Understanding Calls to the Demdex Domain.</td>
</tr>
</tbody>
</table>

COPPA Support in the Experience Cloud ID Service

The Children’s Online Privacy Protection Act (COPPA) prohibits the online collection of personal information from children under 13 years old without verifiable parental consent. Customers concerned about COPPA can add an optional variable to their Experience Cloud ID service code that prevents it from setting cookies in the third-party domain of a browser.

*Note:* For version 1.5.3 or greater.

Cookies and Tracking

When a web page loads, the Experience Cloud ID service calls an Adobe data collection server (DCS). The DCS response includes a Experience Cloud cookie and a demdex.net cookie.
• The Experience Cloud cookie is set in the first party domain. It cannot be used to track visitors across different domains, unless those domains work together to allow access.
• The demdex.net cookie is set in the third-party domain. It contains a unique identifier that can be used to track visitors across different domains.

Cookies and COPPA Compliance

Third-party cookies that track visitors across different domains on websites directed to (or primarily for) children, trigger COPPA parental consent requirements. To more easily comply with COPPA for internal website analytics, add the variable `disableThirdPartyCookies: true` to the `Visitor.getInstance` function as shown below.

```javascript
//Call the ID service
var visitor = Visitor.getInstance("insert marketing cloud ID here", {  
  //Set disableThirdPartyCookies configuration param
  disableThirdPartyCookies: true
  ...
});
```

When set to `true`, the `disableThirdPartyCookies` object stops the DCS from returning the third-party demdex.net cookie. If a site visitor already has this cookie in their browser, the ID service won’t use it to create a new Experience Cloud ID or return an existing ID. Instead, the Experience Cloud ID service creates a new, random ID in the first-party cookie. Once enabled, you can collect data with the ID service and share it across different Experience Cloud solutions, including other internal operations allowed by COPPA.

CORS Support in the Experience Cloud ID Service

Browsers use Cross Origin Resource Sharing (CORS) to request resources from a domain other than the current domain. The Experience Cloud ID service supports CORS standards that enable these client-side, cross-origin resource requests. The ID service reverts to JSONP requests on older browsers or browsers that do not support CORS.

Problems with Same-Origin Policies and ID Service Requests

Same-origin policies are security controls or restrictions enforced by a web browser. When enforced on this level, the web browser itself determines if a request for resources made from one page to another will be permitted or blocked. To determine if a request is a same-origin request, the browser compares:

• Uniform Resource Identifiers (URIs)
• Host names (e.g., http://www.my-webpage-example.com)
• Port numbers (e.g., port 80 and 440 for HTTP and HTTPS requests)

The browser allows a request to succeed if both pages share these characteristics and blocks resource requests if they do not.

CORS Resolves Problems with Same-Origin Policies

CORS provides a secure, effective way to request resources across different domains. The CORS specification includes a set of HTTP headers that browsers use to send, receive, and evaluate resource requests. Evaluating a resource request is called a preflight check. This check lets browsers and servers determine which requests are allowed or blocked. The preflight check is transparent to the app, API, or script that requests a resource. Two headers that are important in the resource request process include:

• Origin: A request header that identifies the source of a request.
**Access-Control-Allow-Origin**: A response header that indicates if a resource can be shared with the requestor.

Let’s take a look at how these headers work. In this example, say we have a financial services company that has implemented the Experience Cloud ID service on their site, www.finance-website.com. The following table defines how the CORS request and response headers check for access to a resource.

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Request**| As finance company page loads, the browser makes a request to dpm.demdex.net. This is a call to the domain of the data collection servers (DCS) used by the ID service. This cross-domain request includes the header:  

    Origin: https://www.finance-website.com  |
| **Response**| The response from the DCS domain includes these headers that give the finance company’s site access to required resources:  

    Access-Control-Allow-Origin: https://www.finance-website.com  
    Access-Control-Allow-Credentials: true  |

See also useCORSOnly.

**Other Benefits of Using CORS**

The table below describes some of the advantages CORS provides to customers who use the ID service.

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Description</th>
</tr>
</thead>
</table>
| Increased Security | CORS uses XMLHttpRequest to request and transfer data. This method is more secure than a JSONP request. It ensures that there is no way to execute arbitrary JavaScript, which might be contained in the response from the DCS. The CORS XMLHttpRequest response payload is parsed by the ID service JavaScript and not simply executed in a callback function.  

    Note: To accept cookies, the XMLHttpRequest object needs its withCredentials property set to true. This property is supported in Chrome, Firefox, Internet Explorer (v10+), Opera, and Safari.  |
| Performance Improvements | CORS helps improve performance because:  

    • The browser manages resource requests. The request process is transparent to the ID service.  
    • Unlike asynchronous JSONP requests, the browser does not de-prioritize and queue CORS requests.  
    • The ID service responds permissively. This means when a URL passed in as Origin, the ID service grants the page access to the required resources.  |
Customer IDs and Authentication States

Along with the Experience Cloud visitor ID, you can associate additional customer IDs and an authentication status with each visitor.

Contents

- Authentication States
- Use Cases for Authentication States
- Set Customer IDs and Authenticated States
- Return Customer IDs and Authenticated States
- SDK Support
- Notice for Analytics and Audience Manager Customers

Authentication States

The `setCustomerIDs` method accepts multiple customer IDs for the same visitor. This helps you identify or target an individual user across different devices. For example, you can upload these IDs as customer attributes to the Experience Cloud and access this data across the different solutions.

⚠️ **Important:** `setCustomerIDs` (customer ID synchronization) is required by customer attributes and core services functionality. Synching customer IDs is an optional identification method for Analytics. Target requires `Visitor.AuthState.AUTHENTICATED` for Customer Attributes to work. See Core Services - How to Enable Your Solutions for examples.

Beginning with Experience Cloud ID service v1.5+, `setCustomerIDs` includes the optional AuthState object. AuthState identifies visitors according to their authentication status (e.g., logged in, logged out). You set the authentication state with a status value listed in the table. Authentication status is returned as an integer.

