

## Module 3 – Segmentation and calculated metric

This toolkit is designed for Adobe Analytics Expert Business Practitioner Exam Aspirants. There are **five** Modules. Study Each module per week to stick to schedule. Technical Parts of applications are depicted in Videos, you can learn more about them from experience League. You can visit [Get prep page](#) to understand the contents and anticipate the learning journey.

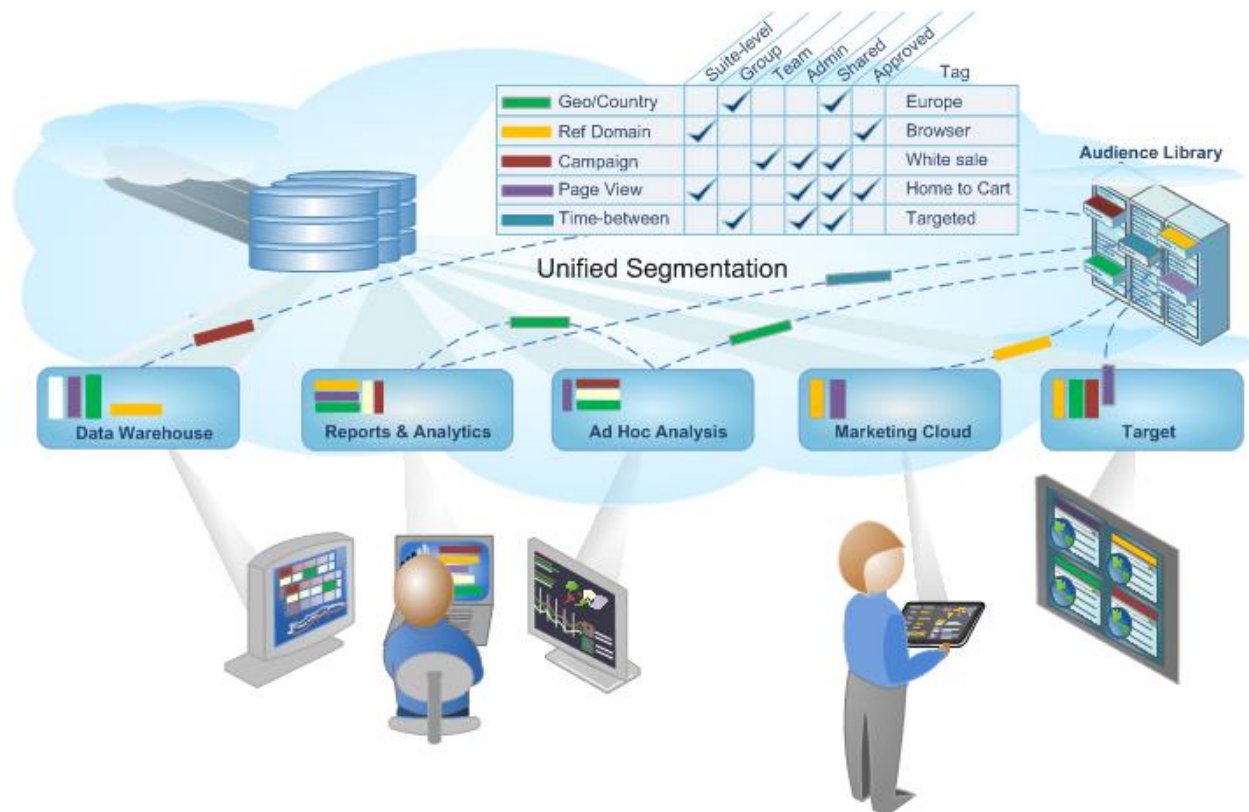
This is Expert Business Practitioner Exam, toolkit Module 3. This module contains two sections.

- [Analytics segmentation](#)
- [Calculated and Advanced Calculated \(Derived\) Metrics](#)

### Section 3.1 Analytics segmentation

Adobe Analytics lets you build, manage, share, and apply powerful, focused audience segments to your reports using Analytics capabilities, the Adobe Experience Cloud, Adobe Target, and other integrated Adobe products.

Analytics segmentation includes the [Segment Builder](#) to construct segments and run a pre-test, and the [Segment Manager](#) to collect, tag, approve, set security, and share segments across your organization.



Data Scientists and Marketing Analysts can employ, extend, and refine segments for analysis specific to his or her needs, and then save the segment for other users to extend, refine and save as a new segment to the library. Once set in motion, it's a cycle of designing and managing codified audience insights as a [unified segment workflow](#).

## About segments

Segments allow you to identify subsets of visitors based on characteristics or website interactions. Segments are designed as audience insights that you can build for your specific needs, and then verify, edit, and share with other team members or use in other Adobe products and Analytics capabilities.

Segments are based on a Visitor, Visit, and Hit level hierarchy using a nested container model. The nested containers allow you to define visitor attributes and actions based on rules between and within the containers. Analytics segments can be built, approved, shared, saved, and run across multiple products and capabilities in the Adobe Experience Cloud. Segments can be generated from a report, built into a dashboard report, or bookmarked for quick access.

You can build and save segments in the Segment Builder, or generate segments from a Fallout report (in [!UICONTROL] Analysis Workspace). You can also employ and extend pre-built segments based on specific rules between nested containers, allowing you to filter results and apply to reports. In addition, segments can be used together as [stacked segments](#).

