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Adobe Marketing Cloud Device Co-op Documentation

The Adobe Marketing Cloud **Device Co-op** is a digital cooperative where participating customers share device link information. The Marketing Cloud **Device Co-op** processes this data to form device clusters. These clusters represent a group of devices used by an unknown person. The **Device Co-op** shares these clusters among its members, which helps them deliver valuable and consistent cross-device experiences to their customers.

<table>
<thead>
<tr>
<th>New and Featured Items</th>
<th>Release Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Overview</td>
<td>• See the latest <em>Marketing Cloud Release Notes</em> for new features and fixes.</td>
</tr>
<tr>
<td>• Membership Requirements</td>
<td>• See the previous release notes for older announcements.</td>
</tr>
<tr>
<td>• People Metric</td>
<td></td>
</tr>
</tbody>
</table>

**Marketing Cloud Resources**

- Adobe Marketing Cloud
- Adobe Training and Tutorials
- Product Documentation Home
Overview

The Adobe Marketing Cloud Device Co-op is a program that lets participants work together to better identify consumers across digital touch points while ensuring the highest level of privacy and transparency. The Marketing Cloud Device Co-op empowers participating brands to recognize their consumers so they can deliver more personalized experiences across devices and apps at massive scale. The Device Co-op is a core service of the Adobe Marketing Cloud. It is available to Adobe customers who use Analytics, Audience Manager, Media Optimizer, or Target.

Contents:

Advantages
Adobe's Role in the Device Co-op
How it Works
Getting Started

Advantages

The Device Co-op allows participants to provide their consumers with a better, more consistent content experience as they migrate across devices. It does this by establishing links between a group of devices used by unknown consumers. This technology helps marketers understand and respond to consumer behaviors across devices. The results provide more accurate website engagement metrics, more personalized content, and more targeted advertising experiences across search, display, and social. Participation in Adobe Marketing Cloud Device Co-op helps our members improve:

- **Customer understanding:** Traditional reporting can reveal insights for a specific device. But, devices and channels don't buy things — people do. With better reporting, the Device Co-op helps analysts and marketers answer the real people-centric questions their business is asking.
- **Content personalization:** Consumers who don't log into a brand's website or app usually receive an experience that's linked to the device they're using at that moment. The Device Co-op helps marketers deliver consistent and valuable experiences based on information a brand has about a person, and not just the device they're using.
- **Ad spend efficiency:** The Device Co-op helps save marketing budgets by focusing display advertising on people, not devices. Because frequency caps typically apply to a single device, a limit of 5 ads per consumer can easily turn into 5 ads per device. With the Device Co-op, marketers can boost their ROI by targeting the person, not the device.
- **Retargeting Across Devices:** Reach your consumers via the power of retargeting unlocked across the mobiles, tablets, browsers, and other devices they use everyday. Advertising is dramatically more effective if you can stay front of mind, and cross device retargeting allows your brand to do exactly that.

Adobe's Role in the Device Co-op

In the Device Co-op, Adobe:

- **Is a data steward:** Device Co-op members do not share data directly with each other. Instead, Adobe, acts as a broker to make device link data available to the co-op through the Device Graph. Device Co-op members get to work with this data through features in their enabled Marketing Cloud solutions.
- **Believes in data fairness:** Equitable data sharing is an important concept in the Device Co-op. All Device Co-op members receive value relative to what they contribute. If you've never interacted with an anonymous person through a site visit or ad impression, you won't get any information about their devices in the Device Graph. The Device Co-op helps brands recognize familiar consumers using unfamiliar devices.
- **Supports privacy standards:** Device Graph data does not include Personally Identifiable Information (PII). Excluding PII from the Device Graph helps Adobe uphold privacy standards and maintain the trust of co-op members and consumers alike.
How it Works

Co-op members will give Adobe access to cryptographically hashed login IDs and HTTP header data, which fully hides a consumer’s identity. Adobe processes this data to create groups of devices ("device clusters") used by an unknown person or household. Adobe will then surface these groups of devices through its digital marketing solutions, so Co-op members can measure, segment, target and advertise directly to individuals across all of their devices.

All of this is possible without disclosing the user’s identity because the Device Co-op does not share personal data such as names, email addresses, phone numbers, or site visit data, etc. among its members.