<table>
<thead>
<tr>
<th>Authentication Status</th>
<th>Status Integer</th>
<th>User Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visitor.AuthState.UNknown</td>
<td>0</td>
<td>Unknown or never authenticated.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unknown is applied by default when AuthState is not used</td>
</tr>
<tr>
<td></td>
<td></td>
<td>with a visitor ID or not explicitly set on each page or app</td>
</tr>
<tr>
<td></td>
<td></td>
<td>context.</td>
</tr>
<tr>
<td>Visitor/AuthState.AUTHENTICATED</td>
<td>1</td>
<td>Authenticated for a particular instance, page, or app.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Attention:</strong> To work properly, Customer Attributes for Target require this status.</td>
</tr>
<tr>
<td>Visitor/AuthState.LOGGED_OUT</td>
<td>2</td>
<td>Logged out.</td>
</tr>
</tbody>
</table>
Use Cases for Authentication States

You can assign authentication states to your users, depending on the actions they are performing on your web properties and whether they are authenticated. See some examples in the table below:

<table>
<thead>
<tr>
<th>Authentication Status</th>
<th>Use Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visitor.AuthState.UNKNOWN</td>
<td>This state could be used for scenarios such as:</td>
</tr>
<tr>
<td></td>
<td>• Reading an email (this action likely means that the reader is the intended recipient, but the email could also have been forwarded).</td>
</tr>
<tr>
<td></td>
<td>• Clicking through from an email to a landing page.</td>
</tr>
<tr>
<td>Visitor.AuthState.AUTHENTICATED</td>
<td>The user is currently authenticated with an active session on your website or app.</td>
</tr>
<tr>
<td>Visitor.AuthState.LOGGED_OUT</td>
<td>The user was authenticated but actively logged out. The user intended and meant to disconnect from the authenticated state. The user no longer wants to be treated as authenticated.</td>
</tr>
</tbody>
</table>

Set Customer IDs and Authenticated States

Customer IDs can include combinations of IDs and authenticated states as shown in the following examples.

⚠️ **Important:**

- IDs are case-sensitive.
- Only use un-encoded values for your IDs.
- Customer IDs and authentication states are not stored in the visitor ID cookie. They must be set for every page or application context.
- You should not include any Personally Identifiable Information (PII) in the customer IDs. If you are using PII to identify a visitor (such as an email address), we recommend storing a hashed or encrypted version of the information instead.

```javascript
// Single ID with a single authentication state
visitor.setCustomerIDs({
  "userid":{
    "id":"67312378756723456",
    "authState":Visitor.AuthState.AUTHENTICATED
  }
});

/*
Multiple IDs with only the first ID explicitly assigned an authentication state.
The second ID is not explicitly assigned an authentication state and is implicitly assigned Visitor.AuthState.Unknown by default.
*/
visitor.setCustomerIDs({
  "userid":{
    "id":"67312378756723456",
    "authState":Visitor.AuthState.AUTHENTICATED
  },
  "puuid":"550e8400-e29b-41d4-a716-446655440000"
});
```
// Multiple IDs with identical authentication states
visitor.setCustomerIDs(
    {
        "userid":{
            "id":"67312378756723456",
            "authState":Visitor.AuthState.AUTHENTICATED
        },
        "puuid":{
            "id":"550e8400-e29b-41d4-a716-446655440000",
            "authState":Visitor.AuthState.AUTHENTICATED
        }
    }
);

// Multiple IDs with different authentication states
visitor.setCustomerIDs(
    {
        "userid":{
            "id":"67312378756723456",
            "authState":Visitor.AuthState.AUTHENTICATED
        },
        "puuid":{
            "id":"550e8400-e29b-41d4-a716-446655440000",
            "authState":Visitor.AuthState.LOGGED_OUT
        }
    }
);

Return Customer IDs and Authenticated States

Use `getCustomerIDs` to return customer IDs and related authenticated states. This method returns a visitor's authenticated state as an integer.

Syntax

`getCustomerIDs` returns data with the following syntax.

```json
{
    [customerIDType1]:{
        "id": [customerID1],
        "authState": [authState1]
    },
    [customerIDType2]:{
        "id": [customerID2],
        "authState": [authState2]
    }
    ...
}
```

