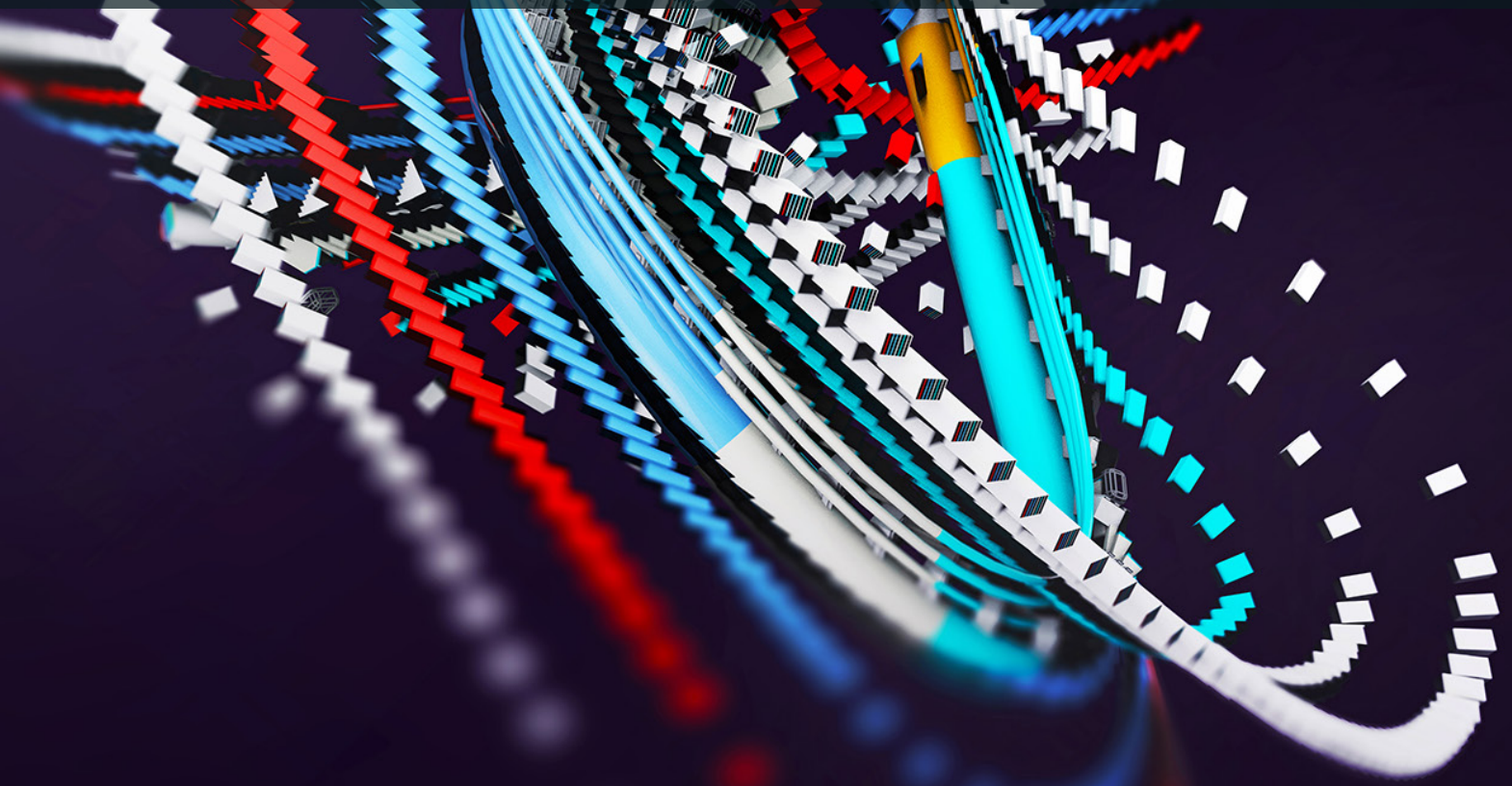
Using Adobe Analytics and Shared Audiences with Adobe Target

student workbook



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Using Adobe Analytics and Shared Audiences with Adobe Target

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Using Adobe Analytics and Shared Audiences with Adobe Target: Course Introduction

Welcome to the **Using Adobe Analytics and Shared Audiences with Adobe Target** student workbook. You should use this manual in conjunction with the **Using Adobe Analytics and Shared Audiences with Adobe Target** training course, not as a standalone training resource. However, once you come to class, return often to the information in this manual, as well as the online training resources, to become increasingly expert at using Adobe Target.

This course provides hands-on instruction for users interested in leveraging the People core service, Marketing Cloud ID (MCID) service, Marketing Cloud audiences, and Analytics as the Reporting Source for Target (A4T) in order to inform their optimization activities using a more complete understanding of their visitors. Students will learn how to use Adobe Analytics reporting to analyze Target activities and how to use the People core service (including Audiences and Customer Attributes) to achieve a complete, 360-degree understanding of their customers to drive more relevant experiences for better engagement and improved ROI. This course is suitable for all roles who use Adobe Target.

This course assumes users already have a fundamental working knowledge of Adobe Target and Adobe Analytics, including how to plan, build, and execute optimization activities. This course also assumes a general understanding of A/B testing and site optimization, as well as how to correctly read and interpret test results.

The following solutions are mentioned in this course with no prerequisite knowledge required:

- Adobe Dynamic Tag Manager (DTM)
- Adobe Audience Manager (AAM)

This course is not designed to give you information about every button, link, and option in the Adobe Target interface, nor in the other interfaces that will be discussed. Instead, you will receive explanations and examples to help you walk on your own in situations you will likely face as you strive to achieve a unified view of visitors across the Marketing Cloud. Please continue to leverage your consultants' expertise for any questions or scenarios that go beyond the topics covered here.

Intended Audience

This course is intended for frequent users of Adobe Target, including both strategists as well as subject matter experts (SMEs). Those interested in this course may have roles that involve optimization, digital strategy, or eCommerce.

- A strategist is a businessperson who uses the tool or project manages the use of the tool. If you are a strategist, you may go by one of the following titles: Director of Digital Strategy; Director of Optimization; Director of Marketing; Director of Product Marketing, eCommerce, or Product Management; or Web Producer.
- A subject matter expert (SME) is a business or technical person who will be the primary campaign implementer. If you are an SME interested in Adobe Target, you may have the title of Marketing Associate, Marketing Coordinator or Director, eCommerce Marketing Manager, Campaign Manager, Marketing Analyst, Content Manager, or Web Analyst.

Course Objectives

After completing this course, learners will be able to:

- Describe the capabilities that enable a unified view of customers across the Marketing Cloud, including Analytics as the Reporting Source for Target (A4T) and the Marketing Cloud ID (MCID) Service
- Create A4T tests
- Share and use historical audiences from Adobe Analytics to the Marketing Cloud
- Share and use real-time audiences from the Audience Library and Audience Manager
- Enrich the customer data available for targeting, segmenting, and reporting, by using customer attributes
- Choose the best solution or location for building audiences
- Implement the Marketing Cloud ID service and A4T
- Troubleshoot portions of the Marketing Cloud ID service and A4T

Overview

Overview

This chapter provides an overview of the Marketing Cloud ID Service, People Core Service, and Analytics as the Reporting Source for Target (A4T).

Objectives

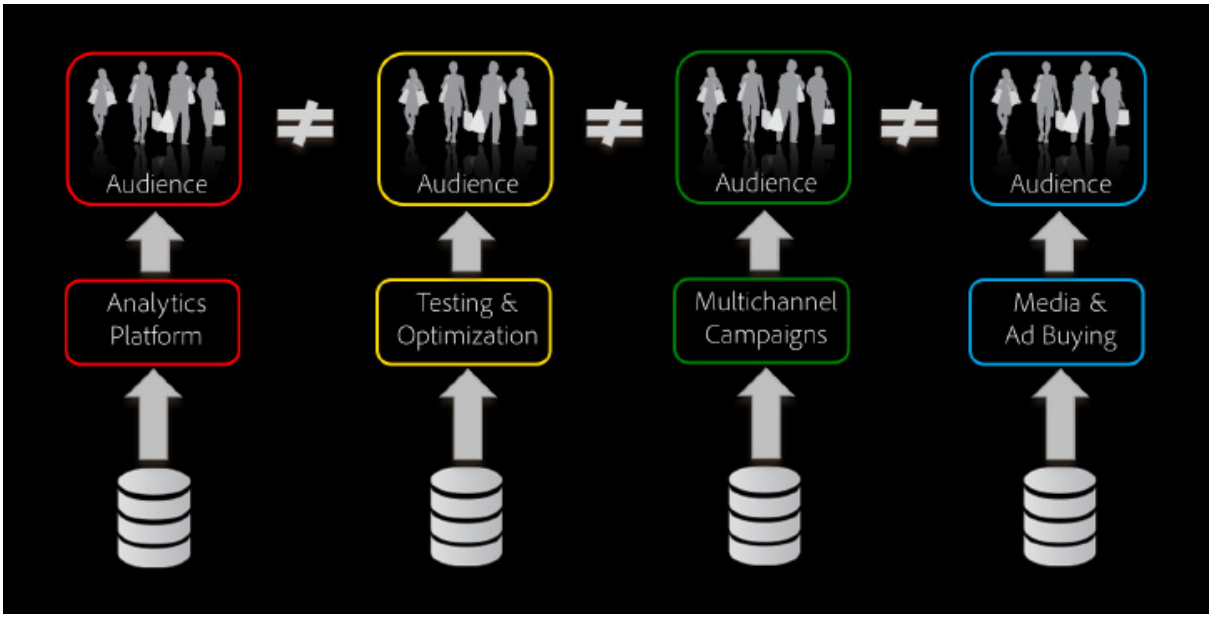
By the end of this chapter, you will be able to:

- Describe the People core service
- Define the Marketing Cloud ID (MCID) Service and its benefits
- Describe A4T and its benefits
- Describe audience sharing
- Define audience terminology

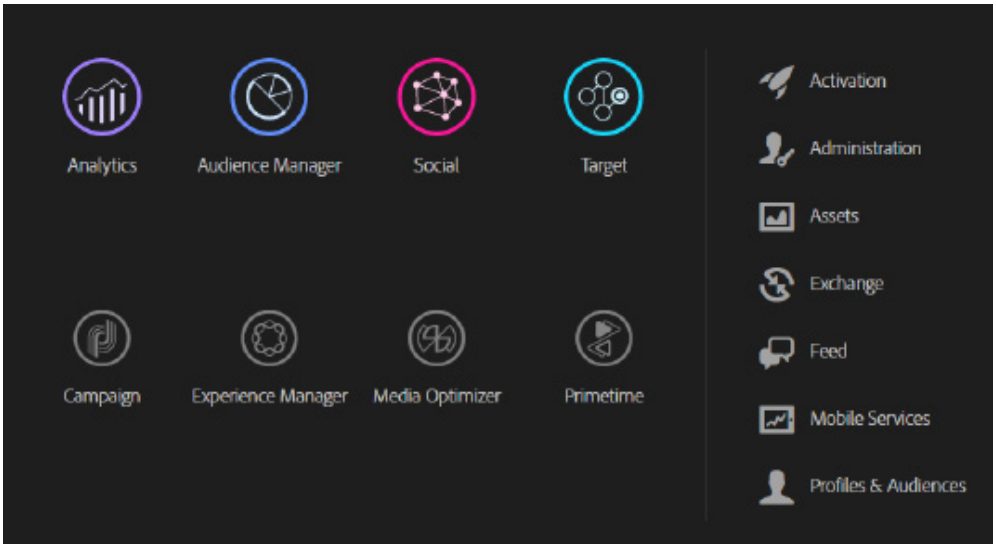
Fragmented Data and Adobe's Solution

Data about customers is found in systems across the globe, throughout the internet, and through commercial providers.

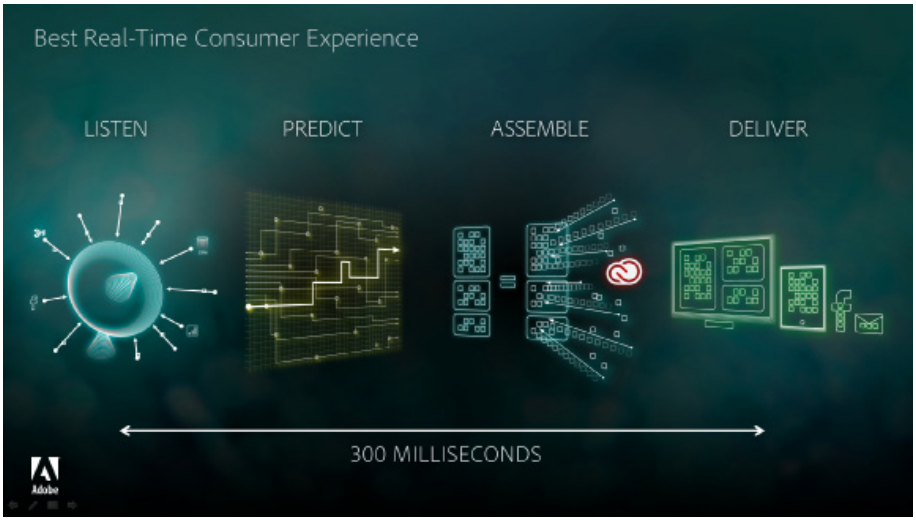
Because marketing efforts and technologies in the industry were largely performed in silos for many years, many data-driven marketing workflows are fraught with inefficiencies and duplicative effort.



Adobe customers, in their implementation of Adobe's digital marketing services, have an extremely robust set of data that should be leverageable for digital marketing workflows that include targeting workflows, which involve changing the experience of the visitor to make it more resonant with them. Recognizing the overlapping technologies in play throughout the marketplace, Adobe developed several core services to remove those overlaps and streamline and align the flow of data and content between Adobe solutions. These services, built with REST APIs in mind, allow each of the solutions to leverage that core service within their respective solution.



Adobe's Marketing Cloud is the most comprehensive and integrated marketing solution available, enabling marketers to measure, personalize, and optimize marketing campaigns and digital experiences for optimal marketing performance. With its complete set of solutions, including Adobe Analytics, Adobe Audience Manager, Adobe Experience Manager, Adobe Social, Adobe Target, Adobe Campaign, Adobe Media Optimizer, and Adobe Primetime, marketers can combine data, insights, and digital content to deliver the optimal brand experience to their customers.



Adobe aims to deliver an ideal real-time consumer experience. It begins with listening to streams of data, understanding who the visitor is, and collating data from different sources into a real-time profile. It involves taking that information, and based on what we know about that visitor, predicting what they will react positively to, and what kinds of offer will resonate with them. Then, using the assets of the Creative Cloud and Adobe's experience delivery capabilities across Adobe Target and other Marketing Cloud solutions, we assemble the offer and deliver it to the user's device, in the right channel—and do all of this within milliseconds.

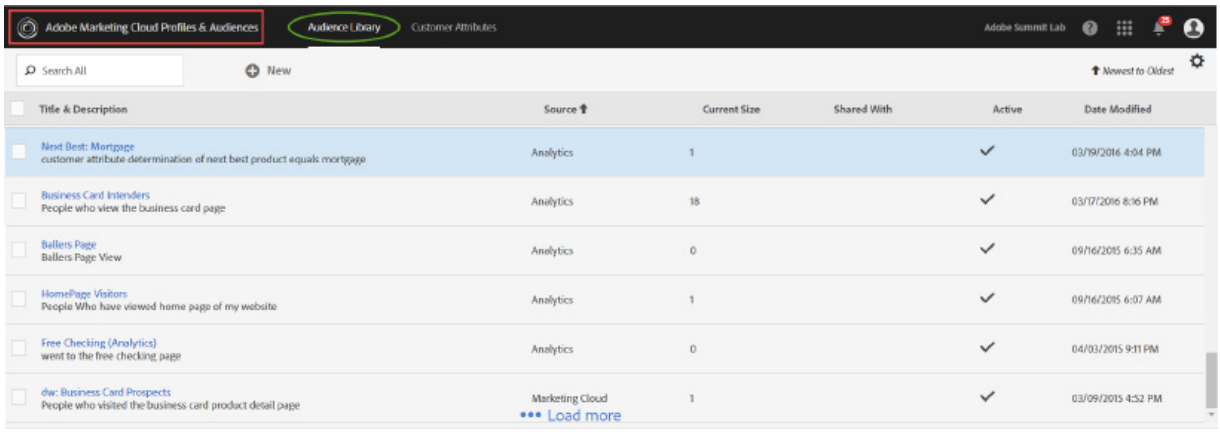
The People Core Service

The People core service (formerly Profiles & Audiences) is a core service that unites data collection and analysis with testing and optimization, making data and insights actionable. Marketers use the People core service to:

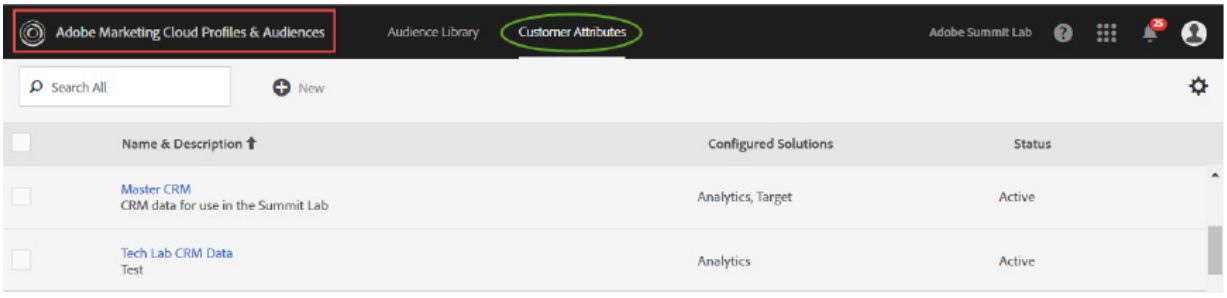
1. Identify people uniformly across the enterprise
2. Manage audiences consistently across channels and solutions
3. Drive further insight and personalization with owned data

The People core service delivers these benefits through Audiences and Customer Attributes.

- **Audiences**. Through the Audience Library, you can create and manage collections of visitors to share across the Marketing Cloud.

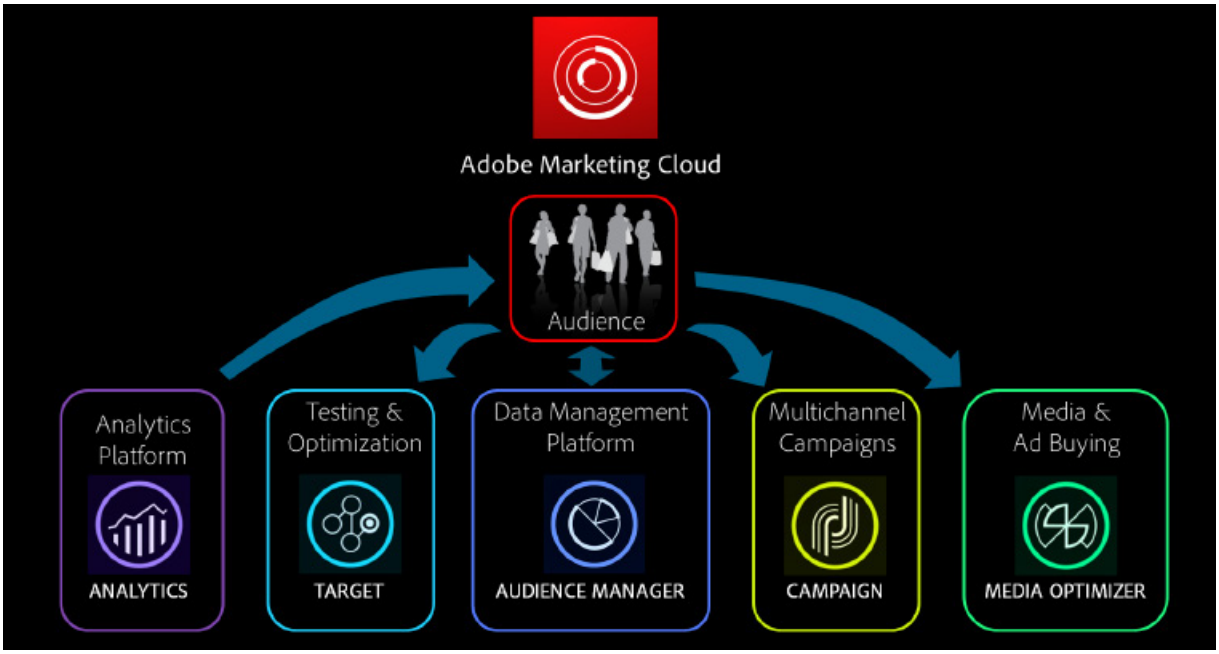


- **Customer Attributes**. Leverage enterprise customer data from your customer relationship management (CRM) database in order to enrich the set of information about your visitors.



Marketing Cloud ID: the foundation of the People core service

At the core of People is a common identification framework called the Marketing Cloud ID service. This service assigns a unique identifier that can be used across solutions to identify a person. When companies implement the ID service, each Marketing Cloud solution will include a common visitor ID, known as the Marketing Cloud ID (MCID), in addition to their own solution-specific identifiers.



The Marketing Cloud assigns a common visitor ID (MCID) across solutions.

Instead of replacing the IDs already present in Target, Analytics, or any other solution, the People core service uses a new one, supplied by the Marketing Cloud ID service. This bestows the benefit of unified visitor identification without having to relearn everything about existing visitors; implementing this integration does not involve a sacrifice of collecting information from scratch, because it augments an existing dataset instead of replacing it.[1]

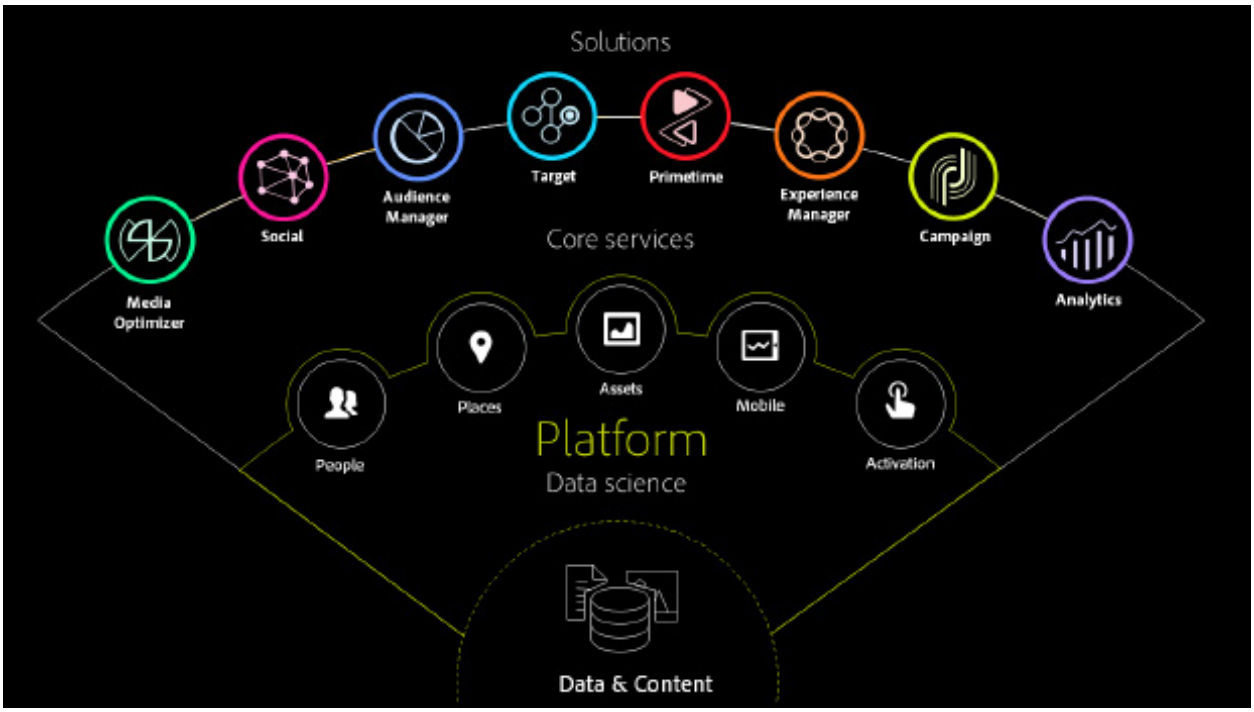
The Marketing Cloud ID Service (MCID) has real-time accessible components that can be used for workflows across the solutions of the Marketing Cloud. Here is a high-level overview of the system.

As a consumer interacts with your digital properties through their devices…

- Tags on websites and calls from apps pull data into Adobe's solutions. This is an over-simplification of the data collection process, but the point is tags are collecting data from your digital properties. That data is captured in a real-time shared profile, which is a key component of the Marketing Cloud ID Service. The MCID enables a set of data on each visitor that is real-time accessible and shared between the solutions of the Marketing Cloud.

1Analytics behaves differently from other solutions in that it does use the MCID as its primary ID for new visitors, once the Marketing Cloud ID service is successfully deployed.

- As the visitor interacts with the digital property, Creative Cloud content can feed into the solutions to deliver an experience back to the consumer.
- When you combine real-time audience data with enterprise data, third-party data, and partner data, the result is an extremely powerful, actionable profile that can be leveraged across digital marketing activities.



The Marketing Cloud consists of eight solutions with their workflows, data collection, and capabilities. Underlying that, several core services tie these solutions together. The "People" core service (formerly Profiles & Audiences) delivers a unified understanding of visitors across the Marketing Cloud so marketers can have more informed, impactful interactions with their customers. Data, Content, and APIs undergird these core services. The ability to bring third-party data and applications into the Marketing Cloud platform completes the capabilities and visibility into the customer.

Seamless Workflows to Better Engage with your Customers

The Marketing Cloud ID Service enables you to leverage your data set in order to create a single, actionable view of customers. It allows the delivery of contextually relevant and personalized content across channels in real time. These audiences are distributable to various solutions of the Marketing Cloud. This course focuses on the way Adobe Target uses the MCID; however, note these audiences are accessible to other solutions as well, including Adobe Audience Manager (AAM) and Adobe Analytics (both of which are also mentioned in this course).

To understand how this could all work together, consider the following example. Suppose you are a housewares retailer. Suppose your analytics team notices a large uptick in sales of high-end coffee grinders, and they narrow in on a group of hipsters from San Francisco who are driving that difference. Based on this information, your marketing team decides to target some hipster-appealing content, such as hempseed oil, to this group. Within Adobe Analytics, they create and share an audience of "SF hipsters" to the Marketing Cloud. The "SF hipsters" audience is then picked up by an optimization manager, who creates a Target activity to offer the specialized hempseed oil to that specific segment of the population.

In other words, users may be using Analytics when they discover or segment an interesting group of people. As a result, they may create a segment from that solution's workflow, share the segment to the Marketing Cloud, and use that audience to target an activity in Target.

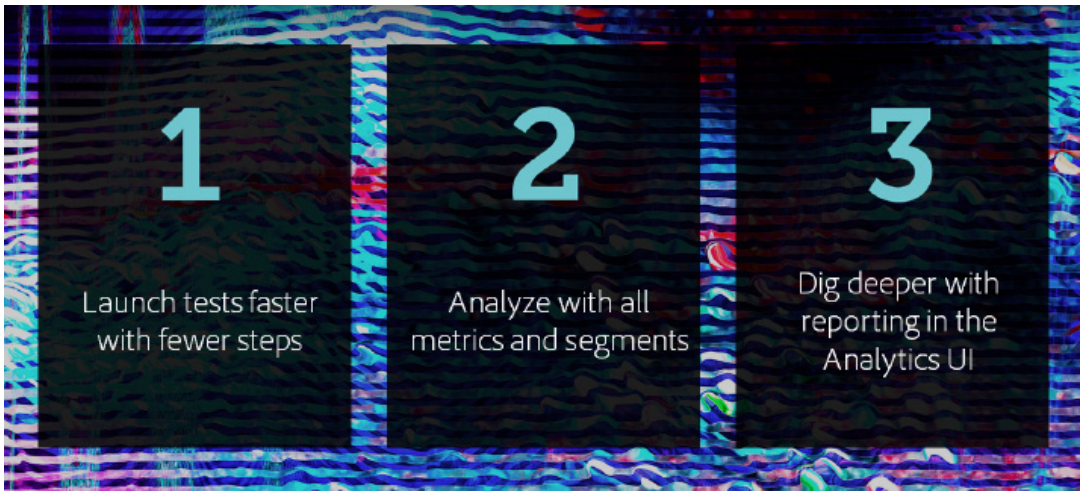
Keep in mind that this unified view of customers and prospects—these Marketing Cloud audiences—may not only originate in Analytics, but may also be derived from Audience Manager using behavioral data from specific Marketing Cloud solutions and third-party systems, such as customer relationship management (CRM), enterprise resource planning (ERP), and even transactional or payment systems.

Summary of the major takeaway points regarding the People core service:

- Use audience data for real time "last-millisecond" targeting and personalization
- Leverage a single visitor ID (MCID) for a cohesive view across all Marketing Cloud solutions
- Share historical audiences from Analytics to the Marketing Cloud and select them in Target
- Create and manage Marketing Cloud audiences in the user-friendly Audience Library interface
- Easier implementation of code libraries for data collection across all Marketing Cloud solutions
- Create Marketing Cloud audiences in Audience Manager and Analytics for consumption in Target

Benefits of Analytics for Target (A4T)

Most Adobe customers who have the People core service also have Analytics for Target (A4T). A4T enables you to leverage Adobe Analytics as a reporting source in Adobe Target to drive the analysis of your optimization program. This means you can view and analyze the performance of your Target activities directly in Analytics—where you can use capabilities native to Analytics, such as download, sharing, dashboarding, and advanced reporting capabilities—or you can view Analytics-driven reports within the Target interface. Enabling Analytics-driven Target activities confers benefits over traditional Target activities driven solely by Target data.



1. **You can launch tests faster**. Using the integration, you are no longer required to set up all segments or metrics that you might want to look at in a report, prior to running the test. The reality is that it may be challenging to ensure you set up all segments and metrics you may only later realize you are interested in analyzing. Removing that requirement simplifies and reduces the steps from start to finish of launching a test.
2. **You can think bigger**. Analytics segments and metrics are now visible in Target, alongside Target audiences and metrics. So you can think beyond the audiences and metrics that you previously focused on, when those factors were limited to Target alone.
3. **You can dig deeper in your results using Analytics reporting**. After a test has run, you can apply any segment or metric you have access to in Analytics and use it for Target activity analysis. You can apply any Analytics segment present in your account or that you create to activities within Target. You can even create these segments *after* the test runs and apply them retroactively to the test. Using A4T, the marketer can apply Analytics' powerful analysis capabilities to evaluate the effectiveness of Target campaigns and reveal actionable insights regarding their customer base.

DID YOU KNOW: Instead of a page-level integration between Target and Analytics, which could result in data variance between the solutions, A4T uses a server-to-server call between the solutions to send campaign and experience information to Analytics.

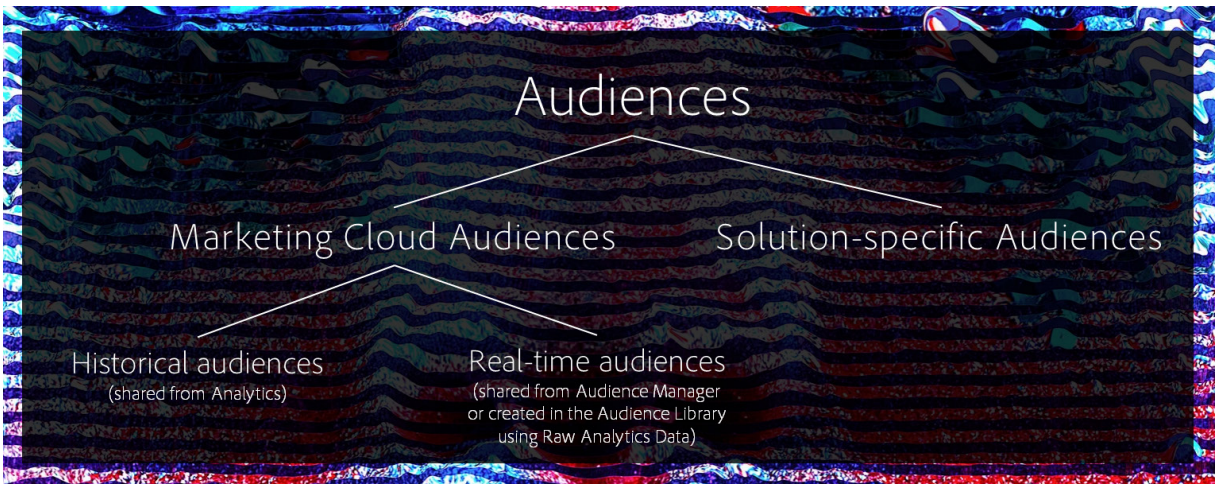
Benefits of the Marketing Cloud ID Service

Here are the high-level benefits of using the MCID framework.

- Instead of handling different visitor IDs for each Marketing Cloud solution, which may be challenging to unify, the MCID service enables a common visitor ID that can be used to stitch data together across solutions.
- With the legacy integration, it was necessary to wait for the next page to load in order for the latest information about a visitor to be available for the purposes of targeting. But the MCID service allows audiences to be matched in either real-time or next-call, which means you can generate a relevant, personalized experience much more rapidly.
- The MCID moves you from siloed, solution-specific audience libraries to a shared Audience Library. This lets you share segments from multiple solutions and aggregate and manage them in a single, visual location.
- The MCID enables
  - Audience Sharing (covered in this course)
  - Analytics for Target (covered in this course)
  - Video Heartbeat (not covered in this course. For more information, please reference Online Help.)

Terminology

An "audience" is a group of visitors or customers. They may be **Marketing Cloud audiences** or **solution-specific audiences**.



Audiences may be divided into two main types:

- Marketing Cloud Audiences
- Solution-specific Audiences

Solution-specific Audiences are those that are created within a particular solution such that their scope remains within that solution. For example, an audience created with Target is available for use within Target, but will not be visible or actionable beyond Target.

Marketing Cloud Audiences are those that are created and shared such that their scope extends to other solutions within the Marketing Cloud. For example, an audience created within Analytics and shared to the Marketing Cloud may be used by other solutions, such as Target. Marketing Cloud Audiences are enabled by the People core service.

Marketing Cloud Audiences are the focus of this training, and they are classified as follows:

- Historical audiences
- Real-time audiences

Historical audiences are those that are shared to the Marketing Cloud from Adobe Analytics.

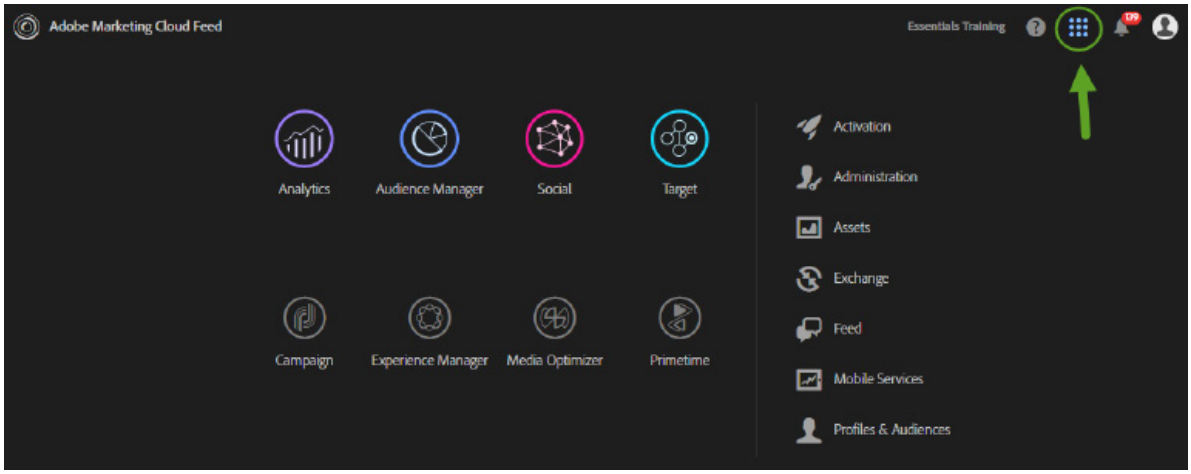
Real-time audiences are those that were either shared from Audience Manager to the Marketing Cloud, or created in the Audience Library using Raw Analytics Data.

We will learn more about Marketing Cloud Audiences throughout this training session.

Exercise 1.1
Log in to the Marketing Cloud and Adobe Target

Instructions: Follow these steps to access the Marketing Cloud audiences and Adobe Target. Be sure to answer the questions at the end of the lab. You may compare your answers with the solutions provided at the end of the chapter. (15 min)

1. Navigate to: http://marketing.adobe.com
2. Log in using the credentials supplied by your instructor.
3. Click to access the Marketing Cloud.



4. Click **Profiles & Audiences**, which provides access to the People core service.
5. Verify you can see both the Audience Library as well as Customer Attributes.
6. Return to the Marketing Cloud interface by clicking **Back** in your browser.
7. Click to access Adobe Target.
8. Verify you can see **Activities**, **Audiences**, and **Offers**.
9. Answer the following questions, then compare your answers against the solutions provided at the end of the chapter.
   a. What is a Marketing Cloud audience? Define it.
   b. Where in the user interface can you view your Marketing Cloud audiences?
   c. What are the two types of Marketing Cloud audiences? Name and define them.

Solutions to Exercise

Solutions to Exercise 1.1
Log in to the Marketing Cloud and Adobe Target

9. Answer the following questions, then compare your answers against the solutions provided at the end of the chapter.
    a. What is a Marketing Cloud audience? Define it.
    Marketing Cloud audiences are those that were shared from a solution, such as Analytics or Audience Manager, or were created in the Audience Library.
    b. Where in the user interface can you view your Marketing Cloud audiences?
    Profiles & Audiences > Audience Library
    c. What are the two types of Marketing Cloud audiences? Name and define them.
    Historical audiences are those that were shared from Analytics. They are saved as lists of IDs.
    Real-time audiences are those that were shared from Audience Manager or created in the Audience Library using Raw Analytics Data. They are saved as sets of rules.

Using Analytics as the Reporting Source for Target

Overview

In this chapter, you will see how Adobe Target and Adobe Analytics work together. You will use Analytics as a Reporting Source to build an A/B test activity. You will also learn how to view those activity results in Adobe Target as well as how to view them in Analytics.

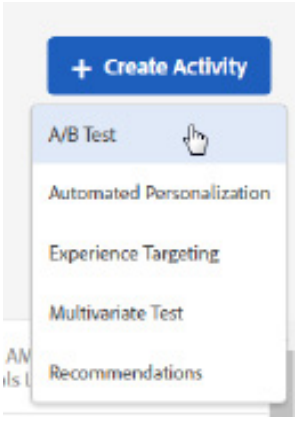
Objectives

By the end of this chapter, you will be able to:

- Create and launch a Target activity that uses Analytics for reporting (an A4T activity)
- View the results of an A4T activity
- Explain considerations regarding A4T

Creating A4T Activities

In this section, we walk through the steps for creating a Target activity that uses Analytics for analysis. As a reminder, this course assumes general familiarity with Adobe Target, including a foundational understanding of how to create activities. As such, the steps outlined here focus on the differences in creating an A4T activity versus one that uses traditional Target calls to track data.



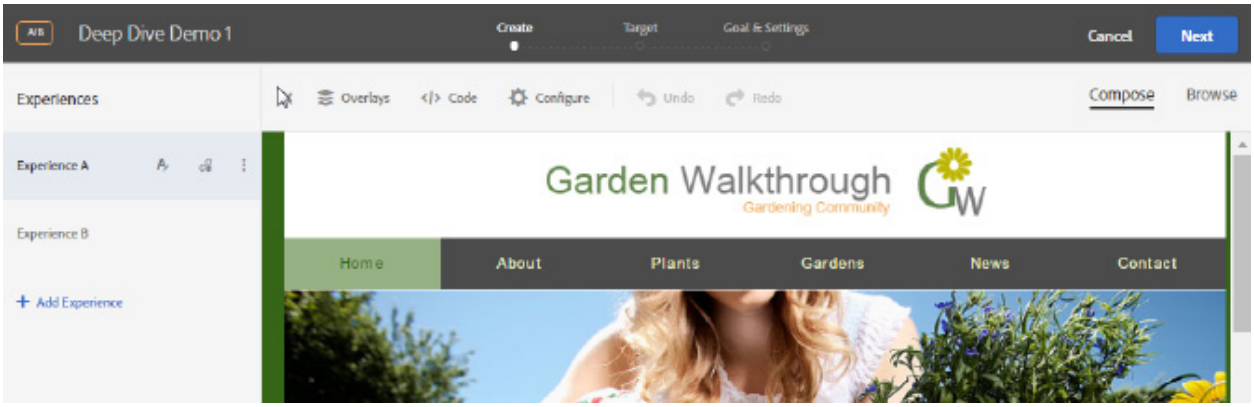
Creating an A4T activity begins the same as creating a Target A/B activity. Click Create Activity > AB Test.