These rules help address important privacy concerns commonly associated with cross-device technologies. In fact, with the Device Co-op, consumers will have privacy controls that exceed industry standards. The Device Co-op provides unprecedented transparency by giving consumers insights into participating brands, as well as all devices that are associated with the device currently being used. See The Device Graph: Internal Processes and Output section for more information.

Getting Started

Take a moment to review the membership requirements if you want participate or to learn more about the Device Co-op. Also, see Working with Device Co-op Data in Other Marketing Cloud Solutions for a summary of how other Adobe products used this data.
Membership Requirements

Your company must meet these minimum standards before you can start using the Marketing Cloud Device Co-op.

Contents:

Requirements
Marketing Cloud Requirements
Adobe Code Library Requirements

Requirements
Talk to your Adobe representative to get started. If you do not have an Adobe representative, visit the Device Co-op membership portal and complete the online form.

Marketing Cloud Requirements
You must be enabled for the Adobe Marketing Cloud and use the following solutions and services to participate in the co-op.

<table>
<thead>
<tr>
<th>Marketing Cloud Requirements</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solutions</td>
<td>Applicants must use at least one of the following Adobe solutions:</td>
</tr>
<tr>
<td></td>
<td>• Analytics</td>
</tr>
<tr>
<td></td>
<td>• Audience Manager</td>
</tr>
<tr>
<td></td>
<td>• Media Optimizer</td>
</tr>
<tr>
<td></td>
<td>• Target</td>
</tr>
<tr>
<td>Core services</td>
<td>Applicants must implement the Marketing Cloud ID Service.</td>
</tr>
</tbody>
</table>

Adobe Code Library Requirements
The following table lists the minimum versions of the code libraries or SDKs used by various Marketing Cloud solutions and services. If you use any of this code and want to participate in the Device Co-op, make sure you meet these minimum requirements.

💡 Tip: As a best practice, we recommend you use the latest code versions rather than the required minimums.

<table>
<thead>
<tr>
<th>Code Requirements</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AppMeasurement (Flash)</td>
<td>Requires version 4.1. See AppMeasurement for Flash, Flex, and AIR.</td>
</tr>
<tr>
<td>AppMeasurement (JavaScript):</td>
<td>Requires version 1.5.4. See AppMeasurement for Flash, Flex, and AIR.</td>
</tr>
<tr>
<td>Mobile SDKs:</td>
<td>Minimum mobile SDK requirements:</td>
</tr>
<tr>
<td></td>
<td>• Android version 4.8.3.</td>
</tr>
<tr>
<td></td>
<td>• iOS version 4.8.5.</td>
</tr>
<tr>
<td>Code Requirements</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>VisitorAPI.js</td>
<td>Requires version 1.5.4. &lt;br&gt;Analytics customers can download the VisitorAPI.js library from Code Manager. &lt;br&gt;It is located in the JavaScript (New) or JavaScript (Legacy) files. Contact Customer Care if you do not have access to Code Manager.</td>
</tr>
<tr>
<td>Target Library</td>
<td>Requires either of the following Target JavaScript libraries: &lt;br&gt;• at.js (any version) &lt;br&gt;• mbox.js version 58 or later</td>
</tr>
</tbody>
</table>
The Device Graph: Internal Processes and Output

In the **Device Graph**, internal processes build an identity hierarchy that maps devices and connects them to individual, anonymized people. The output of the graph includes cross-device links you can use for targeting along with data that's exposed in select Marketing Cloud solutions. The Adobe solutions that work with **Device Graph** data include Analytics, Audience Manager, Media Optimizer, and Target.

**Deterministic and Probabilistic Links**

The **Device Graph** analyzes deterministic and probabilistic data to build a map that links devices together. Deterministic data links devices together based upon hashed logon information. Probabilistic data links devices together based on information such as IP addresses and other metadata. The **Device Graph** associates the linked device clusters to an anonymous individual person. These connections let digital marketers reach people instead of devices. In the **Device Graph**, the owner of a device is the anonymous representation of a real-life person. Both deterministic and probabilistic links help build a structure of user identity.

Contents:

- What are Links?
- Deterministic Links
- Probabilistic Links
- Both Types of Data Provide Value

💡 **Note:** In the Adobe Marketing Cloud Device Co-op, terms such as device, person, identity etc. have specific meanings. For example, “device” can refer to physical hardware such as a phone or tablet and the applications that run on that hardware. See the glossary for definitions.