Examples

Returned customer IDs and authentication state data should look similar to the following examples.

```java
Object customerIDs = visitor.getCustomerIDs();

// No setCustomerIDs call on this instance
{}

// setCustomerIDs call on this instance with{"userid":{"id":"67312378756723456"}}
{
    "userid":{
        "id":"67312378756723456",
        "authState":0
    }
}

// setCustomerIDs call on this instance with
{"userid":{"id":"67312378756723456","authState":Visitor.AuthState.AUTHENTICATED}}
{
    "userid":{
SDK Support

The Experience Cloud ID service supports customer IDs and authentication states in our Android and iOS SDK code. See the following code libraries:

- Android SDK methods
- iOS SDK methods

Notice for Analytics and Audience Manager Customers

If you're passing declared IDs to Audience Manager, the `userid` object needs to match the integration code associated with a data source. For more information, see the Visitor ID Service section in the Configure Merge Rules Code documentation.

ECID library methods in a Safari ITP world

Documentation for ECID library.

As Safari tightens up cross-domain tracking via ITP, Adobe must maintain best practices for libraries that support customers as well as consumer privacy and choice.

On Feb. 21, 2019, Apple announced its latest update to ITP (Intelligent Tracking Prevention). Unlike previous versions focused on third party cookies, this version details new tracking prevention measures for first party cookies. All first party persistent cookies set through the document.cookie API, often known as "client-side" cookies, have their expiration capped at 7 days. Third party cookies will continue to be blocked, as stated in previous versions of ITP. For more details on ITP 2.1 and the impact of Adobe solutions, read Safari ITP 2.1 Impact on Adobe Experience Cloud and Experience Platform Customers.
Get Region and User IDs From the AMCV Cookie or the ID Service

The AMCV cookie contains the Experience Cloud ID (MID) and a region ID for your site visitors. These IDs are stored as key-value pairs. The mid: user ID holds the visitor's Experience Cloud ID. The aamlh: region ID holds the region ID for your site visitors. You can recover this information by parsing the AMCV cookie.

For more information, see Get User IDs and Regions Through the Experience Cloud ID Service.

If you’re an Audience Manager customer, you can get the region ID from the response sent by the Data Collection Server (DCS). See Get User IDs and Regions from a DCS Response.

You can also get the region ID with a GET method provided by the ID service. See getLocationHint.

Requirements for the Experience Cloud ID Service

Review this section to make sure you’re using the right solutions, services, and code versions required by the Experience Cloud ID service.

Contents:

Requirements Ensure Implementation Success and Support
Experience Cloud Requirements: Organization ID
Analytics Requirements: Regional Data Collection (RDC)
Code Libraries and Version Requirements
SDK Requirements for Android and iOS

Requirements Ensure Implementation Success and Support

A successful, supported implementation meets (or exceeds) the code requirements and follows the instructions as they appear in the Adobe help. An unsupported implementation will yield unexpected results and prevent Customer Care and our engineering teams from assisting with efforts to troubleshoot or resolve your issues with the ID service.

<table>
<thead>
<tr>
<th>Implementation Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Standard</strong></td>
<td>For a standard implementation with Dynamic Tag Management (DTM), you must:</td>
</tr>
<tr>
<td></td>
<td>• Place the embed head code in the <code>&lt;head&gt;</code> section of your page.</td>
</tr>
<tr>
<td></td>
<td>• Place the embed footer code before the closing <code>&lt;body&gt;</code> tag.</td>
</tr>
<tr>
<td></td>
<td>A standard implementation is not supported when you:</td>
</tr>
<tr>
<td></td>
<td>• Place either of these DTM embed codes elsewhere in your markup and/or page code.</td>
</tr>
<tr>
<td></td>
<td>• Append, add, or load DTM code with asynchronous methods, calls/callback methods, or wrappers.</td>
</tr>
<tr>
<td></td>
<td>• Include multiple instances of embed code on the same page.</td>
</tr>
<tr>
<td></td>
<td>See also, Embed Code and Hosting Options.</td>
</tr>
</tbody>
</table>

| Non-standard implementations | For non-standard, or manual implementations, you must set up the ID service as described by the procedures this guide. As with the DTM guidelines above, improper code placement and loading will create an unsupported implementation. |
Experience Cloud Requirements: Organization ID

To use the ID service, your company must be enabled for the Experience Cloud and have an Organization ID. Check the following list if you’re unsure of your company’s Experience Cloud status and need to find your Organization ID.

⚠️ Important: The Organization ID is case sensitive and must be used exactly as provided.

<table>
<thead>
<tr>
<th>Experience Cloud Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enabled</td>
<td>If your company is enabled for the Experience Cloud but you do not have your Organization ID, see Organizational IDs (scroll down to the section Find your Organization ID).</td>
</tr>
<tr>
<td>Not sure</td>
<td>If you don’t know your company’s Experience Cloud status, ask whoever manages your Adobe account if members of your company can log in at marketing.adobe.com using an Adobe ID. If you can, then you’re enabled and an administrator can view your Organization ID. To find the Organization ID, see the &quot;Administration Page&quot; section in Experience Cloud Administration.</td>
</tr>
<tr>
<td>Not enabled</td>
<td>If your company is not enabled for Experience Cloud, see Core Services - Enabling Your Solutions to get started.</td>
</tr>
</tbody>
</table>

Analytics Requirements: Regional Data Collection (RDC)

All tracking servers have been converted to RDC, so there is no need to change the Analytics tracking server. More info...

Code Libraries and Version Requirements

The following sections list the minimum code versions that are required to use the Experience Cloud ID service.

💡 Tip: We recommend that you use the latest code versions rather than the required minimums.

JavaScript

<table>
<thead>
<tr>
<th>Experience Cloud Solution</th>
<th>Code Library</th>
<th>Version Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience Cloud ID service</td>
<td>VisitorAPI.js</td>
<td>2.0 or higher</td>
</tr>
<tr>
<td>Analytics</td>
<td>AppMeasurement.js</td>
<td>1.6.4 or higher.</td>
</tr>
<tr>
<td></td>
<td>See AppMeasurement for JavaScript.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>s_code.js</td>
<td>H.27</td>
</tr>
</tbody>
</table>

Note: Analytics s_code version H.27 is no longer supported with the release of the ID
### Experience Cloud Solution

<table>
<thead>
<tr>
<th>Code Library</th>
<th>Version Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>service version 1.6.0. Upgrade your code to the latest version of AppMeasurement.</strong></td>
</tr>
</tbody>
</table>

**Video Heartbeat**  
See [Video Heartbeat 2.x for JavaScript](#).

**Audience Manager**  
- [dil.js](#)  
  See [Data Integration Library (DIL)](#).

**Target**  
- [mbox.js](#)  
  See [mbox Code](#).
- [at.js](#)  
  See [at.js Implementation](#).

### SDK Requirements for Android and iOS

At a minimum, the ID service requires the SDK versions listed below.

- **Android**: 4.11.0  
- **iOS**: 4.11.0

_WARNING: We recommend that you use the latest code versions rather than the required minimums._

Your SDK code must be enabled for the ID service. Enable and download the latest SDK code for each app from your [Adobe Mobile Services](#) account. See also:

- [Configure SDK Visitor ID Service Options](#)  
- [Android SDK methods](#)  
- [iOS SDK methods](#)

### Video Heartbeat and the Experience Cloud ID Service

Video heartbeat requires the Experience Cloud ID service. When measuring video on JavaScript or Flash, implementing the ID service on your site pages and in video playback ensures that visitors are not counted separately when viewing video.
Data Workbench and the Experience Cloud ID Service

Follow these instructions to integrate the Experience Cloud ID field into Data Workbench. This process lets you use the persistent Experience Cloud ID in your data feed, which enables stronger integration with other products in the Adobe Experience Cloud and provides enhanced visitor tracking.

To update Data Workbench to use the ID service:

1. Locate the current Decoder Group configuration file. Typically, the Decoder Group is located in a Profile Manager on this path: Dataset\Log Processing\Decoding Instructions.cfg.
2. Copy the current decoder format from the configuration file.
3. Paste the decoder format below the original.
4. Open the decoder format and add these new field positions to end of the list:
   - x-mcvisid
   - x-tnt-action

   Leave the fields empty if you're not ready to use or define them.

Decoding Instructions

See the full decoder contents below, including the new fields noted above.