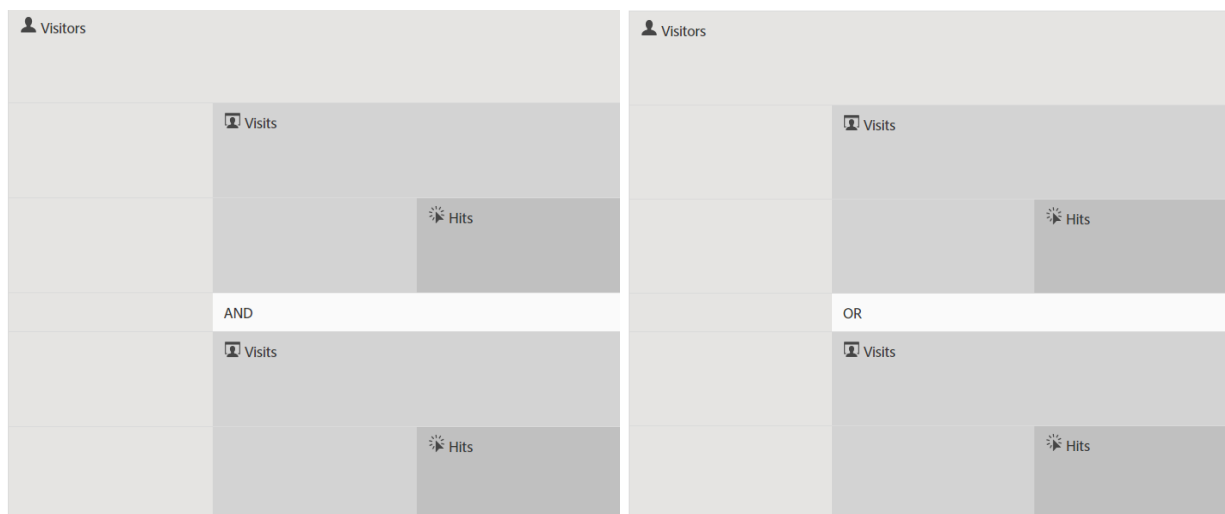
Segments identify

- who your visitors are (country, gender, coffee shop),
- what devices and services they use (browser, search engine, mobile device),
- where they navigated from (search engine, previous exit page, natural search),
- plus a lot more.

Segments can be based in the following values:

- Visitors based on attributes: browser type, device, number of visits, country, gender.
- Visitors based on interactions: campaigns, keyword search, search engine.
- Visitors based on exits and entries: visitors from Facebook, a defined landing page, referring domain.
- Visitors based on custom variables: form field, defined categories, customer ID.

When building audience segments in the Segment Builder, you define conditions using the AND and OR operators between containers.



This type of segment filters data sets based on characteristics joined using the AND and OR operators.

- You can [apply multiple segments to a report or project](#).
- Segments are universal to all report suites.
- The [Segment Builder](#) simplifies segment creation.
- The [Segment Manager](#) lets you set up [workflows](#) with segment sharing, tagging, verification, and approval features.
- You can [tag segments](#) to organize and search later instead of using folders.
- You can create [Sequential Segments](#).
- The Page View container is now the Hit container to indicate that this container segments all types of data and not just page views. For example, link tracking calls, and trackAction calls from the mobile SDKs are all included or excluded by the hit container.

## [Segmentation in Analysis Workspace](#)

Analysis Workspace contains these additional features:

- You can [compare segments](#).
- Use [segments as dimensions](#) in a comparison.
- Use segments in [fallout analysis](#).

## [Adobe-provided segments](#)

The Component rail on the left side of the screen shows segments that are created by you and your company and Adobe segments that are provided out of the box. When you click **Show all**, these segments typically appear at the bottom of the list and are identified by the Adobe logo to the right.