**What are Links?**

When we talk about links, it's important to keep in mind what these really are in the context of the Marketing Cloud Device Graph. In this context, links are not physical connections between devices. Instead, a link is how the Device Graph associates different devices to the same, unknown person. For example, say we have a mobile phone and a desktop browser. The phone and the browser can be considered "linked" once the Device Graph determines both these devices are used by the same, unknown person. As you'll read below, the Device Graph builds identities with deterministic and probabilistic links. And, in the Device Graph, the owner of a device is the anonymous representation of a real-life person.

**Deterministic Links**

Deterministic links associate a device to a person based on an authentication event (e.g., a log in action to a site from a device). This action creates an anonymized identifier known as a consumer ID. Let's take a look at how deterministic linking works. In this example, Person A logs in to a news site through an app on their mobile device. Later that day, Person A again logs on, but this time through a browser on their laptop.
Based on the logon information, the Device Graph:

- Knows that Person A authenticated to the news site with a mobile phone/app and laptop/browser device combination.
- Links these devices to Person A.
- Builds an identity based on linked devices associated with an anonymous person.

**Deterministic Linking**

*Note: Neither the Adobe Marketing Cloud Device Co-op or the Device Graph receives actual authentication information or personally identifiable information (PII) in this data. Members of the Marketing Cloud Device Co-op, pass in cryptographically hashed, unique consumer IDs to the Device Graph. The consumer ID represents an authenticated user in the graph and protects consumer privacy.*

**Probabilistic Links**

Probabilistic links connect a device to a person algorithmically, based on characteristics and metadata such as:

- Browsing behavior
- IP addresses
- Operating systems
- IDFA and GAID identifiers
Let’s take a look at how probabilistic linking works. In this example, Person A browses to a news site on their tablet and then later from a desktop computer. While browsing, Person A does not log on to the news site. During each separate visit, the tablet and desktop share the same IP address.

Based on this information, the Device Graph evaluates IP address sharing patterns between both devices and links these devices together if the results suggest they belong to Person A. The end result is hierarchy of identity derived from algorithmic probability calculations.

In this example, the Device Graph linked both devices after they were used to access the same news site. But, devices do not have to be seen on the same site to be linked. To illustrate this point, let’s say each device in this example visits completely different websites. The Device Graph algorithm can still make a probabilistic link based on their shared IP address and from an analysis of other data. This process is what helps make probabilistic linking so powerful for members of the Marketing Cloud Device Co-op.

Both Types of Data Provide Value

Deterministic and probabilistic data compliment each other. By contrast, a device graph that only includes deterministic data gives you a limited view of a person's identity. Without authentication, a device graph cannot tell you about other devices and people who browse your site. Probabilistic data can make these connections and help you reach unauthenticated devices, people, and households.

However, deterministic data is important too. It can, for example, improve probabilistic decision making by removing false links generated in places where probabilistic signals are plentiful and overlapping (e.g., coffee shops, libraries, airports, etc.).
With both types of data, the Device Graph gives you a more comprehensive picture of a person's identity than with either type alone.

**Device Graph Link Structure**

**Link Sharing in the Device Graph**

The **Device Graph** shares deterministic and probabilistic links with different members of the Adobe Marketing Cloud Device Co-op. Link sharing is what makes the **Device Co-op** so powerful. It extends what each member knows about the devices associated with an anonymous person, but only if you've seen at least one of the devices of that anonymous person before.

**Device Graph Summary Review**

Before getting started, let's take a moment to review how the **Device Graph** works. Members of the **Device Co-op** send data to the **Device Graph**. The **Device Graph** uses this data to construct a person's identity from **deterministic and probabilistic links** between devices. As a **Device Co-op** participant, these links provide insight about the relationship between your authenticated users, other users, and their devices. Let's take a look at how this works in the section below.

**Link Sharing Example**

The following example demonstrates the power of link sharing in the Device Co-op. In this example, we have 2 fictitious companies, the News Company and the Finance Company. Both companies are members of the **Device Co-op**. Person A is a consumer who either logs on or browses the websites of each company from multiple devices.
Because Person A has authenticated to the news site with their mobile phone and tablet, the News Company identifies them with a consumer ID. It sends that ID to the Device Graph as a cryptographic hash. The Finance Company has seen these devices before, but Person A hasn't logged on to the site. Consequently, the Finance Company does not know if or how these devices relate to each other or how they are associated with Person A.