```plaintext
Log Processing Include = LogProcessingInclude:
  Decoder Groups = vector: 1 items
    0 = TextFileDecoderGroup:
      Decoders = vector: 2 items
        0 = DelimitedDecoder:
          Delimiter = string: \t
          Fields = vector: 389 items
            0 = string: x-insight-row_type
            1 = string: x-exclude_hit
            10 = string: x-visit_num
            100 = string: x-prop33
            101 = string: x-prop34
            102 = string: x-prop35
            103 = string: x-prop36
            104 = string: x-prop37
            105 = string: x-prop38
            106 = string: x-prop39
            107 = string: x-prop40
            108 = string: x-prop41
            109 = string: x-prop42
            11 = string: x-visit_page_num
            110 = string: x-prop43
            111 = string: x-prop44
            112 = string: x-prop45
            113 = string: x-prop46
            114 = string: x-prop47
            115 = string: x-prop48
            116 = string: x-prop49
            117 = string: x-prop50
            118 = string: x-prop51
            119 = string: x-prop52
            12 = string: x-hitid_high
            120 = string: x-prop53
            121 = string: x-prop54
            122 = string: x-prop55
            123 = string: x-prop56
            124 = string: x-prop57
            125 = string: x-prop58
            126 = string: x-prop59
```

Reference
19 = string: x-browser_width
190 = string: x-mvvar3
191 = string: x-media
192 = string: x-page_event_media
193 = string: x-page_event_var3
194 = string: x-tnt_instances
195 = string: x-survey_instances
196 = string: x-mvvar1_instances
197 = string: x-mvvar2_instances
198 = string: x-mvvar3_instances
199 = string: x-campaign
2 = string: x-userid
20 = string: x-channel
200 = string: x-purchaseid
201 = string: x-product-num
202 = string: x-category
203 = string: x-product
204 = string: x-units
205 = string: x-revenue
206 = string: x-order
207 = string: x-cart_open
208 = string: x-cart_view
209 = string: x-checkout
21 = string: x-click_action
210 = string: x-cart_add
211 = string: x-cart_remove
212 = string: x-product_view
213 = string: x-evar1
214 = string: x-evar2
215 = string: x-evar3
216 = string: x-evar4
217 = string: x-evar5
218 = string: x-evar6
219 = string: x-evar7
22 = string: x-click_action_type
220 = string: x-evar8
221 = string: x-evar9
222 = string: x-evar10
223 = string: x-evar11
224 = string: x-evar12
225 = string: x-evar13
226 = string: x-evar14
227 = string: x-evar15
228 = string: x-evar16
229 = string: x-evar17
23 = string: x-click_context
230 = string: x-evar18
231 = string: x-evar19
232 = string: x-evar20
233 = string: x-evar21
234 = string: x-evar22
235 = string: x-evar23
236 = string: x-evar24
237 = string: x-evar25
238 = string: x-evar26
239 = string: x-evar27
24 = string: x-click_context_type
240 = string: x-evar28
241 = string: x-evar29
242 = string: x-evar30
243 = string: x-evar31
244 = string: x-evar32
245 = string: x-evar33
246 = string: x-evar34
247 = string: x-evar35
248 = string: x-evar36
249 = string: x-evar37
25 = string: x-click_source_id
250 = string: x-evar38

Reference
251 = string: x-evar39
252 = string: x-evar40
253 = string: x-evar41
254 = string: x-evar42
255 = string: x-evar43
256 = string: x-evar44
257 = string: x-evar45
258 = string: x-evar46
259 = string: x-evar47
26 = string: x-click_tag
260 = string: x-evar48
261 = string: x-evar49
262 = string: x-evar50
263 = string: x-evar51
264 = string: x-evar52
265 = string: x-evar53
266 = string: x-evar54
267 = string: x-evar55
268 = string: x-evar56
269 = string: x-evar57
27 = string: x-code_ver
270 = string: x-evar58
271 = string: x-evar59
272 = string: x-evar60
273 = string: x-evar61
274 = string: x-evar62
275 = string: x-evar63
276 = string: x-evar64
277 = string: x-evar65
278 = string: x-evar66
279 = string: x-evar67
28 = string: x-c_color
280 = string: x-evar68
281 = string: x-evar69
282 = string: x-evar70
283 = string: x-evar71
284 = string: x-evar72
285 = string: x-evar73
286 = string: x-evar74
287 = string: x-evar75
288 = string: x-cust1
289 = string: x-cust2
29 = string: x-color
290 = string: x-cust3
291 = string: x-cust4
292 = string: x-cust5
293 = string: x-cust6
294 = string: x-cust7
295 = string: x-cust8
296 = string: x-cust9
297 = string: x-cust10
298 = string: x-cust11
299 = string: x-cust12
3 = string: x-service
30 = string: x-cookies
300 = string: x-cust13
301 = string: x-cust14
302 = string: x-cust15
303 = string: x-cust16
304 = string: x-cust17
305 = string: x-cust18
306 = string: x-cust19
307 = string: x-cust20
308 = string: x-cust21
309 = string: x-cust22
31 = string: x-ct_connect_type
310 = string: x-cust23
311 = string: x-cust24
312 = string: x-cust25
<table>
<thead>
<tr>
<th>313</th>
<th>= string: x-cust26</th>
</tr>
</thead>
<tbody>
<tr>
<td>314</td>
<td>= string: x-cust27</td>
</tr>
<tr>
<td>315</td>
<td>= string: x-cust28</td>
</tr>
<tr>
<td>316</td>
<td>= string: x-cust29</td>
</tr>
<tr>
<td>317</td>
<td>= string: x-cust30</td>
</tr>
<tr>
<td>318</td>
<td>= string: x-cust31</td>
</tr>
<tr>
<td>319</td>
<td>= string: x-cust32</td>
</tr>
<tr>
<td>32</td>
<td>= string: x-connection_type</td>
</tr>
<tr>
<td>320</td>
<td>= string: x-cust33</td>
</tr>
<tr>
<td>321</td>
<td>= string: x-cust34</td>
</tr>
<tr>
<td>322</td>
<td>= string: x-cust35</td>
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<tr>
<td>323</td>
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<td>325</td>
<td>= string: x-cust38</td>
</tr>
<tr>
<td>326</td>
<td>= string: x-cust39</td>
</tr>
<tr>
<td>327</td>
<td>= string: x-cust40</td>
</tr>
<tr>
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FAQs

Frequently asked questions about the Experience Cloud ID service itself along with sections about the ID service and other Experience Cloud solution combinations.

ID Service FAQs

Frequently asked questions about features, functionality, and issues related to using the ID service.

Functionality

What sort of functionality or capabilities does the ID service provide?

See the Overview.

Why is the ID service not making a call to retrieve the Experience Cloud ID?

This can be difficult to diagnose. One thing you can check are the content security policy headers on your site. If you have a strict security policy, those settings can block the third-party calls made by the ID service. See Content Security Policies and the Experience Cloud ID Service.

VisitorAPI.js file storage

You might experience issues if you host the VisitorAPI.js as a local file in mobile apps. We recommend you host the file on a web server.

Page load times and latency

How does the placement of the ID service VisitorAPI.js library affect page load times?

Place the VisitorAPI.js library at the top of the page in the <head> section of your code. This helps ensure that the call for an ID goes out before the page body starts loading and maximizes the chances that an ID will return successfully.

The ID service call is asynchronous and is the only call to the demdex.net domain. The ID service call does not block other elements from loading on the page.

For Target customers, placing ID service code in the <body> of the page may increase the odds that it could block a Target call. If you must place ID service code in the body of your page, it should be placed after the open <body> tag.

Does the ID service make a server call with every page load?

No, this call will only happen the first time the page renders and once every 7 days thereafter. In the meantime, server calls are not required. The ID service operates in client-side mode and does not need to make a server call to return an ID.

See Overview.

When using the ID service, what can cause slow page load times or affect the user experience?

It is hard to catalog all of the possible conditions. Billions of consumer clients connect to our services and the tremendous variety in where and how they connect affect performance. For example:

- Speeds vary greatly on mobile networks. These networks also suffer from signal and data or voice packet loss.