Note, with the A4T integration in place, you can still create an A/B test using your Target data (by selecting "A/B Test" and then specifying Target as the reporting source). However, at an account level, it is possible your company was configured so only the Analytics option is shown. This simplifies processes and ensures consistency for you, within your own team.

Let's examine the key steps in configuring an A4T A/B test.

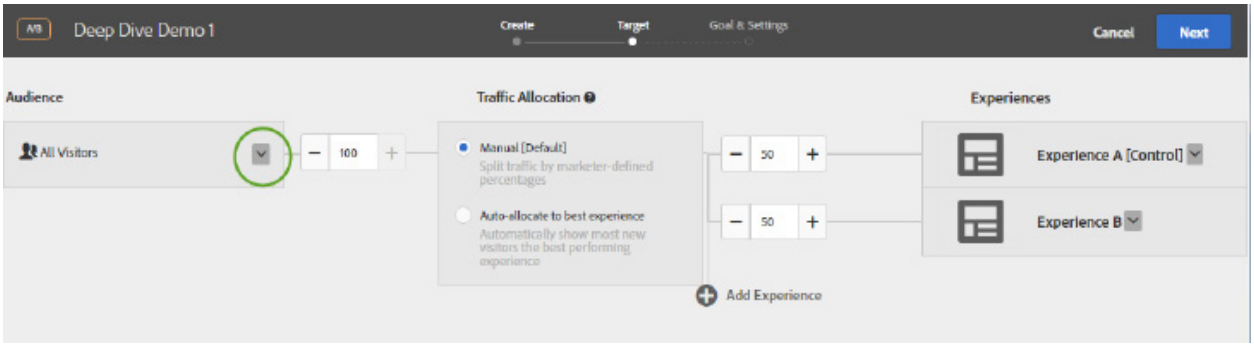
Step 1: Create

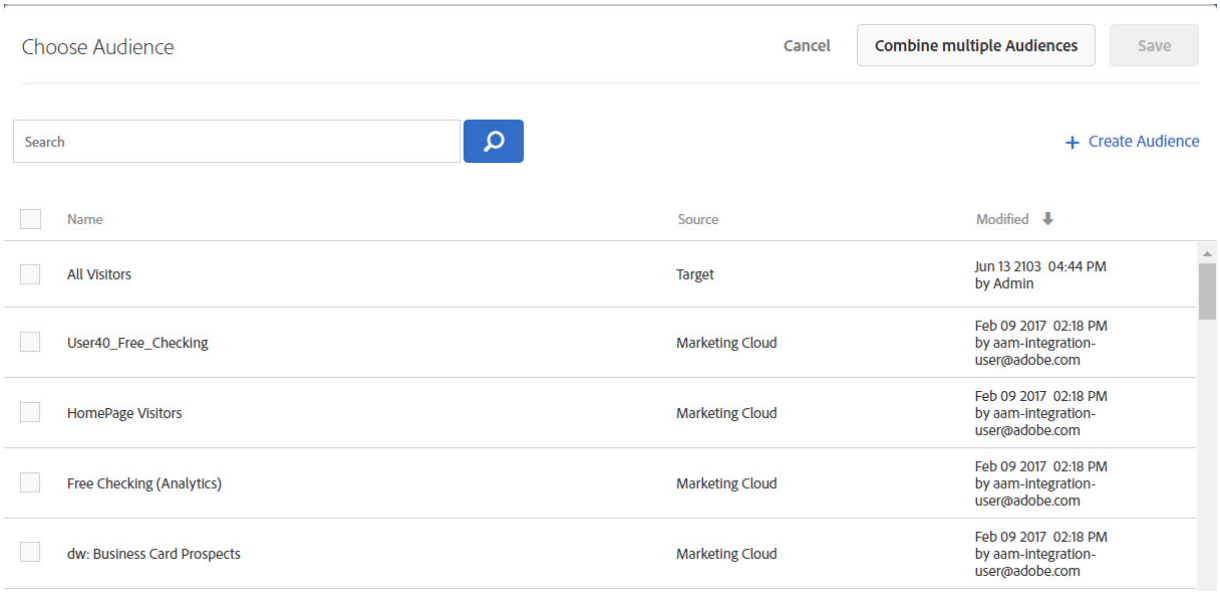
After clicking **A/B Test,** you are taken to the first step of the process, the **Create** step. In this step, define your experiences as you would with a traditional A/B Test.



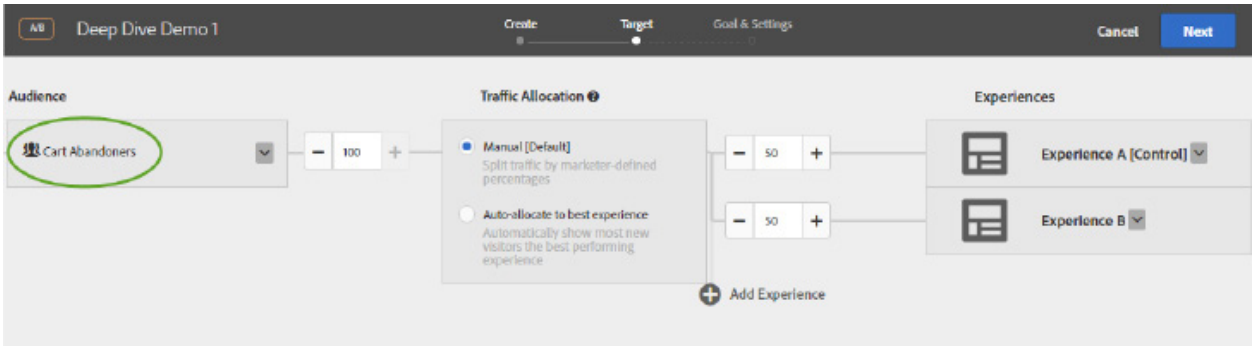
Step 2: Target

The **Target** step looks exactly the same as when you create a Target-based A/B test. Note this is where you can use Marketing Cloud audiences. When you click to choose an audience for targeting…





... you are presented with the list of audiences available to you. In this particular example, the audience at the top of the list is available within Target (as denoted by Source = Target), but is followed by several that were shared from the Marketing Cloud (from Analytics, Audience Library, or Audience Manager). You can select any of these as if they were a traditional audience that was created within Target. For example, suppose you select a Marketing Cloud audience called Cart Abandoners.

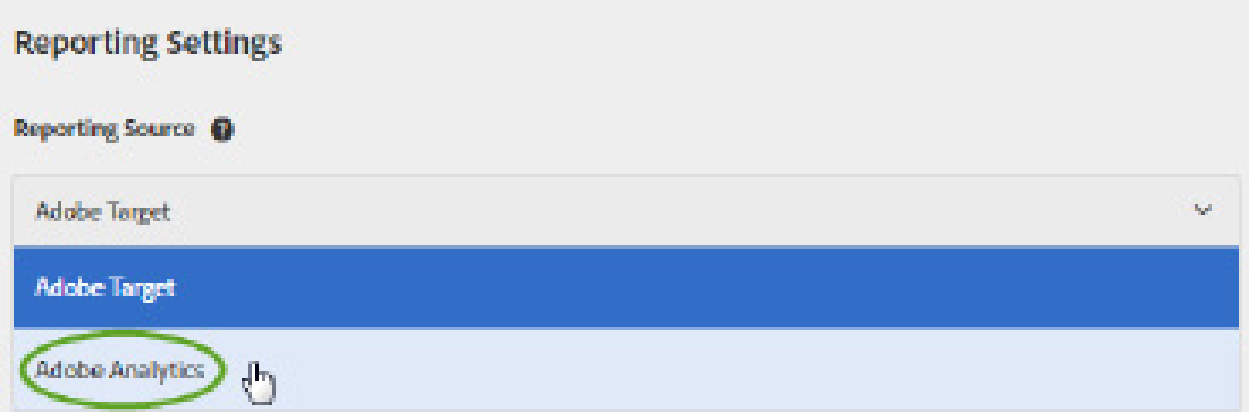


"Cart Abandoners" appears as the audience to which this activity will be targeted.

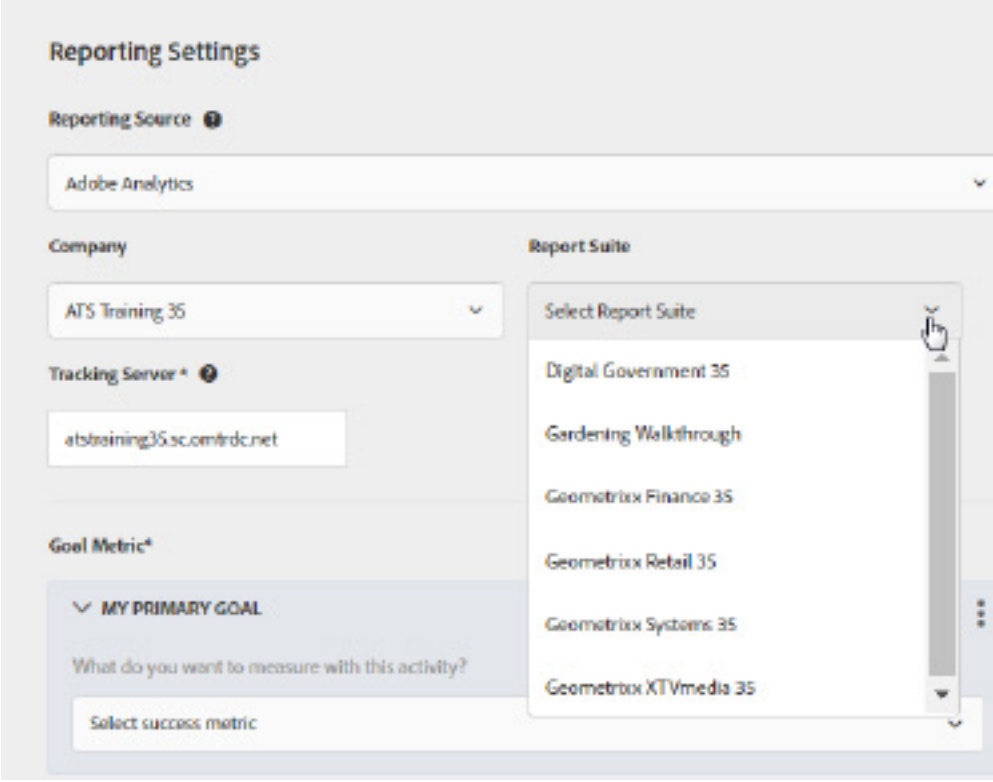
Note: This part of the process is enabled by the Marketing Cloud ID Service, not A4T. In other words, if you have Marketing Cloud audiences, you will actually be able to target any kind of activity to those audiences, not just A4T activities, as we are showing in this particular example.

Step 3: Goal & Settings

The **Goal & Settings** step is where you specify you want the activity to use Analytics for analysis. In the **Reporting Settings** section, specify the **Reporting Source** as **Adobe Analytics**.



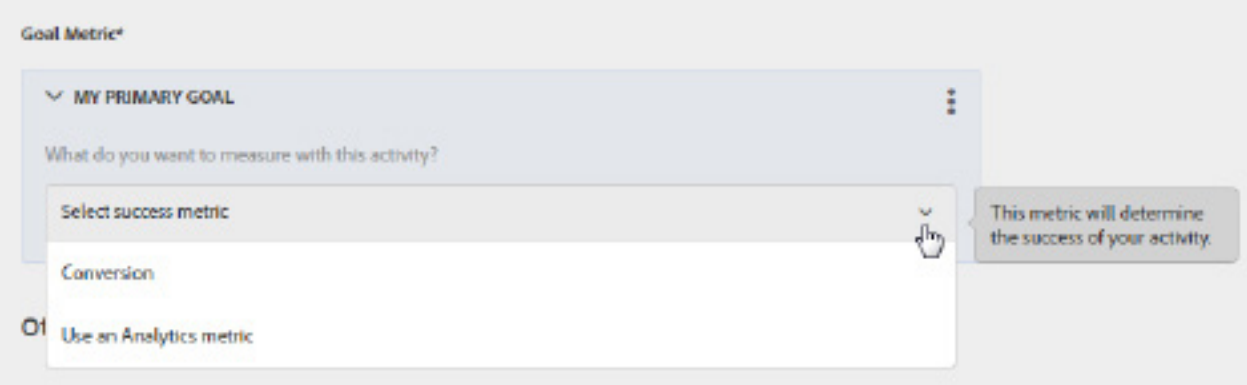
Selecting Adobe Analytics as the Reporting Source is what makes this an A4T activity.



Once Adobe Analytics is selected as the Reporting Source, you must also configure the Company, Report Suite, and Tracking Server.

The dropdown list of report suites will only show those to which you have access. In other words, this is not necessarily the full list available in Analytics, but rather, the list the particular Marketing Cloud user has access to. Select the report suite to which you want to send the data for this test.

What's "missing" from this page? When creating an A4T activity, it is not necessary to set up additional success metrics. Instead, you specify one metric, in the form of your overall activity goal. This is required because it is always good practice to set up an A/B test with an understanding of what it is you want to improve, and what metric you expect will change based on your hypothesis.



An A4T test has one Goal and no additional metrics, instead of having multiple success metrics.

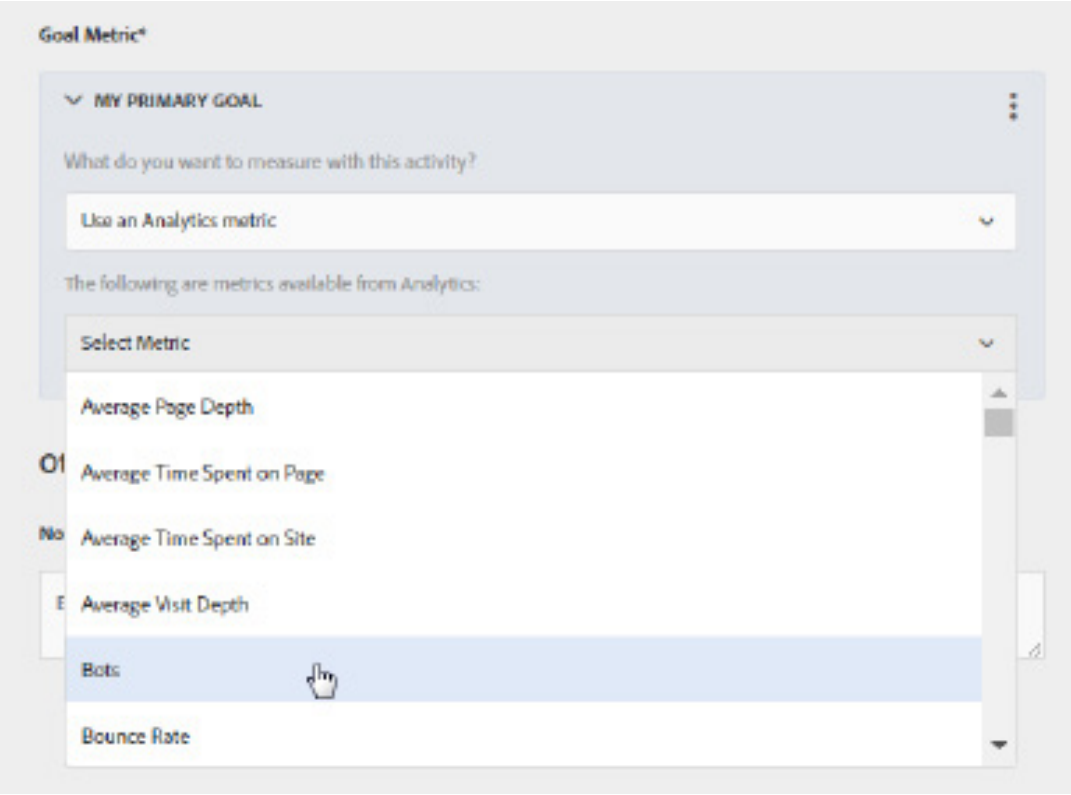
When defining your goal, you can either select **Conversion** or **Use an Analytics metric**. Selecting **Conversion** lets you choose one custom metric using mboxes, your page, or clicks (which is the same as the items you normally configure at this point with Target-driven activities), and send that information to Analytics.

Using one mbox-based metric with A4T of the **Conversion** type (for example, viewed a page, viewed an mbox, or clicked an element) is especially useful for click-tracking, since this is likely tracking the marketer only needs for this particular activity, not for their permanent Analytics implementation. Being able to leverage Target's out-of-the-box click-tracking means you do not have to add and remove Analytics click-tracking code just for this one test.

NOTE: The configuration when selecting **Conversion** as your A4T Goal is exactly the same as it is in a Target-based test..

Reminder: If you choose **Clicked an element** as your Conversion option, the union of those clicks is counted. For example, if anyone clicks on any one of a set of links, then they will be counted as a conversion for that success metric. This point actually holds true for all activities, not just A4T tests.

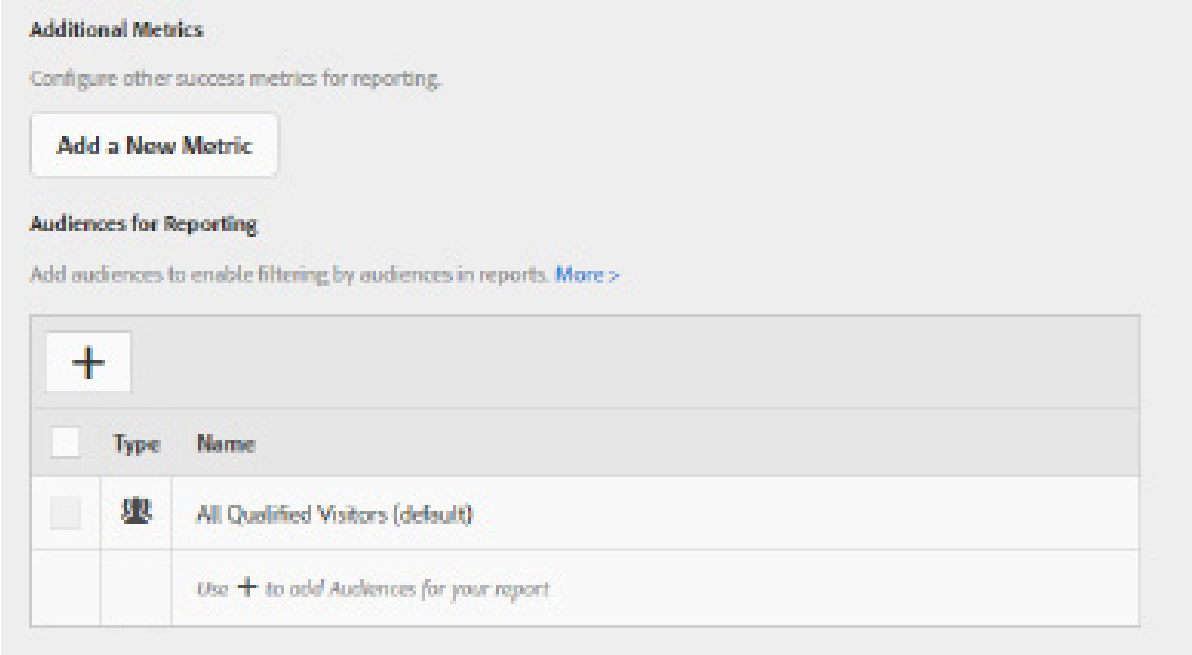
What happens if you select an Analytics metric as your goal?



When selecting **Use an Analytics metric** instead of **Conversion**, you will see a list of all available Analytics metrics. The list includes the default metric, custom metrics, roll up metrics, and also calculated metrics, if they were defined in Analytics.

Final note: We discussed what happens when you select Conversion or an Analytics metric as your goal. But what about engagement and sales metrics, such as page views, time on site, and so on? The answer is all of those components are available via Analytics. So for those types of metrics, choose how you want to track them in Analytics for your reporting, as opposed to defining them here in Target. Analytics metrics can be conversion metrics (for example, orders), engagement metrics (for example, page views) or sales metrics (for example, revenue).

Not only is there no **Additional Metrics** section, as previously noted, but there is also no **Audiences for Reporting** section. In a standard Target-based A/B test, the **Audiences for Reporting** section is the one in which you select report filters—segments by which you want to examine your results, after the test has begun to collect data. That section is moot when Analytics is the data source, because now you can choose any reporting segment in Analytics at any time when viewing your report results.

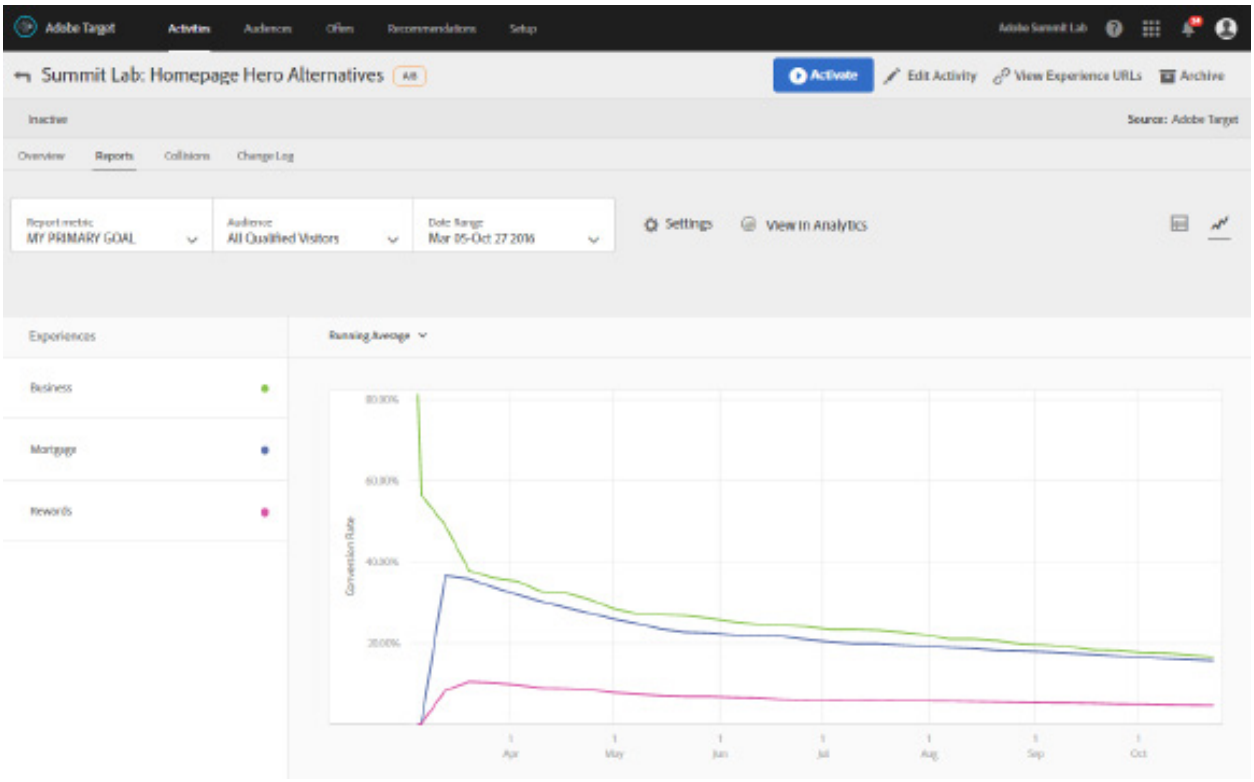


Target-based A/B tests allow you to configure Additional Metrics and Audiences for Reporting, as shown here, but these sections are intentionally absent when configuring A4T tests.

This fact, along with the need to only define a single Goal, explain why it is faster to launch A4T tests. You do not need to strategize segments and metrics prior to test activation, and you do not need to predict future analysis questions at the time an activity is being configured. You can perform those steps later, or even by another team, as necessary.

A4T Results

Here is a sample report for an A4T activity.



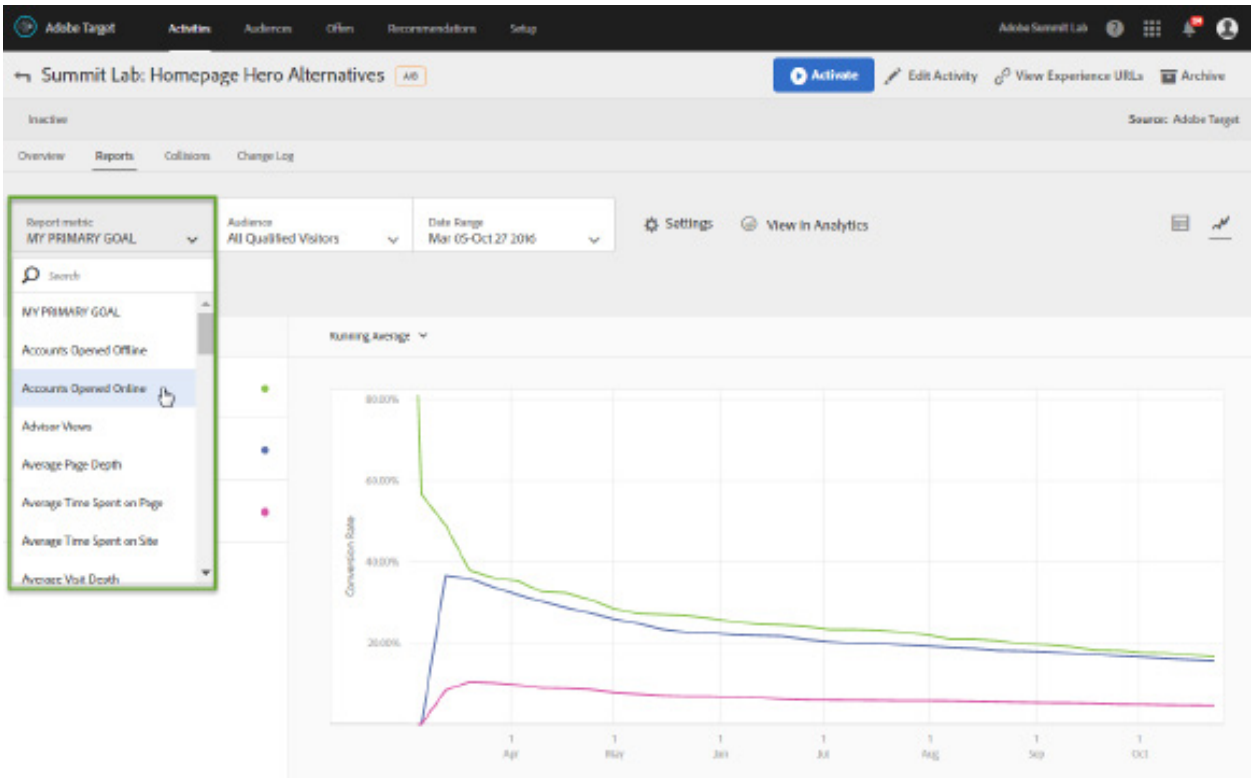
The following two areas are slightly different from those of a standard Target-based report.

1. Report metric ("MY PRIMARY GOAL" selected by default)
2. Audience ("All Qualified Visitors" selected by default)

Both of these areas are available even when running an activity not based on Analytics; however, the specific options you see after clicking them are different.

Metrics in Reports

Clicking the down arrow in the **Report metric** area expands a drop-down from which you can select a different metric on which to base the report.



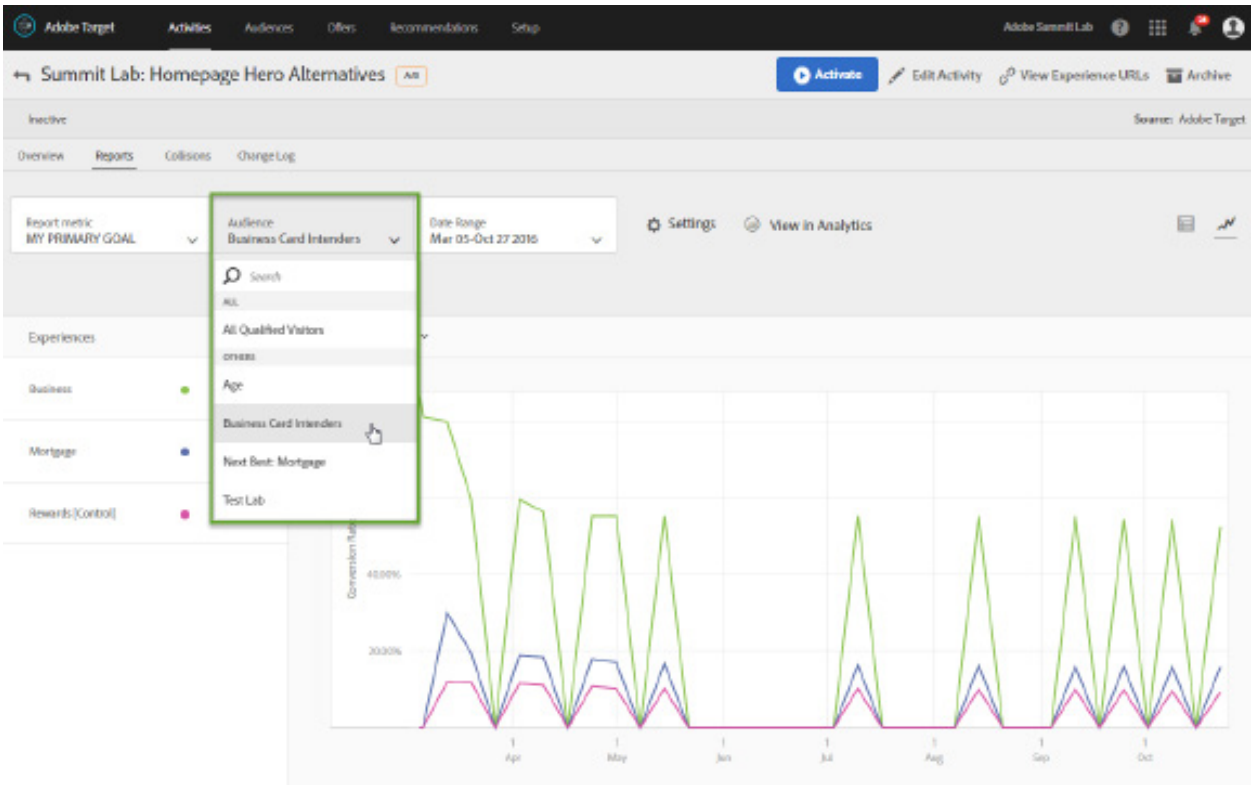
Select any Analytics metric you want in order to view the associated report by that metric. The first metric listed is the primary one for this test and represents the Goal/Conversion metric that was defined in the Goal & Settings step of activity setup.

As previously mentioned, you do need to define one goal for your activity, which is selected by default. However, scrolling down the list of available metrics will reveal Analytics metrics are also included here. In fact, all metrics in your Analytics account that are available when selecting the Change Metric option in a report in Analytics are likewise available here.

NOTE: Click **Report metric** to recalibrate the report by any metric in the report suite, including custom or calculated metrics.

Audiences in Reports

Clicking the down arrow in the **Audience** area expands a drop-down from which you can select a report filter (change the audience), as with Target-based activities. But unique to A4T activities, the list of audiences includes all segments available in Analytics for the report suite.



Note this list is not the same as the set of audiences you may have shared to the Marketing Cloud. Instead, this list contains the *Analytics segments* available when viewing reports in Analytics, the segments you can apply to your Analytics reports. Furthermore, segments can be applied retroactively: long after an activity is activated, if you then create a new segment in Analytics, you can return to Target to see how that segment performed in the test.

By contrast, the segments you share from Adobe Analytics to the Marketing Cloud form a subset of this, therefore it is possibly a different list. More specifically, only the audiences someone in Analytics chose to share to the Marketing Cloud, or were created through the Audience Library or Audience Manager and shared to the Marketing Cloud, will be available for targeting tests during activity setup.

Note the terminology difference. These are called "audiences" in Target, but the list that shows up here includes what are called "segments" in Analytics, which are sets of rules within Analytics. As we will learn later, this is different from Marketing Cloud audiences shared from Analytics, which

are defined as lists of Marketing Cloud IDs as opposed to sets of rules (recall that Marketing Cloud audiences appear as audiences for targeting, not audiences for reporting). In other words, the list of "audiences" you see here in the Reports tab reflects solution-specific, Analytics segments in the report suite, as opposed to Marketing Cloud audiences, the latter of which you see when targeting an activity. The list shown here may therefore be a different (and probably longer) list.

Considerations when using A4T

Counting differences

Note Analytics counts visitors and visits differently from Target.

In Adobe Analytics, a visitor is a site visitor, regardless of whether or not they entered an activity. Likewise, a visit is counted if it is a visit to the site, regardless of whether the visit included a visit to the activity page.

In Adobe Target, a visitor is an activity entrant, a visitor who enters an activity, someone who gets into a test, a person who views test experiences. Likewise, a visit is counted if it is a visit that includes a visit to the activity page.

In other words, in Target, these metrics are scoped to the test. With A4T reporting, Visitors are still scoped to having entered the test, but Visits are not. For example, in an A4T report, you might have a Visitor with three Visits. They certainly went to the test experience on the first visit, but not necessarily on the subsequent two. In Target reporting, the visitor would have to have experienced the test on all three visits to count as three visits.

Activity Types

A/B tests, Experience Targeting (XT) tests, Multivariate Tests (MVT), and Recommendations activities support A4T, but Automated Personalization, Auto-Allocate, and Auto-Target tests do not, as of the writing of this course.

Standard/ Premium	A/B Test	XT	MVT	AP	Auto-Allocate	Auto-Target	Recs
A4T	Yes	Yes	Yes*	No	No	No	Yes
Historical Audiences	Yes	Yes	Yes	Yes	Yes	Yes	Yes

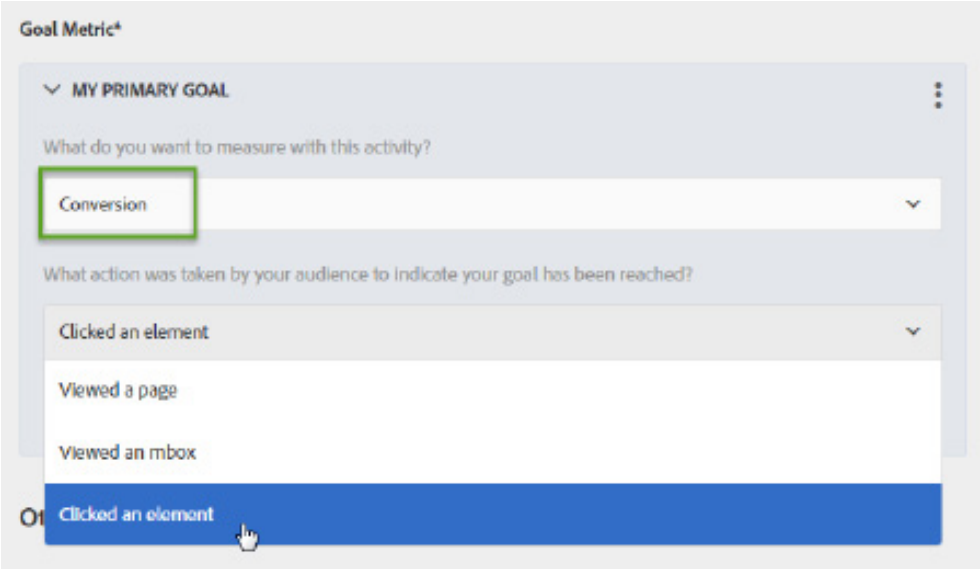
*Element Contribution Report does not currently support Analytics metrics.

Also note the MVT Element Contribution Report does not currently support Analytics metrics, and that audiences must be used in some way by a Target activity (for example, for targeting or as a reporting audience) to be available to contribute towards AP modeling.

Exercise 2.1
Creating A/B Tests using Analytics as the Reporting Source

In this lab, you will create an A/B test that uses Analytics for reporting. (20 min)

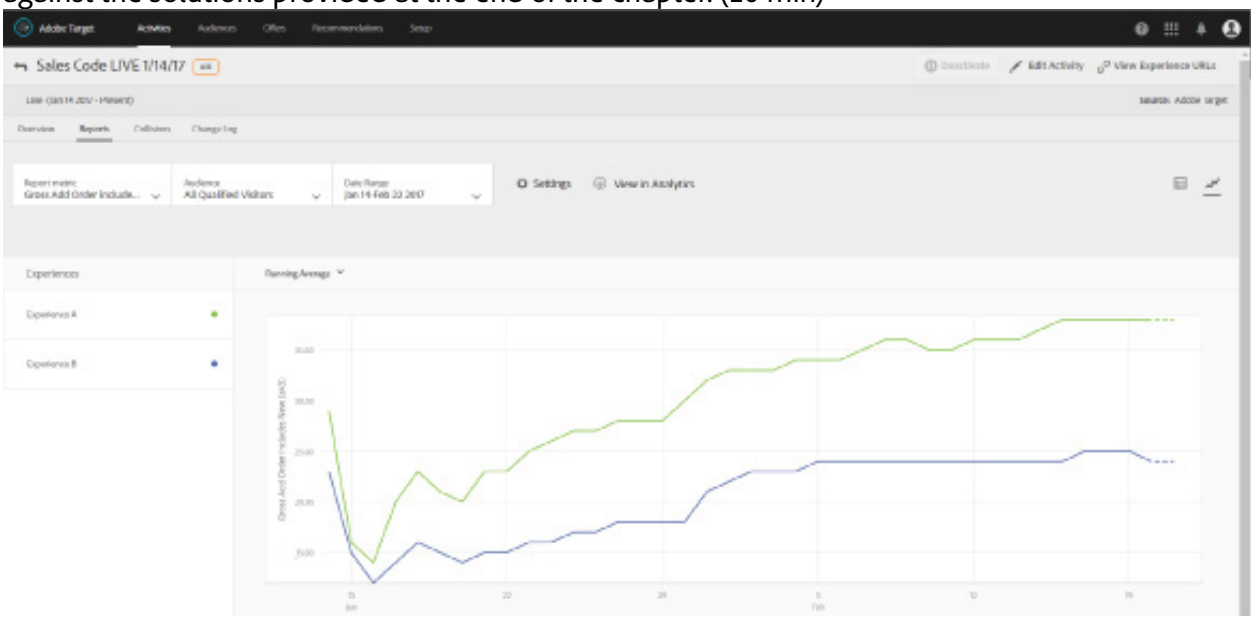
1. Log in to Adobe Target.
    a. Open a browser to navigate to marketing.adobe.com.
    b. Use the user credentials provided by your instructor.
    c. Navigate to Adobe Target.
2. Click **Create Activity > A/B Test**.
3. Keep the default Experience Composer (Visual), but *modify the Activity URL* so that it reflects your user number. Click **Next**. Enable your browser for mixed content if necessary.
4. Name your activity uniquely (preferably by including your User Number in the title).
5. Walk through the activity creation workflow.
    a. In the **Create** step, design your experiences.
    b. In the **Target** step, select a target audience. Where is this list of audiences being pulled from? Analytics, Target, or the Marketing Cloud?
    c. In the **Goal & Settings** step, select **Adobe Analytics** as your **Reporting Source**, select the **Gardening Walkthrough** report suite, select **Conversion** as your **Goal Metric**, and configure additional details as you wish. Sample Conversion configuration:



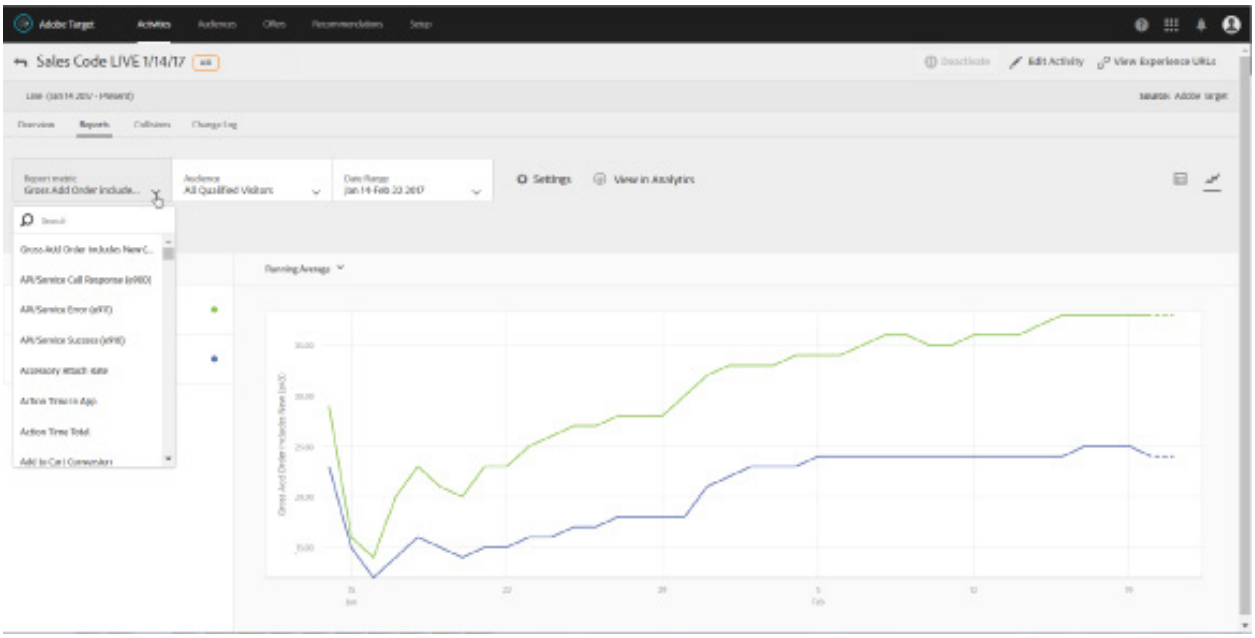
    d. Question: What are the differences between the setup steps of this A4T A/B test versus a traditional Target A/B test?
6. Save and activate. Congratulations! You just created and activated your first A4T test.