Given the cryptographic hash of the consumer ID, the Device Graph recognizes that these devices are related to each other and a particular person. To companies that do not participate in the Device Co-op these site visits would appear to come from separate, random devices. In any case, once the Device Graph has the hashed ID it:

• Knows mobile phone and laptop are linked.
• Recognizes that the Finance Company wants to know if the mobile phone and laptop are linked.

Given these conditions, the Device Graph now shares the link connecting these devices for the News Company with the Finance Company. During this process, the Device Graph duplicates and shares the link from one co-op member to another.
At this point, the **Device Graph** performed its role successfully. Both the News Company and the Finance Company have a clear picture of an identity. They can reach Person A accurately across all their devices.

**Privacy and Link Sharing**

Maintaining consumer privacy and data integrity for **Device Co-op** members is crucial throughout the link sharing process. During this customer identification and link sharing process the **Device Graph** did not:

- Tell the Finance Company that the link came from the News Company.
- Share the customer ID used by one **Device Co-op** member with another.
- Provide any information other than that the mobile device and laptop share a link in common.

**Next Steps**

Reading the documentation on identity, linking, and link sharing should give you a good sense of how the **Device Graph** assembles data internally. As a next step, we recommend taking a look at our documentation that describes how the concept of a *known device* delivers cross-device links to Device Co-op members. See **Known Devices** and **Unknown Devices**.

**Known Devices**

In the Device Graph, we have the concept of a *known device*. A known device is a device a customer uses to interact with your brand.

Contents:

- Supporting Goals with the Known Device
- Device Co-op Goals
- Scale and the Known Device
- Known Devices and Fairness Use Cases

💡 **Note:** In the Adobe Marketing Cloud Device Co-op, terms such as device, person, identity etc. have specific meanings. For example, "device" can refer to physical hardware such as a phone or tablet and the applications that run on that hardware. See the glossary for definitions.

**Supporting Goals with the Known Device**

The known device concept supports a few goals essential to the creation and maintenance of an effective **Device Co-op** program. A known device is one that a **Device Co-op** member knows about from some interaction with a consumer (e.g., a site visit or by using a mobile app). Based on these actions, the **Device Graph** links the known devices of a **Device Co-op** member to devices contributed by other **Device Co-op** members. These links can be **deterministic or probabilistic**. This benefits **Device Co-op** members because they receive:

- More data about their known devices.
- New information about other, linked devices.
The Device Graph will not provide information about device-clusters that a Device Co-op member has not seen.

Device Co-op Goals

Three main goals animate the Device Co-op. These include:

• **Scale**: Share the maximum number of possible links across a variety of use cases.
• **Fairness**: Ensure that each member of the Device Co-op benefits in a manner commensurate with their contributions.
• **Consumer trust**: Maintain and build consumer confidence by making sure the consumer cross-device experience involves brands they already know and trust.

Scale and the Known Device

The following table lists some of the more common ways a device qualifies as a known device. Given these methods, Device Co-op members will almost always have at least 1 known device. This supports the goal of providing maximum scale to all the members of the Device Co-op.

<table>
<thead>
<tr>
<th>Qualification Method</th>
<th>Devices Become Known By or From</th>
</tr>
</thead>
</table>
| Organic              | • From a customer's visit to your site or by using your app. This is qualification from first-party data.  
                        | • By on-boarding customers from a CRM system.                                                         |
| Marketplace          | • Purchasing segment data from Audience Marketplace.                                              
                        | • From purchasing data from a third-party data provider.                                            |
| Advertising          | By winning inventory in an auction and serving an ad to a device. The device becomes a known device if that ad contains an Audience Manager pixel. |

Known Devices and Fairness Use Cases

Members of the Device Co-op get links commensurate with their contributions to the Device Graph. Companies that contribute a lot of devices to the Device Graph receive more links than members who contribute just a few. We
believe this helps make the **Device Co-op** fair for all its members. Let's look at how this works with the large and small use cases described below.