• Connectivity suffers on devices connecting over WiFi under diverse conditions. For example, packet loss and speed problems are common in public places like coffee shops or in other environments like aircraft where packets must bounce through a satellite before reaching terrestrial networks.
• Poorly configured local networks can negatively impact connectivity and speed.
• Client devices may have their own problems such as low memory, excessive disk swapping, or limited CPU power relative to current workloads.
• Browsers queue and execute remote server calls and even process the responses with different rules, depending on the browser maker and version. This behavior affects speed and performance.

Can you name some improvements you made to shorten page load times?
For example, thread yielding. We introduced thread yielding in case of multiple ID sync requests. We observed from lab reports that for customers performing multiple ID syncs, the UI would get blocked due to a lot of continuous CPU computations happening. As a result, we introduced thread yielding to separate out the ID sync requests by 100 msec each.

This change improves performance for customers using Visitor 2.3.0+ and DIL 6.10+. The improvements in page load times are shown in the figure below:

Do browser requests using CORS vs JSON-P affect page performance?
Resource requests with CORS are generally more preferable than with JSONP. With JSONP, some browsers queue and de-prioritize requests relative to other synchronous and asynchronous calls on the page. CORS helps ensure that these requests are treated with a higher priority in the browser call stack.

See CORS Support in the Experience Cloud ID Service.

Security
Does the ID service support CORS?
Yes. See CORS Support in the Experience Cloud ID Service.

What is CORS?
Cross-Origin Resource Sharing or CORS, is a method that browsers use to request resources. The ID service always requests resources using CORS in browsers that support it. The ID service requests resources with JSON-P in older browsers that do not support CORS. See Experience Cloud.

What if my security requirements are so strict that I never want to use JSONP?
If you have strict security requirements, set the ID service API config useCORSOnly: true. You should only enable this mode if you’re confident that your site visitors use browsers that support CORS.
See Experience Cloud and useCORSOnly.

Analytics and ID Service FAQs

Frequently asked questions about features, functionality, and issues related to using Analytics with the ID service.

Tracking servers

How do I find my tracking server information?

Every properly configured piece of AppMeasurement code contains your tracking server information. However, sometimes, customers may break up their Analytics AppMeasurement file into separate files. For example, some customers may put configuration variables in one file, use a second file for plug-ins, and then put AppMeasurement code in a third file. This is not recommended.

If you can't find your tracking server information then your Analytics instance may not be configured properly. Contact Customer Care if you cannot find your tracking server information.

What happens if I am using the ID service and change my tracking server?

Nothing will change for users who have already been identified by the ID service. Legacy visitors who have not been migrated to the ID service and are still identified with an Analytics cookie would be cliffed. The amount of users affected would depend on how long the ID service has been active. For example, an implementation where the ID service has been active for 1 week may have more legacy users than an implementation where ID service has been active for 6 months because users returning to the site would have been migrated.

Implementation and configuration

Do I have to set up a CNAME to track visitors across domains?

If you have a main entry site where customers can be identified before they visit other domains, then a CNAME can enable cross-domain tracking in browsers that do not accept third-party cookies (such as Safari).

In browsers that accept third-party cookies, a cookie is set in the demdex.net domain during the request to retrieve a visitor ID. This cookie allows the ID service to return the same Experience Cloud visitor ID on all domains that are configured using the same organization ID. In browsers that reject third-party cookies, a new Experience Cloud visitor ID is assigned for each domain.

Even when a CNAME is configured, if the main entry site is not visited first, visitors are identified differently on the secondary site and main site in browsers that do not accept third-party cookies.

Why is the Experience Cloud ID (MID) parameter not in the Analytics request?

If the ID service is returning information correctly but you do not see the MID parameter, make sure that you've upgraded to a supported version of AppMeasurement.

Can my site use H code and AppMeasurement for JavaScript with the ID service?

Yes. As long as both files refer to the same VisitorAPI.js file, you can use a mix of H code and AppMeasurement for JavaScript across your site.

However, H code is not supported with the visitorAPI.js code version 1.6 or higher. If you want to upgrade to visitorAPI.js v 1.6 (or higher), you cannot continue to use H code.

What is a grace period and how do I configure it?
See *The ID Service Grace Period* and contact *Customer Care*.

**Why do I need to migrate to Real-time Data Collection (RDC) to use the ID service?**

RDC adds global performance benefits and is required to make sure your implementation is ready for upcoming features that leverage Adobe’s global network of edge notes. See *Analytics Requirements: Regional Data Collection (RDC)*.

---

**Reporting**

**What are some possible causes of discrepancies when using Analytics with the ID service?**

Common causes of discrepancies when using the ID service include:

- Continued use of the legacy s_vi cookie. This contributes to data collection discrepancies.
- Double counting visitors when they navigate from a survey to a pop-up.

---

**Cookies**

**What happens in Analytics when the ID service cannot set the AMCV cookie?**

There are three potential scenarios where this affects Analytics data for new visitors:

1. **An end user leaves a page before the AMCV cookies is set successfully (within the 30 second timeout window).**

   If a visitor leaves a page before it is done loading, the Analytics hit is not sent. Analytics will not receive data from this scenario and would consider that data lost to an early closure of the page. Based on our testing which included outlying geographies, we found that this scenario represented less than 1% of traffic on average. It is important to note that this scenario occurs at times even without the presence of the MCID service — it is an artifact of the inclusion of the Analytics data collection code at the bottom of the page.

2. **An end user is not assigned an ID service or an Analytics ID within the 30 second timeout window due to slow connections or browser "spinning."**

   Both the ID service and the Analytics ID would not be set and the visitor would be assigned a client-side ID. While this allows Analytics data to be captured, the visitor’s profile will be interrupted when on a subsequent page an Analytics ID is set. The client-side ID will also not match with any existing visitor profile stored in Audience Manager or Analytics. This client-side ID will also appear as two different visitors in Analytics if two separate domains are being sent into the same report suite.

3. **An end user is not assigned an ID service ID within the 30 second timeout window, but is assigned a standard Analytics tracking ID and the grace period is not enabled.**

   Scenario 3 has the same outcome to scenario 2 in that a client-side based ID is used.

   **Tip:** *Using the latest updates to VisitorAPI.js and AppMeasurement.js with the default settings should avoid any serious or noticeable impact from the three unlikely scenarios above.*

---