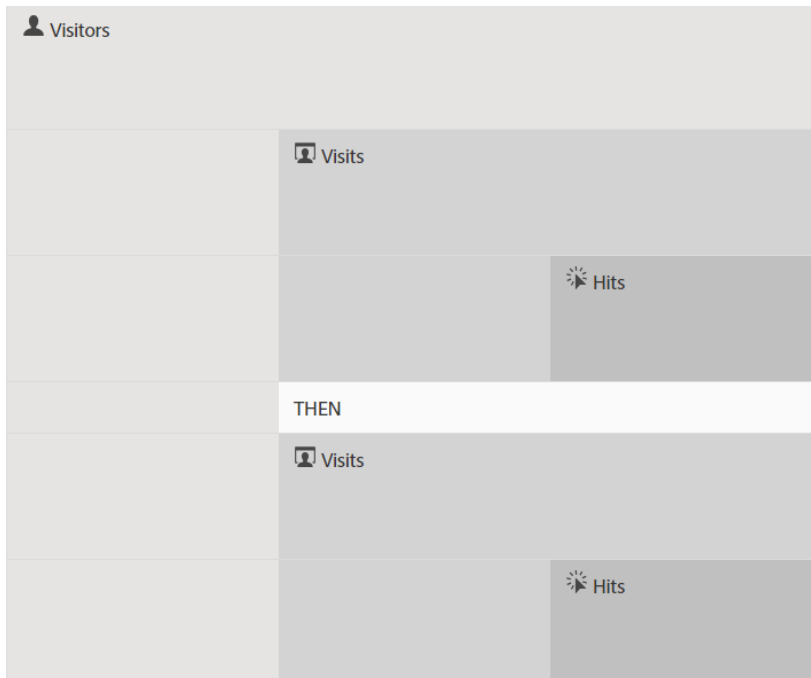
## Sequential Segments

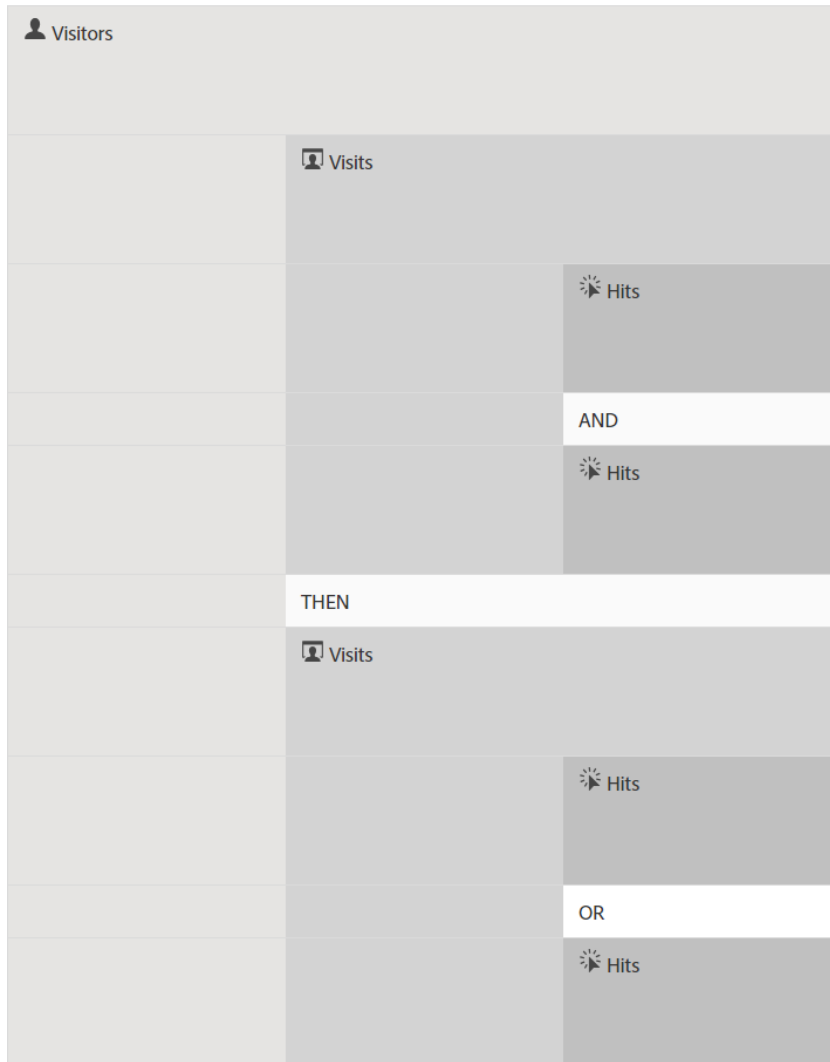
Sequential segments let you identify visitors based on navigation and page view across your site, providing a segment of defined actions and interactions. Sequential segments help you identify what a visitor likes and what a visitor avoids. When building sequential segments, the THEN operator is used to define and order visitor navigation.

Visit One	Visit Two	Visit Three
In the first visit, the visitor went to the main landing page A, excluded the campaign page B, and then viewed the Product page C.	In the second visit, the visitor again went to the main landing page A, excluded the campaign page B, and went again to the Product page C, and then to a new page D.	In the third visit, the visitor entered and followed that same path as in the first and second visits, then excluded page F to go directly to a targeted product page G.

Sequential segments can be based on the following hit values:

- Visitors based on sequence of page hits: page views within a single visit, page views across separate visits, visits that excluded page views.
- Visitors based on time between and after page views: after a time limit, between hits, after an event.





A sequential segment filters data sets based on user actions using the THEN operator.

### [Access the Segmentation Tools](#)

#### How do I get to the Segment Builder?

You can access the Segment Builder by:

- Displaying an existing report and clicking the Segments icon in the left navigation. In the segment rail that displays, then click **Add**, or
- At the top of the Segment Manager, clicking + **Add** or,
- Clicking an existing segment title in the Segment Manager to edit the segment in the Segment Builder.

## How do I get to the Segment Manager?

Access the Segment Manager by:

- Going to **Analytics > Components** in the top navigation. Then click **Segments**, or
- Displaying an existing report and clicking the Segments icon in the left navigation. Then click **Manage**, or
- Pressing the slash key ‘/’ anywhere in the interface and searching for segment manager.

## Permissions

### What rights and privileges do I need to use, create, and manage segments?

By default, all users can create and edit personal segments. However, Admins can decide who should have [permissions to create segments](#) and can assign them to specific groups. These segments can be shared directly with any other Analytics user.

Admins can edit any segment, and share segments with groups and with everyone in the organization. [More...](#)

### Can I see all segments in my company?

Yes, Admins can see all segments within the Analysis Workspace and Reports & Analytics user interfaces.

Report Builder displays segments that you own and segments that are shared with you.

### Can I manage all Analytics segments in the Segment Manager?

Yes, all segments can be managed in the Segment Manager. Segment Manager displays segments that are visible to the owner (user who created the segment), shared users, and admin users. The segment selector displays segments that are owned by and shared with the user.

Admins can see all segments within the Analysis Workspace and Reports & Analytics user interfaces.

Report Builder displays only segments built by you or segments that have been shared specifically with you.

### Why can't I delete this segment?

If the segment was [published to the Experience Cloud](#), you cannot delete it or edit it. However, you can copy it and edit the copied version.

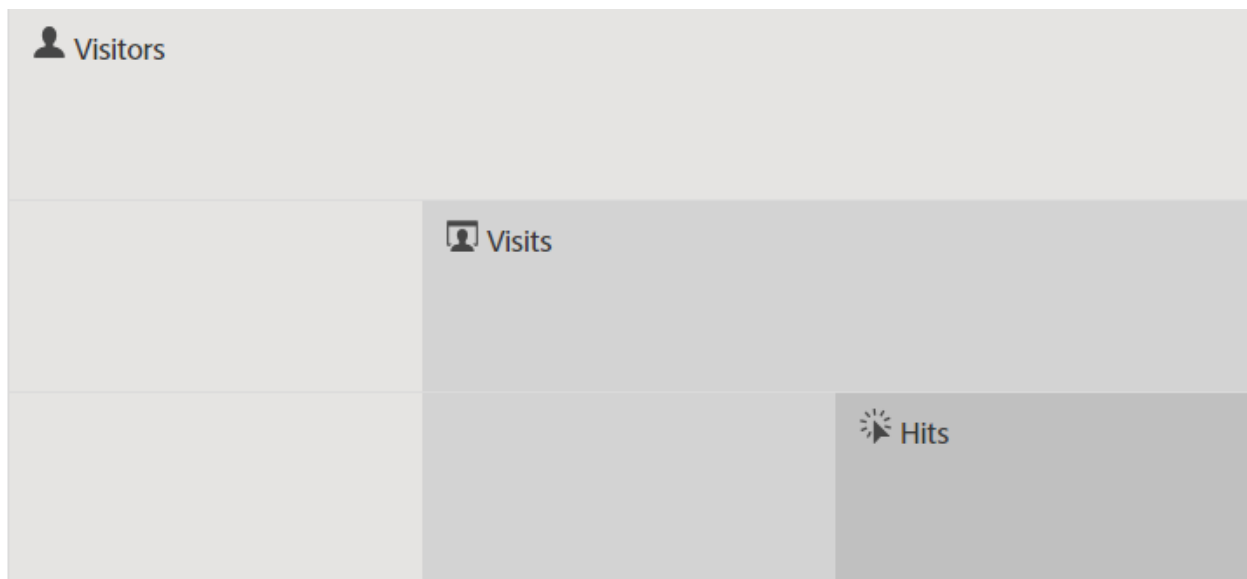
## Segment containers

A Segment sets conditions to filter a visitor based on the visitor's attributes or interactions with your site. To set conditions in a segment, you set rules to filter visitors based on visitor characteristics and/or navigation traits. To further break down visitor data, you can filter based on specific visits and/or page view hits for each visitor. The Segment Builder provides a simple architecture to build these subsets and apply rules as nested, hierarchical Visitor, Visit, or Hit containers.