### Brand A: Large Use Case

In this example, Brand A has 100 site visitors each month and starts a new cross-device, brand campaign. For simplicity, assume the **Device Graph** knows all of the visitors to Brand A are linked to 1 additional device. This means Brand A could reach another 100 devices. Additionally, the **Device Graph** contains about 200 devices linked together.

<table>
<thead>
<tr>
<th>Known Devices/Month</th>
<th>Linked Devices Received from Device Co-op</th>
<th>Total Devices for Campaign</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>100</td>
<td>200</td>
</tr>
</tbody>
</table>

### Brand B: Small Use Case

In this example, Brand B has 100 site visitors each month and starts a new cross-device, brand campaign. For simplicity, assume the **Device Graph** knows all of the visitors to Brand B are linked to 50 additional devices. This means Brand B could reach 150 devices. Additionally, the **Device Graph** contains about 1,000 devices linked together.

<table>
<thead>
<tr>
<th>Known Devices/Month</th>
<th>Linked Devices Received from Device Co-op</th>
<th>Total Devices for Campaign</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>50</td>
<td>150</td>
</tr>
</tbody>
</table>

### Unknown Devices

When a person has devices that are not used to interact with your brand, those devices are called unknown devices.

### Unknown Device Categories

There are several ways or categories by which a device may be considered "unknown" to you. These include:

- **First-party visits to other Device Co-op members**: Visits to other **Device Co-op** member sites or advertising to a device does not, by itself, make a device known to your brand.
- **Not tracked ad inventory**: Advertising inventory that is available, but not yet served or ingested does not make a device known to your brand.
- **Consumer opt-out**: To respect consumer desire, devices that have been opted-out are not considered known devices.

Unlike known devices, unknown devices are not linked to other devices or associated with individual people.

### Rules for Setting Known/Unknown Status

The **Device Graph** tries to be inclusive as possible when classifying devices as known compared to unknown. The rules that help determine known/unknown status work in priority order (1 is highest) as shown below:

- **Rule 1**: Is the device opted-out? If yes, then the device is unknown.
- **Rule 2**: Is the device known by *any* method? If yes, then the device is known.
- **Rule 3**: If the previous do not apply, the device is unknown.
Working with Device Co-op Data in Other Marketing Cloud Solutions

**Device Graph** data appears in new features, reports, or additional data in selected Marketing Cloud solutions. These include Analytics, Audience Manager, Media Optimizer, and Target.

### People Metric

The People metric is the count of people (or groups of devices) based on Adobe's Device Graph. You can apply the People metric to identify visitors across their devices in Analysis Workspace.

- **People Metric Prerequisites and Considerations**
- **What Is the People Metric?**
- **How Is the People Metric Calculated?**
- **Using the People Metric with Segments**

#### People Metric Prerequisites and Considerations

<table>
<thead>
<tr>
<th>Prerequisite or Consideration</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Device Co-op**             | To use the People metric, become a member of the *Adobe Marketing Cloud Device Co-op*. The co-op identifies a person’s multiple devices (or Marketing Cloud IDs). Analytics leverages this information to statistically derive the number of people that interact with a brand. The metric is accurate to within 5%.

**Regions:** The Device Co-op is currently available in the US and Canada only. Therefore, when evaluating the People metric, you should apply a segment to your analysis that filters your data for the US and Canada only.

Each week the Device Graph calculates a new version of the co-op and publishes it for use. On Tuesdays, the system collects the latest data and publishes an updated version of the graph. Marketing Cloud solutions then use the latest version of the graph. Specifically for Analytics, the changes are read in on Wednesdays and processing the changes typically takes between 1 and 2 business days.

**Important:** When the graph updates on a weekly basis, it can impact the People metric historically. In other words, historical People counts can change over time as the graph learns and is updated. For example, if you run a report today that counts People last month, and then run the same report in a week after the graph has updated, the historical People count can change slightly.