**FAQs for other Experience Cloud solutions**

Frequently asked questions about features, functionality, and issues related to using other Experience Cloud solutions with the ID service.
**Dynamic Tag Management (DTM)**

**Can I use Dynamic Tag Management to deploy the visitor ID service?**

Yes, this is the preferred and recommended deployment option.

See .

**Analytics and Audience Manager**

**Will the visiting history of a user be exported from Adobe Analytics to Audience Manager after I implement the Experience Cloud ID Service?**

There are two options here:

- If a user has any visiting activity after the ID Service is implemented, the visitor and their history is included in the data export to Audience Manager.
- If a user does not have any visiting activity after the ID Service is implemented, the visitor and their history will not be included in the data export to Audience Manager. Because new activity is not present, we have no way to associate the Analytics ID with the Experience Cloud ID.
2019 Release Notes

Feature releases, updates, or changes to the Experience Cloud ID service.

Version 4.3

Support for ITP 2.1. If a tracking server is set in a first party CNAME, a new cookie (s_ecid) is placed with the ECID value. The ECID library references the value to persist the ID beyond 7 days. See ECID library methods in a Safari ITP world.

Bug fix for secureCookie config. See secureCookie.

Version 4.0

Opt-in service. Opt-in is an extension of Experience Cloud ID (ECID) that allows you to control whether (and then which) Experience Cloud libraries can create cookies on web pages for visitors. Using Launch, you can simplify gathering visitor opt-in consents for Experience Cloud solution by enabling Analytics, Target, Audience Manager, and other or all select Experience Cloud solutions to opt-in to your consent management system.

Version 3.4

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>disableIdSyncs flag not working when passed a string.</td>
<td>Fixed. Values set on disableIdSyncs parameter for getInstance function are now being honored.</td>
</tr>
<tr>
<td>Third-party iFrames not getting ECID</td>
<td>Fixed ECID on Safari Mobil and ECIDs in various iFrames that were not working.</td>
</tr>
</tbody>
</table>

2018 Release Notes

Feature releases, updates, or changes to the Experience Cloud ID service for 2018.

Version 3.3

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased security for AMCV cookies</td>
<td>During an internal security scan, it was discovered that when using the DTM library, cookies used for session management fail to specify proper attributes. This could result in cookie information being inadvertently shared. To solve for this, we have introduced a configuration that allows the Customer to set the AMCV cookie as secure. See secureCookie.</td>
</tr>
</tbody>
</table>

Version 3.2

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased security for AMCV cookies</td>
<td>During an internal security scan, it was discovered that when using the DTM library, cookies used for session management fail to specify proper attributes.</td>
</tr>
<tr>
<td>Item Description</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>This could result in cookie information being inadvertently shared. To solve for this, we have introduced a configuration that allows the Customer to set the AMCV cookie as secure. See secureCookie.</td>
<td></td>
</tr>
<tr>
<td>Integration code and id must be numbers or non-empty strings</td>
<td>Fixed an issue with validating <code>setCustomerIDs</code> when data contains an integration <code>code</code> or <code>id</code> that is neither a number nor a non-empty string.</td>
</tr>
<tr>
<td>ECID JS is available in Public Git repo</td>
<td>ECID JS is now available in Public Git repo for all Experience Cloud customers at <a href="https://github.com/Adobe-Marketing-Cloud/id-service/releases">https://github.com/Adobe-Marketing-Cloud/id-service/releases</a>.</td>
</tr>
</tbody>
</table>

**Version 3.1.2**

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unrealistic spike in the unique visitor count</td>
<td>With the release of Experience Cloud ID Service 3.1.0, we found an issue that created an unrealistic spike in the unique visitor count when this version was implemented. This behavior is exhibited only with the latest version of ECID, v3.1.0, and if a user has selected the &quot;Allow from current website only&quot; option in the privacy settings of a Safari browser. Version 3.1.2 fixes this issue.</td>
</tr>
</tbody>
</table>

**Version 3.1.0**

💡 **Note:** *It is recommended that you upgrade from version 3.1.0 to the latest version at the earliest convenient time. See the version 3.1.2 description. The latest bundle is available within Adobe Launch, DTM, and AppMeasurement.*

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cookie set on incorrect domain</td>
<td>We fixed a bug where temp Visitor cookie was setting a cookie in the 'default' cookie domain instead of setting it in the domain provided in the config (initConfig).</td>
</tr>
</tbody>
</table>

**Version 3.0**

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thread yielding for multiple ID sync requests</td>
<td><strong>Iframe</strong></td>
</tr>
<tr>
<td></td>
<td>For customers performing multiple ID syncs, due to continuous CPU computations happening, the UI gets blocked in some cases. We are introducing thread yielding to separate the ID sync requests by 100msec each.</td>
</tr>
<tr>
<td></td>
<td>This change will improve performance for customers using Visitor 2.3.0+ and DIL 6.10+.</td>
</tr>
</tbody>
</table>
### Item Description

| Added the ability to disable third-party calls | JavaScript - 3.0.0  
Adobe renamed the following configurations to allow for disabling third-party sync calls.  
idSyncDisableSyncs to disableIdSyncs  
idSyncDisable3rdPartySyncing to disableThirdPartyCookies |
| Internet Explorer support | The ID service no longer supports Internet Explorer 6, 7, 8, and 9. |
| Update to getInstance documentation | Added a warning to the Visitor function about not instantiating this function with `var visitor = new Visitor`. |

### 2017 Release Notes

Feature releases, updates, or changes to the Experience Cloud ID service for 2017.

These changes are also captured in the [Experience Cloud Release notes](https://gaia.adobe.com/guides/). For older ID service release notes, see the [previous release notes](https://gaia.adobe.com/guides/) or the links at the bottom of this page.

⚠️ **Attention:** There are no customer-facing release notes or code changes for March, April, May, and October 2017. For those months, the ID service code remained unchanged at v2.1.

### Version 2.5

September, 2017

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>getVisitorValues</td>
<td>This is an asynchronous API that returns identifiers for Analytics, the ID service, data collection opt-out, geographic location, and metadata &quot;blob&quot; content by default. Also, you can control which IDs you want to return with the optional <code>visitor.FIELDS</code> enum. See <code>getVisitorValues</code>.</td>
</tr>
</tbody>
</table>

### Bug Fixes and Other Changes

- Fixed a Chrome-related bug that caused the ID service to throw an error when clicking the back button in that browser.
- The ID service now re-fires ID syncs when the region ID in the event call response changes.
- Added new documentation, [Content Security Policies and the Experience Cloud ID Service](https://gaia.adobe.com/guides/), that explains how to whitelist calls to Adobe domains used by the ID service.

### Version 2.4

August, 2017
### Feature | Description
--- | ---
**isCoopSafe** | An optional, Boolean configuration that determines if the ID service sends (or does not send) data to the Adobe Experience Cloud Device Co-op. See *isCoopSafe*.  

### Revised Documentation
Updated and revised the *FAQs* to include separate FAQs for different Experience Cloud solutions.