The container architecture employed in the Segment Builder defines

- **Visitor** as the outermost container, containing overarching data specific for the visitor across visits and page views.
- a nested **Visit** container lets you set rules to break down the visitor's data based on visits, and
- a nested **Hit** container lets you break down visitor information based on individual page views.

Each container lets you report across a visitor's history, interactions broken down by visits, or break down individual hits.



### Visitor container

The Visitor container includes every visit and page view for visitors within a specified time frame. A segment at the Visitor level returns the page that meets the condition plus all other pages viewed by the visitor (and only constrained by defined date ranges). As the most broadly defined container,

reports generated at the Visitor container level returns page views across all visits and lets you generate a multi-visit analysis. Therefore, the Visitor container is the most susceptible to change based on defined date ranges.

Visitor containers can include values based on a visitor's overall history:

- Days Before First Purchase
- Original Entry Page
- Original Referring Domains

## Visit container

The Visit container lets you identify page interactions, campaigns, or conversions for a specific web session. A segment at the Visit level returns the page that meets the condition plus all other pages viewed as part of the visit session (and only constrained by defined date ranges). The Visit container is the most commonly used container because it captures behaviors for the entire visit session once the rule is met. The Visit container lets you define which visits you want to include or exclude in building and applying a segment. It can help you answer the question of how many visitors viewed the News and Sports section in the same visit? Or pages that attributed to a successful conversion to a sale?

Visit containers include values based on occurrence per visit:

- Visit Number
- Entry Page
- Return Frequency
- Participation Metrics
- Linearly allocated metrics

## Hit container

The Hit container defines which page hits you would like to include or exclude from a segment. The Hit container is the most narrow of the containers available to let you identify specific clicks and page view where a condition is true. You can view a single tracking code, or isolate behavior within a particular section of your site. You may also want to pinpoint a specific value when an action occurs, such as the marketing channel when an order was placed.

Hit containers include values based single page breakdowns:

- Products
- List Props
- List eVars
- Merchandising eVars (in context of events)

### **Note:**

If you use this container on a value that persists, such as an evar, it pulls in every hit where that value is persisting. If there is a tracking code that expires after a week, that value could be persisting across multiple visits.



## Logic Group container

The Logic Group container allows you to provide a separate container within the segment rules to filter entities not based on hierarchy. For example, you may want to provide a container nested within the segment that filters based on Visitor. This type of logic requires you to break the hierarchy (as you already used a top-level Visitor container) to filter only for selected visitors. See [Logic Group examples](#) for additional information.

## Nesting containers

When creating segment containers within other containers, you are in essence creating a segment within a segment. The following logic is used with nested containers:

1. Determine what data is included using the outermost container. Any data that does not match this outer rule is discarded in the segmented report.
2. Apply the nested rule to the remaining data. The nested rule does NOT apply to any hits that the first rule throws out.
3. Repeat until all nested container rules have been calculated. The remaining data is then included in the resulting report.

You can use nesting between containers and between rules within a container. Here is what you can nest in each container:

Container Name	What you can nest inside
Hit	Events only
Visit	Hit Container, events
Visitor	Visit Container, Hit Container, Events
Logic Group	Visitor container, Visit container, Hit container

## Include multiple containers within a single definition

Including multiple segments in a new compound segment lets you refine data even further. Dragging two existing segments together acts as an “OR” statement when filtering visitors. All containers in the canvas are reviewed against all data, and any data that matches any of the containers is included in the reporting.

For example, dragging a Visit container where Country = United States with a Visit container where Order = True,

**Country = United States + Order = True**

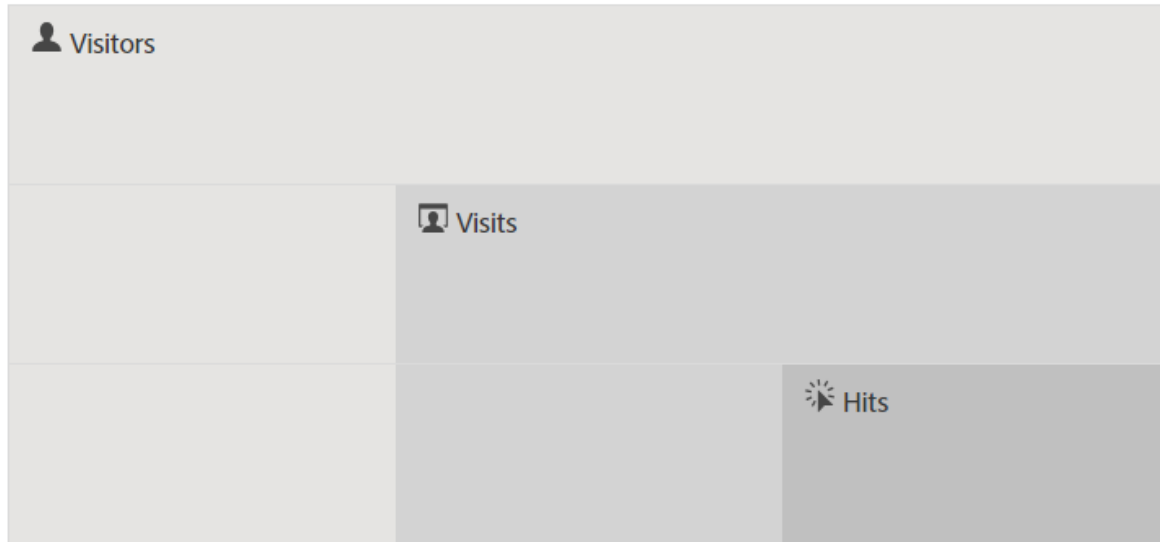
builds a segment that behaves in this order:

1. This segment would first look at your entire data and identify all visitors within the United States.
2. The segment would then look at all your data again, searching to see if any visitors made an order.