<p>| <strong>Metric Permissions</strong> | You can use the People metric only if you have been granted access to it. Administrators can <a href="#">customize metrics permissions</a> in the Admin Tools. |
| <strong>Mapping to IMS org</strong> | The People Metric will be enabled for all report suites that are <a href="#">mapped to an IMSORG</a>. |</p>
<table>
<thead>
<tr>
<th>Prerequisite or Consideration</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Analysis Projects / Tools</strong></td>
<td>Use the People metric in <strong>Analysis Workspace</strong>, <strong>Ad Hoc Analysis</strong>, <strong>Report Builder</strong>, and via the API. You can use it wherever you would use the Unique Visitors metric, including Calculated Metrics. For example, create a revenue-per-person metric to replace a revenue-per-unique visitor metric. A <strong>People project template</strong> is available to get started using the People metric in Analysis Workspace.</td>
</tr>
<tr>
<td><strong>Turn on bot rules</strong></td>
<td>Adobe recommends that you turn on <strong>Bot Rules</strong>, especially when using the People metric. When a bot crawls your website, it artificially increases your Unique Visitor count. Removing bot traffic from your report suite provides a more accurate measurement of activity on your digital properties, both in terms of Unique Visitors and People. To do so, navigate to <strong>Analytics &gt; Admin &gt; Report Suites</strong>. Select the correct report suite, and then go to <strong>Edit Settings &gt; General &gt; Bot Rules</strong>.</td>
</tr>
<tr>
<td><strong>Segmentation considerations</strong></td>
<td>When you use segments with the People metric, the metric reporting may be dramatically lower than expected. See <strong>Using the People Metric with Segments</strong>.</td>
</tr>
</tbody>
</table>

**What Is the People Metric?**

The People metric is an Analytics reporting metric that helps you attribute devices to people. It provides a people-based view of marketing, letting you measure visitors' activity across all of their devices. Think of it as a de-duplicated version of Unique Visitors, and you can use the People metric for analysis where you previously used Unique Visitors.

**Devices Are People**

Before the People metric became available, a person (for example) might visit your site and engage with a campaign or brand on three different devices and make a purchase, even doing so within minutes. Depending on your implementation, Analytics might report each device as a unique visitor and attribute $10 to three devices in a $30 purchase.

The People metric lets you accurately attribute that $30 purchase to one person:

![Safari on Desktop](Image) ![App on iPhone](Image) ![Android on Tablet](Image)

**People Metric**

= 1 Person, $30 Revenue

**Increased Accuracy in Reports**

The People metric enables you to think of multiple devices as a single entity. The following Analysis Workspace project shows increased accuracy comparisons between Unique Visitors reporting and People reporting:
Compare People and Unique Visitors side-by-side:

**Definitions**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>People</td>
<td>The People metric is based on the idea that consumers interact with your brand using multiple devices. The more you slice or segment your data, the smaller the chance that the same person used multiple devices within that slice of data.</td>
</tr>
<tr>
<td>Unique Visitors</td>
<td>For example, the more you slice your data by date or time, the smaller the difference between People and Unique visitors will be. If you want a good understanding of the overall impact of the Device Co-op, Adobe recommends using a date range of the last 90 days</td>
</tr>
<tr>
<td>Compression</td>
<td>Using a simple calculated metric you can see how much smaller the People metric is as a percentage of Unique Visitors. Click on the info icon next to &quot;Compression&quot; in the table above to see how to create this metric.</td>
</tr>
</tbody>
</table>
How Is the People Metric Calculated?

The following image shows how the People metric is calculated and how it can decrease over time for the same report date range in the past.

In this example, assume there is a fixed set of visitors. If you run a report for a fixed time frame in the past, it displays a fixed set of visitors. If the Device Graph outputs the data shown on the left graphic in week 1, that results in 90 People. A week later, after the next run of the Device Graph, new information is taken into account. If you run the same report that you did a week ago, the number of people has gone down to 84. History has changed because the Device Graph provided new information about which devices should be grouped together.

Using the People Metric with Segments

When you use segments with the People metric, the metric results may be dramatically lower than expected. This issue occurs because, in segmentation, there is no person container. Segmentation uses the Visitor container, which is the highest-level container in the definition and is based on the device, not on the person.

This issue occurs primarily when stacking segments with the People metric.

Stacking segments creates a new segment that represents the combination of the segments. Stacking segments occurs whenever you:

• Place a segment on top of another segment in Analysis Workspace. (These are automatically joined using the And operator.)
• Apply a single segment that contains the *And* operator.
• Apply a segment at both the project level and table level.
• Use a virtual report suite with another segment.

For example, assume that you stack the following segments on the People metric:

* Campaign = Spring Promotion
* Site Section = Product Overview

Only the number of people who qualify in both segments *using a single device* are counted. (The People metric does not display the number of qualifying people across devices.)