### Version 2.3
**July, 2017**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>sdidParamExpiry</strong></td>
<td>When added to the <code>Visitor.getInstance</code> function, this configuration lets you override the default Supplemental Data ID (SDID) expiration interval when passing that ID from one page to another. You would use <code>sdidParamExpiry</code> with the <code>appendSupplementalDataTo</code> helper function. See <em>sdidParamExpiry</em>.</td>
</tr>
<tr>
<td><strong>resetState</strong></td>
<td>This function is designed mainly for A4T customers to help solve issues related to working with IDs on single page sites/screens or apps. See <em>resetState</em>.</td>
</tr>
</tbody>
</table>

### Bug Fixes and Other Changes
- Fixed a bug in `VisitorAPI.js` v2.2 that prevented the ID service and Target from working together in Internet Explorer.
- Revised code to help improve how the ID service sends data to the Destination Publishing iFrame. This helps reduce CPU usage.

### Version 2.2
**June, 2017**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>whitelistParentDomain and whitelistIframeDomains</strong></td>
<td>These configurations let different instances of ID service code implemented in an iFrame and on the parent page communicate with each other. They're designed to help resolve problems with 2 specific use cases where you may or may not control the parent page/domain and you have ID service code loading in the iFrame of a domain that you do control.</td>
</tr>
</tbody>
</table>

### Documentation Updates for May

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ID Service FAQs</strong></td>
<td>Updated the Analytics section with information on how to find tracking server information.</td>
</tr>
</tbody>
</table>
### Documentation Updates for April

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>audienceManagerServer</strong> and <strong>audienceManagerServerSecure</strong></td>
<td>Added links to Audience Manager documentation that describes calls to the demdex.net domain.</td>
</tr>
<tr>
<td><strong>Understanding ID synchronization and match rates</strong></td>
<td>Revised Media Optimizer section to describe the call to cm.eversttech.net. This is the automatic ID sync that the ID service performs with Media Optimizer. This feature was released in January, 2017. See Version 2.0 below.</td>
</tr>
</tbody>
</table>

### Version 2.1
February, 2017

#### Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID service API property, <strong>idSyncContainerID</strong></td>
<td>This property sets the container ID used by Audience Manager for ID syncs. See <strong>idSyncContainerID</strong>.</td>
</tr>
<tr>
<td>ID service API method, <strong>appendSupplementalDataIDTo(URL, SDID)</strong></td>
<td>This public method appends the <strong>Supplemental Data ID</strong> (SDID) as a query string parameter to a redirect URL. See <strong>appendSupplementalDataIDTo</strong>. (MCID-285)</td>
</tr>
</tbody>
</table>

#### Fixes

Fixed a bug that caused the ID service to make redundant server calls for an ID instead of using the ID stored in the AMCV cookie. (MCID-296)

#### New Documentation

*Using DNS Prefetch with Different Experience Cloud Solutions and Services*

### Version 2.0
January, 2017

⚠️ **Important:** The ID service code v2.0 automatically synchronizes IDs with Adobe Media Optimizer by default. This means you’ll see a call from the page to cm.eversttech.net, which is a legacy Media Optimizer domain controlled by Adobe. See also, Understanding ID Synchronization and Match Rates.

#### Fixes and Improvements

- Fixed a bug that prevented AppMeasurement from making tracking calls to Analytics. (MCID-254, MCID-256, MCID-286)
- Fixed a bug that prevented the ID service from failing right away if a visitor had enabled an ad blocker and that blocker was configured to exclude the demdex.net domain. This is a rare and unusual bug because most ad blocking tools do not block the demdex.net domain. (MCID-233)
• Fixed a bug caused by interactions between ID service code and a custom script on a customer's website. This issue prevented Internet Explorer 9 from loading Web pages. (MCID-206)

Previous Years
Older ID service release notes.

2016 Release Notes
Feature releases, updates, or changes to the Experience Cloud ID service for 2016.
These changes are also captured in the Experience Cloud Release notes. See the previous release notes for older Experience Cloud announcements.

Version 1.10
November, 2016

⚠️ Important:
• Version 1.10 requires AppMeasurement 1.8.0.
• Using Experience Cloud ID service Library 2.0.0+, ID synching will begin for Adobe Media Optimizer by default. See Understanding ID Synchronization and Match Rates.

Fixes and Improvements
• Added instructions on how to implement the ID service in a server-side environment.
• Added Visitor.overwriteCrossDomainMCIDAndAID, a boolean function that lets you overwrite the Experience Cloud and Analytics IDs on other domains that you own. See overwriteCrossDomainMCIDAndAID.
• Added TS = UTC timestamp as a property of the visitor.appendVisitorIDsTo function. The ID service uses the timestamp to determine if it should use the IDs in the redirect URL based on a 5-minute aging interval. See appendVisitorIDsTo (Cross-Domain Tracking).
• Added Visitor.getLocationHint, a new function that returns a region ID. See getLocationHint.
• Added idSyncByUrl and idSyncByDataSource, 2 functions that let you manually implement an ID sync in the Destination Publishing iFrame. See ID Synchronization by URL or Data Source.
• Fixed a bug that blocked the AppMeasurement tracking call if disableThirdPartyCalls:true.
• Fixed a bug that prevented the ID service from passing the Experience Cloud ID (MID) across different domains.

Version 1.9.0
October, 2016

Fixes and Improvements
• Fixed a bug that passed Audience Manager unique user IDs (AAMUUIIDs) as Experience Cloud IDs to the ID service.
• If time-to-live (TTL) for an AMCV cookie has expired, the ID service will still return that information to the server as long as the cookie contains a Experience Cloud ID. After this call, the ID service makes an asynchronous call to update the cookie. This helps improve performance because the ID service doesn't have to wait for a server response. It can use existing AMCV cookie values and then request an update.
• The ID service automatically synchronizes Experience Cloud IDs (MIDs) with Adobe Media Optimizer and other internal Adobe domains directly on the page. Automatic synchronization is enabled for all existing and new accounts.
This helps improve match rates for Media Optimizer. Applies to VisitorAPI.js version 1.8, or higher. See also, *Understanding ID synchronization and match rates*.

**New and Revised Documentation**

**New:** *Get Region and User IDs From the AMCV Cookie or the ID Service*

**Version 1.8.0**
September, 2016

**Fixes and Improvements**

Added `disableThirdPartyCalls` as an optional, Boolean flag you can set in the `Visitor.getInstance` function. When `disableThirdPartyCalls = true`, the ID service will not make calls to other domains. By default, `disableThirdPartyCalls = false`. See `disableThirdPartyCalls`.

**Version 1.7.0**
August, 2016

**Fixes and Improvements**

- Added `idSyncAttachIframeOnWindowLoad` as an optional boolean flag you can set in the `Visitor.getInstance` function. When `idSyncAttachIframeOnWindowLoad = true`, the ID service loads the ID synchronization iFrame on window load. By default, the ID service loads the iFrame as fast as possible. This flag replaces `idSyncAttachIframeASAP`, which is deprecated. See `Configurations`.
- Added functionality to support tracking Experience Cloud IDs across domains, native apps and hybrid apps to web transitions. See `appendVisitorIdsTo (Cross-Domain Tracking)`.
- Added functions to `visitorAPI.js` code that determine if the ID service has generated the visitor Experience Cloud ID client-side or server-side or if ID calls timed out. See `callTimeOut Methods` and `isClientSideMarketingCloudVisitorID`.