Exercise 2.2
A4T Test Results

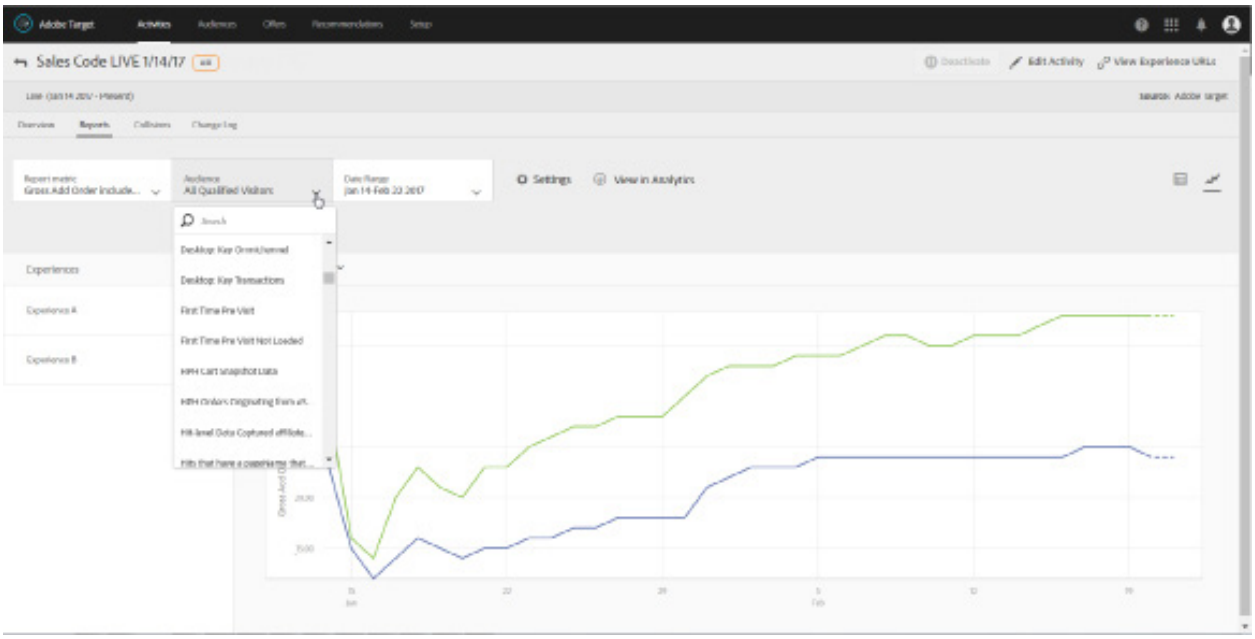
Consider the following A4T report and answer the questions that follow. Check your answers against the solutions provided at the end of the chapter. (10 min)



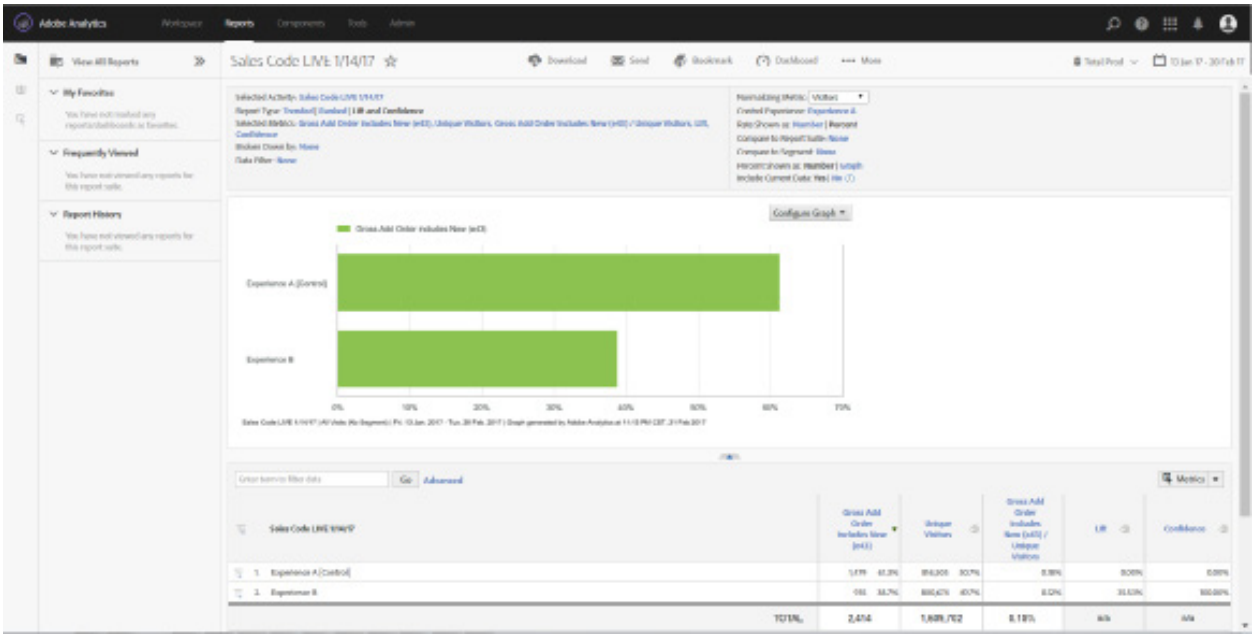
1. When you click to change the report metric, where is this list of metrics populated from?



2. When you click to change the audience, where is this list of audiences populated from?



3. How would you view the report results in Analytics, as shown here?



Solutions to Exercises

Solutions to Exercise 2.1:
Creating A/B Tests using Analytics as the Reporting Source

5. Walk through the activity creation workflow.

b. In the Target step, select a target audience. Where is this list of audiences being pulled from? Analytics or the Marketing Cloud?
These are Target audiences and Marketing Cloud audiences. They are not Analytics segments. Those segments may be used later, as report filters for this A4T test.

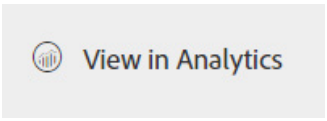
d. Question: What are the differences between the setup steps of this A4T A/B test versus a traditional Target A/B test?

- ***Ability to select Report Suite***
- ***No need to define additional success metrics, therefore there is no section for selecting these.***
- ***No "Audiences for Reporting" selection. In other words, no need to pre-configure report filters.***

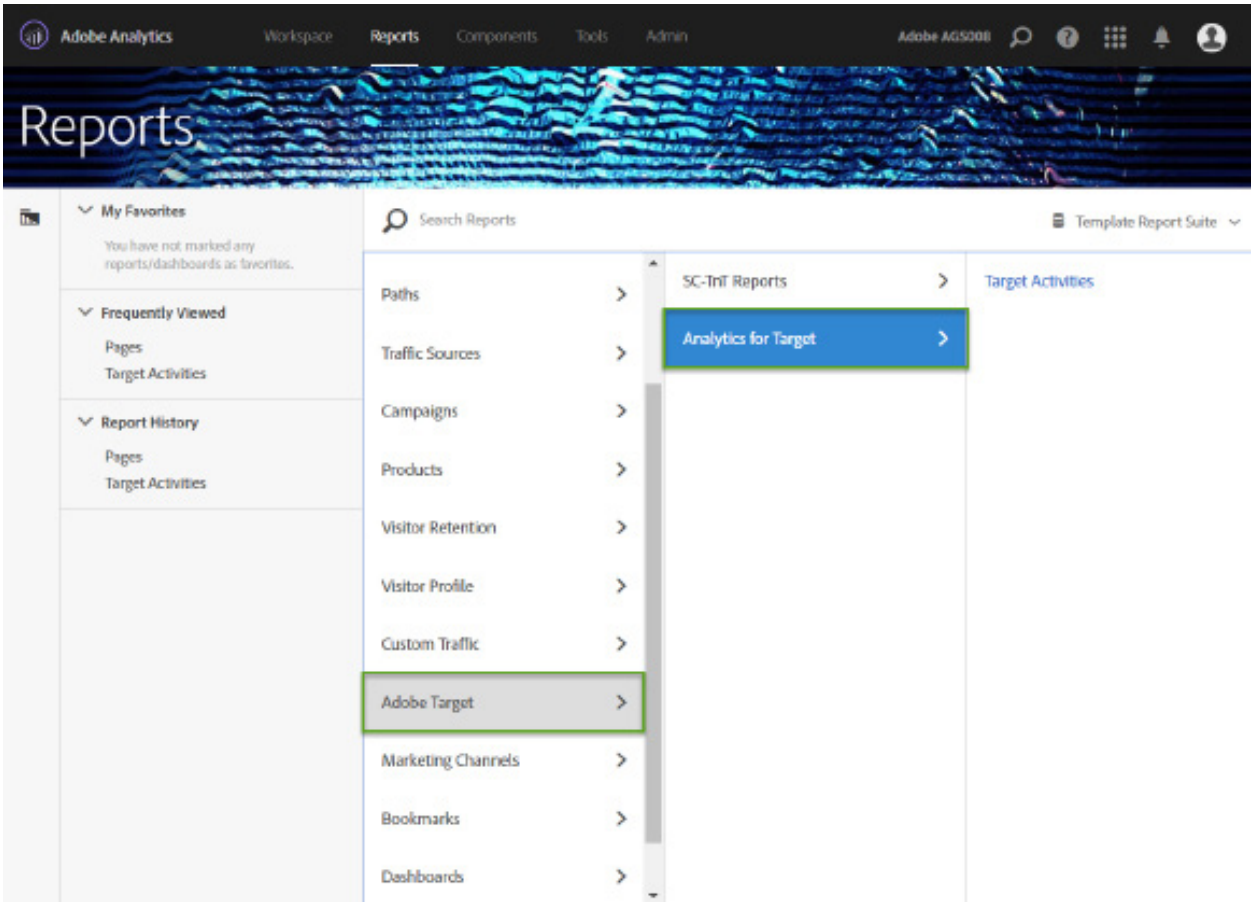
Solutions to Exercise 2.2
A4T Test Results

1. When you click to change the report metric, where is this list of metrics populated from?
These are metrics from the Analytics report suite.
2. When you click to change the audience, where is this list of audiences populated from?
These are segments from the Analytics report suite.
3. How would you view the report results in Analytics, as shown here?
From the Adobe Target report, click the View in Analytics link. This takes the user into the activity's report within Adobe Analytics.

4. How would you view the report results in Analytics?
   Click the View in Analytics link from within the A4T report in Target.



Or, in Analytics, navigate to Reports > Adobe Target > Analytics for Target > Target Activities, and then locate the specific activity of interest to view its report.



Marketing Cloud Historical Audiences

Overview

At this point, you should be familiar with the fundamental steps involved in creating A4T tests and viewing the results of those activities. The creation of those tests involved audiences that may have been shared to the Marketing Cloud. In this chapter, we take a step back and show you how some of those audiences were created and published to the Marketing Cloud.

In this chapter, we cover how to share audiences from Adobe Analytics, as well as data latencies to consider when planning activities that use these audiences.

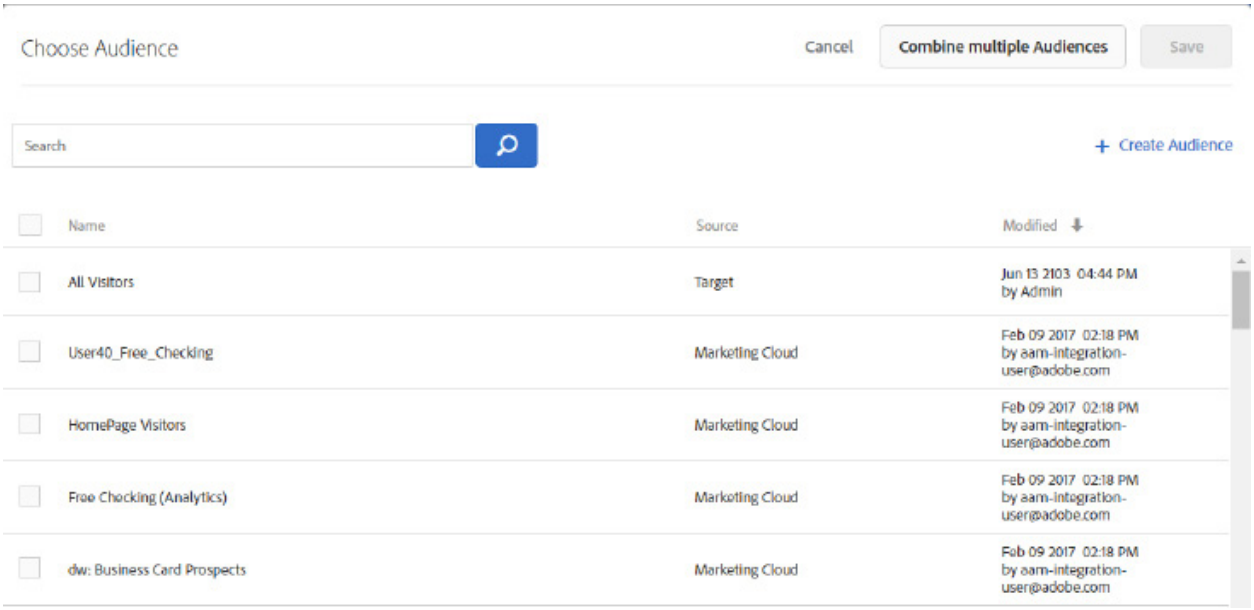
Objectives

By the end of this chapter, you will be able to:

- Share Analytics segments to the Marketing Cloud
- Describe expected data latencies when sharing audiences from Analytics

Sharing Audiences for Targeting

In previous chapters and exercises, we explored the way that Target can use Marketing Cloud audiences to target activities.



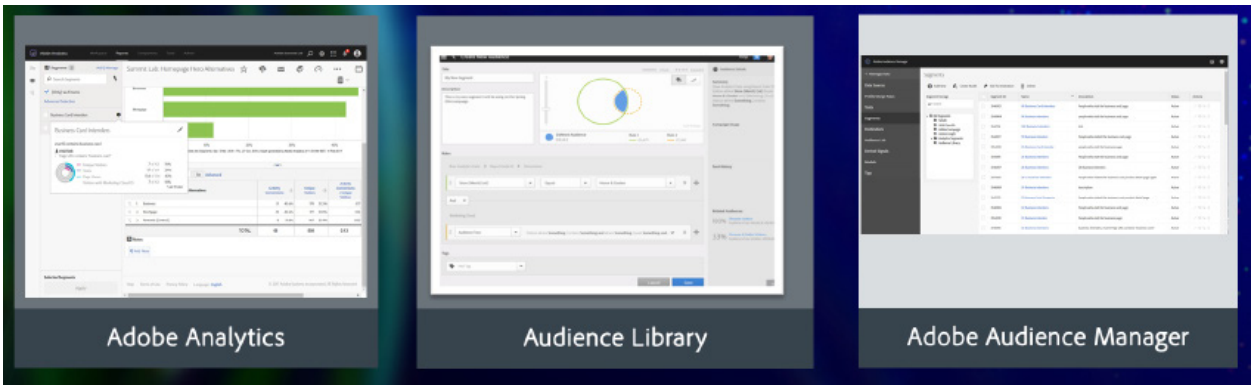
Choosing an audience for targeting, during activity configuration within Adobe Target.

Notice the "Source" field. Some of these audiences were shared from other solutions to the Marketing Cloud, where they may now be used by Adobe Target. But where did these audiences come from? How did they become available for use within Target? We begin to answer this question in this chapter, and give you a chance to share your own audiences as well.

Where do audiences come from?

In Target, when an audience is listed as originating from the "Marketing Cloud" instead of from "Target" as its source, that means that it was created in one of the following:

- Adobe Analytics
- Audience Library
- Audience Manager



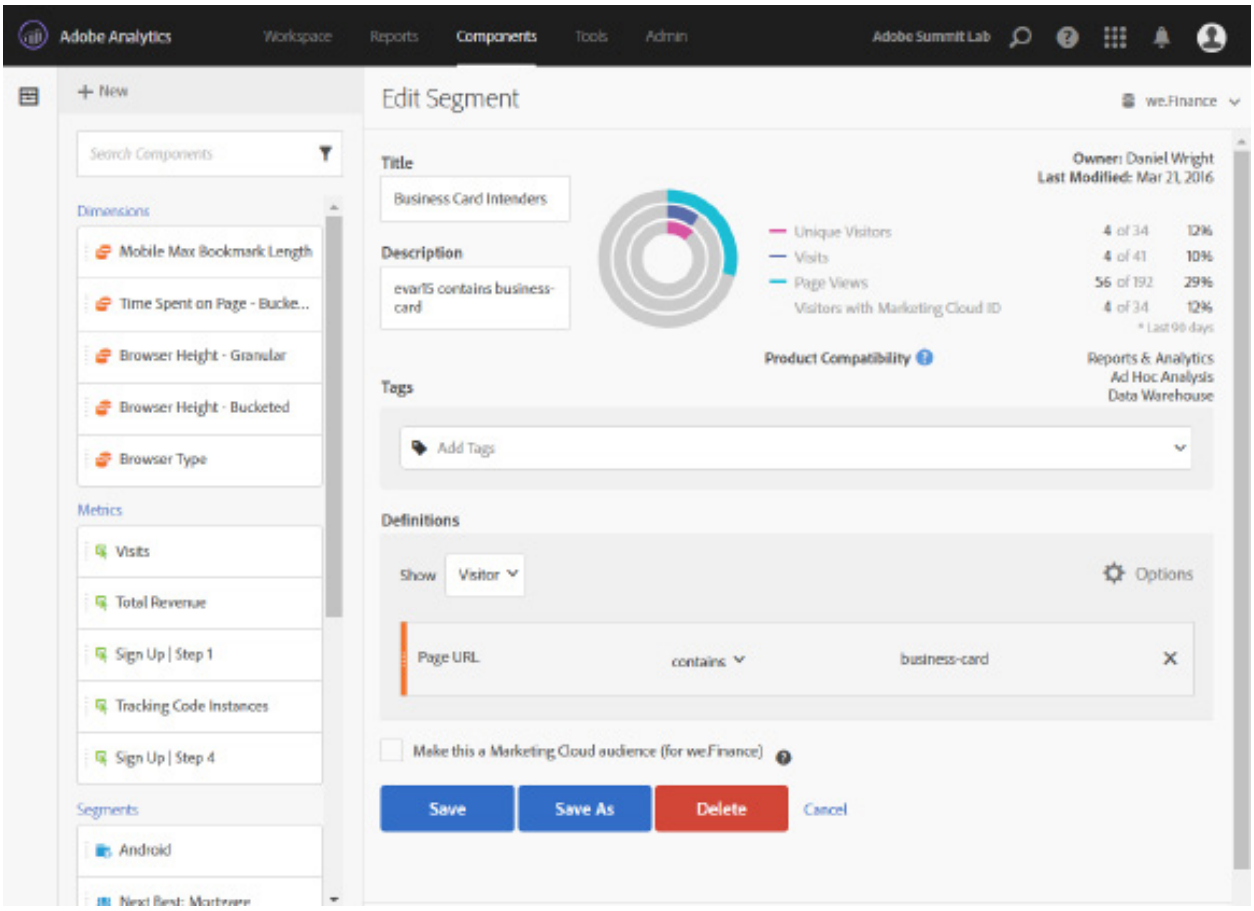
As before, keep in mind that Adobe Target also allows for real-time targeting with its own profile capabilities. What is being discussed in this course are ways to create robust audiences using the Marketing Cloud ID Service, without requiring you to add code or pass data to the page to do so. This delivers a much more nimble, more responsive framework that enables audience identification beyond the visitor parameters available within Target alone.

Regarding the three sources listed above, Adobe Analytics and the Audience Library interface are available through the Marketing Cloud. As long as you have Analytics, Target, and the correct services enabled, you will have access to both Adobe Analytics and the Audience Library. Audience Manager, however, is an added solution, as it confers additional value as a more robust service for creating audiences prior to sharing to the Marketing Cloud.

DEFINITION: An audience that was shared to the Marketing Cloud from Adobe Analytics is a Marketing Cloud audience that is also a *historical audience*.

How to share an audience from Adobe Analytics

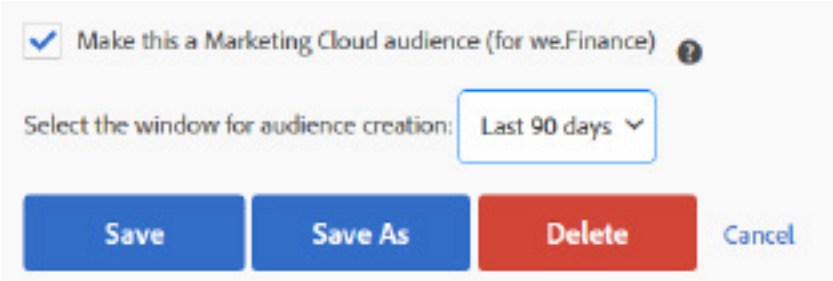
In Adobe Analytics Reports & Analytics, use the Segment Builder to create new segments.



Above: Segment Definition Builder in Reports & Analytics.

Define the segment's title, description, rules, and tags, and determine whether it should be shared to the Marketing Cloud by checking the box labeled, "Make this a Marketing Cloud audience." Checking the box indicates to Adobe Analytics that this is an audience worth sharing, and saving will publish that segment to the Audience Library in the Marketing Cloud.

When checked, the option to define the lookback period appears.



Configuring the "window for audience creation," also known as the lookback period.

By default, the lookback period is 90 days, although this value is configurable on a segment-by-segment basis.

What is a lookback period? The determination as to whether or not a given visitor meets the criteria required for them to be included in an audience is based on the past X days' worth of data, where "X" is the lookback period. For example, suppose you use the default of 90 days. This means that if someone has met the audience criteria at any point within the past 90 days, they are included in the segment, meaning Target recognizes their audience membership and delivers the content to them as expected when they reach the activity.

In addition to using Adobe Analytics Reports & Analytics, analysts may also use Analytics Workspace to share Analytics audiences to the Marketing Cloud. This is because Workspace leverages the same segment building tool that is used by Reports & Analytics, and therefore the workflow for sharing audiences is the same: If you create an audience you want to share from Analytics, that segment will appear in both Reports & Analytics as well as in Analysis Workspace for you to use.

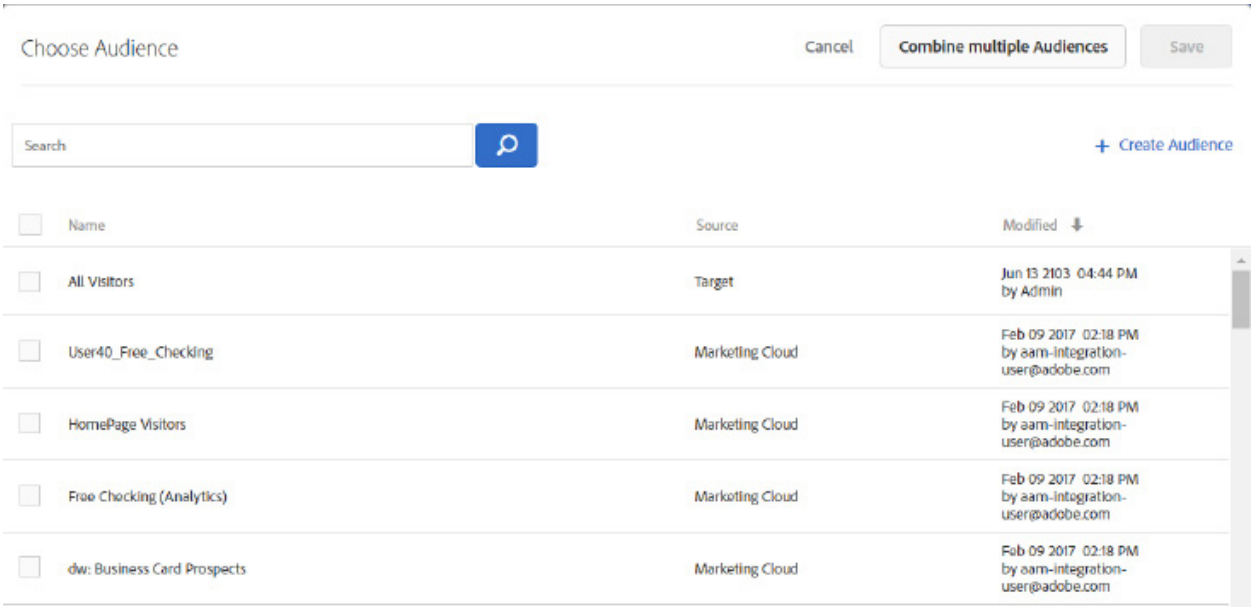
Benefits of sharing audiences from Analytics

Adobe Analytics continues to be the go-to solution for leveraging historical, behavioral data. It is a truly robust solution to use in targeting efforts because of its ability to look across segments even after a campaign has completed.

Adobe Analytics does things that no other solution can do, such as pathing, segmentation based on a long history of interaction data, segmentation that leverages processing rules, classifications, and so on. These are unique capabilities that enable more robust analysis.

Considerations when choosing a historical audience from within Target

Audience titles and descriptions are sent to the Marketing Cloud immediately. (The audience membership isn't sent right away, just the title and description.) This allows audiences to be configured for targeting without having to wait for audience membership processing. Every 15 minutes, Target pings the audience exchange looking for changes, at which point the audience titles and descriptions are obtained and become available for use in Target.



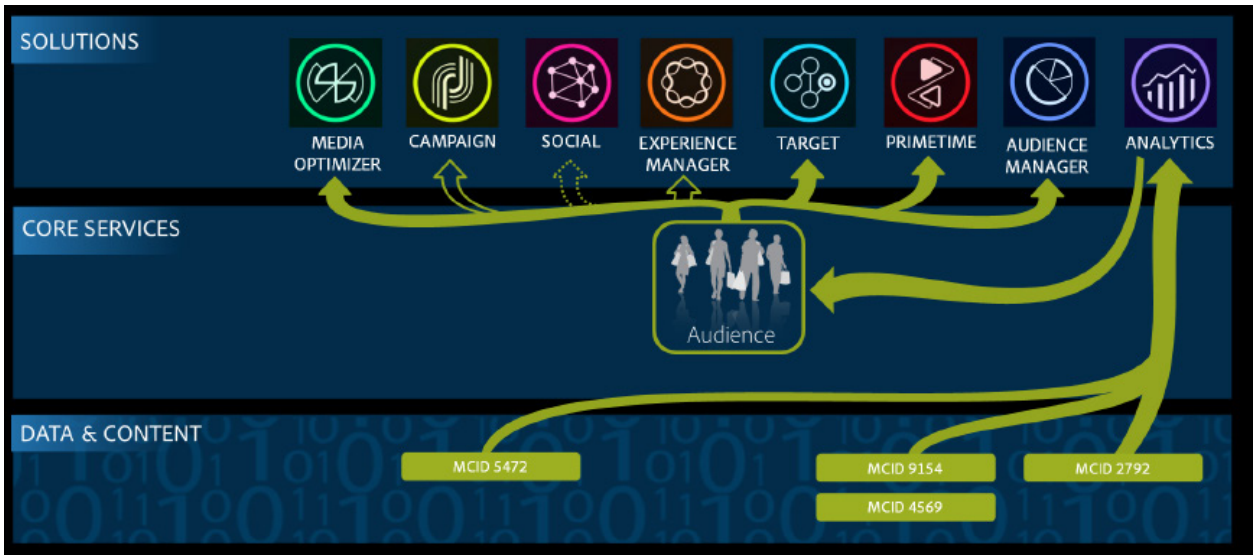
When choosing an audience for targeting, note the following:

- It may take a few minutes (at most, 15 minutes) for audiences to appear in Adobe Target when shared to the Marketing Cloud from Analytics.
- All audiences appear as being sourced from the "Marketing Cloud" and last modified by "aam-integration-user@adobe.com."

As an additional consideration, note that you can have 20 historical audiences active at any given time. That's not a limit on the number you can share—meaning you can publish as many Analytics segments to the Marketing Cloud as you want—but rather, that is the number of historical audiences that the Marketing Cloud will support in active campaigns.

How Historical Audiences Work: Behind the Scenes

When an audience is initially published to the Marketing Cloud, the name and description of the audience is immediately sent to the Marketing Cloud so it becomes visible in the Audience Library. At this point, the audience data itself has not arrived yet, but because its name and description are available, it can be used to set up actions in solutions like Adobe Target or Adobe Audience Manager. The actual data is packaged and delivered using a data processing and distribution workflow that may take up to 48 hours.

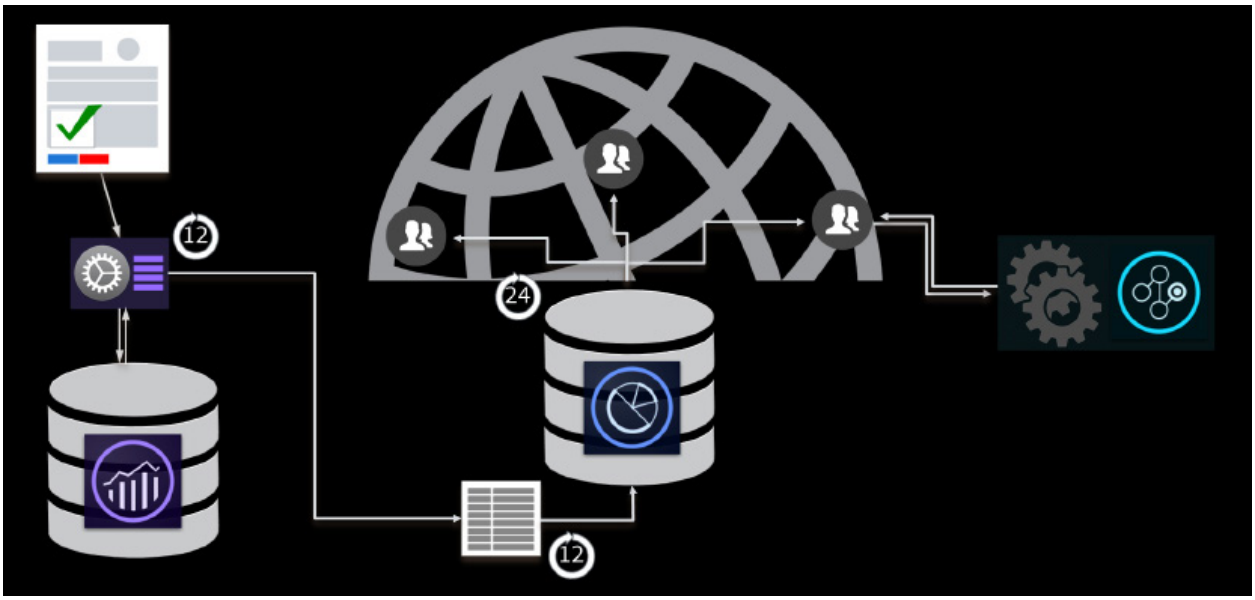


Audience sharing from Analytics:
The entire process to get audience membership from Analytics may take up to 48 hours.

When you share an audience from Analytics to the Marketing Cloud, audience IDs for that audience are added to the schedule for processing and distribution, regardless of whether or not that audience is being used in a Target activity. Let's examine this process in greater detail in the next section.

Data Latencies regarding Audiences Shared from Adobe Analytics

The caveat to always bear in mind is audiences shared from Adobe Analytics take up to 48 hours to become actionable. This means if you use a historical audience to target your activity, it may take up to two days for a given visitor to be identified as being part of that target group. What is happening in the background during those two days?



Starting from the left of the diagram, we see a representation of the Analytics interface at the top left, with the Analytics dataset in the bottom left, and an "audience exchange" service that sits between them.

1. **Twice per day**: Checking the box in order to share the audience from Analytics results in Adobe adding the new audience to a list of audience exchange queries scheduled to run every 12 hours against the Analytics dataset in order to obtain audience membership information. All queries are scheduled to run at this predetermined, 12-hour interval. Therefore, the maximum latency for any given visitor to be identified as qualifying for an audience is 12 hours for this step in the process.
2. **The next 12 hours**: In the middle of the diagram sits the Adobe Audience Manager (AAM) dataset, upon which Marketing Cloud audiences are built. The completed audience membership file is shipped from the exchange to AAM, where AAM uploads and ingests it. The first column in the file is the Marketing Cloud ID, and subsequent columns are segment

memberships that that visitor may qualify for. For example, suppose there are four audiences, and a given visitor only qualified for one of them—after the ID column, we would see data in one subsequent column. But if the visitor qualified for all four audiences, then we would see four columns after the initial ID column. Note the file may be quite large, up to 20 million unique IDs. The process whereby AAM uploads and ingests this file takes approximately 12 hours.

3. **The final 24 hours**: In order for the data in the file to be actionable—in order for Target to be able to use this data to target—it needs to be pushed out to the appropriate Edge server in the Global Delivery Network (GDN). This push process takes up to 24 hours. Adding up all the steps in the process results in the 48-hour data latency. After the 48 hours, Adobe Target can hit the particular AAM server it is closest to, in order to ask for audience membership information.

In summation, there is significant data processing and movement before audience membership information for audiences shared from Analytics can become actionable in Target. The entire process, end to end, from when you check the Adobe Analytics box to share the segment, to when the data becomes available on a specific server, may take about 48 hours. This is a rolling 48-hour window, which is rolled every 12 hours—according to the schedule of the audience exchange service.

When do audiences appear within the Audience Library? Audience titles and descriptions are sent to the Marketing Cloud immediately, without having to wait for 48 hours. (The audience membership is not sent right away, just the title and description.) This allows you to configure audiences for targeting without having to wait. And as previously mentioned, every 15 minutes, Target pings the audience exchange looking for changes, at which point those audience titles and descriptions are obtained and become available for use in Target.

TIP: Set your content delivery expectations based on the following factors, which will influence whether a given visitor is included in an audience:
1. The visitor has to be qualified into the audience based on the selected lookback period, and
2. Data must synch from Analytics to Target (which may take up to 48 hours), before you can view content as intended.

NOTE: Is it ever possible for the overall process to take longer than 48 hours?
Yes. If your audience ID file is particularly large, it is possible the ingestion and processing of that file could itself take longer than 48 hours. If you do not see your expected audience qualification behavior within 48-72 hours, contact Client Care. However, for the majority of users, the process takes 48 hours or less.

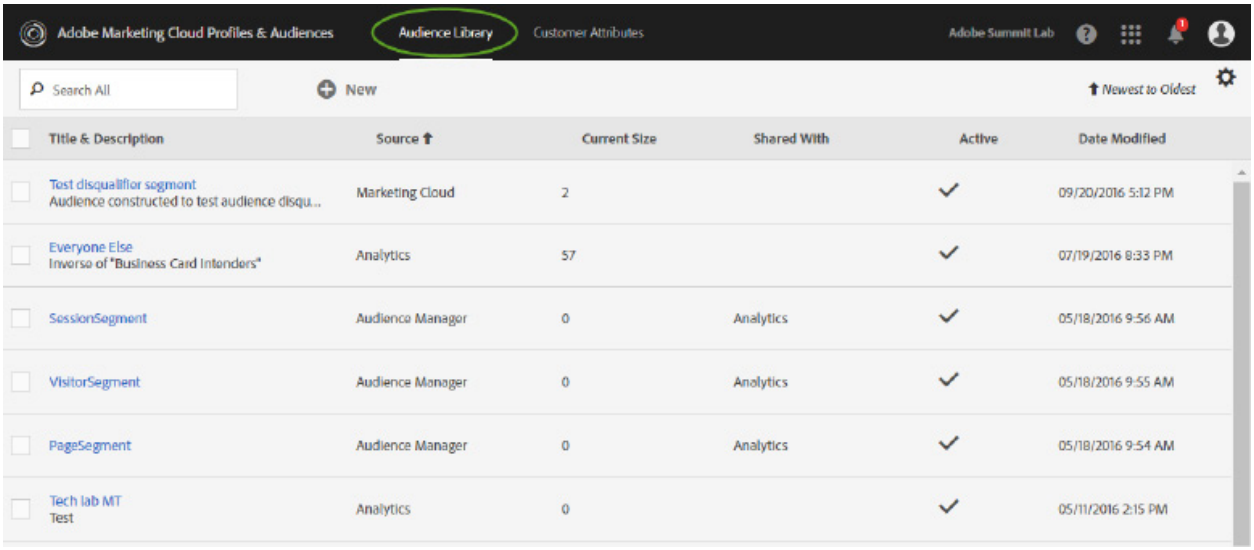
A4T report latency considerations

What about report latencies? For example, in an A4T report, how long does it take from the time a visitor completes an order to the time that order should appear in the report?

- The first consideration to keep in mind is that for A4T tests, your typical report suite latency applies. For most Analytics users, this may be 30-60 minutes.
- The second consideration to keep in mind is, when you first save an A4T test, there is an initial delay of approximately 12 hours for the classifications to process. (The data will still flow, but it will not appear as expected—raw campaign IDs will appear instead of campaign names—if the activity was not saved at least 12 hours ago.) For this reason, Adobe advises that when you are planning an A4T test, create and save it before pushing it live, because saving the test initiates the classification process. This way, once the test goes live, you will be able to see expected report data within the standard report suite latency, as opposed to waiting for the report suite latency plus up to 12 hours.

Overview of the Audience Library

The Audience Library is a Marketing Cloud level interface for audiences shared from multiple sources.



Note the Source field. Audience Library aggregates audiences across multiple solutions.

Audiences can be shared from multiple sources and aggregated here. In terms of the Source field, note the following values:

- Marketing Cloud = Audience Library
- Audience Manager = Adobe Audience Manager
- Analytics = Adobe Analytics

We mention the Audience Library in this chapter due to the fact historical audiences (those created as segments within Analytics, then pushed to the Marketing Cloud) appear here in the Audience Library, as well as in the audience selector when targeting activities within Target. We will cover the Audience Library in more detail in the chapter on real-time audiences.

Exercise 3.1
Sharing Audiences from Adobe Analytics

In this exercise, you will log in to Adobe Analytics and use the Segment Builder in Reports & Analytics to share an audience with Target. (10 min)

1. In the Marketing Cloud, navigate to Adobe Analytics.
2. Access Reports & Analytics.
3. Launch the Segment Builder. (**Components** > **Segments**)
4. Create a new segment, naming it uniquely by including your user number in the name.
   a. For example, you may use Browser Type = Google.
   b. Be sure to select the **Make this a Marketing Cloud audience…** checkbox prior to saving.
5. View and use the new audience in Adobe Target.
   a. Navigate to Adobe Target.
   b. Verify the audience appears in the Adobe Target Audience list. Note there may be a delay of several (up to 15 minutes) before the audience appears here.
   c. Begin to create a new activity, whether an A4T activity or not. Verify the audience you published from Analytics is available for selection when you target the activity.