Also, using the *Or* operator is not recommended in this situation. Doing so would produce a count of people who saw one or the other, with no way of counting how many people qualify for both segments.

See *Building Segments* in the Segmentation help for more information.

**Device Types**

The Device Co-op and People metric work best in Adobe Analytics when your report suite contains data from multiple device types. For example, combining web and app data in the same report suite makes the People metric more powerful and effective. The more device crossover in your data, the greater the chance that multiple unique visitors will be grouped together as a single person.

![Device types chart](image)

**Marketing Cloud ID Service Coverage**

The Device Co-op requires your digital properties to be instrumented using the Marketing Cloud ID (MCID) service. If the data in your report suite contains a significant number of visitors without an MCID, the effectiveness of the Device Co-op and the People metric is diminished.

**Apply the People metric to a project**

Apply the People metric to an Analytics Workspace project in Adobe Analytics.

In Analysis Workspace, create a *project*, then drag the **People** metric to the project table:
Important: See Using the People Metric with Segments for important information about how segmentation affects the People metric.

Audience Manager: Profile Link

Device Graph data is available in Profile Link as a merge rule option. A merge rule lets you control the type of data Audience Manager uses for segmentation.

See the Profile Link documentation for more information.

Target: A/B Tests, Multivariate Tests, and Experience Targeting

Learn how to use Device Co-op data in Adobe Target activities.

You can use Device Co-op data in A/B tests, Multivariate (MVT) tests, and Experience Targeting activities. The Device Co-op option is available during activity creation on the Goals & Settings page in the Target three-step guided workflow.

You cannot use Device Co-op data in Automated Personalization activities, Recommendation activities, or activities using Adobe Analytics as the reporting source (the Target and Analytics integration, known as A4T).

Note: Ensure that you have the required version of mbox.js. You can use any version of at.js. For more information, see Membership Requirements.

This section contains the following information:

• Deliver Relevant Content Regardless of the Device
• Analyze Target Activities by People Instead of by Visitors
• Use Device Co-op Data Per Activity
Deliver Relevant Content Regardless of the Device

Marketers want to deliver the most relevant experience to each visitor, regardless of the device the visitor is currently using to interact with their company or brand.

Users interact with the same company or brand from many different devices: work laptops, home computers, iPads, iPhones, various browsers, and so forth. If you can't recognize that each specific device or browser is being used by the same person who has previously interacted with your brand on another device or browser, you can't deliver a consistent and targeted experience to that person.

With the Device Co-op, a user's various devices can be identified as being used by the same user. When that user sees a page with Target activities—either activities or targeted content—Target can ensure that the user sees the same experience seen on another device.

Analyze Target Activities by People Instead of by Visitors

Marketers want to analyze Target activities by “people” instead of “visitors.”

Each person is likely interacting with the same company or brand across devices and browsers, but without the Device Co-op, each individual device or browser is considered a separate “visitor” in Target reports.

Viewing reports by individual devices and browsers inflates the “visitor” count to a higher number than the number of different people interacting with the company or brand. These people typically convert only once across these various devices and browsers, so the conversion rate will be lower than in reality because more “visitors” will be counted for a single conversion.

With the Device Co-op, content delivery and reporting is done at the “people” level, so the reports accurately show how many different people saw the activity and how many of the people converted.

Without Device Co-op data, you might determine that a particular activity is the winner; however, because reporting is more accurate with the Device Co-op, another activity might actually have a higher conversion rate, and, therefore, be the winner.

For more information on this concept, see People Metric.

Use Device Co-op Data Per Activity

Marketers can choose to use the Device Co-op data per activity. Certain Target activities might not be appropriate for Device Co-op data, such as:

- Specific content appropriate for users on an iPad.
  - Users who first view an experience on an iPad, will continue to see that experience on their home computers.
- An interest rate offer available only for a strict segment of visitors.
- Products allowed to be advertised only in a specific state (for example, an insurance policy with license restrictions).