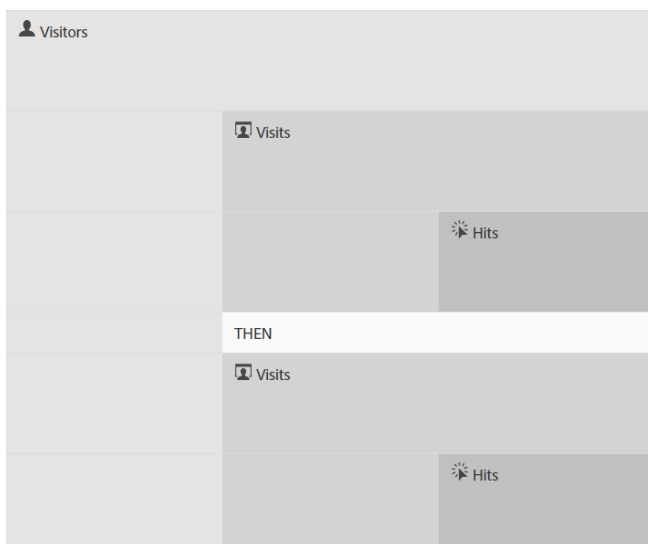
- Both sets of data would then be applied to the report.

## Containers for sequential segments

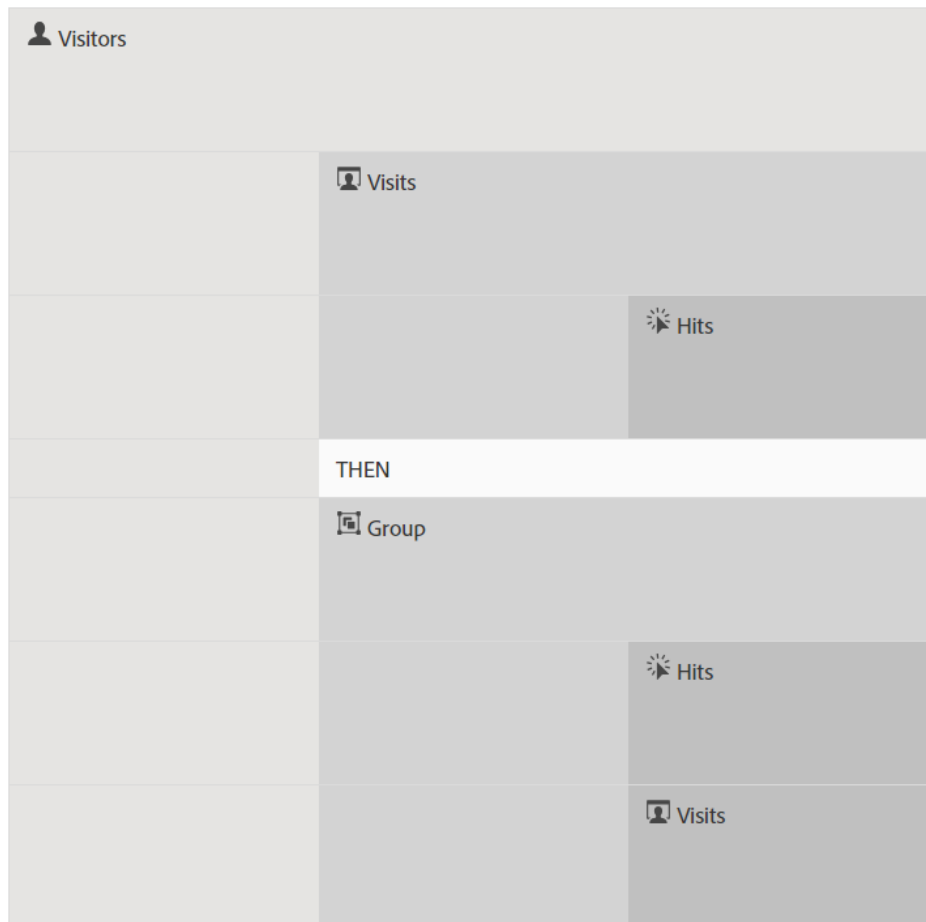
Sequential segmentation employs the same basic containers, including Visitors, Visits, and Hits (including page views or other dimensions) nested hierarchically.



Visitors constitute the highest-order container in sequential segmentation, with Visits contained within the Visitors container, and Hits contained within the Visitors or Visits containers. This [container hierarchy](#) must be maintained to build well-ordered sequential segments. **To build sequential segments**, containers are nested and sequential logic joined using the THEN operator that requires each container to be true based on the sequence of the visitor.



The only exception to this hierarchy of containers is when using the [Logic Group container](#). The Logic Group container lets you nest a hit within a container without order to capture events and dimensions but outside of a sequential order.



## Reports based on container data

Containers allow you to filter different data differently based on reporting values when breaking down segments and applying them to reports.

Data captured at each level of the Visitor > Visit > Hit containers hierarchy affects how you build your segments. If you take the same segment applied to the same report using the same data set, you get different values based on the container from which you generate the report. Factors such as container reporting level and persistence of values across hits can mean significant changes in your reporting accuracy.






## Basics of container data

For example, the visitor depicted below visited a site on the first visit, landed on the Home page and then visited three additional pages and converted the visit to a sale. On a separate visit, the visitor landed this time through Product page, then to the Home page, back to the Product page,






and then closed the session after looking at Winter Hats. Based in the data captured for each container for the segment, different values are shown in the report.

The Pages equals Winter Coat segment below is applied to the **Pages Report**.

Based on the container selected, the report displays different results for the following visits and page views by a visitor.

Visit 1							
	 Home	→	 Winter Apparel	→	 Winter Coat	→	 Purchase \$100


Visit 2							
	 Winter Apparel	→	 Winter Boots	→	 Winter Apparel	→	 Winter Hats

### Reporting from the Hit container

When this condition is within a Hit container, then the report lists only pages where *Page = Winter Coats* is true. Since only one page matches this condition in a container of only one page, only the Winter Coats page is displayed.