Marketing Cloud Real-Time Audiences

Overview

In this chapter, we talk about how to create audiences directly in the Marketing Cloud Audience Library, so they may be used by other Marketing Cloud solutions. We also discuss how to share audiences from Audience Manager.

Topics covered in this chapter include:

- The Audience Library
- Composite audiences
  - Raw Analytics Data as a component
  - Marketing Cloud audiences as a component
- Sharing audiences from Audience Manager
- Data latencies for real-time audiences ("next call" latency)

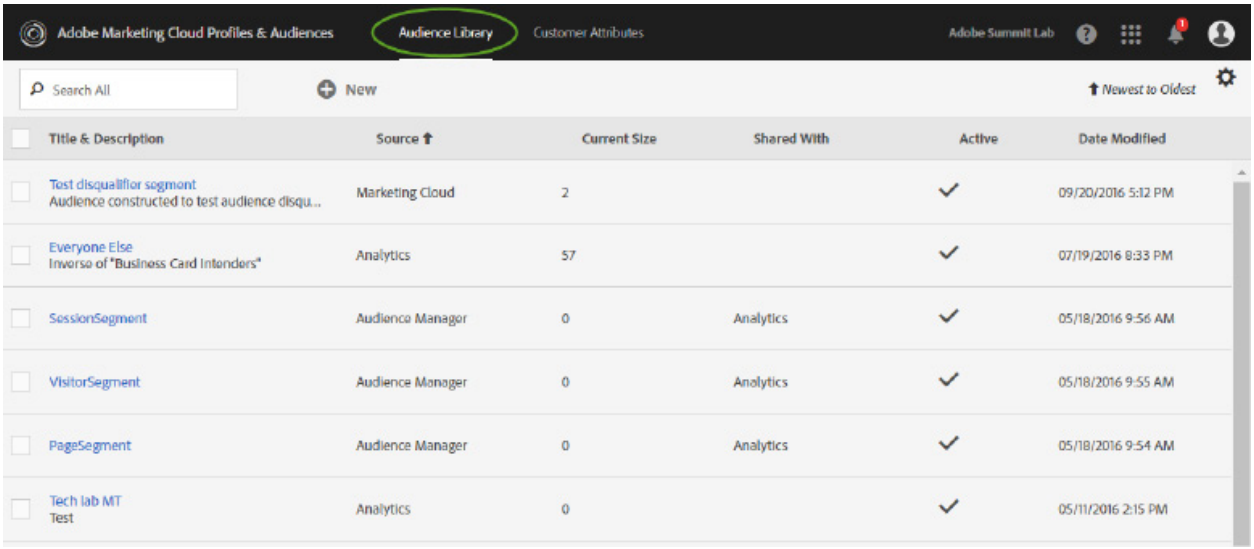
Objectives

By the end of this chapter, you will be able to:

- Create Marketing Cloud real-time audiences using the Audience Library
- Create Marketing Cloud real-time audiences by sharing audiences from Audience Manager
- Describe expected data latencies for real-time audiences

What is a Real-time Audience?

As a review, the Audience Library is a Marketing Cloud level interface for Marketing Cloud audiences.



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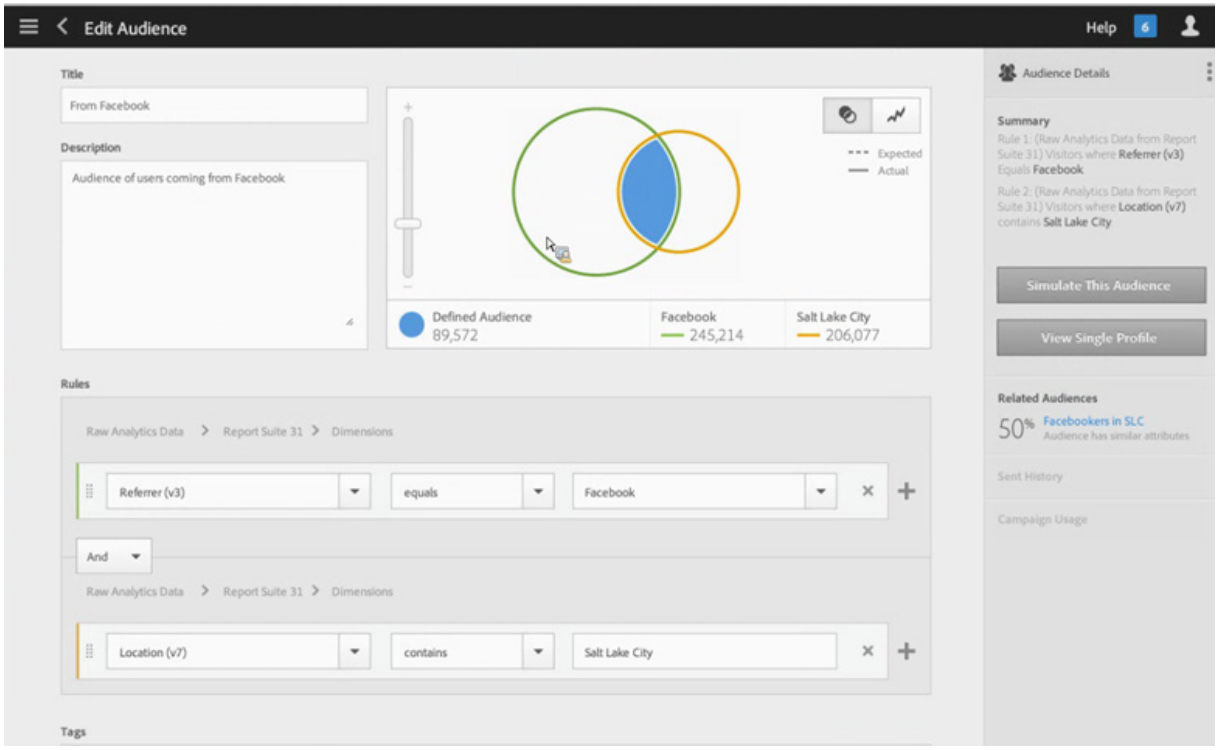
- Audience Manager = Adobe Audience Manager
- Analytics = Adobe Analytics

As covered in the previous chapter, historical audiences (those created as segments within Analytics, then pushed to the Marketing Cloud), appear here in the Audience Library, as well as in the audience selector when targeting activities within Target. However, as indicated by the **Source** values, it is also a repository for displaying *segments shared from Audience Manager*. Additionally, as indicated by the presence of the **New** button shown above, the Audience Library also contains a *native audience creation capability*. This chapter covers both of these capabilities, which together comprise what we call "real-time audiences."

DEFINITION: A Marketing Cloud audience either created natively within the Audience Library using Raw Analytics Data, or shared from Audience Manager to the Marketing Cloud, is called a *real-time audience*. Both appear in the Audience Library as well as in the audience selector within Adobe Target. Unlike historical audiences, real-time audiences demonstrate a near real-time audience qualification capability.

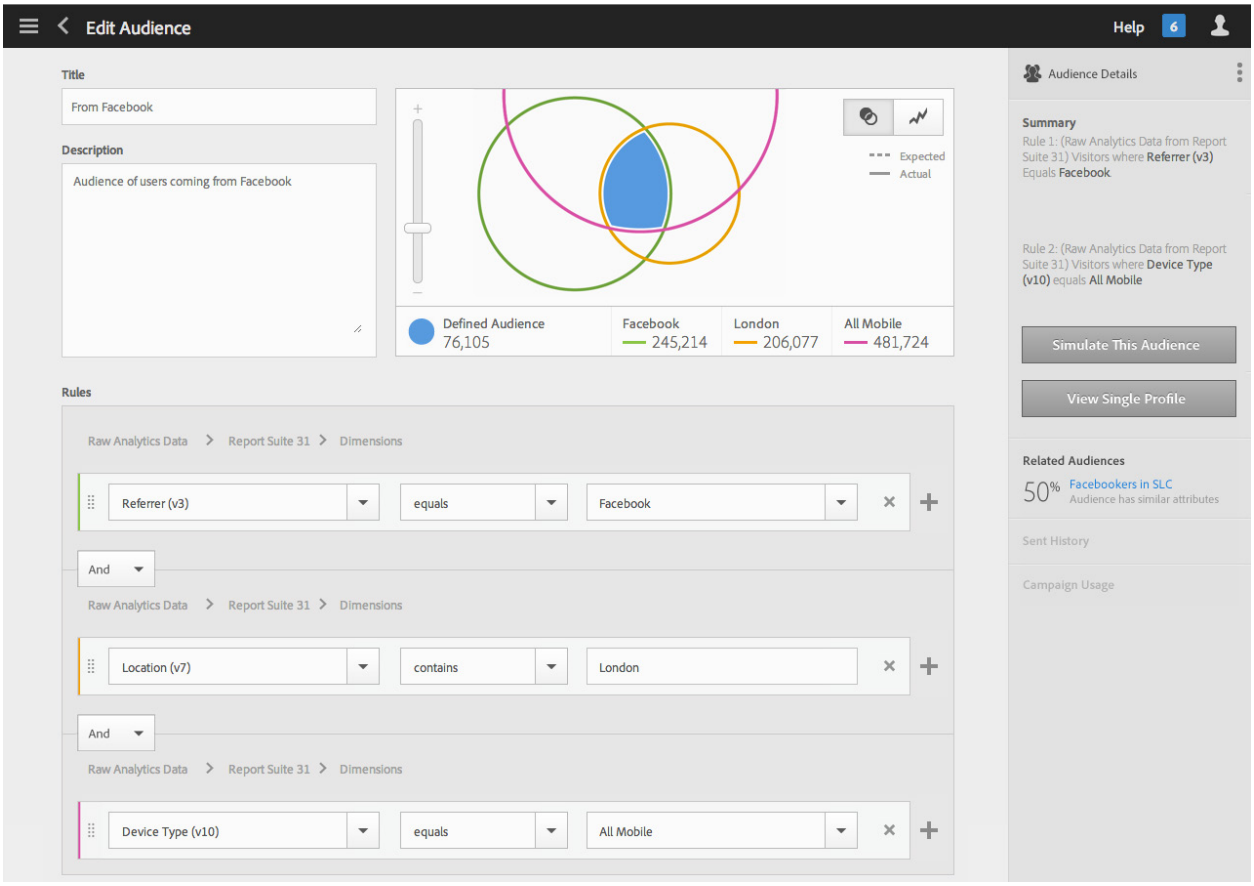
Audience Library Capabilities

More than just a repository for audiences shared across the Marketing Cloud, the Audience Library also lets you create new audiences, combine existing ones to create composite audiences, and view historical audiences, all in a very visual interface.



In the example shown here, notice how the Audience Library displays the intersection between two audiences as the blue segment. It allows you to configure the audience, get information on members, obtain an estimate of segment size, and share that audience for targeting in Target and analysis in Analytics.

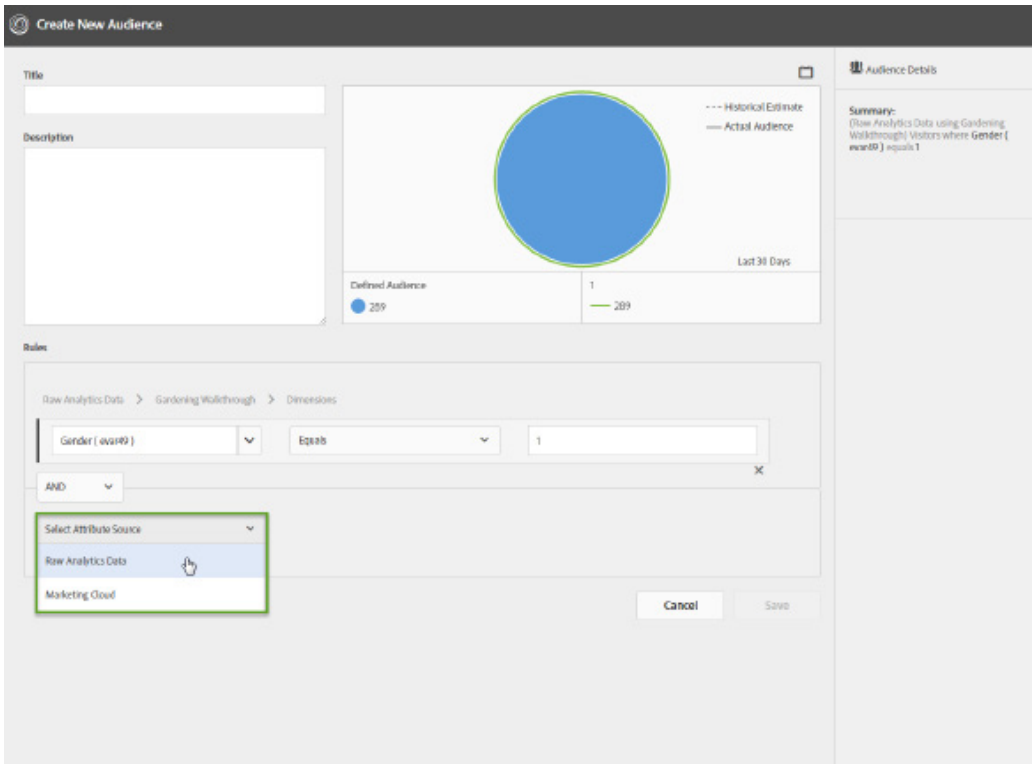
Rules may be defined with multiple criteria, using AND and OR logic to combine those criteria. This enables marketers to check at-a-glance to ensure the audience size and composition being targeted makes sense for the type of campaign or effort being delivered.



The image above shows an additional example of the Audience Library's size estimation. In this example, the user created an audience based on the intersection of three distinct criteria. Size estimates are provided not only for the defined audience, but also for each individual criterion.

Creating Marketing Cloud Audiences within the Audience Library

Creating new audiences directly in the Audience Library is achieved using a combination of either of the following types of criteria: Raw Analytics Data and Marketing Cloud audiences.



In the Audience Library, you can create a Marketing Cloud audience of Raw Analytics Data, or create an audience using pre-saved Marketing Cloud audiences, or combine both to make a composite audience.

- **Raw Analytics Data**: This is attribute data derived from real-time Analytics image requests, and includes data such as eVars and events. You must select a report suite when using this attribute source, and define the dimension or event to include. This report suite selection provides the variable structure used by the report suite.
- **Marketing Cloud**: This is attribute data derived from Marketing Cloud sources. In other words, these are pre-saved segments or audiences shared from Adobe Analytics, Adobe Audience Manager, or the Audience Library itself.

REMINDER: Audiences created in the Audience Library ultimately based on Raw Analytics Data, or segments shared from Audience Manager, are considered *real-time audiences*. But when an audience is created using a combination of both types of criteria above, it is called a *composite audience* and may not be real time..

Why create Composite Audiences?

One use case of creating a composite audience based on a combination of Raw Analytics Data and Marketing Cloud data involves a strategy for addressing the fact the actual audience IDs from historical audiences are sent twice per day. If your goal is to create a real-time or next-click targeting campaign based on such data, you can combine the segment definition used in that historical audience with real-time attributes coming in from the raw analytics data stream. Do this in the Audience Library interface by combining the existing Analytics audience with the raw analytics data using a union (OR condition). This kind of intentional redundancy in the underlying audience definition results in closer to real-time audience membership validation and activity entry.

Along similar lines, one could also create a composite audience where a historical audience is combined with an audience shared from Audience Manager, based on the same segment definition criteria. This composite audience would immediately begin qualifying visitors due to the Audience Manager portion of the Audience, and later receive its batch of historical data, when such data is eventually sent from Analytics.

Benefits of using the Audience Library

The Audience Library provides an intuitive, graphical interface, complete with estimated audience size, for creating real-time audiences. It enables marketers to use raw analytics attributes like events and eVars—basically, data derived from page-level tags in Analytics and Dynamic Tag Management—instead of building a complete historical analysis in Analytics. This means you can configure the setup so if someone sees a certain event or eVar, they will be matched into the audience as soon as the relevant information is relayed to Target during the server call, as opposed to considering whether the visitor matched the criteria during a lookback period of historical data. Raw Analytics Data-based audience validation happens in real time, just as it does for audiences shared from Audience Manager. Users who do not have access to Audience Manager or who are not as familiar with Audience Manager workflows will find the Audience Library interface to be a user-friendly way to create real-time audiences.

Additionally, the tool provides flexibility so any composite audiences you create can be a combination of both real-time and historical audience membership, if that's what you would like to specify.

Considerations regarding the Audience Library

There are limits on the number of native audiences that can be active (50), as well as limits on the number of rules or traits (100) defined in active audiences. If that becomes a hindrance in any way, upgrading from the Audience Library service to Audience Manager removes those limitations.

Also, Audience Library destinations are limited to Marketing Cloud solutions. In order to send segments outside of the Marketing Cloud, you would need Audience Manager.

DEFINITION: Audience Manager *segments* are groups of people who share common attributes. They are defined using combinations of one or more traits. *Traits* qualify signals. They are filters that catch the signals you care about. *Signals* are the building blocks that come through to Audience Manager. Signals are key-value pairs.

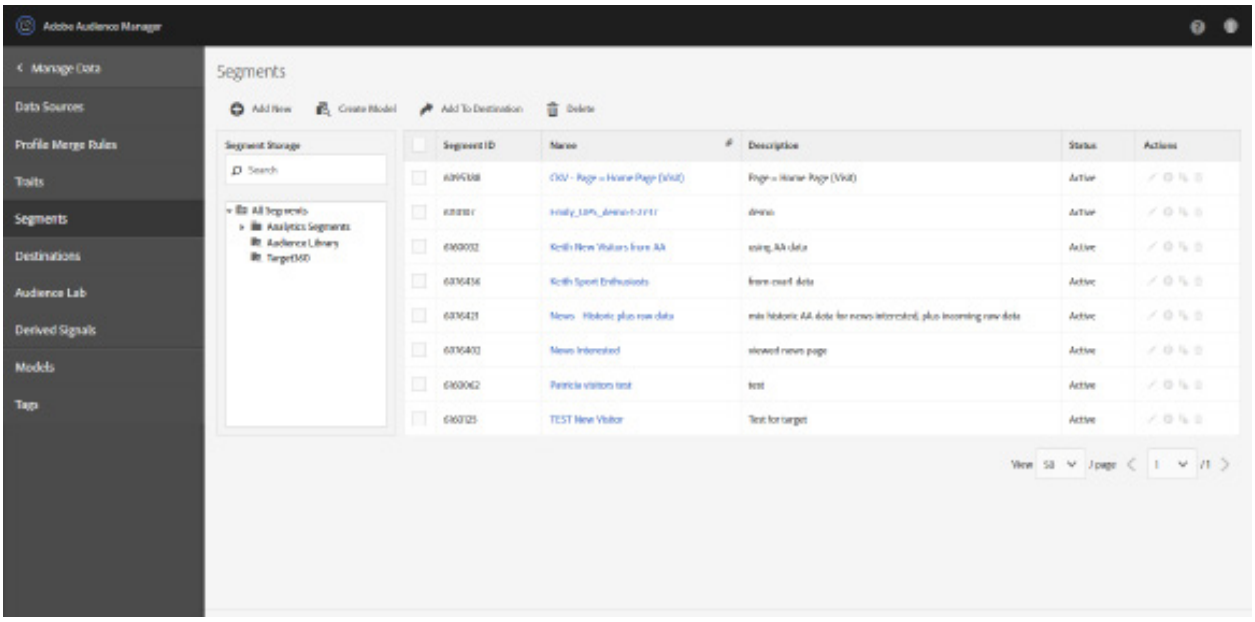
Signal examples:
gender=female
member=platinum
member=gold

Trait examples:
The trait, "Women," defined to catch the gender=female signal.
The trait, "Platinum Level," defined to catch the member=platinum signal.

Segment example:
The segment, "Platinum Level Women," defined as the "Women" trait OR the "Platinum Level" trait.

Creating Marketing Cloud Audiences within Adobe Audience Manager

In Adobe Audience Manager (AAM), you may view and manage all Marketing Cloud audiences, both real-time and historical. You may also create real-time segments that you may then share back to the Marketing Cloud.



All audiences shared to the Marketing Cloud are available natively in Audience Manager.

Benefits of sharing audiences with Audience Manager

Audience Manager delivers the functionality of Audience Library, plus additional data sets. It provides the ability to augment profile data with additional data, since Audience Manager enables the inclusion of second- or third-party data.

Audience Manager also allows for offsite destinationing and look-alike modeling. Offsite destinationing is functionality that enables you to send an audience outside of the Marketing Cloud to a third-party system (ad server, DSP, ad network, and so on). Look-alike modeling is functionality in which Audience Manager can take the rules you defined, determine the set of people who share characteristics in such a way they are similarly predictive, even if they are not defined exactly the same, and use that information to expand the scope of your targeting. It's a way to broaden your

audience in order to get more people to see your ad, while still adhering to the spirit of the rules you defined for that audience.

As with Audience Library audiences created using Raw Analytics Data, Audience Manager enables real-time audience creation.

Considerations regarding sharing audiences with Audience Manager

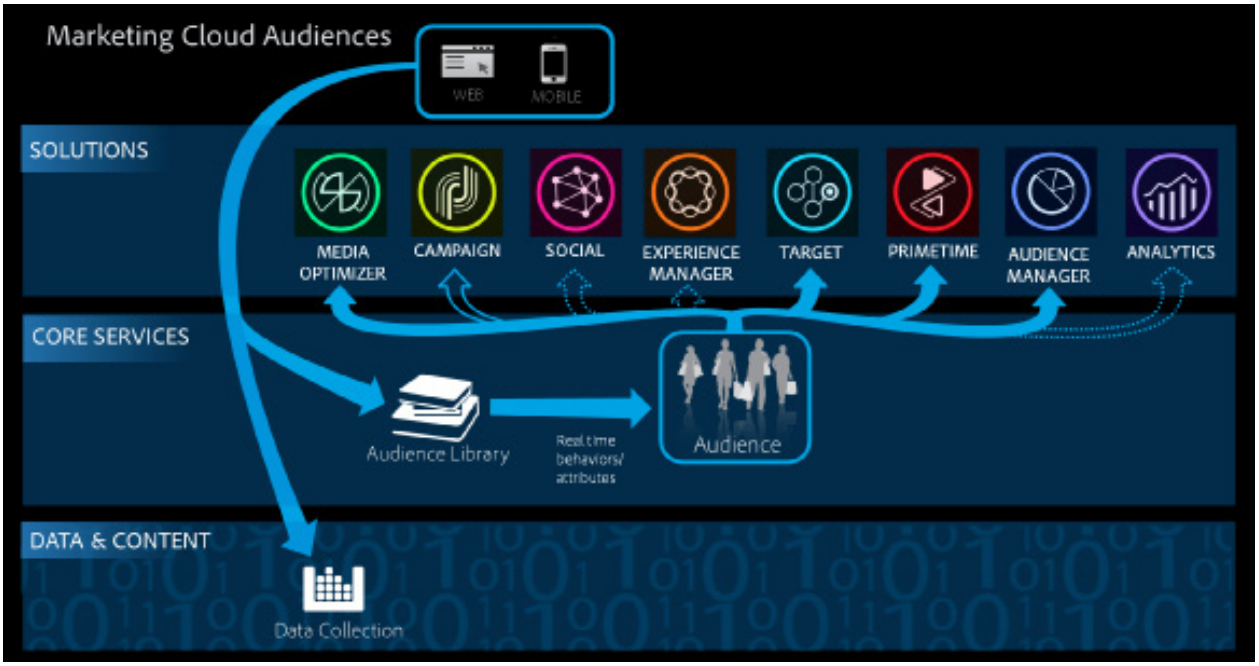
Note Audience Library does not replace Audience Manager. In the Audience Library, you can define complex audiences using raw analytics data, as previously mentioned, but you cannot use second- and third-party data nor perform look-alike modeling, as you can do in Audience Manager. Audience Manager is an opportunity for more robust targeting options as you become more experienced and want to expand your use of Marketing Cloud audiences.

WARNING: To avoid unexpected behavior, do not delete audiences from within Audience Manager, unless they were created inside Audience Manager.

Audience Manager should be considered in order to extend your segmentation capabilities to get as much value out of sharing audiences across the Marketing Cloud as possible.

How Real-time Audiences Work: Behind the Scenes

Real-time audiences are powered by Adobe Audience Manager. When an audience is created and saved in the Marketing Cloud interface, Audience Manager traits are configured to watch for the conditions specified in the audience rules. When an Analytics image request fires on the page, data from the request is forwarded to Audience Manager, where it is checked against the trait criteria defined by the active audiences. If there is a match, the Marketing Cloud ID for that person is added to the appropriate audience(s). This process makes updated audience membership available to subscribing solutions such as Adobe Target in real time.



Real-time audience data flow:

Web and mobile traffic flow into the system. While moving through our data collection framework, the data is forwarded to the Marketing Cloud, where we can use the rules established within the Audience Library to build audiences in real time. At that point, those audiences can be used across the Marketing Cloud, equally accessible by the solutions. Let's examine this process in greater detail in the next section.

Data Latencies regarding Real-time audiences

Real-time audiences operate very differently from historical audiences (those shared from Analytics).

When real-time audiences are created in the Audience Library—that is, when Raw Analytics Data is used to create a Marketing Cloud audience—or when segments are created and shared from Audience Manager, there is no batching or scheduling involved. Audience data does not need to be uploaded or processed. Instead, real-time audiences are defined by sets of rules; there are no IDs that need to be distributed. Because it's so much smaller, the rule set propagates very quickly through the Global Delivery Network (GDN), taking only about 30 minutes to be pushed to the necessary servers.

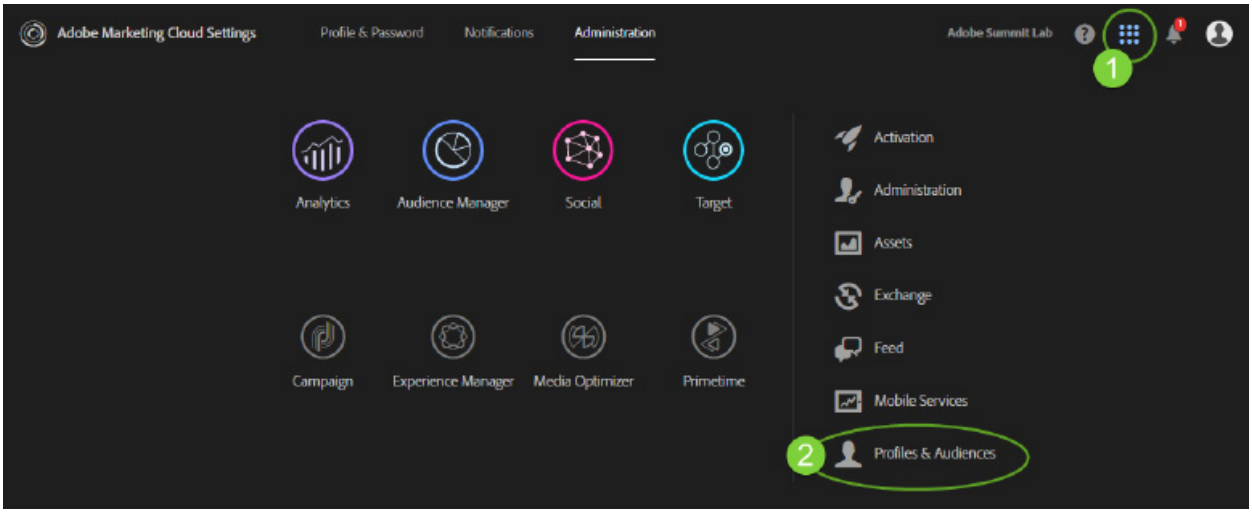
This is "Next Call" availability. The segmentation itself happens in real time, within milliseconds. By then, the Target call is usually gone for that specific page. But the *next* time Target asks for audience membership, the update is available. The next time that Target asks is generally on the next page. If the page was implemented in such a way that information is refreshed based on a click or some other event on the page, then it's possible audience information may be provided on that same page. But in general practice, the effect will be shown on the next page.

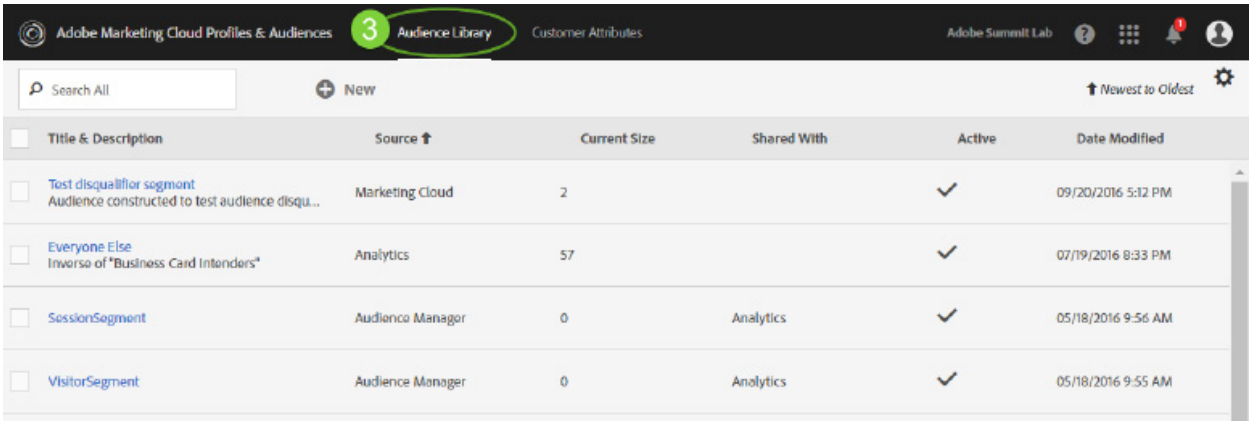
REMEMBER: The latency described in this section applies to real-time audiences, meaning those created in the Audience Library based on Raw Analytics Data, or those shared from Audience Manager. If you create an Audience Library audience that references not only Raw Analytics Data but also a historical audience, you could be subject to the 48-hour latency inherent with audiences shared from Analytics.

Exercise 4.1
Creating Real-time Audiences using the Audience Library

In this exercise, you will use the Audience Library to create and use an audience in Target. (15 min)

1. In the Marketing Cloud, navigate to the Audience Library.





   a. Does the historical audience that you previously shared from Analytics appear here? (The answer should be Yes.)

   b. What is its "Source?"

2. Click **New** to create a new Marketing Cloud audience. Add two or more Rules to define the audience. (For now, stick to Raw Analytics Data as the Attribute Source across all of your Rules.)

   a. Can you use AND and OR logic to combine different criteria?

   b. What kind of information is provided by the Venn diagram?

   c. What kind of information is provided in the Audience Summary?

3. Save the audience.

   a. Does it appear in the Audience Library? (The answer should be Yes.)

b. What is its "Source?"

4. View and use the new audience in Adobe Target.

   a. Navigate to Adobe Target.

   b. Verify the audience appears in the Adobe Target Audience list. Be aware there may be a delay of a few minutes between audience creation in Audience Library and Target displaying that information.

   c. Begin to create a new A/B activity, whether an A4T activity or not. Verify the audience you published from the Audience Library is available for selection when you target the activity.

5. Back in the Audience Library, create a new composite audience that combines the audience you created previously in Analytics with two additional rules based off of Raw Analytics Data.

   a. What can you expect regarding the data latency for this audience?

Exercise 4.2
Creating Real-time Audiences using Audience Manager

In this exercise, you will use Audience Manager to create and use an audience in Target. (10 min)

1. In the Marketing Cloud, navigate to the Segments list in Audience Manager. (**Audience Manager** > **Manage Data** > **Segments**)
2. Validate that the audience you created from Analytics appears here.
3. Validate that the audience you created from the Audience Library appears here.
4. Create a new Audience Manager segment, naming it uniquely.

   a. Within **Segments**, click **Add New**. Browse the available traits, select the ones you want to include, and complete the definition. (Alternatively, navigate to **Traits**, select some traits, click **Create Segment**, and complete the definition.)

   b. Select **Audience Library** as the folder in which you would like to save this segment definition, and click **Save**.

5. Navigate to the Audience Library in the Marketing Cloud.

   a. Validate that the audience you created from Audience Manager appears here.

   b. What is its "Source?"

6. View and use the new audience in Adobe Target.

   a. Navigate to Adobe Target.

   b. Verify that the audience appears in the Audiences list. Be aware there may be a delay of a few minutes between audience creation in Audience Manager and Target displaying that information.

   c. Begin to create a new A/B activity, whether an A4T activity or not. Verify the audience you published from Audience Manager is available for selection when you target the activity.

Solutions to Exercises

Solutions to Exercise 4.1
Creating Real-time Audiences using the Audience Library

1. In the Marketing Cloud, navigate to the Audience Library.

   a. Does the audience you created in Analytics appear here? (The answer should be Yes.)

   b. What is its "Source?"
   Audience Manager

2. Add two or more Rules to define the audience.

   a. Can you use AND and OR logic to combine different criteria?
   Yes

   b. What kind of information is provided by the Venn diagram?
   Number of visitors in each contributing population, number of visitors in the defined audience (intersection of the contributing populations)

   c. What kind of information is provided in the Audience Summary?
   Summary of rules
   Related Audiences
   Sent History
   Campaign Usage

3. Save the audience.

   a. Does it appear in the Audience Library? (The answer should be Yes.)

   b. What is its "Source?"
   Marketing Cloud

5. Back in the Audience Library, create a new composite audience that combines the audience you created previously in Analytics with two additional rules based off of Raw Analytics Data.

   a. What can you expect regarding the data latency for this audience?
   If you use an AND condition, the availability of audience data will always be as fast as its slowest component. If a composite audience includes both Raw Analytics Data as well as historical audiences in its definition and uses an intersection to combine them, then it will be bound by the one with the slower data latency, which in this case is the historical audience component. Marketing Cloud audiences that are built solely on Raw Analytics Data or

segments created in Audience Manager will provide the closest to real-time availability of audience membership to subscribing solutions (such as Adobe Target).

Solutions to Exercise 4.2
Creating Real-time Audiences using Audience Manager

5. Navigate to the Audience Library.

   a. Validate that the audience you created from Audience Manager appears here.

   b. What is its "Source?"
   Marketing Cloud

Customer Attributes

Overview

In this chapter, we demonstrate how to upload customer attributes from external systems to further enrich your understanding of your customers and target them more effectively.

Topics covered in this chapter include:

- Enterprise data
- Prerequisites
- How to upload Customer Attributes
- How to use Customer Attributes
    - Run Analytics reports
    - Create an audience in Target
    - Target to that audience in a Target activity

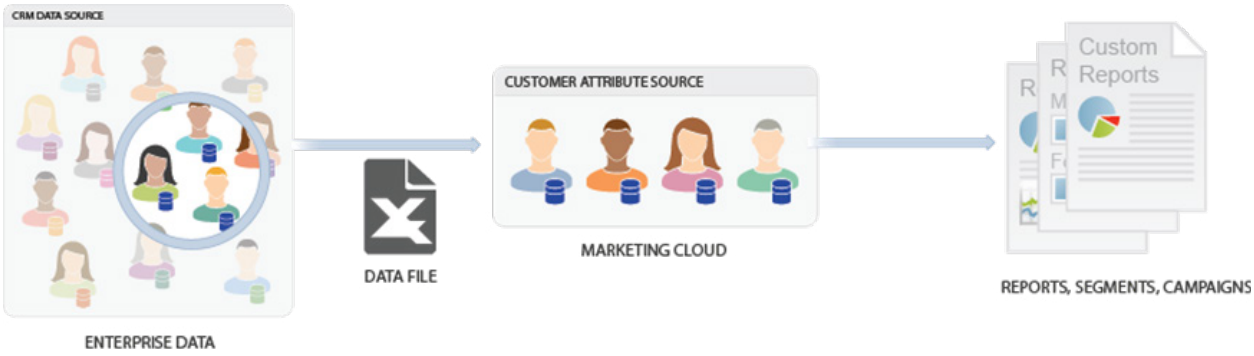
Objectives

By the end of this chapter, you will be able to:

- Describe customer attributes
- Upload customer attributes to the Marketing Cloud
- Use customer attributes to target visitors more effectively

An Introduction to Customer Attributes

If you capture enterprise data in a customer relationship management (CRM) database, you can upload the data into a customer attribute data source in the Marketing Cloud. Once there, these offline customer attributes are matched to people's online behavioral data and made available for reporting, segmentation, and activities.



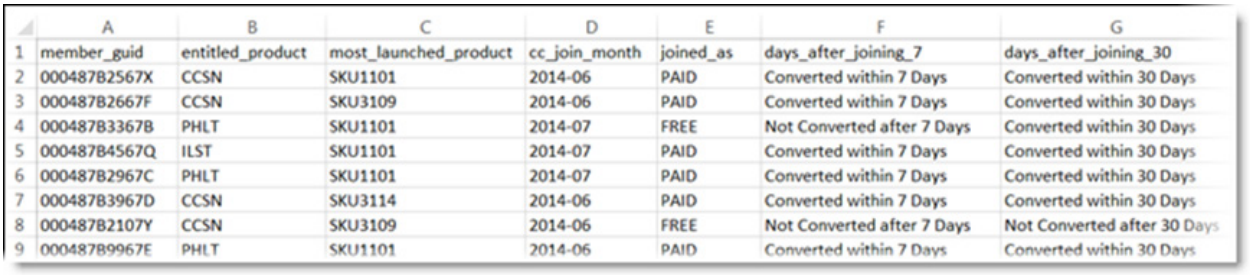
Using customer attribute data, marketers and analysts can answer questions like:

- Which online campaigns are most effective with my gold-level customers?
- Which products do gold-level customers search for versus platinum-level customers?
- Is my site redesign having a positive impact on conversion rates for older customers?
- What products do customers with a low lifetime value tend to research on my site?

What Is Enterprise Data?

Enterprise data resides in other systems. It can be complex and mean different things to different people. This data can include information such as memberships, loyalty level, age, gender, products owned, interests, and Lifetime Value.

The following image is an example of an enterprise data file showing subscriber data for products, including member IDs, entitled products, most-launched products, and so on.



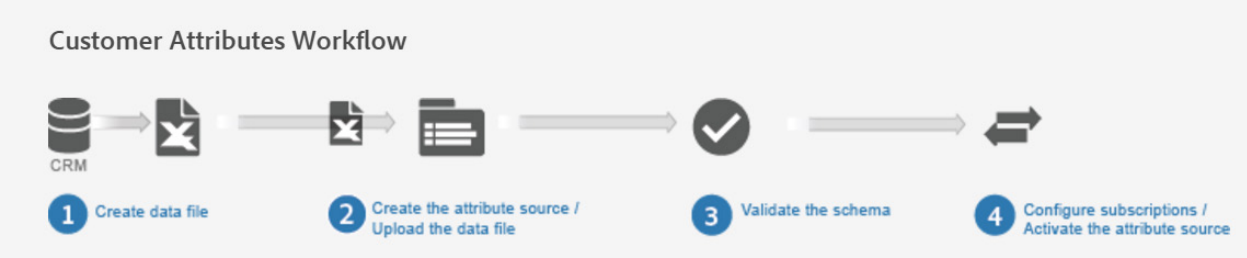
	A	B	C	D	E	F	G
1	member_guid	entitled_product	most_launched_product	cc_join_month	joined_as	days_after_joining_7	days_after_joining_30
2	000487B2567X	CCSN	SKU1101	2014-06	PAID	Converted within 7 Days	Converted within 30 Days
3	000487B2667F	CCSN	SKU3109	2014-06	PAID	Converted within 7 Days	Converted within 30 Days
4	000487B3367B	PHLT	SKU1101	2014-07	FREE	Not Converted after 7 Days	Converted within 30 Days
5	000487B4567Q	ILST	SKU1101	2014-07	PAID	Converted within 7 Days	Converted within 30 Days
6	000487B2967C	PHLT	SKU1101	2014-07	PAID	Converted within 7 Days	Converted within 30 Days
7	000487B3967D	CCSN	SKU3114	2014-06	PAID	Converted within 7 Days	Converted within 30 Days
8	000487B2107Y	CCSN	SKU3109	2014-06	FREE	Not Converted after 7 Days	Not Converted after 30 Days
9	000487B9967E	PHLT	SKU1101	2014-06	PAID	Converted within 7 Days	Converted within 30 Days

After creating the data file, upload it to the Marketing Cloud using a *customer attribute source* you create in **Marketing Cloud** > **Customer Attributes**.