When marketers create audiences in Target, they are alerted if the audience is not appropriate for Device Co-op data-enabled activities. Appropriate audiences include all visitors, new visitors, and returning visitors.
Consumer Opt-Out Tool, Privacy, and the Device Graph

See the Device Co-op Privacy Control site for information about how the Adobe Marketing Cloud Device Co-op protects consumer privacy.
Glossary of Device Co-op Terms

Adobe Marketing Cloud Device Co-op

The program is a group of brands, all Adobe customers, who have agreed to share data about which devices consumers use so as to better identify an individual across devices and deliver more meaningful, consistent experiences. The technology that results will be a core service of the Marketing Cloud and will help marketers identify customers/consumers consistently across channels, solutions, experiences and devices.

Deterministic Linking

Links a device to a person based on authentication (e.g., a logon by a person on a device). See Deterministic and Probabilistic Links.

Device

In the context of the Device Graph, device has a dual meaning. First, a device is a hardware device such as a tablet, phone, desktop on which other devices run. Second, a device is a mobile, desktop, or other interaction point where a person engages with a brand. Currently, a unique Marketing Cloud ID is assigned to a person for each device they use. For example, the same person could engage with a brand from Chrome on their desktop, Firefox on their laptop, and an app on an Android phone. In this case, Chrome, Firefox, and the app are all considered “devices.”

Devices per Person

See Device.

Device Advertising ID (DAID)

An ID unique to each hardware device, to be used for advertising purposes. Usually provided by the manufacturer of the device or device operating system (e.g., IDFA, GAID, Roku ID, Playstation ID).

Device Graph

The Device Graph is the set of all people and their associated devices. The Adobe Marketing Cloud Device Co-op generates the Device Graph.

Linking

Grouping devices together through their touch-points.
Person

Probabilistic Linking

Links a device to a person algorithmically, based on characteristics such as browsing behavior, IP address, operating system. See *Deterministic and Probabilistic Links*. 
FAQ

Descriptions and answers to common questions about the Identity Services Cooperative and the Identity Graph.

What is the Device Co-op?

The Device Co-op is a digital cooperative for participating Adobe Marketing Cloud customers to work together to better identify their consumers across devices.

What technologies are used in the Device Co-op?

The Device Co-op consists of two technologies:

- **Marketing Cloud ID Service**: This core service of the Adobe Marketing Cloud provides a common ID for identifying consumers consistently across solutions, channels, experiences, and devices.
- **Adobe Marketing Cloud Device Co-op**: This technology links different devices used by a consumer or household.

How does the Device Co-op work?

As brands pitch in their piece of the cross-device puzzle through anonymized logins and site visits, Adobe processes this data to form device clusters which represent a group of devices used by an unknown person. These device clusters are given to Device Co-op members, and used to provide their consumers with a better, more consistent cross-device experience.

How does the Device Co-op link devices?

See *Deterministic and Probabilistic Links*.

What data do participants provide Adobe?

See *Consumer Opt-Out Tool, Privacy, and the Device Graph*.

What data is shared between Device Co-op members?

See *Link Sharing in the Device Graph*.

Can a Device Co-op member see links to devices they have never seen before?

No. Device Co-op members can only gain data based on devices that have visited one of their brand’s web properties. See *Known Devices* and *Unknown Devices*.

Will I need to share any of my company’s marketing information?

No. Brands only supply anonymous device data to Adobe.

Does Adobe use personally identifiable information (PII) in the Device Co-op?

No. All personally identifiable information is hashed before it’s brought into any Adobe system, so your customer’s information is never transferred to Adobe systems.

Do smaller brands who contribute less device data to the Device Co-op get more value than what they put in, compared to their larger counterparts?

No. All members of the Cooperative get back value relative to what they put in. For instance, if a brand contributes 10,000 devices they will be able to receive additional linked device information associated with those 10,000. Looking at the big picture, this contribution may seem minimal; but as more and more brands of all sizes join, the aggregated contribution is significant, and will provide the missing link for many devices that many other, perhaps larger, brands are looking for. See *Known Devices and Fairness Use Cases*.

How will Adobe manage IP addresses if some countries consider an IP address as personal information?
The Device Co-op is first being released in the United States and Canada where IP address is not considered to be personal information. When the Cooperative is released in countries where IP address is considered to be personal information, the IP address will not be used.
Marketing Cloud Device Co-op Release Notes

Feature releases, updates, or changes to the Device Co-op.

These changes are also captured in the Marketing Cloud Release notes. See the previous release notes for older Marketing Cloud announcements.