Page	Page Views
Winter Coat	1

Reporting from the Hit container, you can see how reporting from different containers effect overall reporting values. Viewing the segment report, notice that page views are approximately equal to visits (about 2,000 visitors saw duplicate pages within a visit which adds to the total number of page views). And unique visitors are approximately equal to the number of visits (about 2,000 unique visitors visited more than once).

 Metric	#	%
Page Views:	69,252 of 351,292	19%
Views:	67,554 of 165,175	40%
Unique Visitors:	63,541 of 113,169	56%

**IMPORTANT**


Regardless of how you view the data (from the Hit, Visit, or Visitor containers), they all have the same number of visitors, 63,541, in this example. Regardless of how you generate the report, the initial visitor condition (Visitors who viewed the Winter Coats page) remains intact. It is the subset of data from which you are reporting at the different levels.

### Reporting from the Visit container

If this same condition is within a Visit container, then the report lists all pages in the visit where *Page equals Winter Coats* is true. It filters the Winter Coats page, but also captures all other pages in the visit where the condition is true. Because the visitor also visited the Home, Product, and Purchase pages within the visit, these additional pages are listed in the report when reported using Visitor container data.

Page	Page Views
Home	1
Product	1
Winter Coat	1
Purchase	1

Showing segment values from the Visit container, you can see that the number of page views has increased significantly. This increase is because reporting from the Visit container identifies all pages that meet the conditions, plus all other pages viewed in the visit (with all page views captured in each Visit container).

 Metric	#	%
Page Views:	226,193 of 351,292	64%
Views:	67,554 of 165,175	40%
Unique Visitors:	63,541 of 113,169	56%

### Reporting from the Visitor container


If this same condition is within a Visitor container, the report lists all pages viewed by any visitor where *Page equals Winter Coats* is true. This condition means that if a visitor viewed the Winter Coats page, then all pages in the Visitor container (including page views in other visits) are listed. Therefore, pages that don't match the condition are also listed in the report because the visitor viewed them at a previous time. All pages in the Visitor container are listed in the report, even if occurred previously and do not specifically meet the conditions.

Visit 1	Page	Page Views
	Home	1
	Winter Apparel	1
	Winter Coat	1
	Purchase	1

Visit 2	Page	Page Views
	Winter Apparel	2
	Winter Boots	1
	Winter Hats	1

Visit 1 + Visit 2 Page	Page Views
Winter Apparel	3
Home	1
Winter Coat	1
Purchase	1
Winter Boots	1
Winter Hats	1

Showing segments from the Visitor container, you can see that the Page Views and Visits have increased. This increase is because, from the visitor level, if the visitor visited the Winter Coats page only once (making the condition true), then all other page views and all other visits captured for that visitor.

 Metric	#	%
Page Views:	240,094 of 351,292	68%
Views:	83,823 of 165,175	50%
Unique Visitors:	63,541 of 113,169	56%

In summary, understanding how segmentation works on various data breakdowns is key to interpreting the data it returns.

### Reporting based on the container

Every breakdown of segment data has a scope to which it is applied. Most breakdowns are based on *Page Views*, however, many valuable segments are based on the *Visit* container, and to a lesser degree the *Visitor* container. It is important to understand reporting based on the scope of your container.

Using the Page equals Winter Coats segment example, below are examples of the results of this segment based on how the container data is applied and how the scope of the data matches the segment type.

## Segment container based on matching segment rule

Applying the segment container against a natural scope of data brings expected results where the line items match the segment rule.

- **Hit container where page equals “Winter Coat”:** Viewing a *Page* report with this segment returns only the values equaling “Winter Coat.” All other pages are excluded from reporting.
- **Visit container where entry page equals “Winter Apparel”:** Viewing an *Entry Page* report with this segment only returns the second visit because its entry page matches the segment rule.
- **Visit container where visit number equals 1:** Viewing a *Visit All* page views from the first visit are included in the report because it matches the segment rule.

## Page Views at the Visit container level

Many segment rules identify page views per visit. When this identification occurs, the entire Visitor container is applied, if only a single hit matches the rule. This segment report is especially valuable because page views based on visits provide insight based on page views per visit.

- **Visit container where page equals “Winter Coat” page:** In a *Page* report at the Visitor container level displays all page views of visits that included a view of the “Winter Apparel” page. If a page matches the segment rule, all page views associated with that visit are included in the report.
- **Visit container where page equals “Home” page:** In a *Page* report with this segment only displays data from the first visit, because in the second visit the visitor did not view a “Home” page.
- **Visitor container where page equals “Winter Apparel”:** In a *Page* report, this segment retrieves all data from both visits because in both visits the visitor viewed the “Winter Apparel” page.

## Segment container identifying Hits smaller than Page Views

Using segment with a smaller container than the breakdown scope returns unexpected data. Using a smaller breakdown still pulls in all hits from that scope of data.

- **Hit container where entry page equals Product page:** Every page associates with the visit’s entry page, making it a visit-based breakdown. Using this segment not only pulls in the entry page Product Page, but also all hits in that visit.
- **Hit container where List Var 1 contains ValueA:** If multiple values were defined on the same hit as the list var, then all variable values are included in the segment. There is no way to separate values that occur in the same page view because the Hit container is the smallest segment container to break down hits.
- **Hit container where Page equals “Purchase”:** If using page views as a metric, only the Purchase page is displayed (as expected). If using a Revenue Participation report, then all pages in the first visit receive \$100, since participation metrics are visit-based.
- **Hit container where Page equals “Winter Coat”:** If using page views as a metric, only the Winter Coat page is displayed (as expected). If using a Revenue Participation report, no pages receive credit because this dimension requires a persistent dimension. The page view that actually made the purchase (the Purchase page) is not included in the Hit container, so no revenue participation is given to any item. However, running a report from the Visit container would include all page views in that visit and would distribute revenue participation (\$100) across all pages viewed in the session.





## Persistence across containers

Filtering by dimensions that persist across a range of pages, such as a Campaign eVar or a Referring dimension, affects the data collected at the container level and must be understood for reporting accuracy.

Segment data can vary based on the persistence of a dimension or applied variable across selected pages. Some dimensions, such as the Page dimension, provide unique values at the page level and are filtered based on data from the Hit container. (See the [Reports based on Container Data](#) example). Other dimensions, such as the Referring Domain dimension, persist across multiple pages for a visit. For example: Referring Domain equals aol.com. Some dimensions or applied variables, such as Visit Duration, span across a visitor's entire history.