Uploading Customer Attributes to the Marketing Cloud

You can break down the workflow for uploading enterprise data from a CRM system to the Marketing Cloud into these main tasks:

1. Create a data file
2. Create the attribute source / upload the data file
3. Validate the schema
4. Configure subscriptions / Activate the attribute source



Step 1: Create a data file

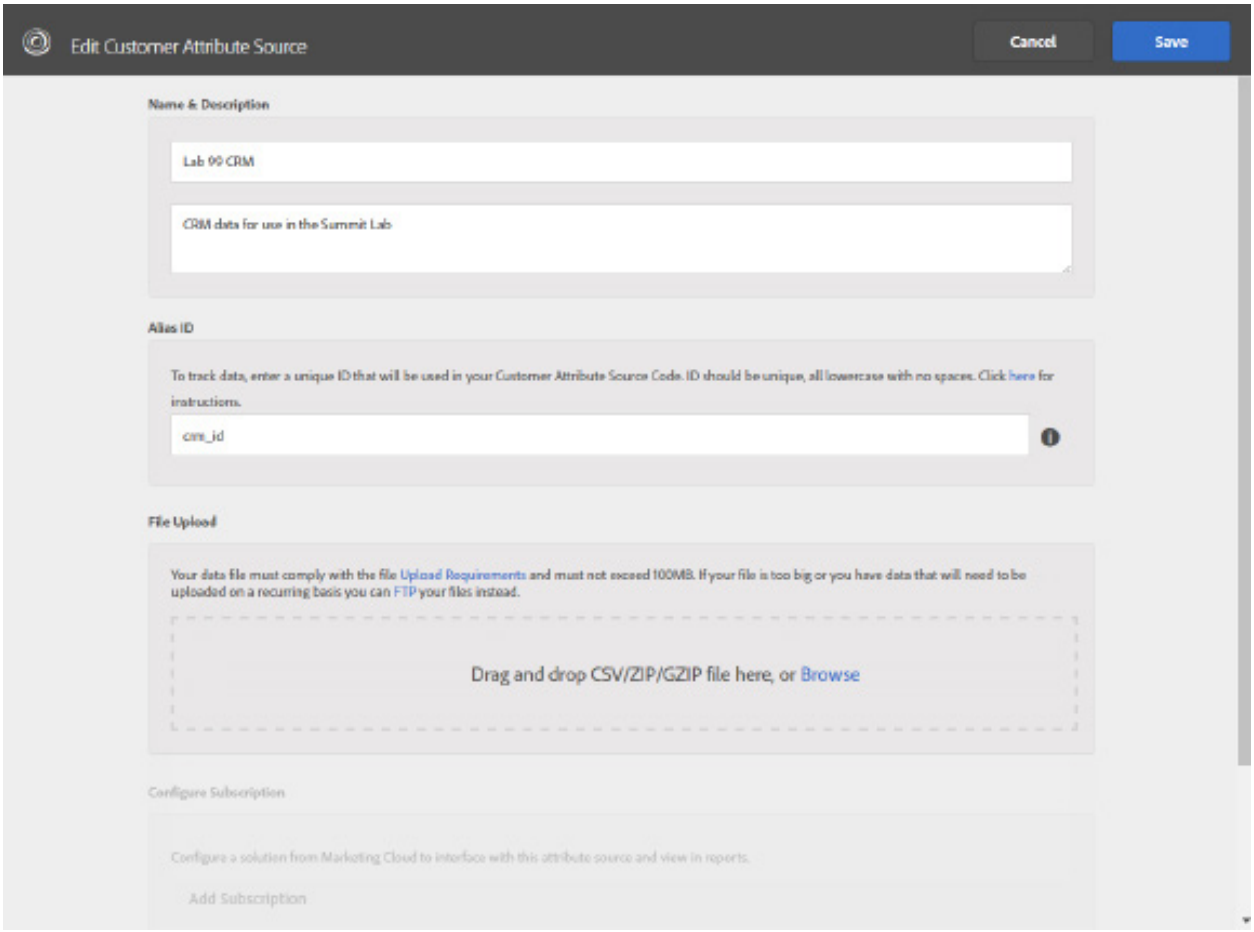
Data files should be in .csv format, with the customer ID to be matched in the first column.

What does the data file look like? Consider the following sample .csv data file.

	A	B	C	D	E
1	customer_id	age	gender	loyalty_level	lifetime_value
2	11jj454op69	31	F	Platinum	550
3	52mc210tr42	49	M	Gold	320
4	11jj454aaaa	31			100
5	11jj454bbbb				

Step 2: Create the attribute source and upload the data file

Navigate to the Marketing Cloud Customer Attributes Sources page, where you can manage and edit existing attribute data sources. Configure the fields to define your source. The Alias ID is the same as the Integration Code for the Marketing Cloud ID Service Customer ID, which you would have previously identified when configuring the Marketing Cloud ID Service Customer Settings during implementation. If you have multiple customer IDs, you will define multiple customer attribute sources. Each source refers to one customer ID. To upload the file, drag and drop it into the File Upload area.



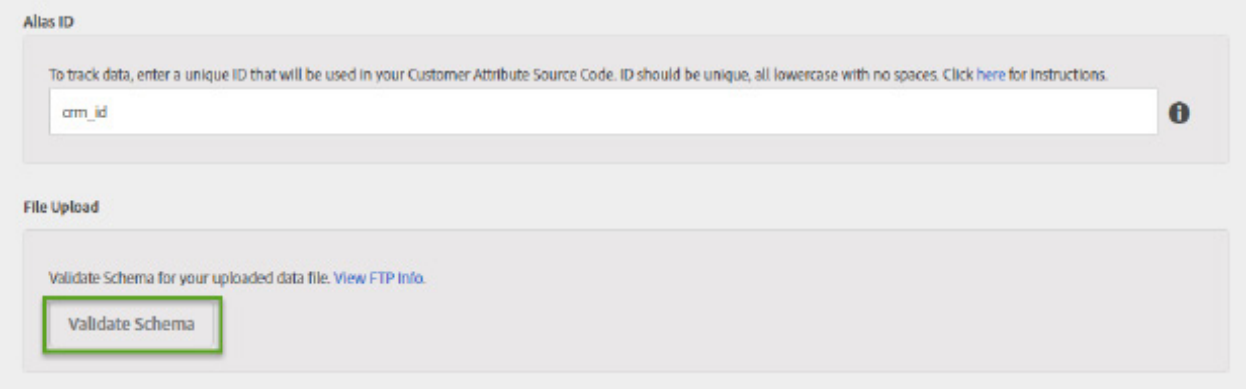
Customer Attribute Source configuration.

The Alias ID for the Customer Attribute Source is the same as the Integration Code for the Marketing Cloud ID service.

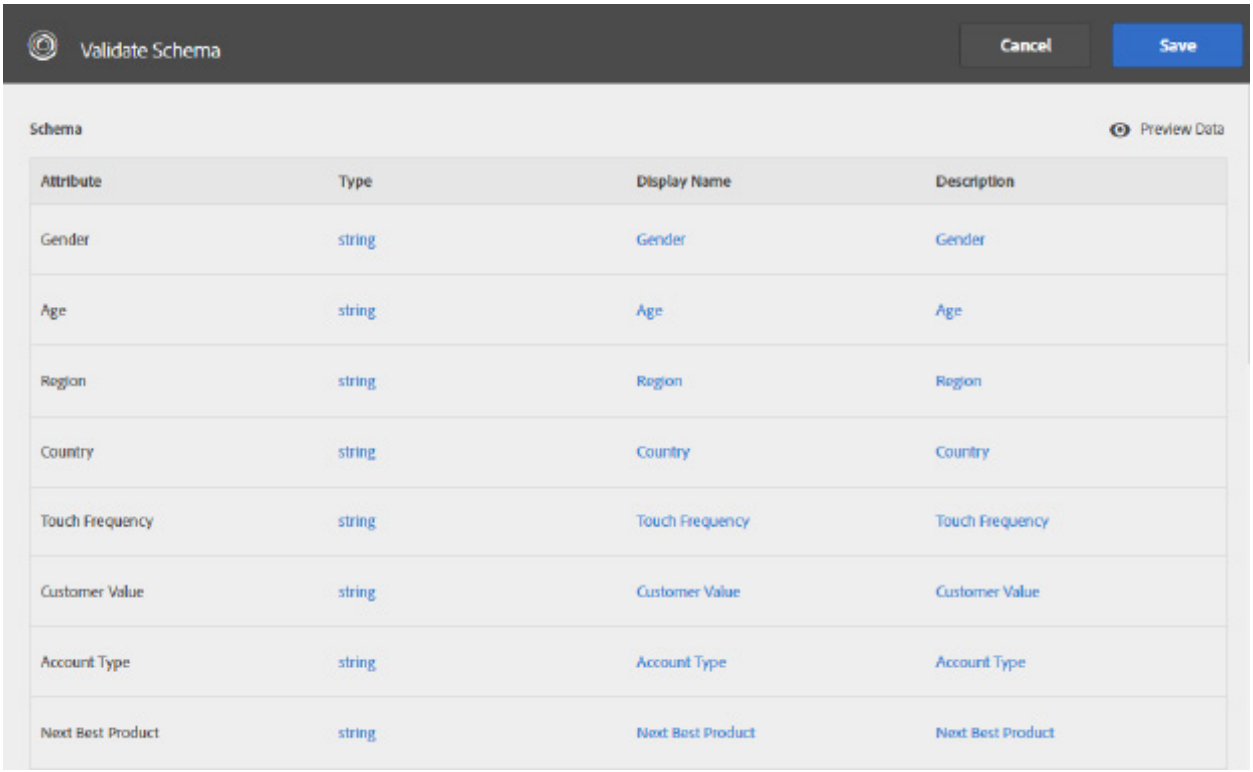
Step 3: Validate the attribute source schema

The validation process lets you map friendly names and descriptions to uploaded attributes (strings, integers, numbers, and so on). This mapping process does not alter the original data.

After uploading the file, click the **Validate Schema** button that appears.



On the Validate Schema page, each row of the schema represents a column of the uploaded CSV file. Edit the display names and description to your liking, then click **Save**.



Validating the schema

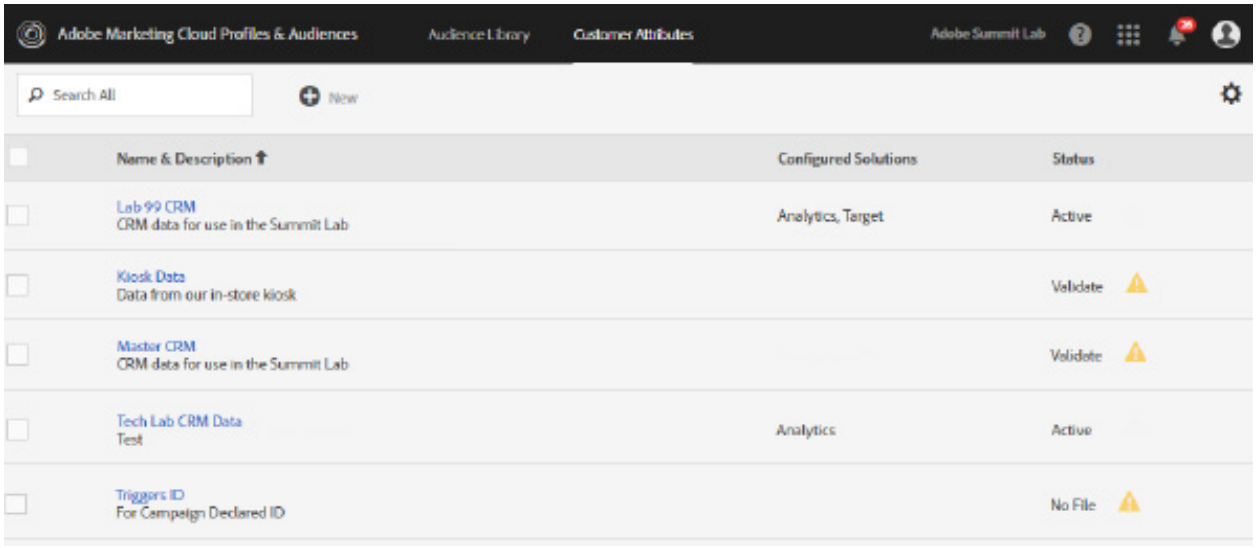
NOTE: The names you apply to strings, integers, and numbers are used to create Analytics metrics. These metrics appear in **Visitor Profile** > **Customer Attributes** reports. For this reason, it is good practice to specify the appropriate data type, such as a string, list of strings, numbers, a record, and so on.

Step 4: Configure subscriptions and activate the attribute source

Configuring a subscription enables customer attribute data to be passed between the Marketing Cloud and other solutions, such as Adobe Analytics. For example, an Analytics subscription enables customer attribute data to appear in Analytics reports. If you do not configure an Analytics subscription for a source, the customer attribute data in that source will not be sent to Analytics. Adobe Analytics and Adobe Target are the first solutions with a subscription service available for Customer Attributes, with more solutions planned for the future.

On the Create New [or Edit] Customer Attribute Source page, click Add Subscription.

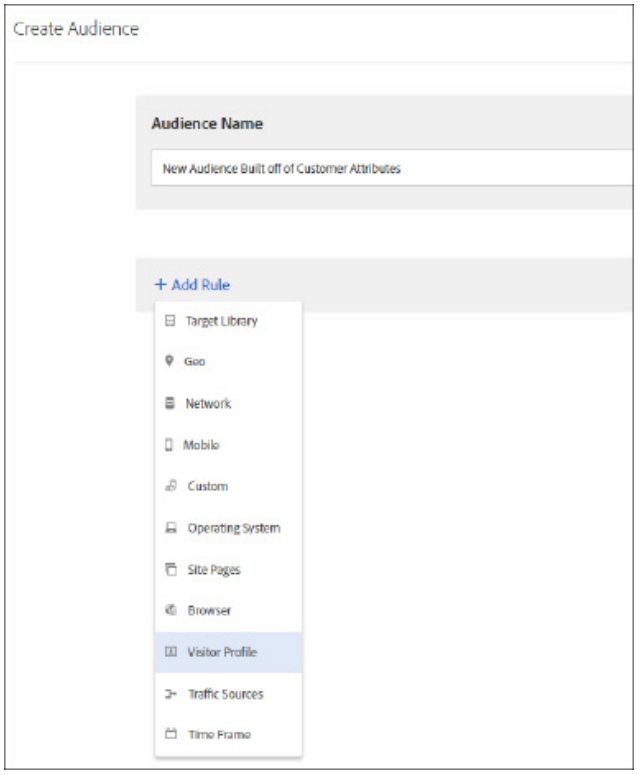
After saving your Customer Attribute Source, it will appear in the Customer Attributes page.



TIP: You can also upload data via FTP after you create a customer attribute source and an FTP account in the Marketing Cloud. You create one FTP account per attribute source. The uploaded files are stored in the root folder of that account. The data must be in .csv format, with a second .fin file to indicate the upload is complete.

Using Customer Attribute data in Adobe Target

Customer Attributes appear in Target within the Visitor Profile menu when creating audiences.[1] To create an audience based off of a Customer Attribute, select **Visitor Profile**.



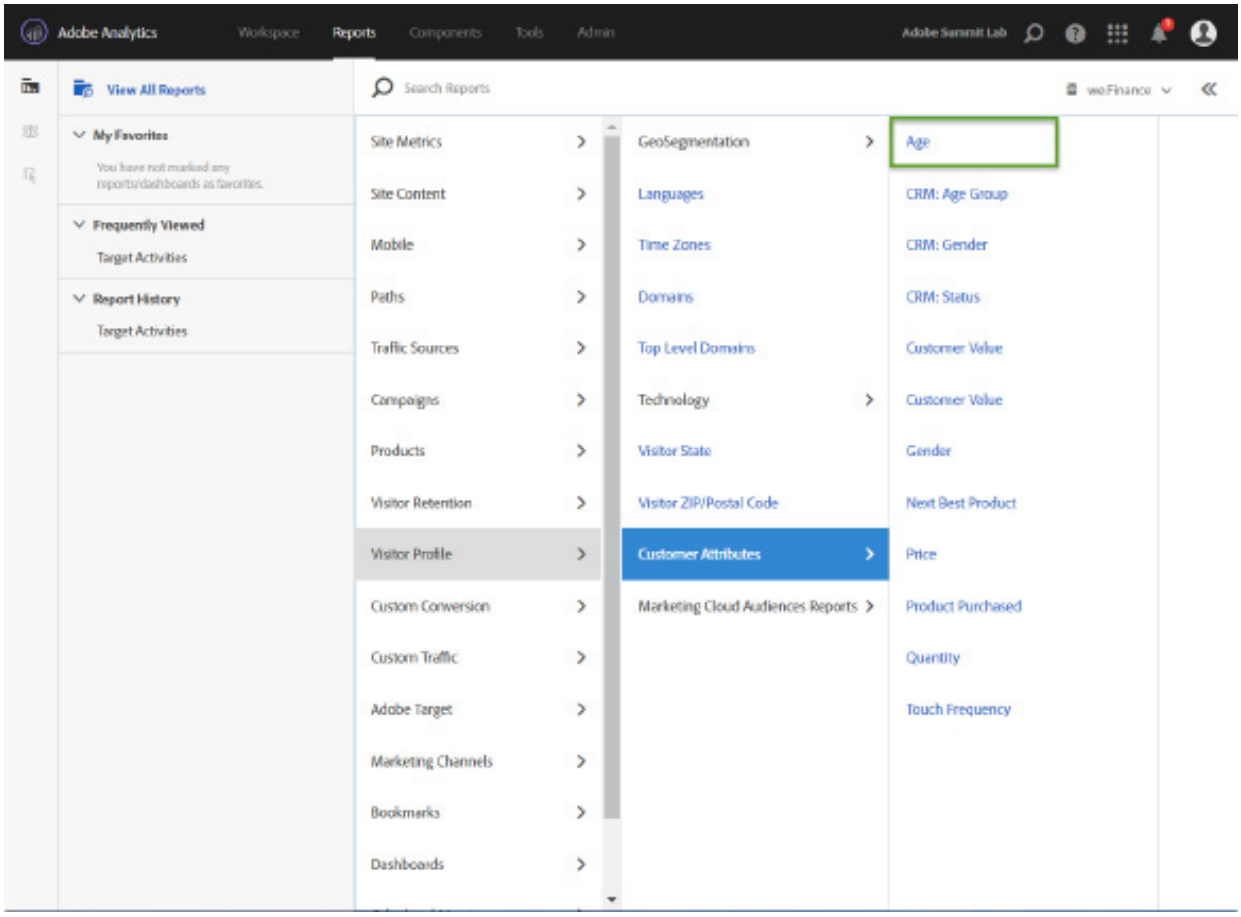
Within Visitor Profile, how can you tell which parameters are Customer Attributes versus those created using other means? Note the naming convention for the customer attribute profile parameters: each is prefixed with the Customer Attribute Source name. For example, if you created a Customer Attribute Source and named it "Master CRM," the "Next Best Mortgage" customer attribute would appear within the Visitor Profile drop-down as **Master CRM.Next Best Mortgage**.

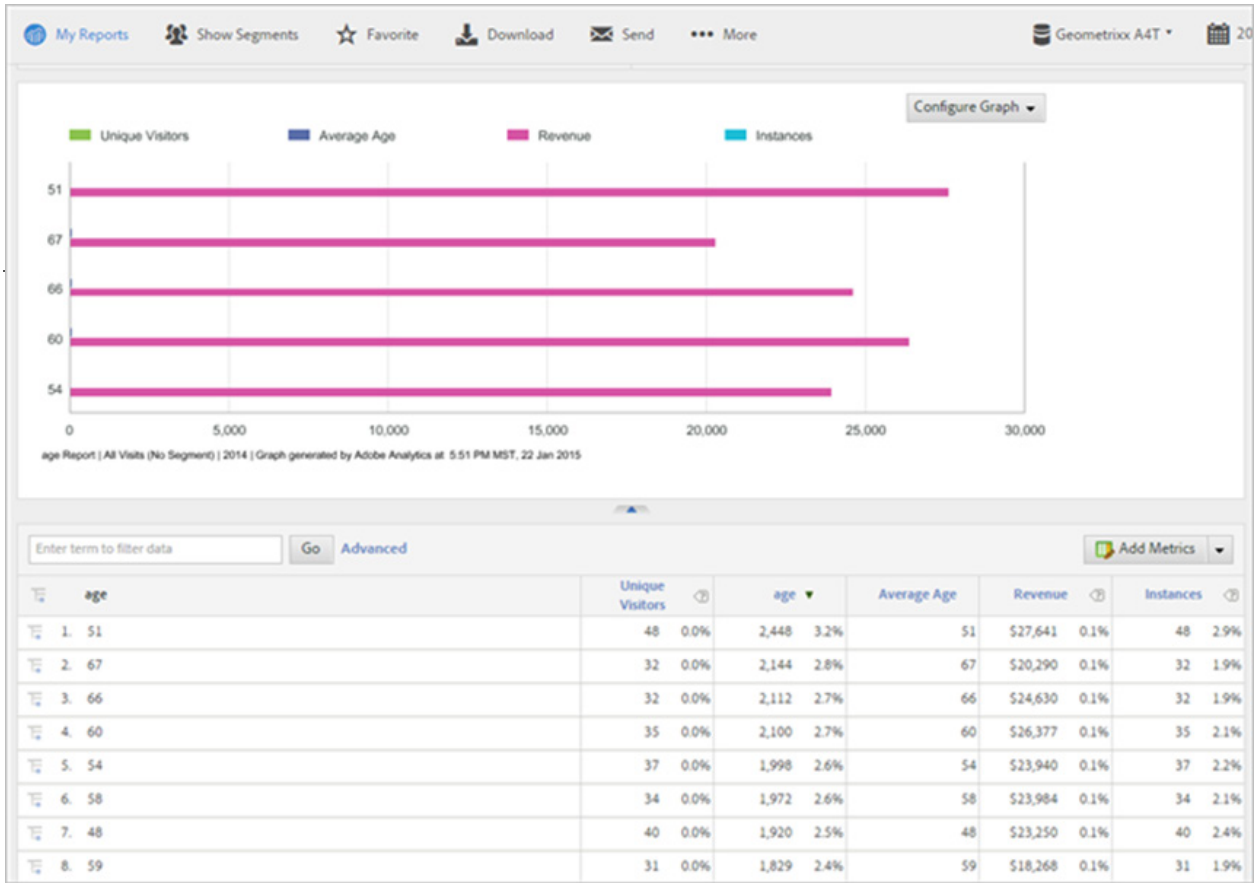
Once saved, you may use this audience for targeting or report filtering, just as you would any other audience in Adobe Target.

1 Note it may take up to 30 min for a newly-created customer attribute source to become visible in Target or Analytics."

Run Analytics reports on customer attribute data

After you upload customer attributes, validate the schema, and define a subscription, the system creates metrics based on the friendly names (such as age or gender) you map to the attribute strings and integers. These metrics appear in **Visitor Profile** > **Customer Attributes** reports in Adobe Analytics. For example, consider **Visitor Profile** > **Customer Attributes** > **Age.**





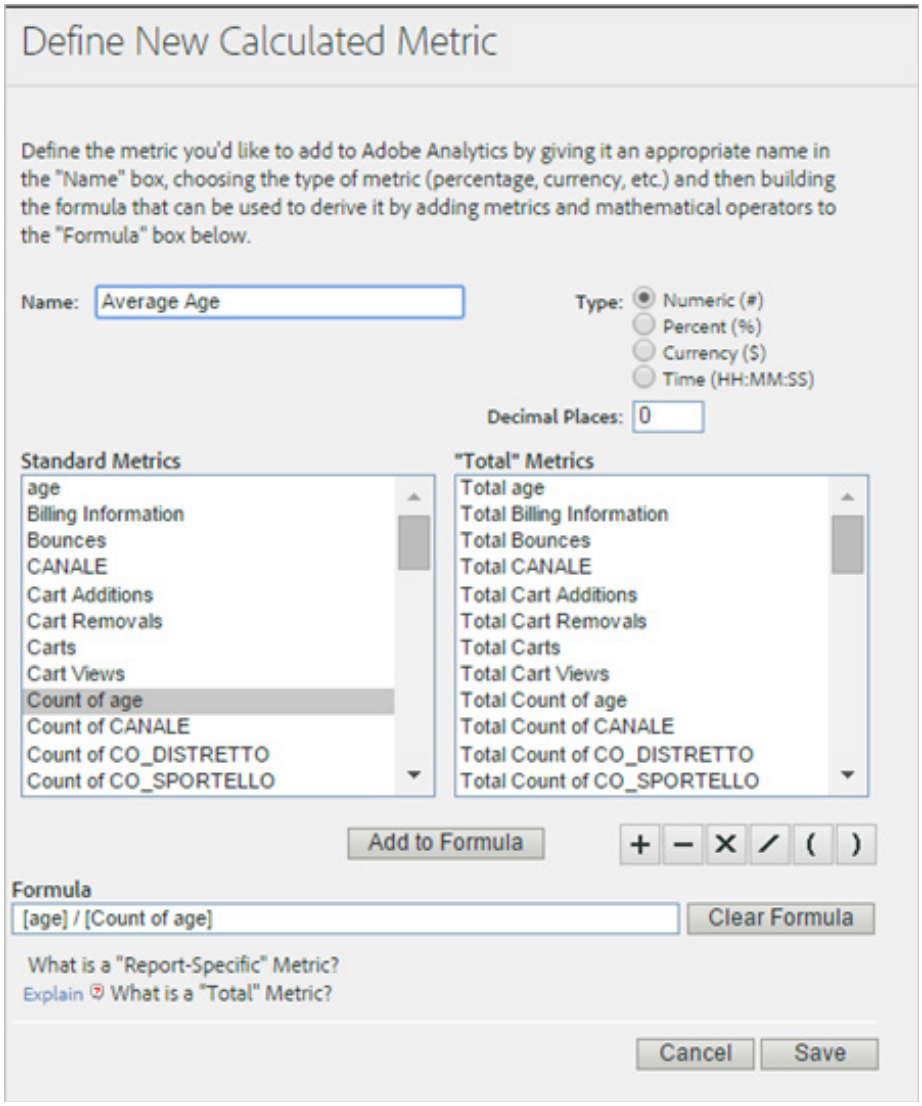
Example report based on Customer Attributes data

Example: Age Metrics

If you specify a string as age, the system creates the following metrics and dimensions:

- Age dimension: Lets you run a report based on the Age attribute.
- Age metric: A metric you can add to a report, such as a Unique Visitors report.
- Count of Age metric: Lets you understand, for example, if visitors specified an age value on a form.

Because metrics are sums in a report table, create a calculated metric that tells you the average age. The formula for this metric is Age / Count of Age:



Defining calculated metrics based on Customer Attribute data

BEST PRACTICE: Customer Relationship Management (CRM) databases often contain Personally Identifiable Information, or PII. CRM exports intended to be used in Marketing Cloud Profiles & Audiences should not contain information such as first and last name, a home or other physical address, an email address, a telephone number, a Social Security number, or any other identifier that permits the physical or online contacting of a specific individual.

Latency considerations for Customer Attributes

While Customer Attributes are not subject to the same kind of data latency considerations as historical audiences, they are subject to an initial synchronization latency. This process may take 12 hours.

For example, suppose that we.Finance has customer attribute information about a visitor, Shay Blake. The first time the we.Finance marketer uploads customer attribute data about Shay, there will be a 12-hour delay for that data to be processed and prepared. When Shay authenticates on a new device, the aliasing event takes place: Shay's Marketing Cloud ID is tied to her unique customer ID, and those additional attributes associated with her customer ID will become available for analysis in Adobe Analytics or on-page decisioning using Adobe Target.

As another example, suppose Neha goes to a web page on a new computer. She gets her MCID, but she is anonymous other than that. Any decisioning on that page happens on her MCID. But at some point, she logs in (authenticates). At that point, her customer ID becomes connected to the MCID in the same fashion as Shay's example above. As soon as a match happens, all of the additional attributes are added to the consumer's profile. Before that, all the attributes are waiting to be assigned to specific Marketing Cloud profiles. But once Neha authenticates, Adobe is able to match all relevant customer attributes to her, which then become available in her profile from that point onwards.

Exercise 5.1
Creating and Uploading Customer Attributes to Adobe Target (Optional)

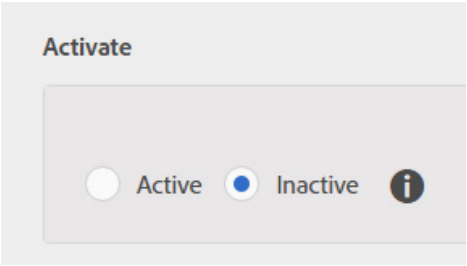
Instructions: in this lab, you will create and upload customer attributes to Adobe Target by creating a customer attribute source. Recall the main steps involved in the customer attribute workflow. (20 min)

1. Create a data file. Note that for this lab, a sample data file was already generated for you, but you will need to configure the customer ID slightly.
   a. In Excel, open the CSV file provided by your instructor.
   b. Examine the file contents.
   c. Note the name of the first column. It should be **crm_id**. Modify it so that it is unique by adding your user name to it. For example, if you are user47, change the column name to **crm47_id**. Save the file.
2. Create the customer attribute source and upload the data file.
   a. In the Marketing Cloud, navigate to **Profiles & Audiences** > **Customer Attributes**. This takes you to the Customer Attributes Sources page, from where you can manage and edit existing attribute data sources.
   b. Click **New**. The Create New Customer Attribute Source page opens.
   c. Configure the following fields:
      i. Name: Name your customer attribute source uniquely, preferably by using your assigned user number in the title.
      ii. Description: (Optional) A description for the data attribute source.
      iii. Alias ID: This is the Customer ID. It should be unique, lowercase, with no spaces. For the lab, use the name of the first column in the CSV file, which you should have modified so that it is unique (for example, **crm47_id**).
   d. Upload the data file
      i. Browse for the CSV data file, or drag and drop it into the designated **File Upload** area of the page.
3. Validate the schema.
   a. After uploading the file, click the **Validate Schema** button that appears.
   b. On the Validate Schema page, each row of the schema represents a column of the uploaded CSV file.
   c. Edit the display names and descriptions to your liking, then click **Save**.

4. Configure a subscription.
    a. On the Create New [or Edit] Customer Attribute Source page, click **Add Subscription**.

    b. Choose **Analytics** from the solution menu.
    c. Select the report suite.
    d. Choose up to three attributes to begin sending to Analytics Standard.
    e. Set up another subscription, this time to **Target**.
    f. Click **Save**.
    g. From the **Create New [or Edit] Customer Attribute Source** page, keep the subscription **Inactive** for the purposes of class (you will instead use an existing, activated source).

WARNING: For class purposes, do not activate this customer attribute source!
Keep your source ***Inactive***, as shown here.



    h. Click **Save**. This returns you to the Customer Attributes page, where you can manage your Customer Attribute Sources.
    i. Verify you can now see your customer attribute source listed on the Customer Attributes page. Congratulations! You have just configured your first Customer Attribute Source.

5. Examine an existing customer attribute source.
    a. On the Customer Attributes page, there should be one customer attribute source whose status is Active. Click this source to examine it.
    b. Note the following, as you will reference them in a later lab.
        i. The *name* of the customer attribute source.
        ii. The *attributes* that have been subscribed to Target from this customer attribute source.

6. Click **Cancel** to cancel out of the customer attribute source without making any changes.

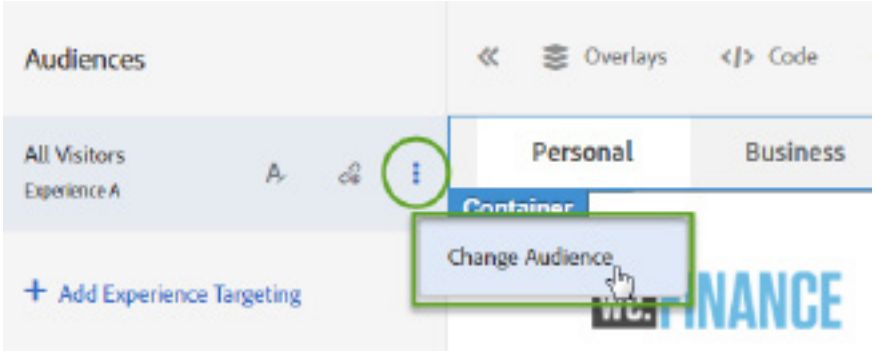
7. Exercise 5.2
End-to-End Exercise: Targeting to Audiences in Adobe Target

Instructions: In this lab, you will use everything you learned in the course in order to:

- Create an audience in Target based off of Customer Attributes
- Use that audience in an Experience Targeting activity using that audience and A4T

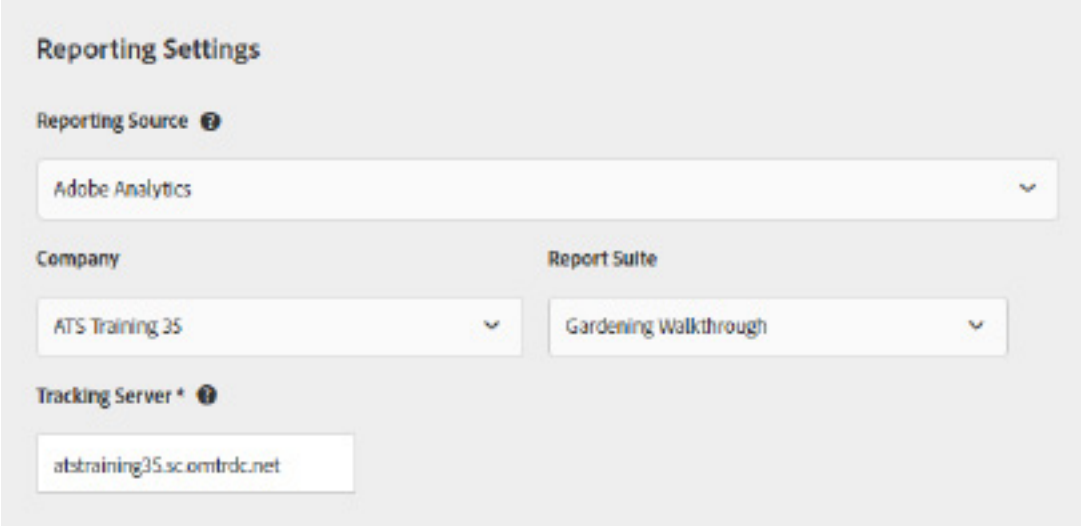
(25 min)

1. Create an audience in Target based off of Customer Attributes.
   a. From the Marketing Cloud Feed page, click **Target**, then launch Adobe Target by selecting the **Target** card.
   b. Navigate to **Audiences** > **Audience List**.
   c. Create a new Audience by clicking **Create Audience**.
   d. Name your audience **YOURNUMBER Final Audience**, or something else unique and descriptive.
   e. Click **Add Rule**.
   f. Select **Visitor Profile**.
   g. Define the audience by scrolling through the Visitor Profile parameters to find the customer attributes you examined earlier, from the sample source that was previously uploaded. Tip: Recall that they should be prefixed by the name of the customer attribute source, which should be "ctest." For example, you might define **ctest.Gender contains Female**, or **ctest.Account Type contains Business**.
   h. Save the audience.
2. Identify a Marketing Cloud audience you created in an earlier exercise.
   a. If you do not have a Marketing Cloud audience from a previous exercise but would like to use one now, create one by navigating to **Profiles & Audiences** > **Audience Library**, and creating a new audience based on Raw Analytics Data.
3. Create an Experience Targeting activity that leverages both of the audiences.
   a. Navigate to the Adobe Target Activities list. In the upper-right corner of the Activities list, click **Create Activity** > **Experience Targeting**.
   b. Modify the URL, then click **Next** to accept the default of the Visual Experience Composer.
   c. Compose Experience A.
   d. Click the three dots to change the audience to which Experience A will be targeted.

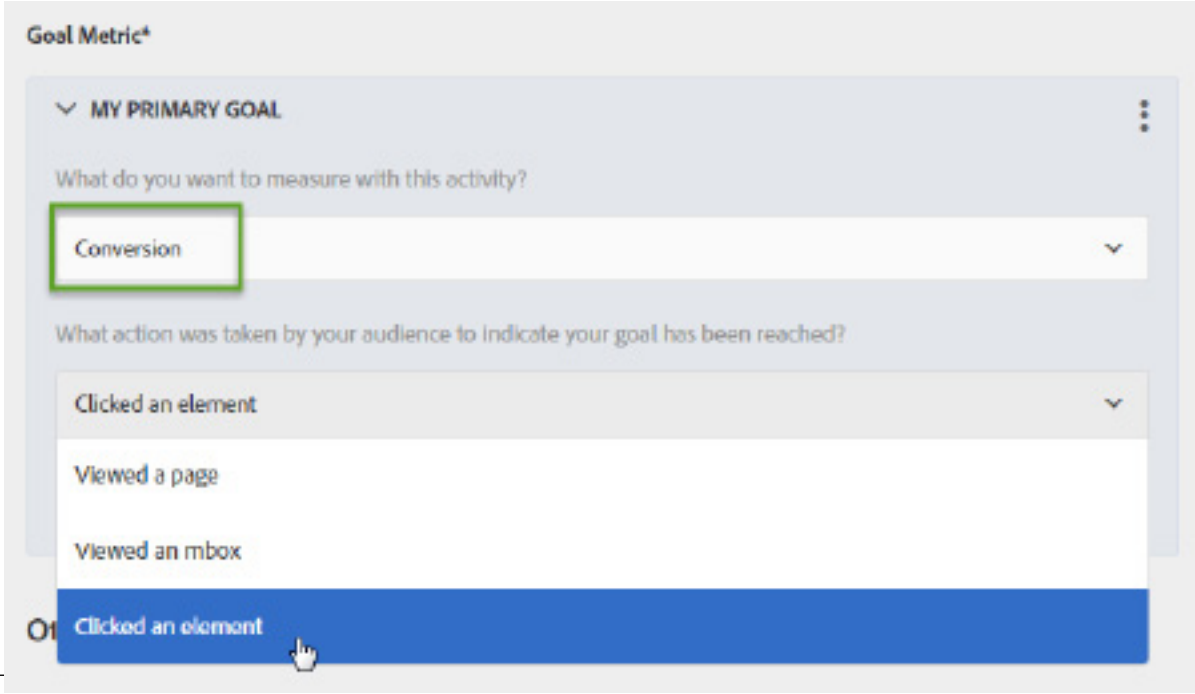


e. Locate the audience you created earlier, which is based off of a customer attribute. Select it, then click **Save**. Experience A will be targeted to this audience.
f. Click **Add Experience Targeting** to create a new experience. Target this experience to the other audience which you identified (or created) in step 2, the Marketing Cloud audience.

4. Finish the configuration of your activity.
   a. Click **Untitled Activity** to rename it. Provide a unique name for your test, and click **Next**.
   b. From the **Target** page, review the diagram of the test you just created.
   c. Click **Next** to proceed to the final configuration page, **Goal & Settings**.Define this activity as an A4T activity by selecting **Adobe Analytics** as the **Reporting Source**.



   d. Define your **Goal Metric**. For example, to enable Adobe Target's click tracking, configure your goal as follows.



Click **Select Elements** in order to select the page element whose clicks you want to track. This launches the VEC again. Click the hero image and then click the checkmark in the top right to return to the metrics page.

e. Save and activate your activity. (Here in class, we will skip the step of performing Quality Assurance.)

5. Consider the following questions.
   a. In your own words, describe the expected behavior of this test.
   b. Describe how the audience for the first experience was created.
   c. Describe how the audience for the second experience was created.
   d. How are customer attributes used in Adobe Target?