**New and Revised Documentation**

**Revised:** *Requirements for the Experience Cloud ID Service*

**Known Issues**

Customers using Audience Manager DIL code and `visitorAPI.js` code on the same page should set the DIL variable `secureDataCollection = false`. See `secureDataCollection`.

**Version 1.6.0**
July, 2016

⚠️ **Important:** *Version 1.6.0 of the Experience Cloud ID service requires AppMeasurement for JavaScript version 1.6.2. If you upgrade to ID service version 1.6.0, please make sure you are using the right AppMeasurement code version.*

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-Origin Resource Sharing (CORS)</td>
<td>CORS allows browsers to request resources from a domain other than the current domain. The Experience Cloud ID service supports CORS standards to enable</td>
</tr>
</tbody>
</table>
### Description

client side, cross-origin resource requests. The ID service reverts to JSONP requests on browsers that do not support CORS.

See:

- [CORS Support in the Experience Cloud ID Service](#)

### Fixes and Improvements

- **Added a `d_fieldgroup` parameter to ID synchronization calls to dpm.demdex.net.** This new parameter is used for internal troubleshooting and debugging purposes.
- **Added a title attribute to the ID service iFrame.** An iFrame title helps screen readers provide page information to users who require assistance when interacting with online content. The iFrame title attribute is set to Adobe ID Syncing iFrame.
- **Added `idSyncAttachIframeASAP: true` as an optional flag you can set in the `Visitor.getInstance` function.** When true, the ID service loads the ID synchronization iFrame as fast as possible. This is designed to help improve ID synchronization match rates. By default, the ID service loads the iFrame on window load. See Configurations.
- **Fixed a bug with a callback function that caused AppMeasurement to get stuck in an infinite loop.**
- **Changed the default `loadTimeout` interval to 30,000 milliseconds (from 500 milliseconds).** See Configurations.

### New and Revised Documentation

**New**

- Implement the Experience Cloud ID Service for Analytics
- Implement the Experience Cloud ID Service for Analytics, Audience Manager, and Target

**Revised**

- Requirements for the Experience Cloud ID Service
- Test and verify the Experience Cloud ID Service

### Version 1.5.7

June, 2016

### Feature

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes to the <code>iframe.sandbox</code> attribute</td>
<td>The iFrame is now set so that <code>iframe.sandbox='allow-scripts allow-same-origin';</code>. Allowing only these 2 tokens helps improve security and provides the ID service with the basic functionality required for ID synchronization. The sandbox attribute is not supported in Internet Explorer version 9 or earlier. For more information, see the Attributes section in this <a href="#">iFrame documentation</a>.</td>
</tr>
<tr>
<td>Encoding the Experience Cloud ID (MID)</td>
<td>The ID service encodes the MID value returned from the server or when it's set by the <code>visitor.setMarketingCloudVisitorID()</code> function. For more information about the MID, see <a href="#">Cookies and the Experience Cloud ID</a>.</td>
</tr>
</tbody>
</table>

### Fixes
The visitor API no longer forces an extra re-synchronization call with Audience Manager when there is no legacy Analytics visitor ID.

**Version 1.5.x**

May, 2016

**Documentation Updates**

- *SDK Requirements for Android and iOS*
- *Data Workbench and the Experience Cloud ID Service*
- *Test and verify the Experience Cloud ID Service*

**Version 1.5.x**

April, 2016

**Documentation Updates**

*Implement the Experience Cloud ID Service for Target*

**Version 1.5.4**

March, 2016

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opt-out support</td>
<td>The Experience Cloud ID service supports visitor opt-out requests.</td>
</tr>
<tr>
<td>Change ID synchronization interval</td>
<td>The Experience Cloud ID service now makes ID synchronization calls on every call to the data collection servers. Previously, the ID service made only 1 request on the first call to get a Experience Cloud ID.</td>
</tr>
</tbody>
</table>

**Documentation Updates**

- *Implement the Experience Cloud ID Service for Analytics*: New procedure that describes how to set up the ID service with Analytics.
- *Experience Cloud ID Service Migration Decision Points*: Revised text for clarity. Working with a single domain means you can migrate away from a data collection CNAME if you no longer wish to manage it. However, there's no requirement to change if your CNAME is working.

**Version 1.5.3**

January, 2016

**Documentation Updates**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer IDs and Authentication States</td>
<td>Revised text. Customer IDs must be passed in as un-encoded values only. Encoding IDs will create double-encoded identifiers.</td>
</tr>
</tbody>
</table>
2015 Release Notes

Release notes and updates for 2015.

Version 1.5.3
November, 2015
The Children's Online Privacy Protection Act (COPPA) prohibits the online collection of personal information from children under 13 years old without verifiable parental consent. Customers concerned about COPPA can add an optional variable to their Experience Cloud ID service code that prevents it from setting cookies in the third-party domain of a browser. See COPPA Support in the Experience Cloud ID Service. For version 1.5.3 or greater.

Version 1.5.2
September, 2015
• Fixed a bug in the Safari browser that prevented synchronization services from functioning when users blocked third-party cookies. (AAM-20764)
• Calls to the ID service now include the version ID in the d_visid_ver= parameter. The returned ID helps internal teams with troubleshooting and support issues. (AAM-20824)

Version 1.5.1
August, 2015
• Fixed a bug to prevent the ID service from requesting an iframe if there's no data to synchronize or fire. (AAM-20164)
• Fixed a bug that prevented the ID service from properly setting a multi-part, top-level domain cookie. For example, if you have a domain like my_company.co.uk, under some circumstances, the ID service would set a cookie in co.uk only. (AN-104683)

This only affected a few clients that met all of the following criteria:
• Using the ID service.
• Enabled a grace period or are using first-party cookies and users block third-party cookies.
• Have pages with multi-part, top-level domains.

Documentation revisions in this release include:
• ID Service API: Reorganized content and text. In most cases, each method gets its own page.
• Requirements for the Experience Cloud ID Service: Revised content and reorganized text.

Version 1.5
July, 2015
The Experience Cloud ID service supports multiple IDs and authentication states. This change also removes deprecated support for Audience Manager DPID mappings to user IDs used by the setCustomerIDs function. See Customer IDs and Authentication States

Version 1.4
May, 2015
As of version 1.4, the preferred method of setting configuration is passing in a config object in as the second parameter to the `Visitor.getInstance` function.

```javascript
var visitor = Visitor.getInstance("016D5C175213CCA80A490D05@AdobeOrg",{
    "loadTimeout":1000,
    "trackingServer":"myco.sc.omtrdc.net",
    "idSyncContainerID":80
});
```

See [Experience Cloud](#).

### Version 1.3.5

February, 2015

Fixed the handling of timeout on requests for AAM Blob and Location Hint. Now, on a timeout, the system will correctly leave those fields blank for the current page and make all callbacks. The timeout is treated as an error condition, so it will try again on the next page. (AN-94473, AN-94474)

### Version 1.3.4

January, 2015

Reworked `<head>`/`<body>` tag finding for JSONP request `<script>` tag container, as well as the creation of the `<script>` tag to account for different DOM implementations (HTML vs XHTML) with possibly different case sensitivity settings. (AN-9355)
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