In contrast to the Page dimension, the Referring Domain value is attached to each page in this visit. For example, the visitor below arrives at the Home page from a referred site. Therefore, all pages within that visit are assigned the same referring domain value.

The Referring Domain equals aol.com segment below is applied to the **Pages Report**.

Visit 1							
 aol.com	<input type="checkbox"/>	→	<input type="checkbox"/>	→	<input type="checkbox"/>	→	<input type="checkbox"/>
	Home		Winter Apparel		Winter Coat		Purchase \$100
Visit 2							
 weather.com	<input type="checkbox"/>	→	<input type="checkbox"/>	→	<input type="checkbox"/>	→	<input type="checkbox"/>
	Winter Apparel		Winter Boots		Winter Apparel		Winter Hats


In a new visit, the visitor is referred from another site. Therefore, all pages in the new visit are assigned the new referring domain value for each page view.

## Reporting from the Hit container

Because all page views within the same visit are assigned the same Referring Domain value, reporting at the Hit container level where Referring Domain equals 'aol.com' returns all pages listed in the table below.

Referring Domain equals 'aol.com'	Page Views
Home	1
Winter Apparel	1
Winter Coat	1
Purchase	1

Showing data from the Hit container, just over 92,000 page views were viewed in over 33,000 Visits by just over 32,000 Visitors. On average, there were three page views in each visit, and almost all visits were by unique visitors.


	Metric	#	%
	Page Views:	98,234 of 351,165	27%
	Views:	33,203 of 165,173	20%
	Unique Visitors:	32,269 of 113,110	28%

#### Reporting from the Visit container

If this same condition is filtered in the Visit container for a Pages report, then all pages in the visit where Referring Domain equals 'aol.com' is true. Because the value of the referring domain is set at the visit level, reports at the Page View and Visit levels are the same.

Referring Domain equals 'aol.com'	Page Views
Home	1
Winter Apparel	1
Winter Coat	1
Purchase	1

Because all pages have the same referring domain value based on the visit, the report from the Visit container level is (almost) the same to the report from the Page View container. There is a slight offset (98,234 versus 98,248) due to data anomalies.

 Metric	#	%
Page Views:	98,248 of 351,165	27%
Views:	33,203 of 165,173	20%
Unique Visitors:	32,269 of 113,110	28%

## Reporting from the Visitor container

From the Visitor container, the Page report lists all pages viewed by any visitor where Referring Domain equals 'aol.com' is true. Therefore, if a visitor had 'aol.com' as a referring domain at any time in the history (within the defined time period), then all pages in the Visitor container (including page views in other visits) are listed. Even pages that don't match the primary condition are listed in the report because these pages are included in the Visitor container. All pages in the Visitor container are listed in the report, even if they occurred previously and do not specifically meet the conditions.

In a Referring Domain report, Referring Domain equals 'aol.com' is true in four page views, but Referring Domain equals "weather.com" is true in the other pages the visitor hit. From the Visitor container, you get a list of Visitors where 'aol.com' is true. But it also gives you pages where the referring domain is "weather.com", not the value that matched your initial request in the segment.


Visit 1 Referring Domain equals 'aol.com'	Page Views
Home	1
Winter Apparel	1
Winter Coat	1
Purchase	1

Visit 2 Referring Domain = 'weather.com'	Page Views
Winter Apparel	2
Winter Coat	1
Purchase	1

Visitor container Referring Domain equals 'aol.com'	Page Views
Winter Apparel Referring Domain: 'aol.com'	1
Winter Apparel Referring Domain: 'weather.com'	1
Home Referring Domain: 'aol.com'	1
Winter Coat Referring Domain: 'aol.com'	1
Purchase Referring Domain: 'aol.com'	1
Winter Boots Referring Domain: 'weather.com'	1
Winter Hats Referring Domain: 'weather.com'	1

When you view data from the Visitor container, notice that the page views have increased significantly (from 98,248 to 112,925). This increase is because all page views by the visitor (including those pages with other referring domain values saved to at the Visitor container level) have been listed. And the additional visits by that visitor, increasing visits from 33,203 to 43,448.

	Metric	#	%
	Page Views:	112,925 of 351,165	32%
	Views:	43,448 of 165,173	26%
	Unique Visitors:	32,269 of 113,110	28%

## Summary

- The Visitor container returns all pages seen by a visitor where at least one page meets the criteria. So, if a page is only seen on visit 1 on day 1, then all pages viewed by the visitor across multiple visits are included in the data.
- The Visit container returns all the pages seen in a visit, for which at least one page meets the criteria. So, if a page is only seen on visit 1 on day 1, then all pages viewed across the entire visit are included in the data.

- Be careful to base the condition that you use for segmentation on an eVar or other type of persistent variable. For example, you might use the condition “where campaign contains email” and it expires after seven days. So, if the campaign is set on the first visit, it persists for seven more days. Each visit is included even though the campaign was only set on the first visit. The other visits are also included (as long as they are in the date range of the report). If you want to eliminate persistent values from being included, either use the event “instance of”, or an equivalent Prop variable, if available.

### **Additional Resources**

- [Segmentation features in Analysis Workspace](#)
- [Segmentation workflow](#)
  - [Segmentation workflow overview](#)
  - [Plan segments](#)
  - [Build segments](#)
  - [Build sequential segments](#)
  - [Tag segments](#)
  - [Approve segments](#)
  - [Share segments](#)
  - [Publish segments to the Experience Cloud](#)
  - [Select and apply segments](#)
  - [Filter segments](#)
  - [Mark segments as favorites](#)
  - [Delete segments](#)
  - [Manage segments](#)
- [Segment Reference](#)
  - [Comparison Operators for Segments](#)
  - [Data Warehouse Segment Compatibility](#)
  - [Segment Rights by Role](#)
  - [Troubleshooting](#)
- [FAQs on managing legacy segments](#)
- [Best practices](#)

## Section 3.2 Calculated and Advanced Calculated (Derived) metrics

Calculated and Advanced Calculated (or Derived) metrics are custom metrics that you can create from existing metrics.