Solutions to Exercises

Solutions to Exercise 5.2
End-to-End Exercise: Targeting to Audiences in Adobe Target

5. Consider the following questions.
    a. In your own words, describe the expected behavior of this test.
    Visitors to the page will see Experience A if they meet the criteria defined by the customer attribute qualification, or they will see Experience B if they meet the criteria defined by the Marketing Cloud audience.
    b. Describe how the audience for the first experience was created.
    A customer attribute source file was defined and uploaded, and a subscription to Target was defined. The attributes in the file then became available for selection under Visitor Profile when defining an audience. One of the attributes was then used to define a condition for the audience.
    c. Describe how the audience for the second experience was created.
    Answers may vary depending on how you defined your Marketing Cloud audience, but if you followed the instructions as listed in the exercise, then you went to the Audience Library to define a real-time audience using Raw Analytics Data.
    d. How are customer attributes used in Adobe Target?
    They:
    - ***Provide a means for loading 1st party or CRM data into the Marketing Cloud***
    - ***Can be used to affect the machine learning models in Target, as they provide a means for loading additional customer data into the models***
    - ***May be used to create audiences, target activities, and segment reports***

Where Should I Build My Audiences?

Overview

While these new audience creation options are quite powerful, the additional choices they provide for creating audiences leads to some new questions. Namely: Now that I have the ability to use audiences from multiple solutions, how do I decide where I should create them?

Objectives

By the end of this chapter, you will be able to:

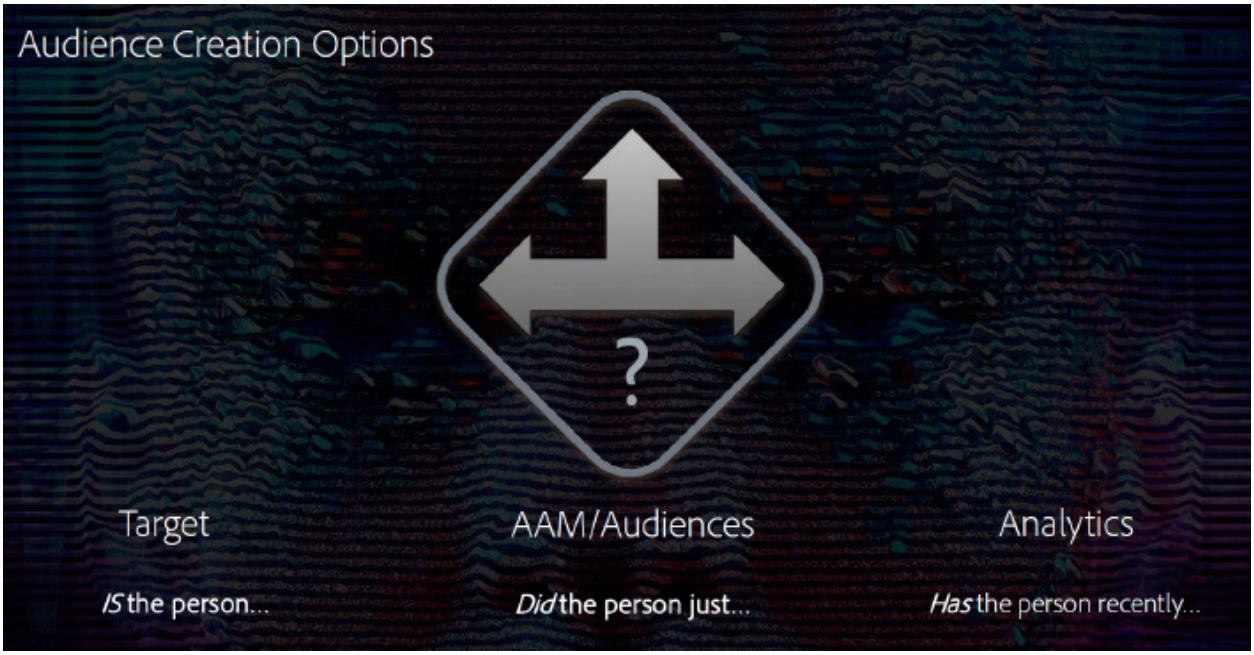
- Employ best practices and guidelines for using audiences in Target
- Decide where to build audiences to meet your business needs

Deciding where to build audiences

While the audience creation options covered in this course are quite powerful, the additional choices they provide for creating audiences leads to some new questions. Namely: *Now that I have the ability to use audiences from multiple solutions, how do I decide where I should create them?*

There are a number of factors that play a role in that determination, such as the user's overall comfort and experience with the interface, the intended use of audiences, timing and portability requirements, and so on.

Here are some general considerations to keep in mind as *guidelines*. When determining where to create audiences, consider the *type of question* you are trying to answer with the audience. This will help determine where to build the audience.



Audience creation option guidelines

If you find yourself asking, "***Is the person*** a new or return visitor? Is the person on a mobile device? Is the person in a particular geography?" then Adobe Target may be the right place to build such an audience. Target is still the fastest way to make decisions on current visitor profile information.

If you find yourself asking, "***Did the person just*** look at a particular page? Did the person just add something to their cart? Did they just apply for a credit card or loan?" then these types of questions can be answered very well with audiences created in Audience Manager and the Audience Library. Qualification in Audience Manager or the Marketing Cloud happens as the data flows into the system. When Raw Analytics Data is involved, it usually takes place on the Analytics call, which is typically at the bottom of the page. Consider the business card example, in which a visitor qualifies for the business card experience after that page loads, keeping in mind the data usually is not sent until the page is done rendering. Target will take action by serving the appropriate hero banner, but it will do so the NEXT time the page loads, now that Target has the necessary information about the visitor. This is why questions involving whether or not a visitor "just" did something is a clue that audiences created in Audience Manager or the Audience Library are well suited to identifying such visitors.

If you find yourself asking, "***Has the person recently*** abandoned my site? Has the person in the last few days searched (or researched) a particular product or service?" then Adobe Analytics is a great place to create these kinds of audiences. In other words, if you find yourself asking questions about recent activity, such as 48 hours ago or longer, then you want to use Analytics to identify audiences based on this kind of historical data. Keep in mind that there is an inherent processing delay from the time someone qualifies for an Analytics audience to the time that qualification becomes actionable. If you are segmenting on slowly changing dimensions like loyalty status, marital status, geography, and so on—dimensions whose values for a given visitor do not change very often—that makes Analytics a good candidate for identifying such visitors. By contrast, for data that is inherently more responsive or changeable, or for which you want to take action within 48 hours of it occurring, you will want to choose one of the other two methods of creating audiences.

Pros and Cons for audience creation options

	Adobe Target	Audience Library Real-time Audiences	Adobe Audience Manager	Adobe Analytics
Customer Attributes?	Yes	No	No	Yes
Pros	Immediate response, familiar workflow	Fastest and easiest way to use eVars or events directly from the page	External syndication, advanced segmentation capabilities	Advanced segmentation capability (processing rules, classifications, etc)
Cons	Some features requiring a profile script might be beyond the ability of non-technical users	Limited segmentation capability	Can require page code updates	Data export/ingestion to Marketing Cloud is slow
Timing	Immediate	Next Page	Next Page	24-48 hour delay
Hard Limits	Destinations limited to Adobe Target	Destinations limited to Marketing Cloud solutions (currently just Target)	None	Limited to 20 Active audiences (for now)

Pros and Cons of the various audience creation options

Consider **Adobe Target** as the audience creation tool for situations involving data that needs to be utilized immediately, on the first page load. This includes parameters such as geography or category affinity, for example. Target handles such "immediate" attributes especially well. However, keep in mind not all of these values will be immediately accessible; sometimes the marketer has to do some work, including profile scripting, to obtain the desired segmentation information. Also, at the time this course was written, Target is a consumer of audiences in the Marketing Cloud, but it cannot push its audiences back to the Marketing Cloud for sharing with other solutions.

Audience Library real-time audiences (created using Raw Analytics Data from the Audience Library) provide a great way to use eVars or events directly from the page in order to define segments. This works very well in "next page" targeting scenarios. The cons here are the marketer is limited to using eVars or events. (In the future, the scope of this capability may be expanded.) In terms of limitations, any audiences created here must stay within the Marketing Cloud—only other Marketing Cloud solutions can use these audiences.

Adobe **Audience Manager** (AAM) enables much more advanced segmentation capabilities. For example, suppose you want to segment visitors who visited your business card page, but have

done so three times in the past five days. This is a much more precise, sophisticated question that goes beyond merely asking whether they were there or not. Not only does AAM allow for this kind of advanced logic, but it also has algorithmic modeling capabilities to get better segmentation. Although Customer Attributes may not technically be used as-is within AAM, you can use AAM to import the same data that you can with Customer Attributes. There is also third-party data that can be on-boarded. Regarding the Analytics tag, all types of data may be used, including not only eVars and events, but also s_props, URLs, and so on, whereas Audience Library real-time audiences are limited to eVars and events. AAM is also able to syndicate its audiences anywhere, even outside of the Marketing Cloud. AAM provides for all capabilities of Marketing Cloud real-time audiences, plus additional capabilities.

NOTE: If you are a user who is most familiar with Adobe Target, perhaps you may not have access to AAM within your organization, or perhaps you are not as familiar with the AAM user interface. In such a case, when you need to create an audience, you can put in a request to your AAM team, but if it is something based on an eVar or an event, you also have the option of using the Audience Library to create that audience on your own. The Audience Library is so intuitive and easy to use that it provides accessibility to a larger pool of users. Bottom line: Users always have the option of using the Audience Library, even if they also have access to AAM.

Adobe Analytics does things that no other solution can do, such as pathing, segmentation based on a long history of interaction data, segmentation that leverages processing rules, classifications, and so on. These are unique in the Marketing Cloud. The caveat to always bear in mind, however, is the 48-hour delay regarding audiences shared from Analytics.

REMEMBER: For Target power users who are also familiar with Analytics, there may be a temptation to use Analytics to build audiences because of that familiarity. Therefore, it is all the more important to ensure the 48-hour latency for audience membership identification still aligns with your goals for your activity. If it does not, then **use real-time audiences (Audience Library audiences based on Raw Analytics Data, or Audience Manager audiences) instead of Analytics**, to achieve more immediate audience membership verification.

Exercise 6.1
Group Discussion: Deciding where to create audiences

Instructions: For each of the following business scenarios, determine whether Target, Audience Manager/Audience Library, or Analytics would be the best choice for targeting the audience described. (10 min)

1. I am interested in targeting people who made total orders in excess of $1000 within the past month.
2. Let's show this offer only to those visitors who just started a registration process.
3. This activity should resonate most with individuals from Japan who are browsing the site from their phone.
4. I want to put people in an experience based on these Customer Attributes. Should I use Target or Analytics to create the audience?

Solutions to Exercises

Solutions to Exercise 6.1
Group Discussion: Deciding where to create audiences

1. I am interested in targeting people who have made total orders in excess of $1000 within the past month.
   Analytics
2. Let's show this offer only to those visitors who have just started a registration process.
   AAM/Audience Library. In the Audience Library, you can make real-time audiences from events. You may also be able to do this from Target, if you can identify the start of the registration process from the page URL.
3. This activity should resonate most with individuals from Japan who are browsing the site from their phone.
   Target
4. I want to put people in an experience based on these Customer Attributes. Should I use Target or Analytics to create the audience?
   Target. If you can achieve the same audience definitions using either Target or Analytics, choose Target, because of the data latency considerations regarding historical audiences.

Implementation and Validation

Overview

At this point in the class, you created tests, viewed results, shared audiences from Analytics, created real-time audiences in the Marketing Cloud, and used Marketing Cloud audiences for targeting. In this chapter, we walk through the major steps involved in implementing the pieces required to enable the services that make these marketing activities possible.

Objectives

By the end of this chapter, you will be able to:

- Describe the main steps required to implement Analytics as a reporting source for Target (A4T)
- Describe the main steps involved in implementing the Marketing Cloud ID service and People core service
- Validate A4T and the Marketing Cloud ID service are functioning as expected

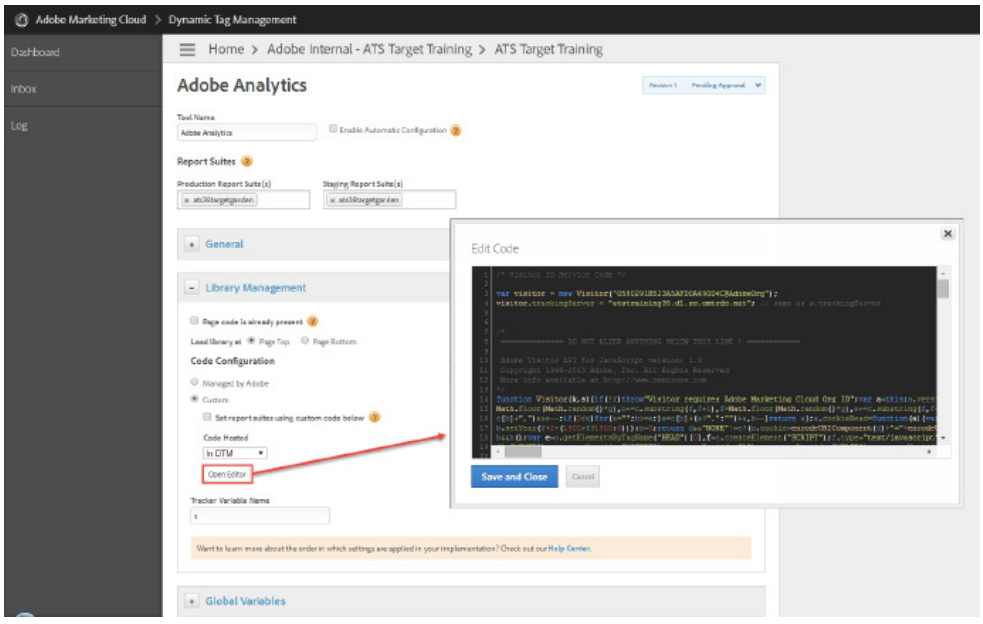
Implementation Requirements

There are many steps involved in order to enable the integration and services, but most steps occur behind the scenes and are handled by your account manager, consulting, or Adobe Client Care. This chapter focuses on certain portions that you, as the Adobe customer, may be involved in most directly.

From an implementation perspective, you will need to make updates to the following Javascript libraries to use the Marketing Cloud ID service:

1. **VisitorAPI.js** to enable the Marketing Cloud ID service. VisitorAPI.js must be loaded before any other Adobe calls.
2. **AppMeasurement.js** to enable Analytics. This replaces the s_code.
3. **AT.js** to enable Target. This replaces the current at.js or mbox.js.

Note that if you are using Dynamic Tag Management (DTM) or other tag management tools, taking care of these code changes is much easier and more streamlined.



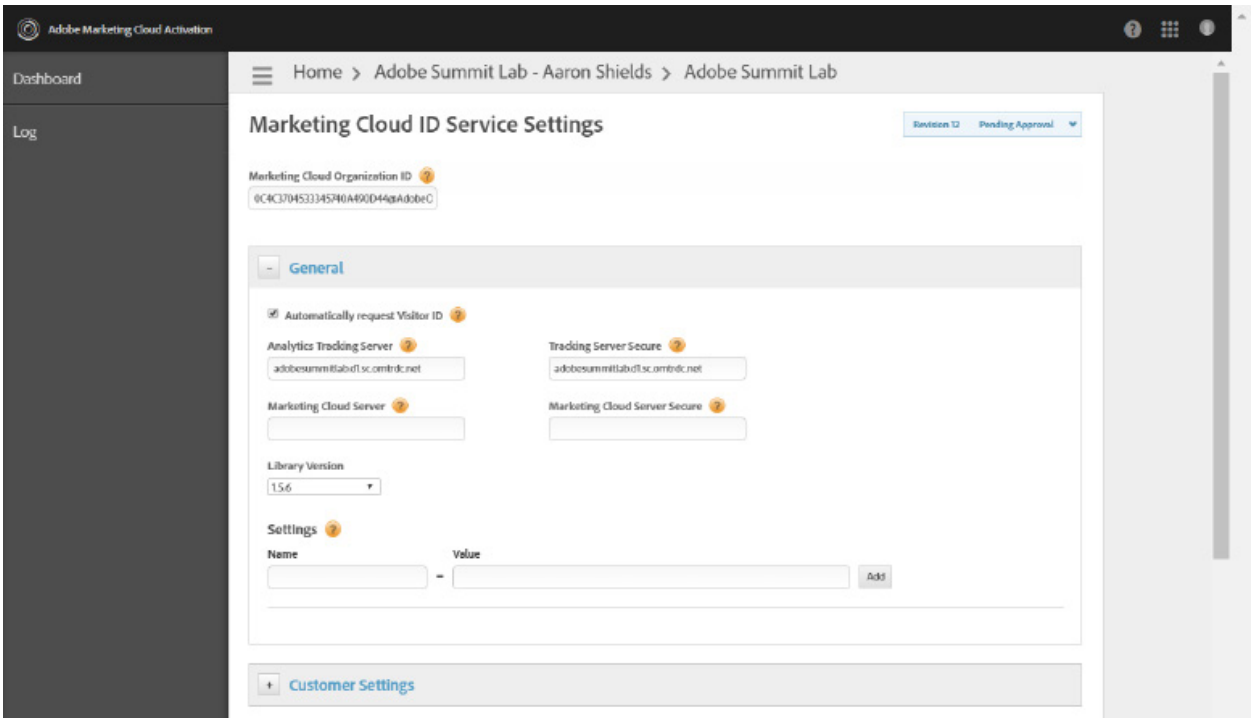
Use DTM to easily deploy and manage the integration and services discussed in this class.

BEST PRACTICE: DTM is the standard deployment tool you should use to configure, deploy, and manage your ID service instance and related Marketing Cloud solution integrations. DTM helps simplify the implementation process because it is deeply integrated with the ID service and other Marketing Cloud solutions.

How to implement the Marketing Cloud ID service via Dynamic Tag Management (DTM)

Implementing the Marketing Cloud ID service involves adding a JavaScript library to the page header and ensuring it loads prior to all other Adobe tags. Customers using Dynamic Tag Management (DTM) can take advantage of its native support for the Marketing Cloud ID service by adding and configuring the tool with information such as:

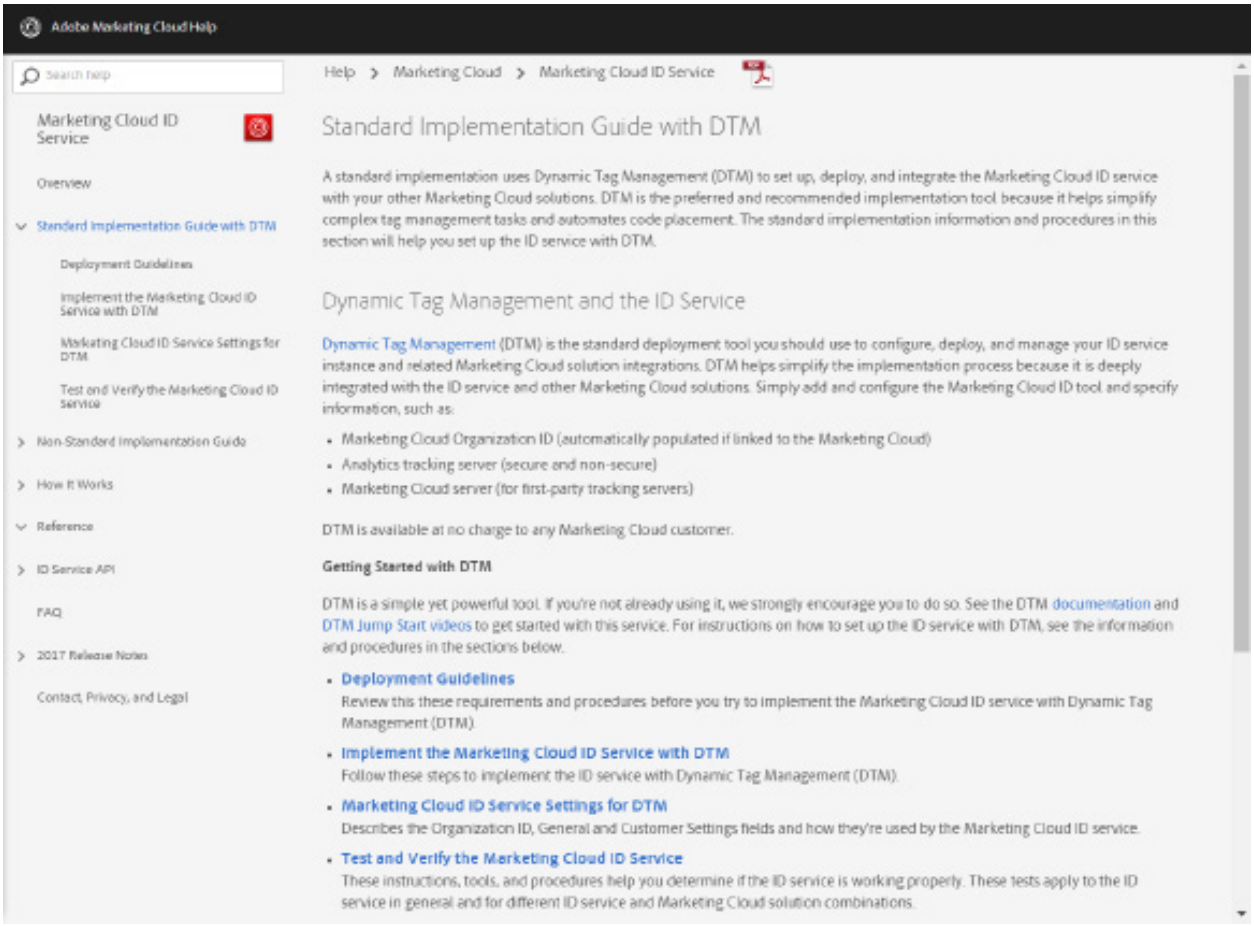
- Marketing Cloud Organization ID (automatically populated when the user is logged into DTM via the Marketing Cloud)
- Analytics tracking server (secure and non-secure). Note the secure Analytics tracking server should only be filled out if the customer uses first-party cookies.
- Marketing Cloud server (for first-party tracking servers)



Configuring the Marketing Cloud ID service in DTM

Documentation

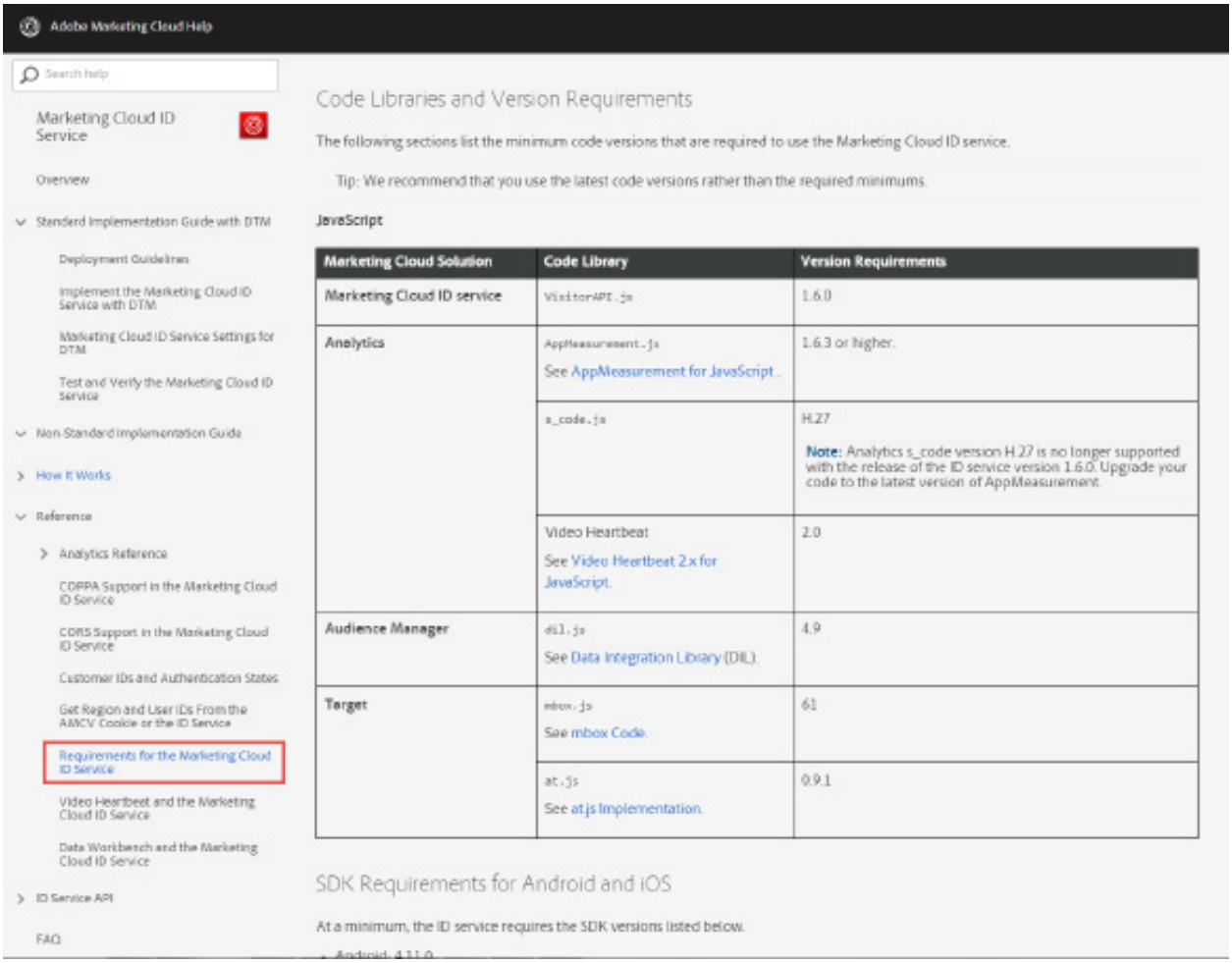
For the latest version requirements and implementation guides, search Marketing Cloud online help for "Marketing Cloud ID Service."



Consult the relevant implementation guides.

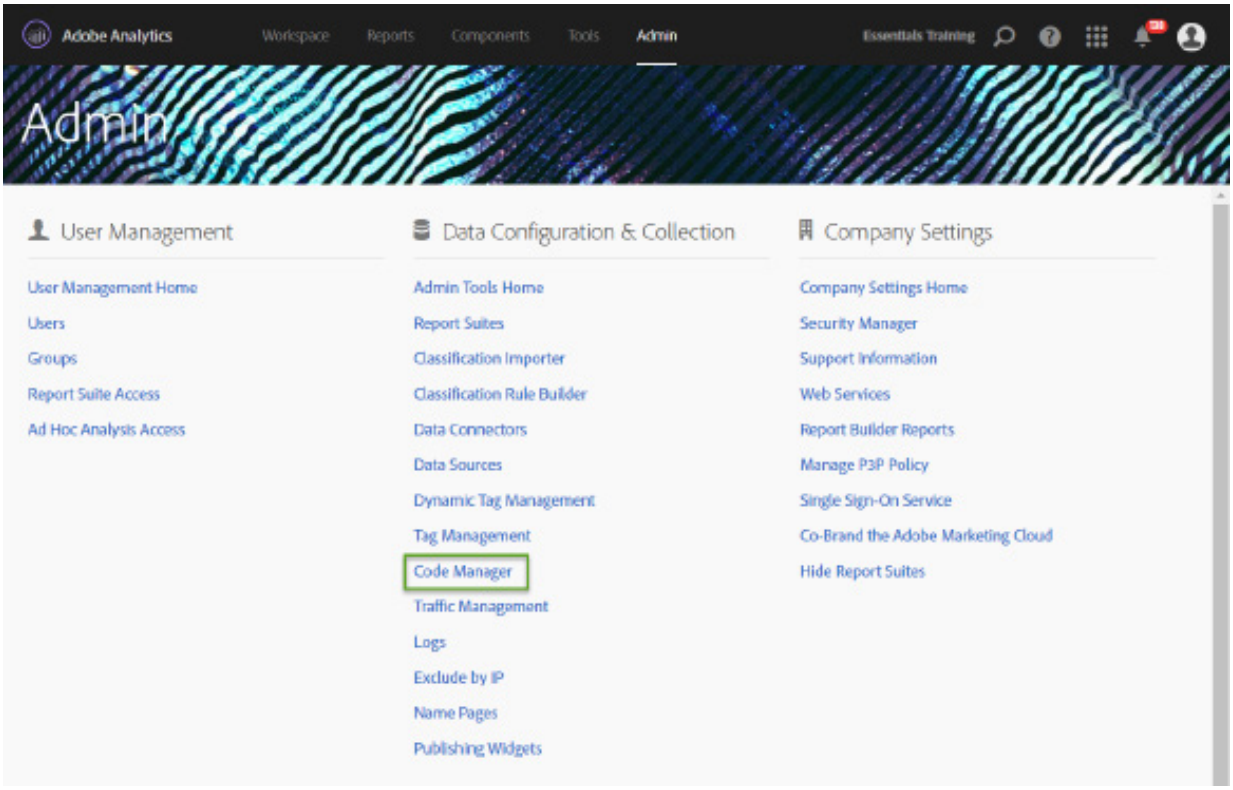
Analytics customers who want to use the Marketing Cloud ID Service but who do not use DTM may consult the Non-Standard Implementation Guide for instructions.

Be sure to consult the appropriate documentation to verify your code libraries and version requirements when implementing the Marketing Cloud ID service.

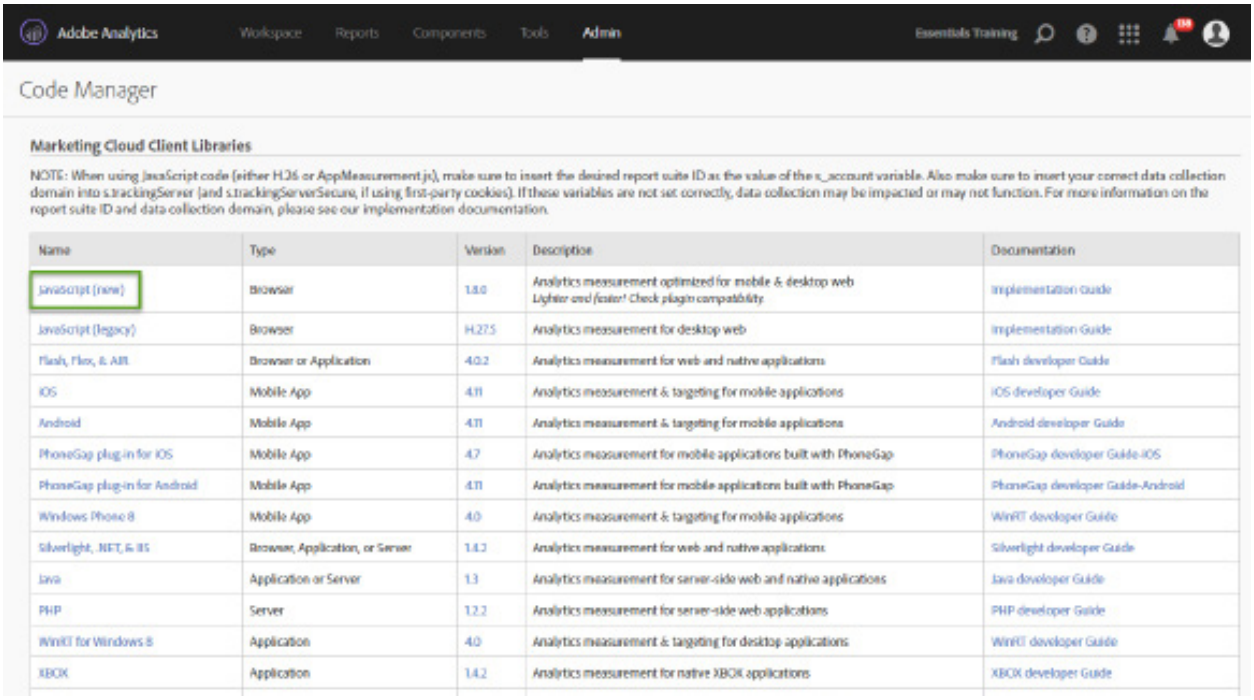


Getting the Code

Where is the code for VisitorAPI.js and AppMeasurement.js? For both of these libraries, navigate to **Analytics** > **Admin** > **Code Manager**.

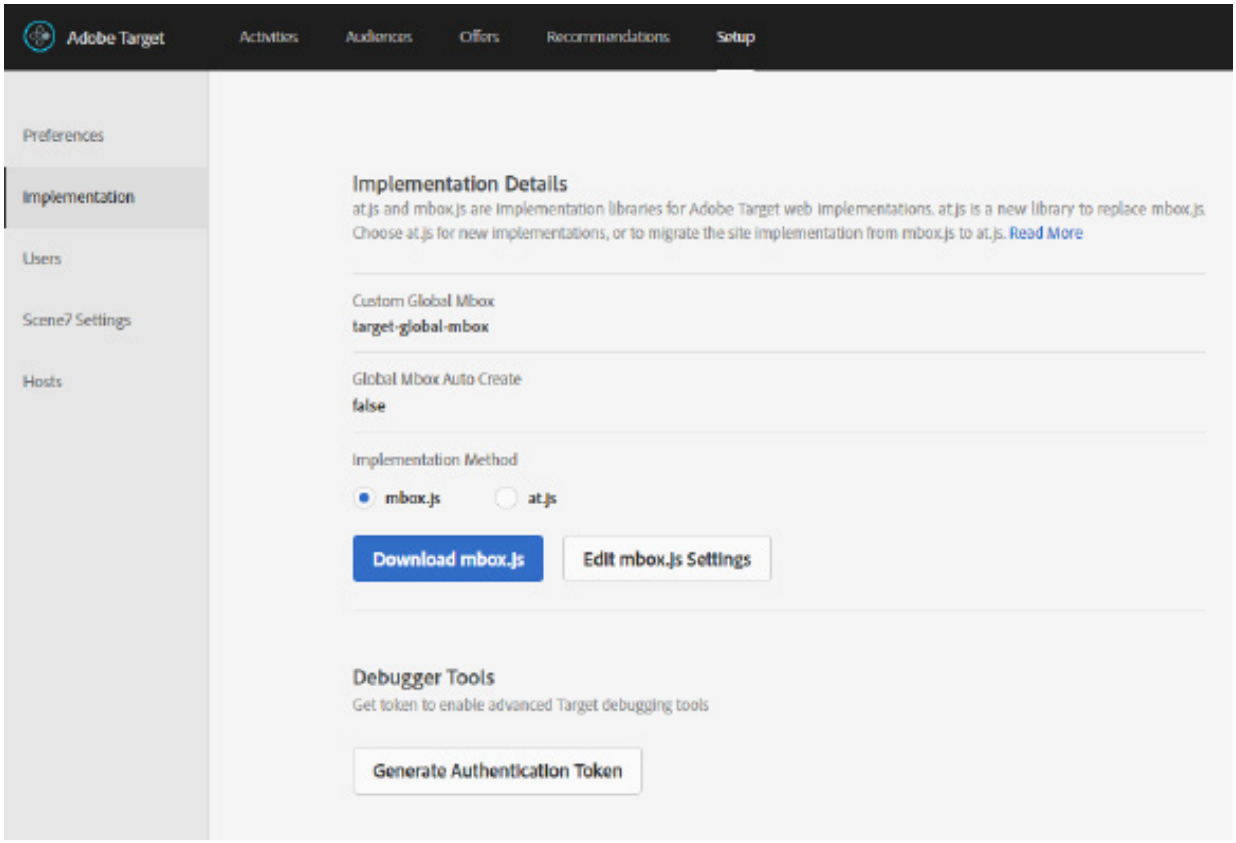


Within Code Manager, you will see a list of Javascript client libraries. Locate the "JavaScript (new)" library. That package contains both the App Measurement and Visitor API files.



At.js or Mbox.js can be retrieved from Adobe Target.

In Adobe Target, navigate to **Setup** > **Implementation**.



Place at.js or mbox.js on your web server or in your tag management system so your pages have access to it.

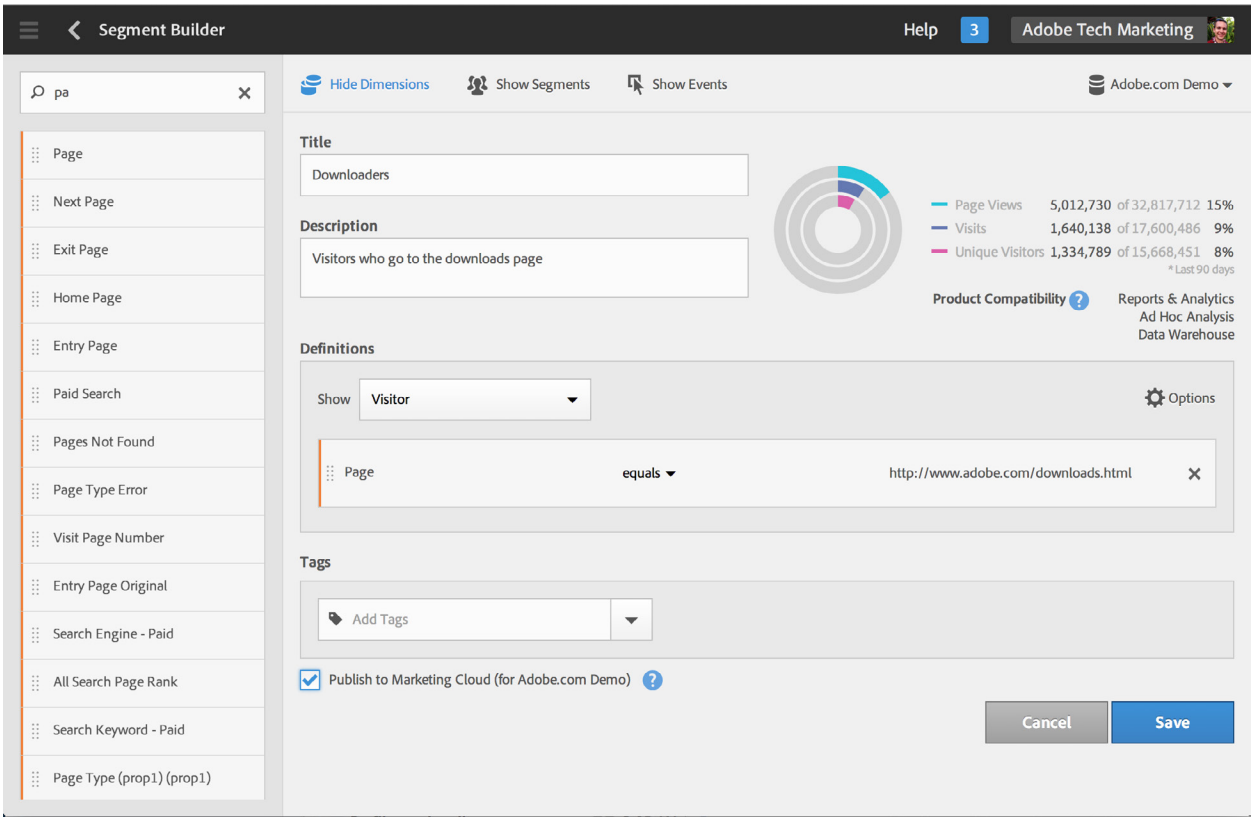
Validation

Once a Marketing Cloud ID service implementation is configured, perform the following steps to ensure it was successful.

You can approach the validation in two parts: solution-level validation, which involves verifying expected functionality, and call-level validation, which involves examining the calls being made to confirm the correct parameter values are being set.

Solution-level validation

Follow these steps to verify segment sharing is taking place between Analytics and Target.