Our Calculated Metrics tools offer a highly flexible way of building, managing and curating metrics. They allow you as marketers, product managers and analysts to ask questions of the data without having to change your Analytics implementation. The custom metrics available in each Analytics package are:

- Adobe Analytics Foundation: Calculated
- [Adobe Analytics Select](#): Calculated + Advanced Calculated
- [Adobe Analytics Prime](#): Calculated + Advanced Calculated
- [Adobe Analytics Ultimate](#): Calculated + Advanced Calculated

Here is a comparison of Calculated metrics and Advanced Calculated metrics capabilities:

<b>Builder Options</b>	<b>Calculated metrics</b>	<b>Advanced Calculated (Derived) metrics</b>
<a href="#">Format types (decimal, time, percent, currency)</a>	Yes	Yes
<a href="#">Attribution changes (default, linear, participation, etc.)</a>	Yes	Yes
<a href="#">Metric types (standard, total)</a>	Yes	Yes
Basic operators (add, subtract, multiply, divide)	Yes	Yes
<a href="#">Apply segments</a>	No	Yes
<a href="#">Basic functions (count, abs value, mean, etc)</a>	No	Yes
<a href="#">Advanced functions (regression, if/then, t-score, etc)</a>	No	Yes

### Capabilities

You can

- Create metrics across Analysis Workspace, Reports & Analytics, Report Builder, Anomaly Detection, and Contribution Analysis.

- Create segmented metrics that are derived at report run time, without having to change the implementation. These can be viewed historically because they are based on segments.
- Share metrics across report suites. This means that all newly created metrics apply to all reports suites in the same login company.
- (Advanced Calculated metrics only) Segment on metrics. For example, you can create a metric for “New visitors”, with a count of people for whom this is the first session.
- (Advanced Calculated metrics only) Incorporate statistical functions to help you better describe your data. For example, you can count the number of items in a report or add in the number of standard deviations for each item.

## Limitations

Some Analytics features let you use events but not calculated metrics:

- Funnels in Reports & Analytics
- Fallout in Analysis Workspace
- Cohort Analysis in Analysis Workspace
- Data Warehouse
- Segments
- Real-Time reports
- Current Data reports
- Analytics for Target

## Tools

Here is a short overview of the Calculated metrics tools:

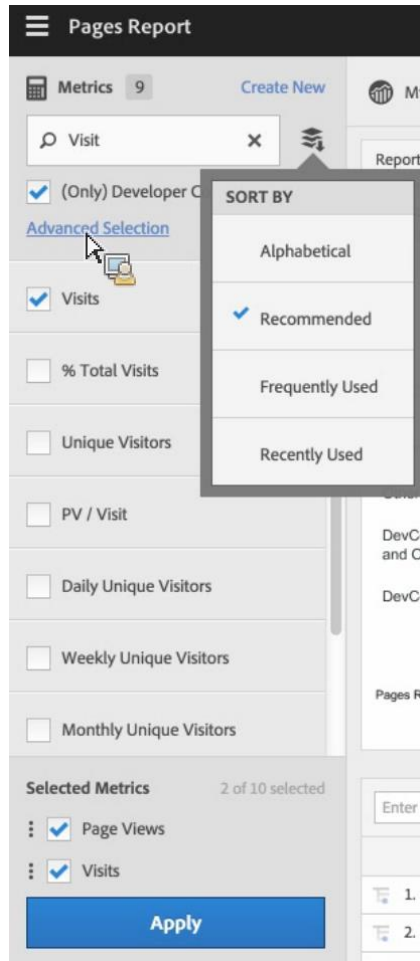
Tool	Capabilities
<a href="#">Calculated Metric Builder</a>	<ul style="list-style-type: none"> <li>• Create calculated and advanced calculated metrics using advanced allocation models.</li> <li>• Add segments inline to metric formulas.</li> <li>• Compare segments in the same report. For example, compare local visitors vs. international visitors.</li> <li>• Use statistical functions.</li> <li>• Provide detailed metric descriptions (show what it does, where to use it, where NOT to use it).</li> <li>• Copy definitions into new metrics.</li> <li>• Provide an inline metric preview.</li> <li>• Set metric polarity, which indicates whether it's good or bad if a given custom event (metric) goes up.</li> <li>• Tag metrics.</li> </ul>
<a href="#">Calculated Metric Manager</a>	<ul style="list-style-type: none"> <li>• Share metrics with others.</li> <li>• Approve and curate metrics.</li> <li>• Organize (tag) your metrics so people can find them.</li> <li>• Delete metrics.</li> <li>• Rename metrics.</li> </ul>

Metric Selector rail

Replaces the Show Metrics popup in Reports & Analytics.

It lets you search for and add/apply metrics to the report. You can also change the [sort](#) order (options are: alphabetical, recommended, frequently used, recently used.) In addition, you can filter on Report Suites to show only metrics created in a specific report suite.

To access this Metric Selector, click the Metrics icon to the left of a report. This is what the Metric Selector looks like:



[API for Calculated Metrics](#)

Part of the Adobe Analytics 2.0 API set.



## How-to videos

These short videos (8 minutes or less) provide an overview of how to optimize the use of the Calculated Metric tools.

- [Metric Selector](#)
- [Metric Builder](#)
- [Segmented Metrics](#)
- [Implementation-Less Metrics](#)
- [Functions](#)
- [Admin-Specific Tips](#)

## Additional Resources

- [Calculated metrics workflow](#)
  - [Calculated metrics workflow](#)
  - [Find metrics](#)
  - [Build metrics](#)
  - [Build a “Page Views per Visits” metric](#)
  - [Build an “Order Assists” metric](#)
  - [Build a “Participation” metric](#)
  - [Metric type and attribution](#)
  - [Segmented metrics](#)
  - [Stack and replace segments](#)
  - [Filtered and weighted metrics](#)
  - [Use functions](#)
  - [Tag calculated metrics](#)
  - [Approve calculated metrics](#)
  - [Share calculated metrics](#)
  - [Calculated metrics manager](#)
- [Metrics reference](#)
  - [Reference: basic functions](#)
  - [Reference: advanced functions](#)
  - [Metric compatibility](#)
  - [Calculated metrics: role-based rights](#)
  - [Calculated metrics totals](#)
  - [Default calculated metrics](#)