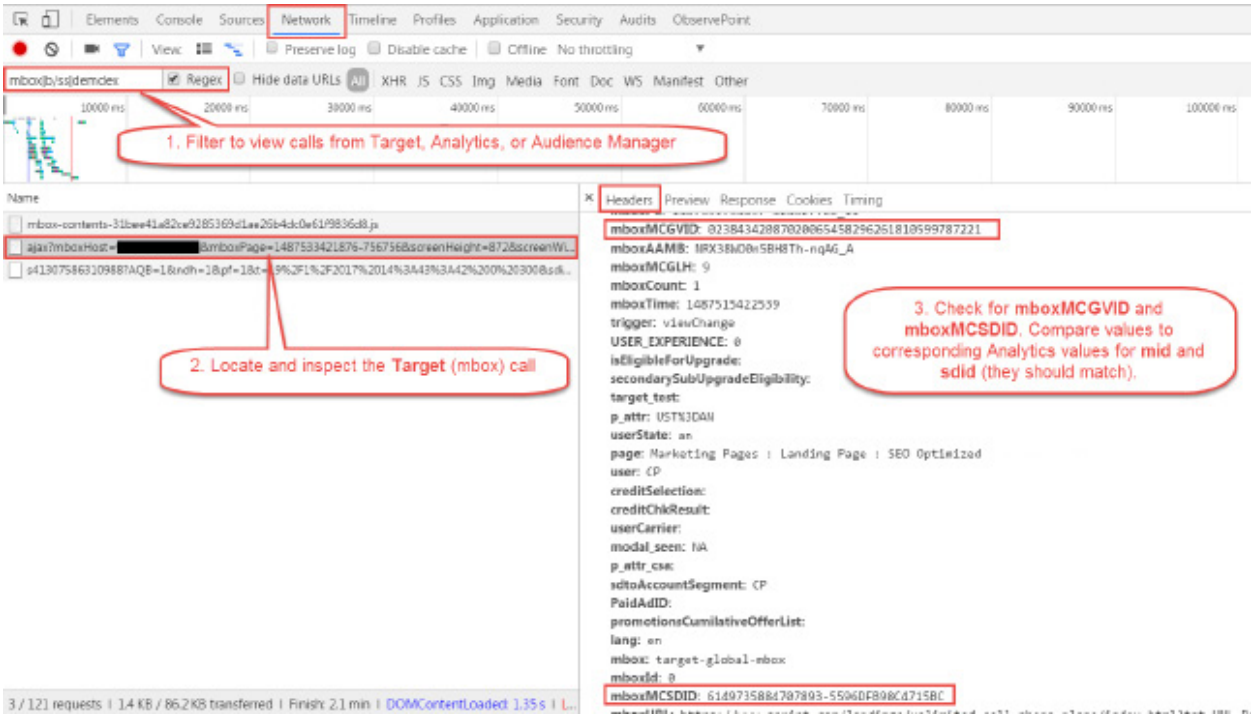


1. Create a segment in Analytics Reports&Analytics.
2. Publish the segment to the Marketing Cloud.
3. Verify the audience appears in
    a. Target
    b. Audience Library
    c. Audience Manager (if applicable)

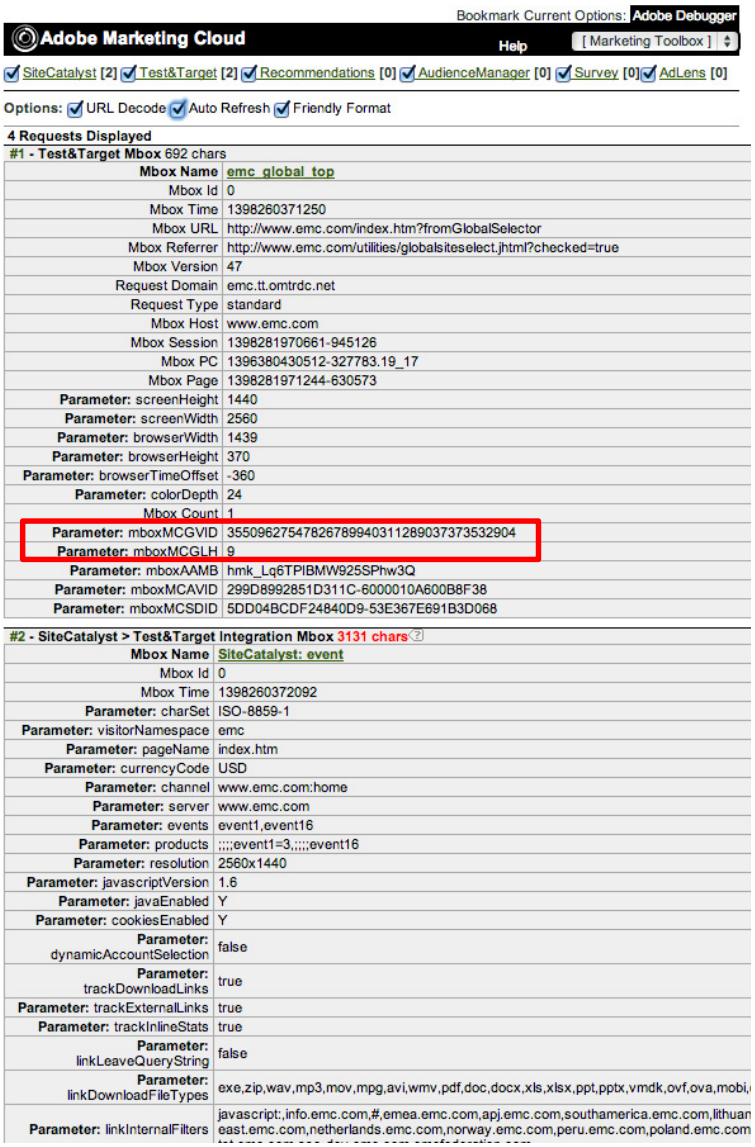
Call-level validation

Navigate to the web page and use a debugging tool to verify the right calls are being made and that the expected variables are being passed. Follow these general steps:

1. Clear cookies for your site—or even better, use an incognito or private browser session—to see the request to the Marketing Cloud ID service. (Using an incognito or private browser session provides you with a fresh set of cookies for debugging, without having to worry about whether or not you are clearing the correct cookies.)
2. Use a debugging tool on your site and look for a request going to **dpm.demdex.net**.
3. Verify the response contains **d_mid** and a value.
4. Verify the necessary Target and Analytics calls are being made.
   a. In the mbox call, look for **mboxMCGLH**, **mboxMCGVID**, and **mboxMCSDID**.
   b. In the Analytics call, look for the mid parameter (the Marketing Cloud visitor ID) and the sdid parameter (the Supplemental Data ID).
   c. Verify Analytics "mid" matches Target **mboxMCGVID**.
   d. Verify Analytics "sdid" matches Target **mboxMCSDID**.



Sample call-level validation of the Target mbox call using Chrome DevTools



Bookmark Current Options: Adobe Debugger

Adobe Marketing Cloud — Help — [Marketing Toolbox]

SiteCatalyst [2] Test&Target [2] Recommendations [0] AudienceManager [0] Survey [0] AdLens [0]

Options: URL Decode Auto Refresh Friendly Format

4 Requests Displayed

#1 - Test&Target Mbox 692 chars

Mbox Name	emc_global_top
Mbox Id	0
Mbox Time	1398260371250
Mbox URL	http://www.emc.com/index.htm?fromGlobalSelector
Mbox Referrer	http://www.emc.com/utilities/globalsiteselect.jhtml?checked=true
Mbox Version	47
Request Domain	emc.tt.omtrdc.net
Request Type	standard
Mbox Host	www.emc.com
Mbox Session	1398281970661-945126
Mbox PC	1396380430512-327783.19_17
Mbox Page	1398281971244-630573
Parameter: screenHeight	1440
Parameter: screenWidth	2560
Parameter: browserWidth	1439
Parameter: browserHeight	370
Parameter: browserTimeOffset	-360
Parameter: colorDepth	24
Mbox Count	1
Parameter: mboxMCGVID	355096275478267899403112890373735329O4
Parameter: mboxMCGLH	9
Parameter: mboxAAMB	hmk_Lq6TPIBMW925SPhw3Q
Parameter: mboxMCAVID	299D8992851D311C-6000010A600B8F38
Parameter: mboxMCSDID	5DD04BCDF24840D9-53E367E691B3D068

#2 - SiteCatalyst > Test&Target Integration Mbox 3131 chars

Mbox Name	SiteCatalyst: event
Mbox Id	0
Mbox Time	1398260372092
Parameter: charSet	ISO-8859-1
Parameter: visitorNamespace	emc
Parameter: pageName	index.htm
Parameter: currencyCode	USD
Parameter: channel	www.emc.com:home
Parameter: server	www.emc.com
Parameter: events	event1,event16
Parameter: products	;;;;event1=3,;;;;event16
Parameter: resolution	2560x1440
Parameter: javascriptVersion	1.6
Parameter: javaEnabled	Y
Parameter: cookiesEnabled	Y
Parameter: dynamicAccountSelection	false
Parameter: trackDownloadLinks	true
Parameter: trackExternalLinks	true
Parameter: trackInlineStats	true
Parameter: linkLeaveQueryString	false
Parameter: linkDownloadFileTypes	exe,zip,wav,mp3,mov,mpg,avi,wmv,pdf,doc,docx,xls,xlsx,ppt,pptx,vmdk,ovf,ova,mobi,
Parameter: linkInternalFilters	javascript:,info.emc.com,#,emea.emc.com,apj.emc.com,southamerica.emc.com,lithuan east.emc.com,netherlands.emc.com,norway.emc.com,peru.emc.com,poland.emc.com

Sample call-level validation of the mbox call using Adobe Debugger

Debugging Tools

While you are always welcome to use your browser's native developer tool to perform implementation validation or troubleshooting, some may prefer to use other debugging tools, such as:

- Adobe Debugger (all browsers)
- ObservePoint plugin (variety of browser agents and devices)
- Charles (Web debugging proxy application, for Windows, Mac OS, and Linux)

The Adobe Debugger (previously known as the Adobe DigitalPulse Debugger) is a free tool provided by Adobe that lets you view the data being collected from your site on any given page, presenting it in a more readable, user-friendly way. For more information, search Marketing Cloud online help for "Adobe Debugger."

Similarly, ObservePoint is also a free tool that helps you troubleshoot and inspect all web analytics tags, variables, and on-click events.

Charles is an optional web debugging proxy application, which you may need to use if your initial testing fails. However, for your initial testing, one of the first two options (or the native browser tool) should suffice.

Marketing Cloud ID Service Parameters

For your reference, note the following parameters and cookies you will see once you enable the Marketing Cloud ID service.

New Target Parameters for the Marketing Cloud ID service

Param	Name	Example	Notes
mboxMCGVID	Marketing Cloud Visitor Id	09026291947188027344398419532238418831	This is the "common ID"
mboxMCGLH	Audience Manager Location Hint	9	References which Data Processing Center responded to the request
mboxAAMB	Audience Manager Blob	NRX38WO0n5BH8Th-nqAG_A	Involved in common ID creation
mboxMCAVID	Analytics Visitor Id	2A5BE9A50507BC80-4000011360004E47	Critical during the Grace Period
mboxMCSDID	Supplemental Data Id	17740D65E66C870E-6E146CCDDED07B6E	Critical for A4T

New Analytics Parameters for the Marketing Cloud ID service

Param	Name	Example	Notes
mid	Marketing Cloud Visitor Id	09026291947188027344398419532238418831	This is the "common ID"
aamlh	Audience Manager Location Hint	9	References which Data Processing Center responded to the request
aamb	Audience Manager Blob	NRX38WO0n5BH8Th-nqAG_A	Involved in common ID creation
aid	Analytics Visitor Id	2A5BE9A50507BC80-4000011360004E47	Critical during the Grace Period
sdid	Supplemental Data Id	17740D65E66C870E-6E146CCDDED07B6E	Critical for A4T

New Cookies for the Marketing Cloud ID service

Cookie	Name	Example	Notes
AMCV	Marketing Cloud Visitor ID	AMCV_5E6C123F5245B32D0A490D45%40AdobeOrg	1st party
demdex	Audience Manager ID	80809342519268003181673932271772816261	3rd party, set at demdex.net, helps x-domain tracking
s_vi	Legacy Analytics ID	[CS]v1|2A77206F051958A2-6000060F60002C1D[CE]	Continues to be set during the grace period

Implementing Customer Attributes

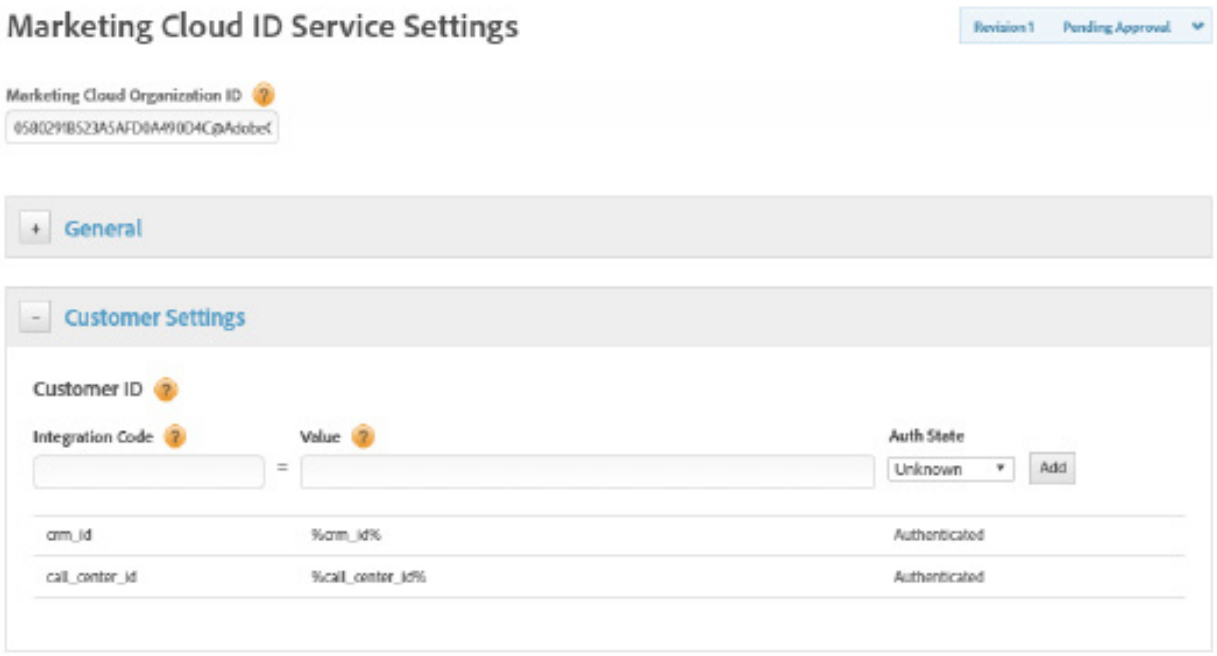
In addition to the implementation requirements for sharing audiences (such as joining the Marketing Cloud and deploying the Marketing Cloud ID service), there are two additional configuration settings for Customer Attributes.

Set Customer IDs in the Marketing Cloud ID service

Along with the Marketing Cloud visitor ID, you can set additional customer IDs to associate with each person. The library accepts multiple customer IDs for the same visitor. These customer IDs are applied as people visit your site and authenticate.

DID YOU KNOW: Why might I need to configure multiple customer IDs?
You may have multiple systems that interact with your website. Suppose you want to use the data from your CRM, Call Center, and Point-of-Sale systems with Customer Attributes, but each has its own unique identifier. Each identifier can only have one customer attribute data source tied to it. Target can only tie with a single identifier and a single customer attribute data source.

The preferred method for configuring them is to manage them via the Marketing Cloud ID service in Dynamic Tag Management, but they can also be added via JavaScript.



Setting customer IDs in Dynamic Tag Management

Be sure to set the **Auth State** for your customer IDs to "Authenticated." The other authorization states ("Unknown" and "Logged Out") are available for future use cases.

WARNING: Target requires Visitor.AuthState.AUTHENTICATED for Customer Attributes to work. This means if you select Unknown or Logged Out, Customer Attributes will not work as expected. This also effectively means Customer Attributes can only be used to qualify visitors who are logged in to the customer's system; they must be logged in while on the activity page in order to qualify for the test.

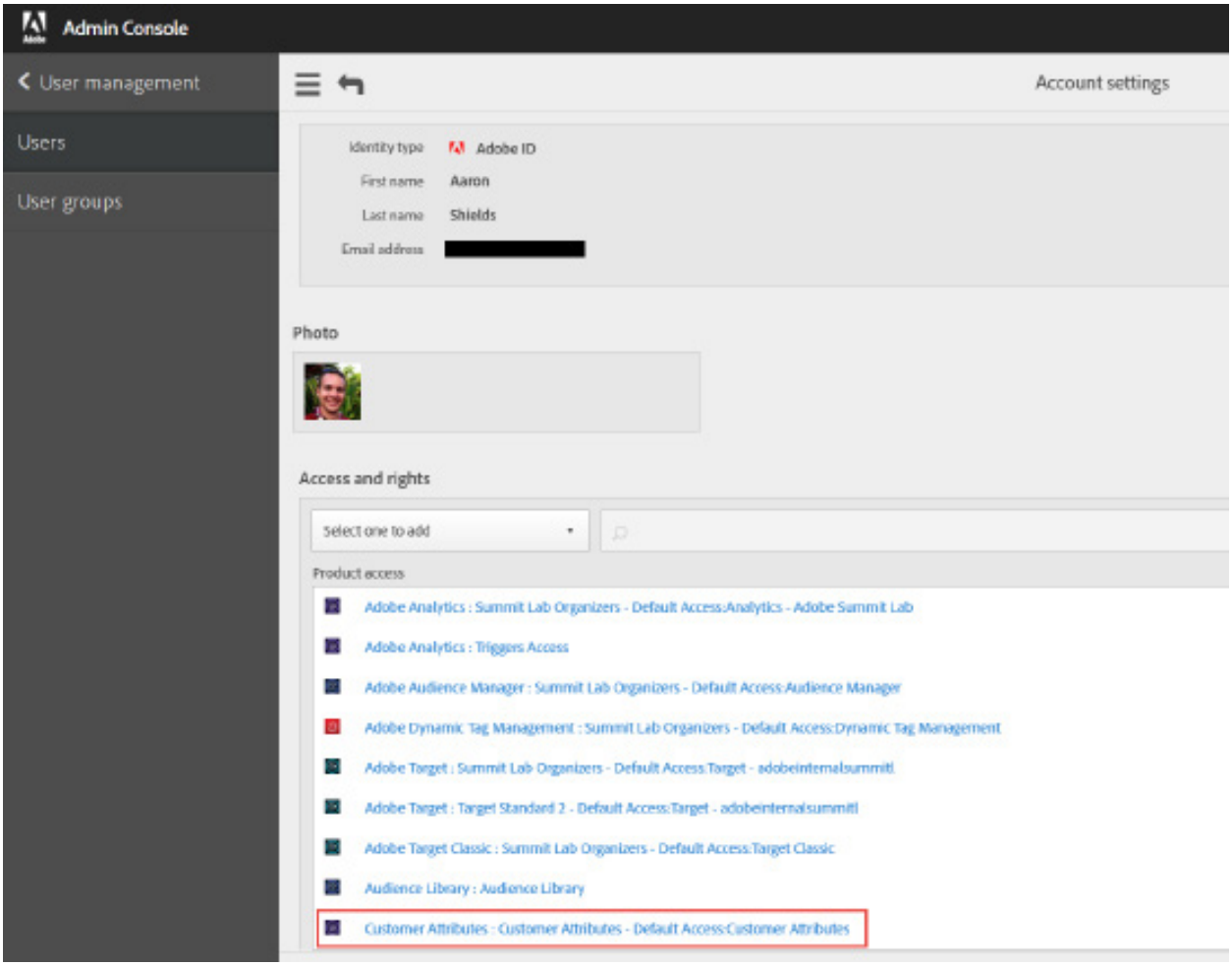
```
// Single ID with a single authentication state
visitor.setCustomerIDs({
    "userid":{
        "id":"67312378756723456",
        "authState":Visitor.AuthState.AUTHENTICATED
    }
});

/*
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"
});
```

Setting customer IDs directly in VisitorAPI.js (alternative method)

Add the Customer Attributes product configuration

Your organization's Marketing Cloud administrator manages access to Customer Attributes. Adding a user to the Customer Attributes product configuration—or conversely, adding the Customer Attributes product configuration to a user—grants them access to the capability.



Granting access to the Customer Attributes product configuration

Note these privileges are managed by an administrator, not by a standard business user. They are mentioned here as general reference information.

Exercise 7.1
Implementation

In this exercise, you will walk through the high-level steps for implementing the Analytics/Target integration. (15 min)

1. Navigate to Code Manager in Adobe Analytics.

   Adobe Marketing Cloud > **Analytics** > **Admin** > **Code Manager**.

2. Download the **JavaScript (new)** package.

   a. Inspect the contents of the download.

   b. Does this package contain both **VisitorAPI.js** and **AppMeasurement.js**?

   c. What do you do with this package once it is downloaded?

3. Navigate to Adobe Target.

   Adobe Marketing Cloud > **Target** > **Setup** > **Implementation**.

4. Download at.js.

   a. Click the **Download at.js** button.

   b. What do you do with at.js once it is downloaded?

Exercise 7.2
Validation

In this exercise, you will walk through the steps for validating the Analytics/Target integration. (15 min)

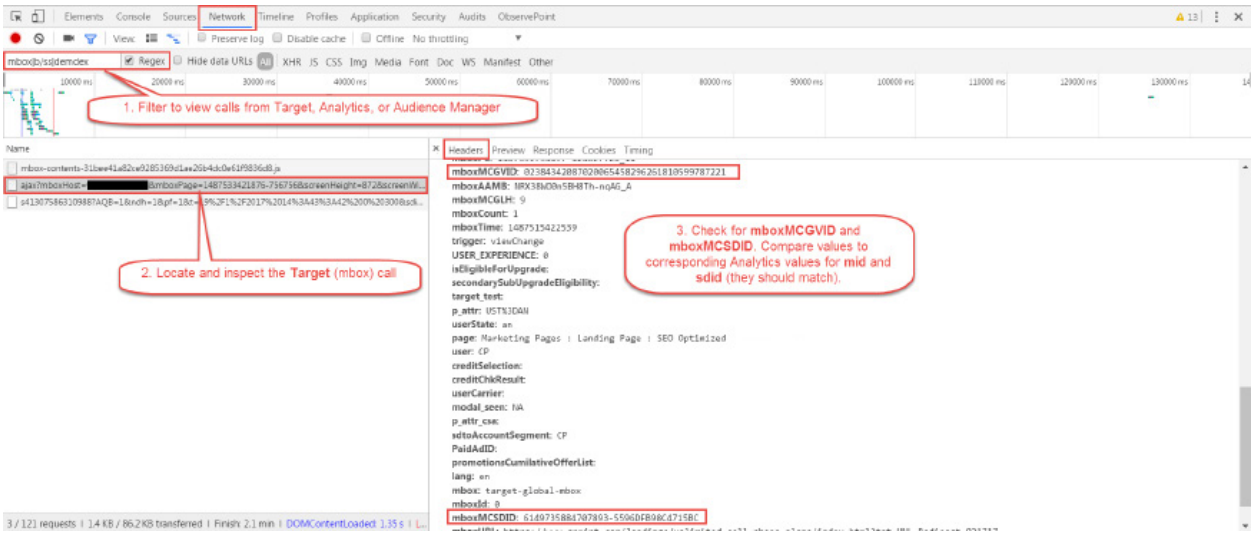
Solution-level validation

1. Validate historical audiences: You already walked through this during a previous exercise. Create a segment in Analytics, share it, then confirm the presence of that segment in other solutions: Target, Audience Library, and Audience Manager.
2. Validate A4T: Create a new Analytics-based activity in Target. Confirm you can see report suites available for selection on the Goals & Settings page.

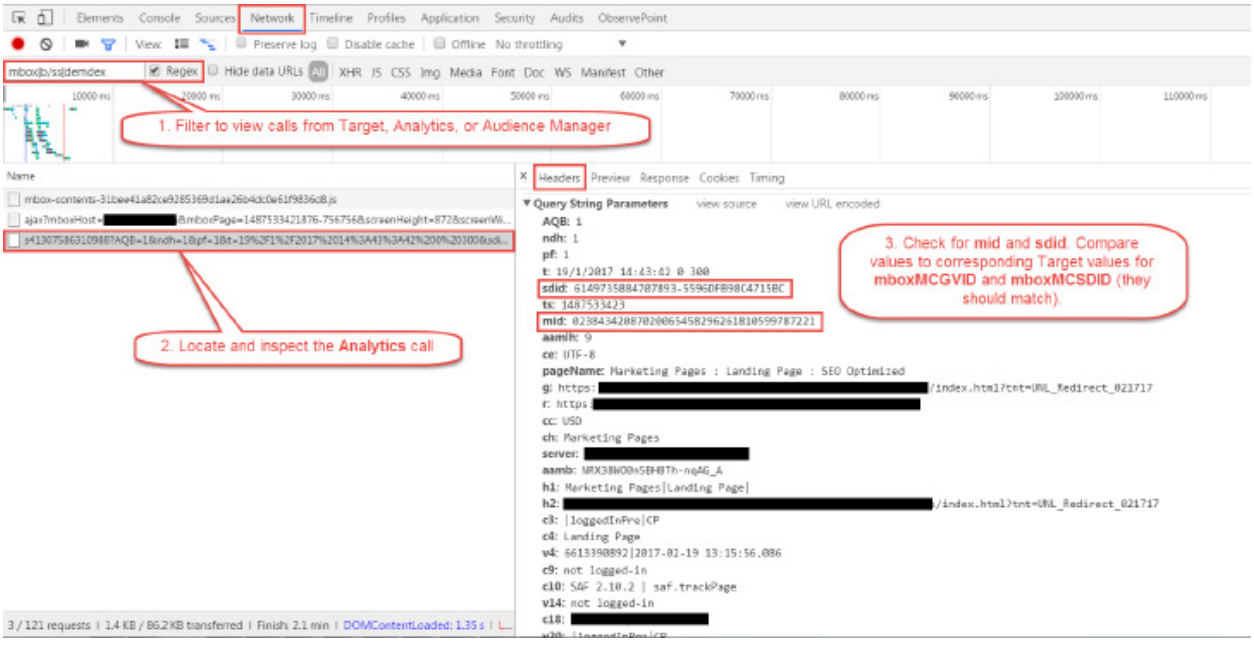
Call-level validation

1. In Chrome, launch an incognito browsing window to get a fresh set of cookies for debugging. (You may also use private mode in another browser type, but here in class, we will use Chrome.)
2. Open the developer console network tab. (Launch Chrome DevTools by right-clicking the window and selecting **Inspect**.)
3. Navigate to your training web page.
4. Check the requests in the **Network** tab.

a. Check to make sure the Marketing Cloud IDs (the global visitor IDs) exist and match as expected. (See the "Tip" below.)
b. Check to make sure the Supplemental Data IDs exist and match, as well. (See the "Tip" below.)
c. Tip for the steps above: Use a Regex search to filter the Network calls to those made by Target, Analytics, or Audience Manager. You may use the regular expression, **mbox|b/ss|demdex** as shown.



Checking the mbox call. Your specific values and results will differ from those shown.



Checking the Analytics call. Your specific values and results will differ from those shown.

Solutions to Exercises

Solutions to Exercise 7.1 Implementation

2. Download the JavaScript (new) package.

   b. Does this package contain both VisitorAPI.js and AppMeasurement.js?
   Yes, the JavaScript (new) package contains both VisitorAPI.js and AppMeasurement.js.

   c. What do you do with this package once it is downloaded?
   Place it on your web server in the location the pages of your Web site refer to, or in your tag management system so that your pages have access to it. If this is an existing implementation, it should replace the earlier versions of the files that currently reside there. If you are not familiar with Adobe Analytics implementation principles, find the Adobe Analytics expert in your company or call Client Care for assistance.

4. Download at.js.

   b. What do you do with at.js once it is downloaded?
   Place it on your web server in the location the pages of your Web site refer to, or in your tag management system so that your pages have access to it. If this is an existing implementation, it should replace the earlier versions of the at.js file.

Troubleshooting

Overview

In the previous chapter, we discussed techniques for verifying the implementation was configured correctly. As it turns out, some of those core techniques are applicable on an ongoing basis as well, in order to continue to troubleshoot unexpected behavior that you may encounter as you use the People core service, Marketing Cloud audiences, and A4T activities. In this chapter, we walk through post-implementation troubleshooting techniques to address the more common issues you may encounter regarding the topics covered in this course.

Objectives

By the end of this chapter, you will be able to:

- Troubleshoot common issues involving the People core service, Marketing Cloud audiences, and A4T activities.

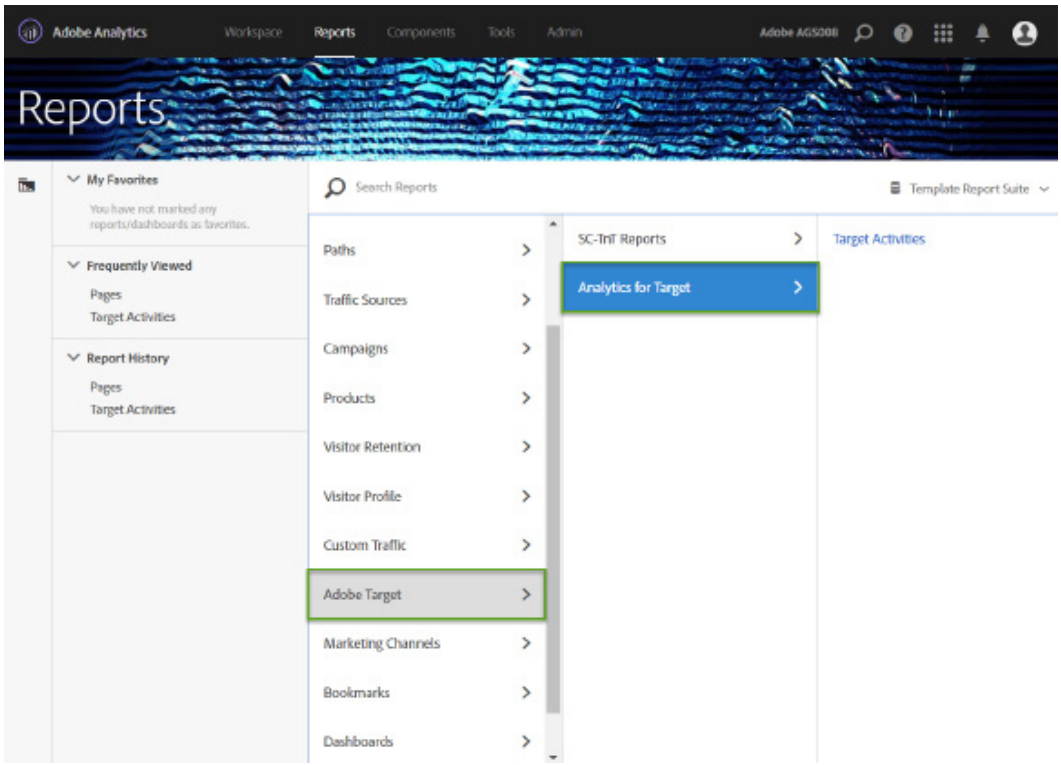
Common Issues

What kinds of unexpected behavior may be encountered when dealing with the People core service, Marketing Cloud audiences, Customer Attributes, and A4T activities? What strategies can we employ to troubleshoot these common issues? In this section, we describe common situations you may encounter, as well as high-level descriptions of the solutions required to address those situations. In the sections that follow, we explore more detailed, step-by-step instructions for troubleshooting these situations.

Provisioning Issues

Key Symptoms

If you find that you cannot see Target reports in Analytics, this may indicate a provisioning issue. For example, if you cannot see the Adobe Target or Analytics for Target reports in Analytics, this may be a symptom of not being provisioned for A4T.



When correctly provisioned for A4T, you can view Target activity reports in Adobe Analytics.

Strategy for Resolution

Talk to your account manager, consultant, or Client Care to resolve A4T provisioning issues.

Target and Analytics Communication Issues

Key Symptoms

Once provisioned, you now see Target reports in Analytics, but you are unable to see any data within those reports.

There may be many reasons for this, including:

- An implementation or deployment issue
- Missing Marketing Cloud ID (MCID) or Supplemental Data ID (SDID)
- Outdated code versions, especially any code versions that do not support A4T
- Sending data to the wrong report suite
- Sending data to the wrong data center

Strategy for Resolution

The majority of the time, these symptoms indicate an issue with the People core service implementation. Therefore, your troubleshooting steps begin with verification of that service.

- Check for the presence of both MCID and SDID in your Analytics and Target hits, ensuring they match across solutions, on any given page.
- Verify visitors can qualify for the activity and audience (use mboxTrace)
- Check the audience and activity definitions
- Check your code version—Consult documentation regarding code version requirements and verify yours meet or exceed these requirements.
- Check your report suite—Double-check the report suite you selected in the Goal & Settings page of activity configuration.
- Check your data center—Double-check the tracking server you selected in the Goal & Settings page of activity configuration and on the page match and are correct according to where your Analytics company is hosted.

Data Expectation Issues

Key Symptom

Instead of seeing user friendly names for activities or experiences, you may sometimes see raw data in A4T reports, such as campaign or experience IDs, as opposed to the classified names. This indicates that although Analytics and Target calls are stitched together correctly and the data is

flowing between those solutions, the Analytics SAINT classifications are not being applied as expected. It is important to keep in mind classifications may take some time to process. For example, if you create an activity today and begin viewing the data within an hour, you may temporarily see the raw campaign IDs because the classification has not had time to process yet.

Strategy for Resolution

- Allow sufficient time for classifications to process. Recall when you first save an A4T test, there is an initial delay of approximately 12 hours for the classifications to propagate.
- Contact Contact Client Care after 24-48 hours if classifications are still missing.

Activity Qualification or Data Issues for Marketing Cloud Audiences

Key Symptoms

You have used a Marketing Cloud audience to target an activity, but visitors do not see the experience as expected, visitors do not appear to be entering the activity, or activity entry is not successfully measured. (You do not seem to be qualifying for, or entering, the test as expected.)

Strategy for Resolution

As with Target and Analytics communication issues, being unable to qualify for Marketing Cloud audiences or encountering issues related to Analytics data measurement usually indicate an issue with the way the People core service is operating. Therefore, your troubleshooting steps will involve what you would normally do for troubleshooting the People core service.

- Check for the presence of both MCID and SDID in your Analytics and Target hits, ensuring they match across solutions, on any given page.
- Verify visitors can qualify for the activity and audience (use mboxTrace)
- Check the audience and activity definitions

Activity Qualification Issues for Customer Attributes

Key Symptoms

You used Customer Attributes in an audience to target an activity, but visitors do not see the experience as expected, or visitors do not appear to be entering the activity. (You do not seem to be qualifying for, or entering, the test as expected.)

Strategy for Resolution

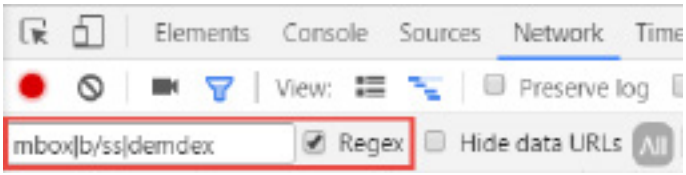
- Verify customer attributes were received by Target and are appearing in your profile (use mboxTrace)

Examining the mbox call

In the previous section, we explained the strategy for resolving many of the issues encountered with the People core service, Marketing Cloud audiences, and A4T will often involve taking a look at the mbox call as well as using mboxTrace. In this section, we describe how to examine *the mbox call* in the context of elements relevant to the People core service, Marketing Cloud audiences, and A4T activities.

Start on your activity page and use your browser developer tool to inspect the calls being made on the page. For example, in Chrome, you can access the Chrome Developer Tools (DevTools), and examine the Network tab to see all the requests that go into constructing the page, including images, the HTML file, all marketing pixels, and so on.

The page requests relevant to the topics covered in this course involve those made to Adobe Target, Adobe Analytics, and Adobe Audience Manager, so focus on those calls. You can do this by executing a Regex for "mbox|b/ss|demdex" to pull back page calls made to Target, Analytics, and Audience Manager, respectively.



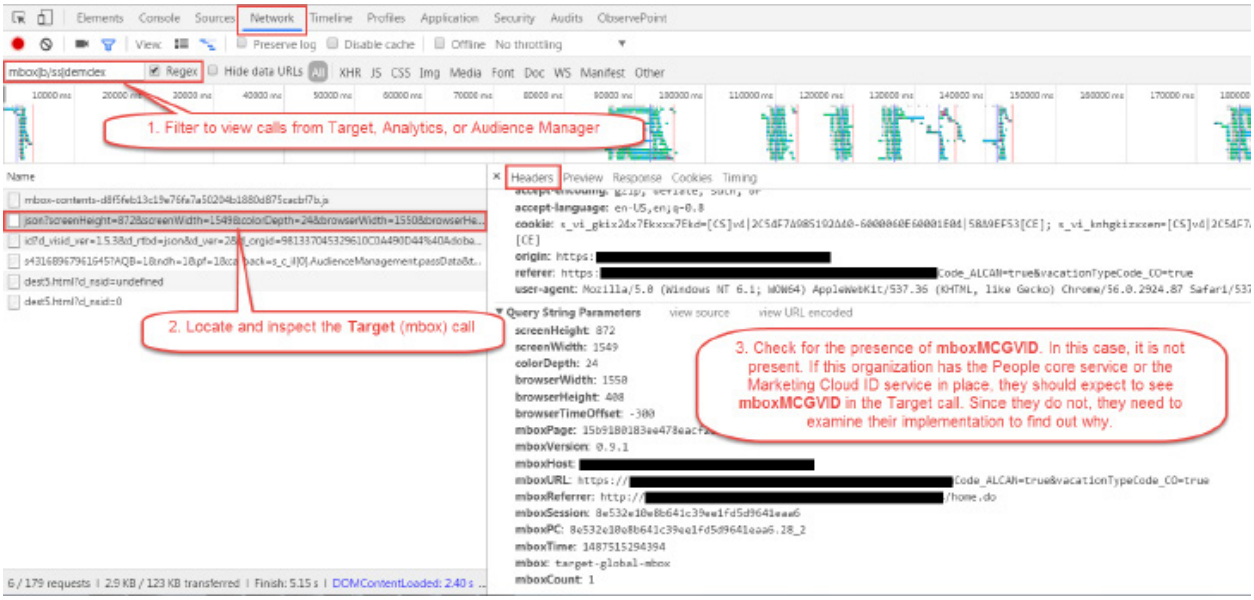
Filtering Chrome DevTools for Target, Analytics, or Audience Manager calls.

TIP: To focus Chrome DevTools only on calls made to Adobe Target, Adobe Analytics, or Adobe Audience Manager, filter using a Regex search for `mbox|b/ss|demdex`.

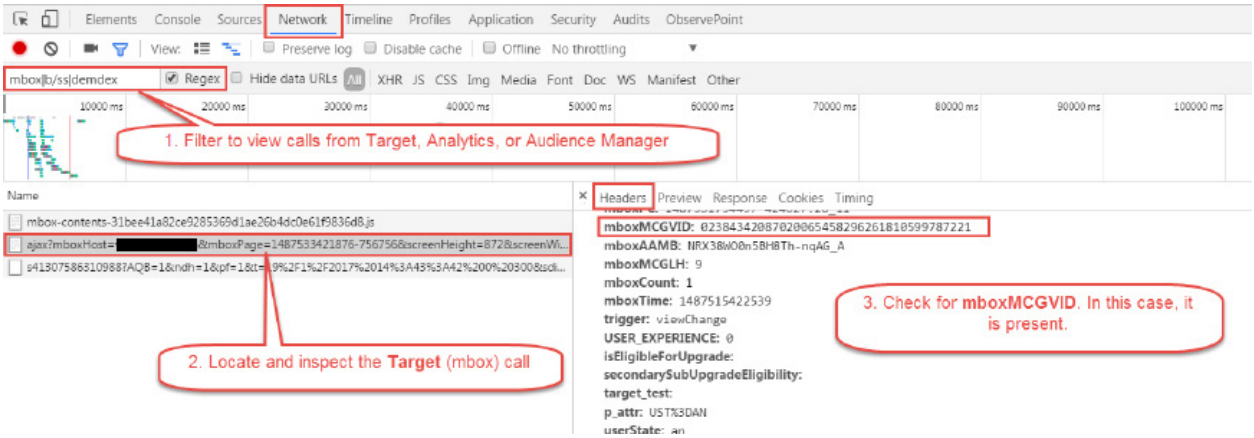
Note the filter above is relevant even for those companies who may not have a separate licence for Audience Manager. This is because the Marketing Cloud ID service is enabled by an Audience Manager instance operating behind the scenes. Therefore, searching your page requests for "demdex" will also include any calls relevant to anyone who has implemented the Marketing Cloud ID service, regardless of whether or not they also have Audience Manager.

The first thing you want to look for is the Marketing Cloud ID and the Supplemental Data ID. Look for this in both the Target and Analytics calls, and make sure those values match each other.

RULE OF THUMB: Troubleshooting most issues involving the People core service begins with verifying the presence of the Marketing Cloud ID (mcgvid or mid). Troubleshooting most issues involving A4T begins with verifying the presence of the Marketing Cloud ID (mcgvid or mid) *and* the Supplemental Data ID (sdid), as well as verifying those values match their counterparts across Target and Analytics.



Checking for the Marketing Cloud ID (the global visitor ID), but finding it is not present.

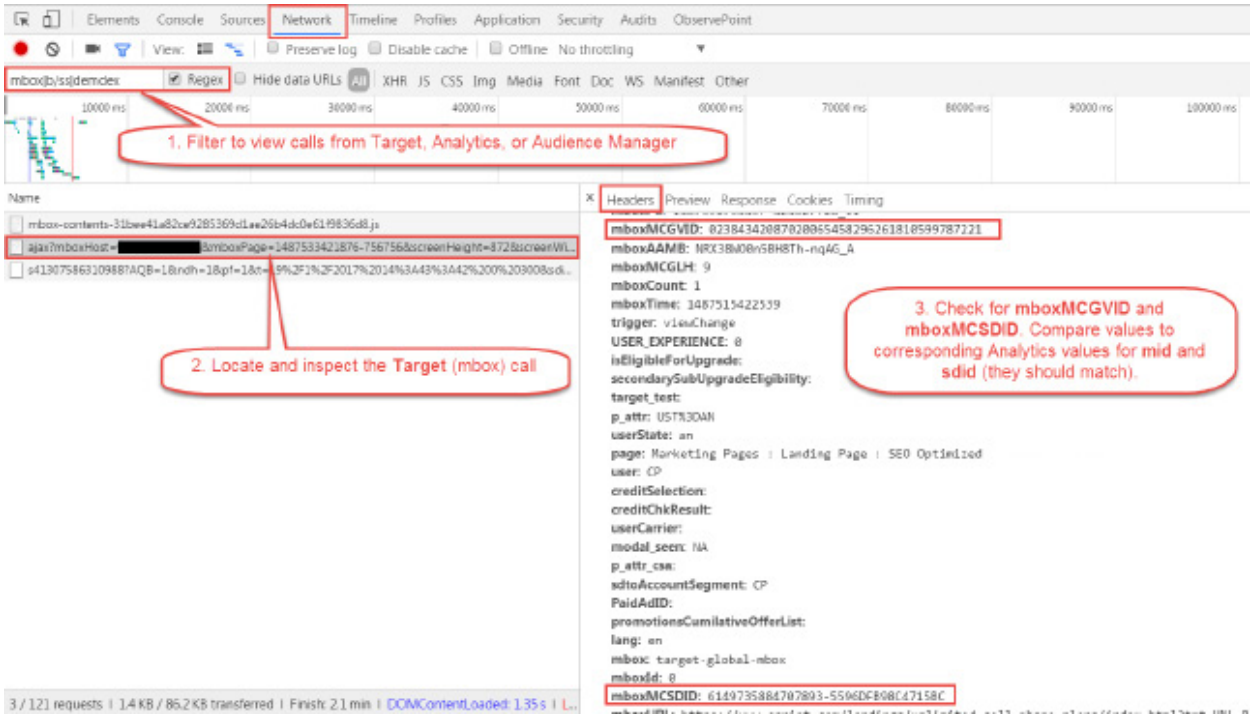


Checking for the Marketing Cloud ID (the global visitor ID), and finding it is present.

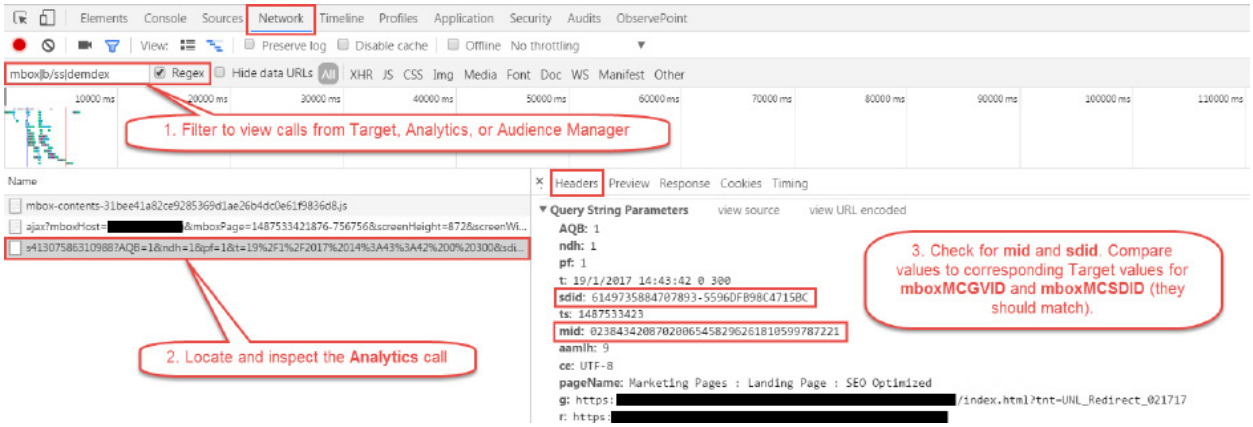
In the two screenshots shown above, we see an example in which the MCID is present, and one in which it is not. When it is not present, meaning for some reason it is not being set successfully, this means it may be possible users could build and share audiences and even target activities using those audiences, but they will never see anyone successfully qualify for the activity. There are many

reasons the MCID might not be set correctly, but at this point in the investigation, the implementation would need to be examined to ensure all code versions are correct and all implementation steps were followed. For example, they should ensure all libraries are being loaded in the correct order, as the Marketing Cloud ID service must load prior to the Target library.

In addition to checking for the MCID, you can also check for the Supplemental Data ID.



Checking the mbox call for the Marketing Cloud ID (the global visitor ID) and the Supplemental Data ID.



Checking the Analytics call for the Marketing Cloud ID (the global visitor ID) and the Supplemental Data ID.

The Supplemental Data ID (mboxMCSDID in Target, sdid in Analytics) appears whenever you have the Marketing Cloud ID service, Target, and Analytics on the same page, regardless of whether or

not you are provisioned for A4T. When checking the MCID and SDID values on a given page, you should confirm the following:

- Confirm that the Marketing Cloud IDs match: Target **mboxMCGVID** = Analytics **mid**
- Confirm that the Supplemental IDs match: Target **mboxMCSDID** = Analytics **sdid**

Note the Supplemental IDs for Target and Analytics will match each other on the current page, but on another page, while they will both exist and match each other again, they will be different from the values seen on the previous page.

Using mboxTrace

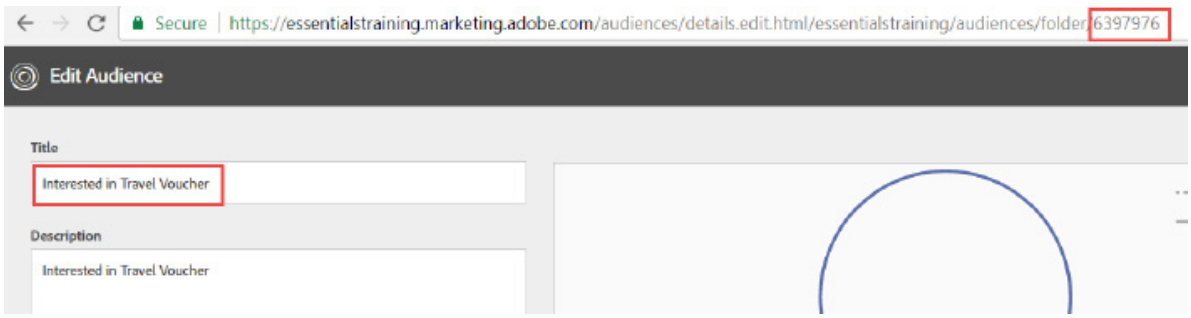
In the previous section, we explained that the strategy for resolving many of the issues encountered with the People core service, Marketing Cloud audiences, and A4T will often involve taking a look at the mbox call as well as using mboxTrace. In this section, we describe *how to use mboxTrace* in the context of elements relevant to the People core service, Marketing Cloud audiences, and A4T activities.

Using mboxTrace to troubleshoot Marketing Cloud audiences

MboxTrace is useful for checking to see if you qualify for the Marketing Cloud audience you expect to qualify for. Use it to verify audience membership whenever you do not seem to be entering activities or experiences as expected.

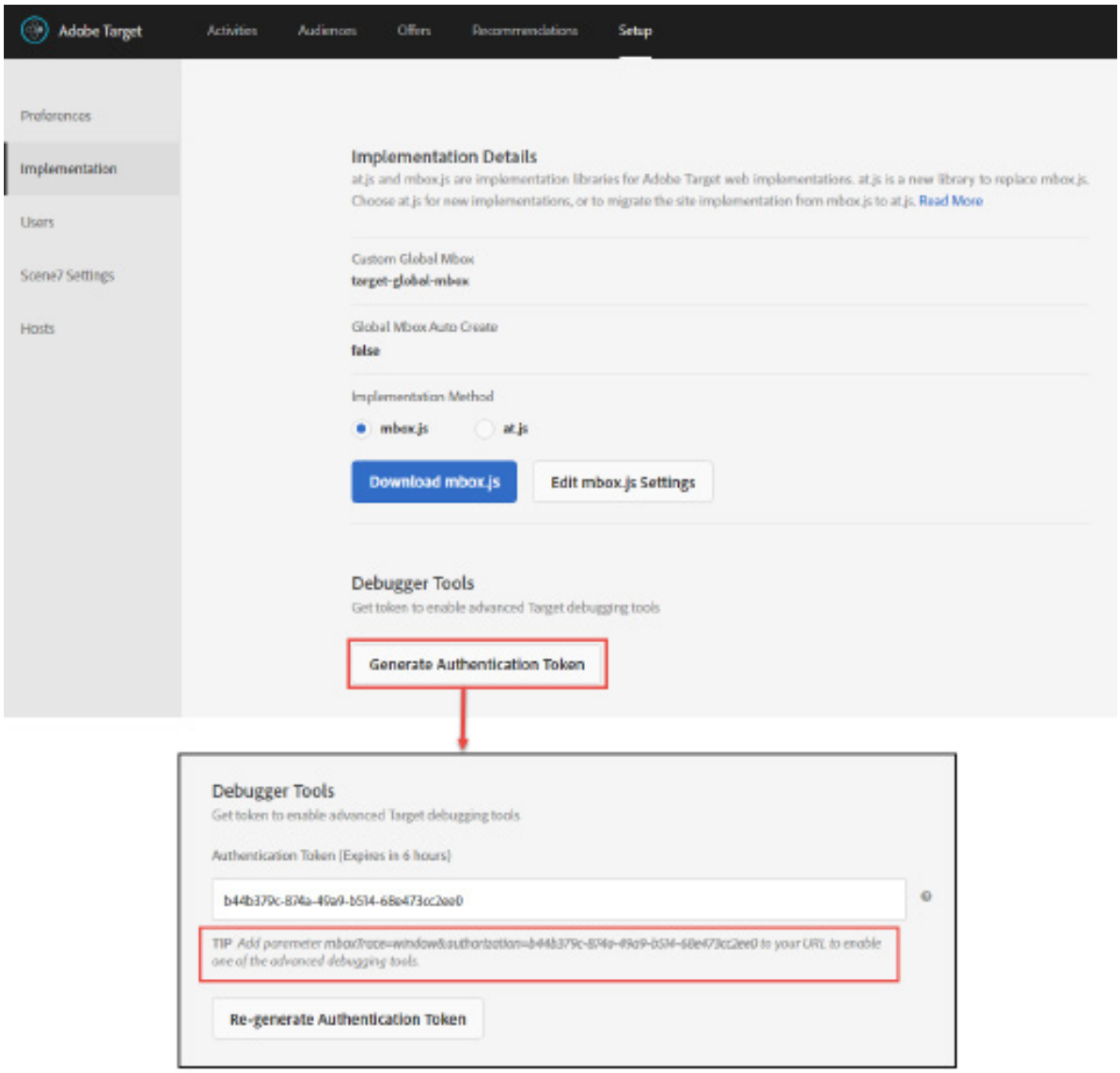
The general steps are as follows:

1. Note the behavior. For example, not entering Activity X, which targets a Marketing Cloud audience.
2. In Target, examine the activity definition, taking note of the audience name.
3. In the Marketing Cloud, use the audience name to determine the audience ID.



From the Audience Library, you can determine an audience's ID by looking at the URL.

4. In Target, obtain and apply the mboxTrace authorization token.



Get the mboxTrace auth token from Setup > Implementation.

Add the authorization token to the URL query string, delete cookies, and reload the page to launch mboxTrace.

5. Examine the mbox call to verify whether you are entering the expected activity, and whether you qualify for the expected audience(s).

Examine trace > responseData to view activity and audience qualification.

- Use "campaigns" to verify activity entry, and use "aam" to verify audience qualification.
- Response data "aam" represents all Marketing Cloud audiences a visitor qualifies for, regardless of whether the segment or audience was created in Audience Library, Audience Manager, or Analytics.
- Use the audience ID noted in an earlier step and check to see if that ID appears in "aam."
- Note you may also take any of the audience IDs listed in "aam" and substitute these into the audience definition URL that you used earlier, in order to examine that audience's definition, in case this kind of cross-checking may be useful.

The point here is what you discover will point you towards the next step in the troubleshooting process. For example, if it turns out you are not qualifying for the audience for which you expect to qualify, then you may need to examine the audience definition or the activity definition in Target to figure out why. As another example, if it turns out you are, in fact, qualifying for the audience for which you expect to qualify, then something other than a failed audience qualification is happening that is preventing the expected audience from appearing. This could be any number of things, but you could perhaps double-check to ensure there are no competing activities occurring on the same page, for example.

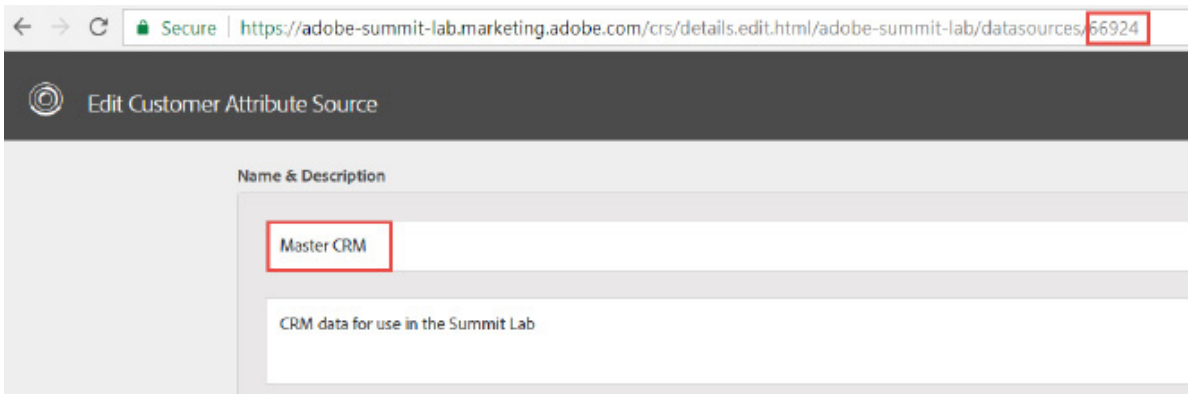
Using mboxTrace to troubleshoot Customer Attributes

MboxTrace is also useful for checking to view the customer attributes you qualify for. Customer attributes appear in the "profile" section of mboxTrace. When you share a customer attribute to Target, it becomes part of a visitor's profile, if that visitor qualifies for it.

The general steps for verifying customer attributes are as follows:

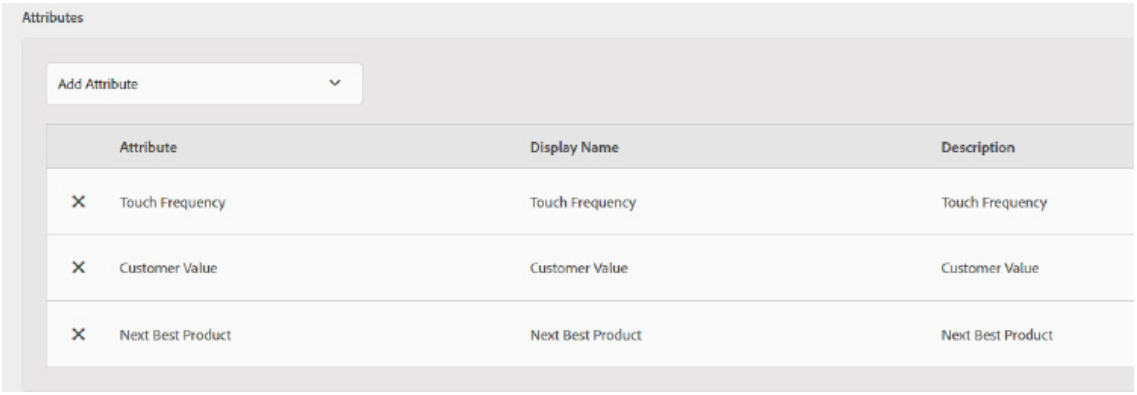
1. Note the behavior. For example, not entering Activity X, which targets an audience based on customer attributes.

2. In Target, examine the customer attribute source definition, taking note of the customer record source (crs) ID in the URL.



From the customer attribute source definition, you can determine the crs ID by looking at the URL.

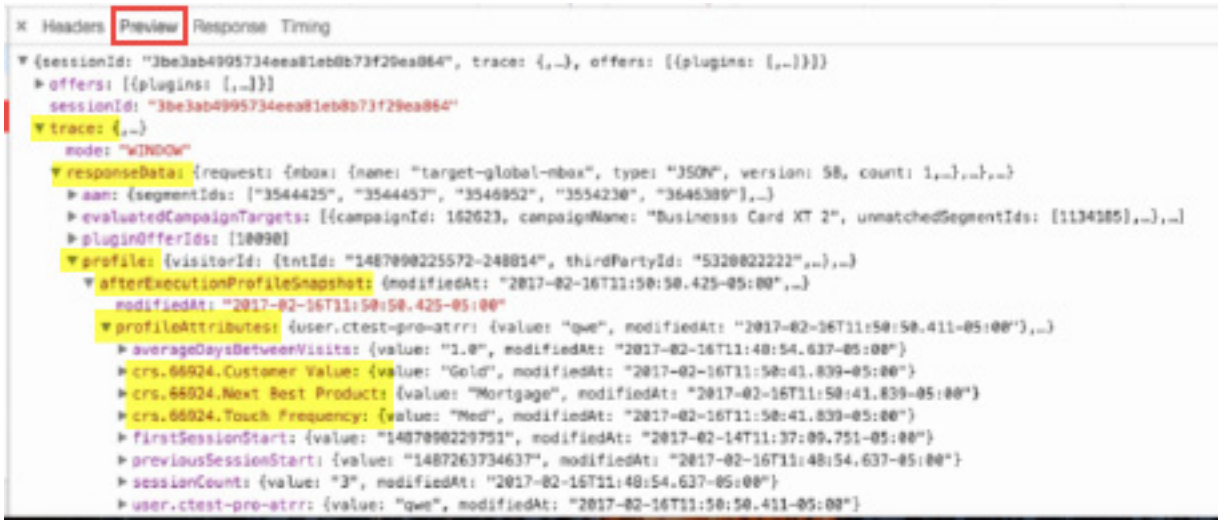
3. Still in the customer attribute source definition, note the names of the attributes you are subscribed to from this source.



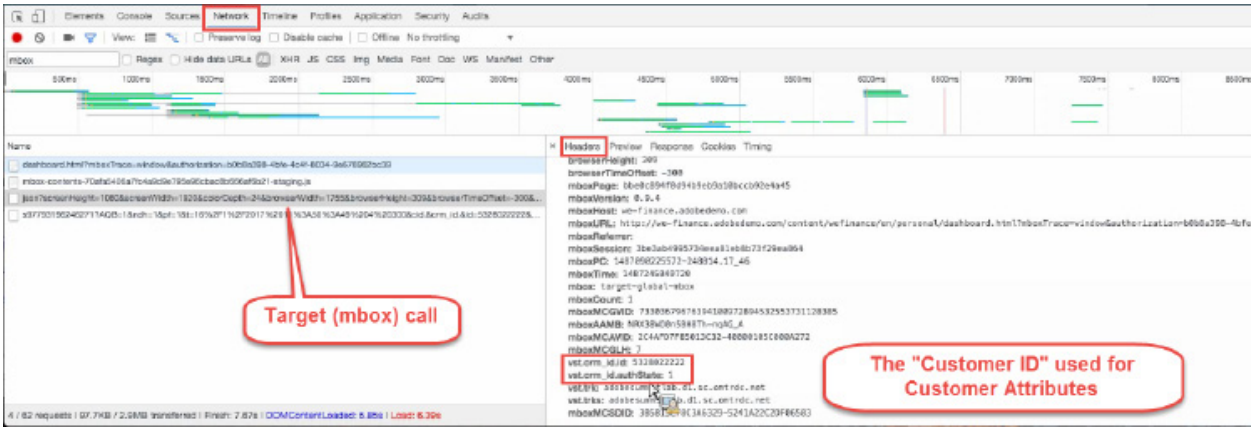
Viewing the attribute subscription.

4. In Target, obtain the mboxTrace authorization token.
5. Launch mboxTrace on the activity page.
6. Examine the mbox call to verify whether you are entering the expected activity.
7. Navigate to **trace** > **responseData** > **profile** > **afterExecutionProfileSnapshot** > **profileAttributes**. Note the ones prefixed by **crs**, using the syntax, "crs.[sourceID].[custattname]."

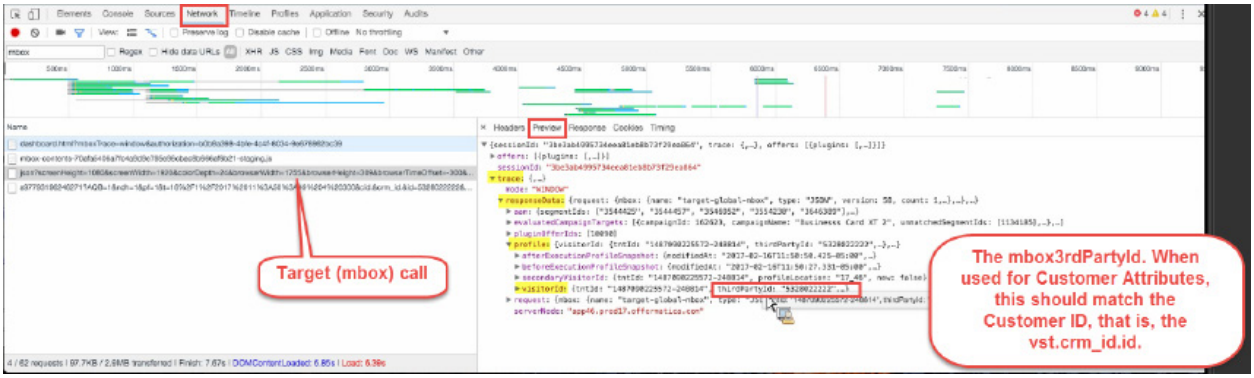
8. Verify you see the expected customer attribute as part of your visitor profile, by locating "crs.[sourceID].[custattname]" in your **profileAttributes**. For example, if your customer attribute source ID was 66924, and if the customer attribute you are using for activity qualification was called "Touch Frequency," you would expect to see "crs.66924.Touch Frequency" in your **profileAttributes**.



   - *What does it mean if the expected customer attribute is present?* If it is present, then the customer attribute is correctly associated with your visitor profile, but you are still not entering the activity. Investigate your audience definition and activity definition further.
   - *What does it mean if the expected customer attribute is not present?* If it is not present, then for some reason, the attribute is not being passed or associated with you. Verify your customer attribute source definition as well as your customer ID configuration. You can verify that Target is correctly identifying the customer ID by confirming the mbox3rdPartyId as shown in the next step.
9. Additional verification: Match the customer ID (vst.crm_id.id) with the Target mbox3rdpartyId (thirdPartyId).



Look in the Headers of the mbox call to see the customer ID used for customer attributes.



Look in the Preview of the mbox call, while running mboxTrace, to see the mbox3rdPartyId, in trace > responseData > profile > visitorId.

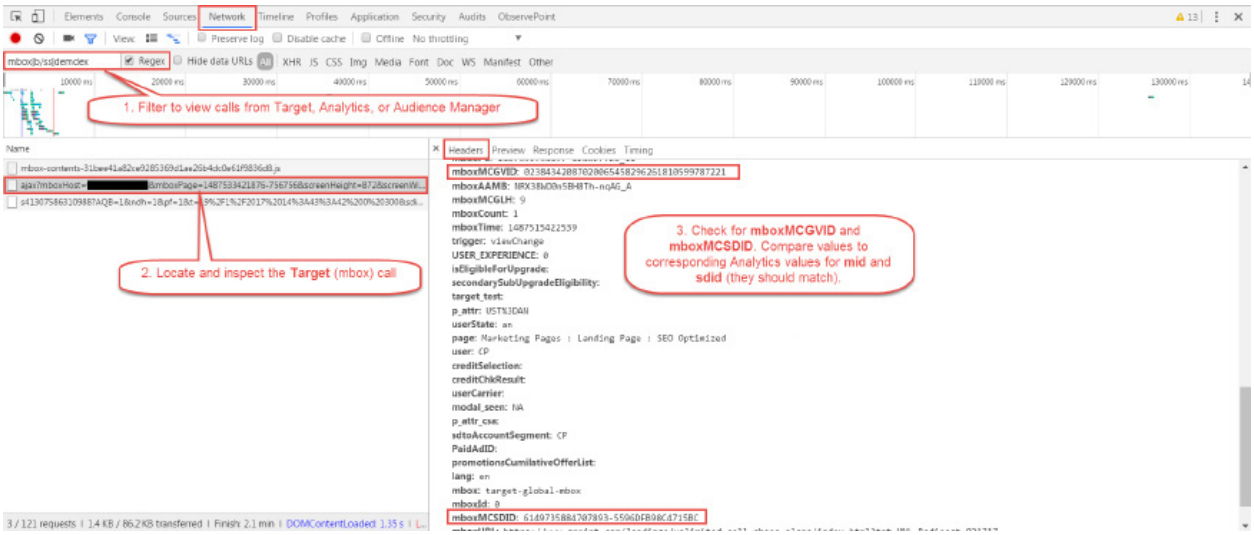
Exercise 8.1
Troubleshooting the Marketing Cloud ID service

In this exercise, you will practice some common troubleshooting steps for addressing issues encountered with the People core service, Marketing Cloud audiences, and A4T.

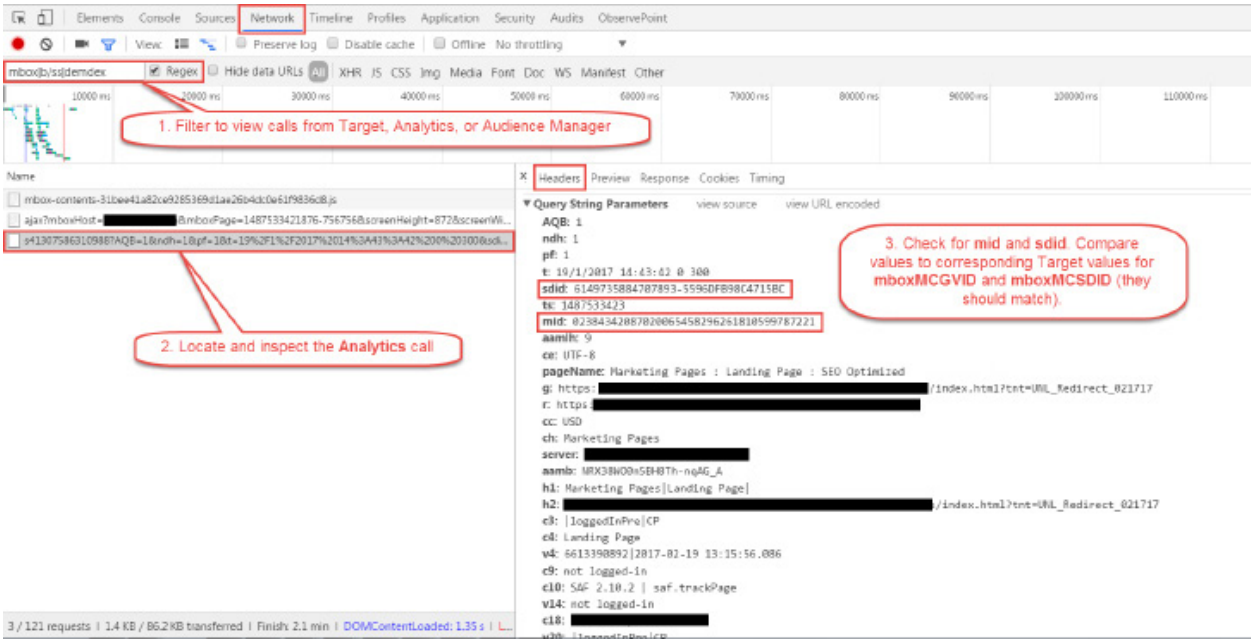
Scenario: You are a marketer who created and shared an audience from Analytics to the Marketing Cloud. You can see the historical audience in the Audience Library, and you added it to your activity in order to target it to those visitors. However, in performing quality assurance tests, you find you are not entering the activity or experience as expected. (25 min)

1. Create a Target activity that uses a historical audience to target visitors.
    a. Save and activate your test.
    b. Pretend you encounter the issue as described above.
2. Take steps to verify the Marketing Cloud services and solutions are communicating as expected.
    a. In Chrome, launch an incognito browsing window to get a fresh set of cookies for debugging. (You may also use private mode in another browser type, but here in class, we will use Chrome.)
    b. Open the developer console Network tab. (Launch Chrome DevTools by right-clicking the window and selecting **Inspect**, then select the **Network** tab.)
    c. Navigate to your test page (For example, http://ats-sb.adobe.com/target/target_training/userX/index.html, where X is your user number.)
    d. Check the requests.
        i. Check to make sure the Marketing Cloud IDs (the global visitor IDs) exist and match as expected. (See the "Tip," below.)
        ii. If you were entering the activity, but not seeing the data populate as expected, check to make sure the Supplemental Data IDs exist and match, as well. (See the "Tip," below.)

iii. Tip for the steps above: Use a Regex search to filter the Network calls to those made by Target, Analytics, or Audience Manager. You may use the regular expression, **mbox|b/ss|demdex** as shown.



Checking the mbox call. Your specific values and results will differ from those shown.



Checking the Analytics call. Your specific values and results will differ from those shown.

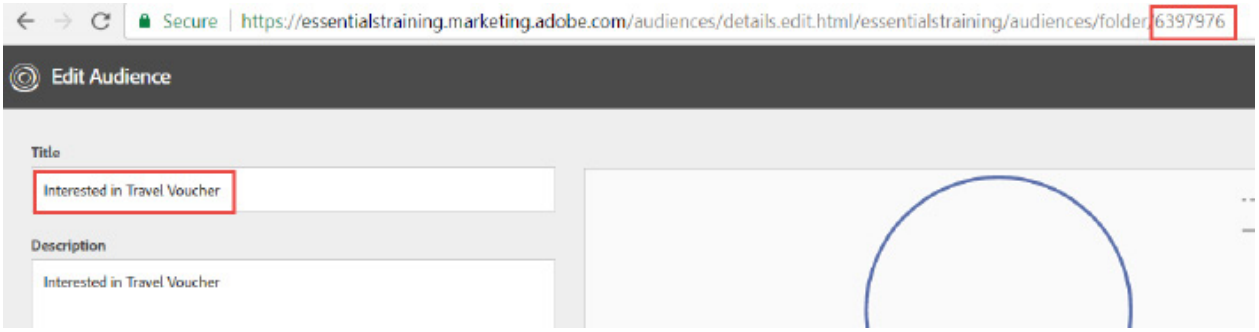
e. Reminders.

i. If you have trouble locating the expected IDs at all, check your implementation to make sure the Marketing Cloud ID service call comes BEFORE the mbox call. (If you use DTM, this should never occur.)

ii. If your IDs exist but do not match, this is an implementation issue that requires further inspection. Contact your consultant or Client Care.

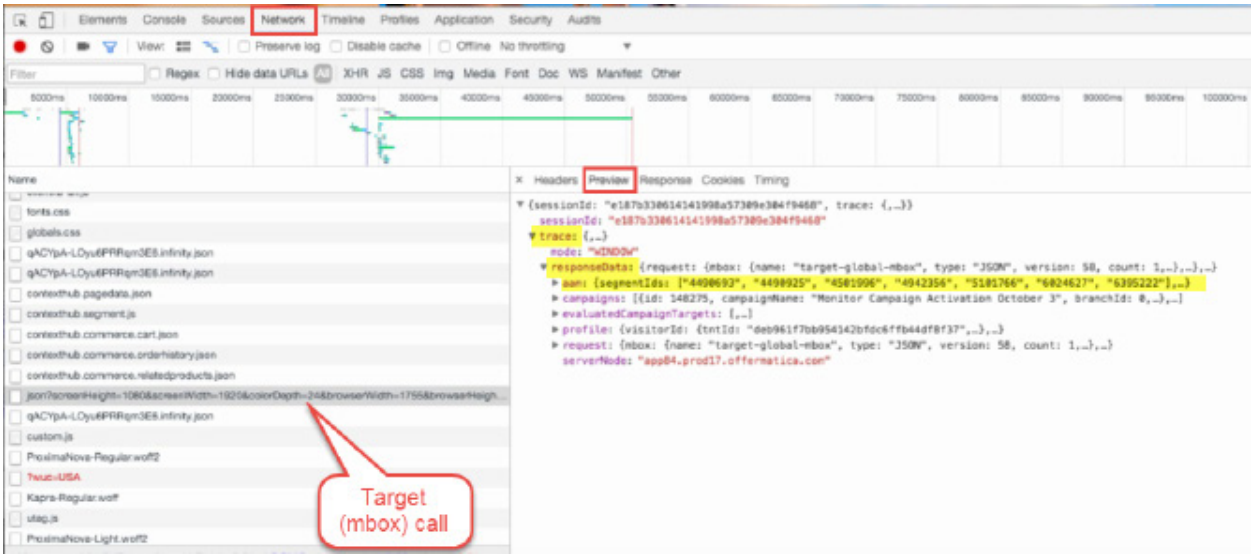
iii. If your IDs do match, indicating your Marketing Cloud ID services and solutions are operating as expected, go to the next step. (Here in class, this is the expected outcome.)

3. Take steps to verify audience membership (verify you are getting into the audience you believe you should be).
   a. Perform the action or behavior that should qualify you for the activity on the page.
   b. In Target, check the name of the audience defined to target the activity.
   c. Navigate to the Audience Library, using the audience name to determine the ID of the audience from the URL. For example (yours will differ):



   d. Get the authorization code for mboxTrace by navigating in Target to **Setup** > **Implementation**. Copy the mboxTrace authorization token, then add it to the URL query string in your incognito window.
   e. Run mboxTrace by refreshing the page.
   f. In the developer tool, click on the mbox call, which should now include mboxTrace parameters.
   g. Go to **Network** > **Preview**.

h. Check **trace** > **responseData** > **aam**, which displays the audiences for which you qualify, regardless of whether the segment or audience was created in Audience Library, Audience Manager, or Analytics. Verify you are getting in to the expected audience. For example (yours will differ):



Using mboxtrace to verify all Marketing Cloud audiences for which you qualify.

i. Try your hand at investigating any of the other audience IDs listed in **trace** > **responseData** > **aam** by copying an audience ID and pasting it into the URL of an Audience Library audience definition. You may use this technique at any time in order to investigate any of the listed audience definitions.

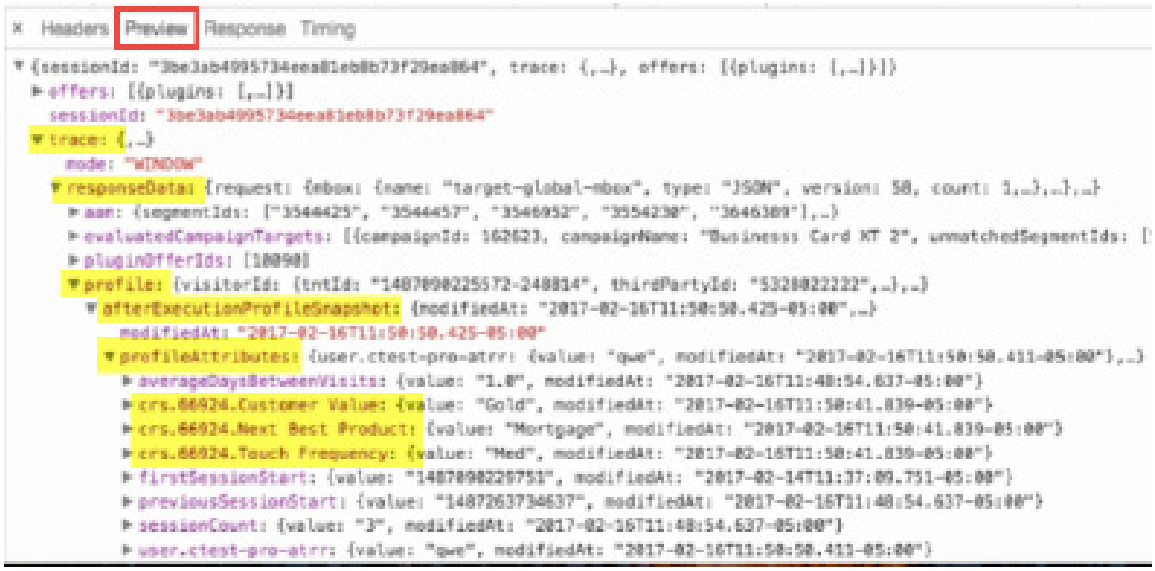
Exercise 8.2
Troubleshooting Customer Attributes

In this exercise, you will practice some common troubleshooting steps for addressing issues encountered with customer attributes.

Scenario: You are a marketer who used a customer attribute to define an audience used to qualify visitors for your activity, but visitors are not getting in to the expected activity. (15 min)

1. Create a Target activity that uses a customer attribute-based audience to target visitors.
   a. Save and activate your test.
   b. Pretend you encounter the issue as described above.
2. In Chrome, launch an incognito browsing window and open the developer tool's **Network** tab (right-click > **Inspect** > **Network**).
3. In Target, get the mboxTrace authorization token and add it to your test URL, submitting it in the incognito window.

4. Investigate the mbox request in the developer tool. (Tip: filter by "mbox" to help find the Target call.)
5. In the **Preview** tab, navigate to **trace** > **responseData** > **profile** > **afterExecutionProfileSnapshot** > **profileAttributes**. To identify customer attributes, look for ones prefixed by **crs**, using the syntax, "crs.[sourceID].[custattname]." For example (yours will differ):



Using mboxTrace to view customer attributes included in this visitor's profile, in the Network > Preview area of the developer tool for the mbox call.

6. Verify Marketing Cloud customer attribute source ID.
   a. In the Marketing Cloud **Profiles & Attributes** > **Customer Attributes** page, click on the customer attribute source that contains the customer attribute you used to target your activity in the first step
   b. From the **Edit Customer Attribute Source** page, note the ID of the customer attribute source, as listed in the URL. For example, suppose your ID is "66924."
7. Return to the browser and to your developer tool.
8. Verify you see the expected customer attribute as part of your visitor profile, by locating "crs.[sourceID].[custattname]" in your **profileAttributes**. For example, if your customer attribute was called "Touch Frequency," you would expect to see "crs.66924.Touch Frequency" in your **profileAttributes**.
9. What does it mean if the expected customer attribute is present?
10. What does it mean if the expected customer attribute is not present?

BONUS: Additional verification: Match the customer ID (vst.crm_id.id), found in the Headers of the mbox call, with the Target mbox3rdpartyId (thirdPartyId), found in **trace** > **responseData** > **profile** > **visitorId**.

Solutions to Exercises

Solutions to Exercise 8.2
Troubleshooting Customer Attributes

9. What does it mean if the expected customer attribute is present?

If it is present, then the customer attribute is correctly associated with your visitor profile, but you are still not entering the activity. Investigate your audience definition and activity definition further.

10. What does it mean if the expected customer attribute is not present?

If it is not present, then for some reason, the attribute is not being passed or associated with you. Verify your customer attribute source definition as well as your customer ID configuration. You can verify that Target is correctly identifying the customer ID by checking the mbox3rdPartyId.