Module 1 – Discovery

This toolkit is designed for <u>Master Architect Exam Aspirants</u>. There are **three** 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 <u>Get prep page</u> to understand the contents and anticipate the learning journey.

This is Master Exam, Architect toolkit Module 1. This module contains five sections.

1.1 Implement Adobe Analytics

Adobe requires code on your site or app to send data to Adobe's data collection servers. The following steps indicate how a typical implementation works.

- 1. When a visitor comes to your site, a request is made to your web server.
- 2. Your site's web server sends the page code information, and the page displays in the browser.
- 3. The page loads, and the Analytics JavaScript code runs.

 The JavaScript code sends an image request to Adobe data collection servers. Page data that you defined in your implementation are sent as part of a query string in this image request.
- 4. Adobe returns a transparent pixel image.
- 5. Adobe servers store collected data in one or more *report suites*.
- 6. Report suite data populates the reports that you can access in a web browser.

The JavaScript code execution occurs quickly and does not noticeably affect page load times. This approach allows you to count pages that were displayed when a visitor clicked **Reload** or **Back** to reach a page, because the JavaScript runs even when the page is retrieved from cache.

Adobe Analytics requires code within your website, mobile app, or other application to send data to data collection servers. There are several methods to implement this code, depending on platform and your organization's needs.

Website implementation methods

For your **website**, the following implementation methods are available:

Web SDK extension: The standardized and recommended method to implement Adobe
Analytics for new customers. Install the Adobe Experience Platform Web SDK
extension in Adobe Experience Platform Data Collection Tags, use a loader tag on each
page, and send data to Adobe Experience Platform Edge Network in a format convenient
to your organization. The Edge Network forwards incoming data to Adobe Analytics in
the correct format.



See <u>How to implement Adobe Analytics using the Adobe Experience Platform Web SDK</u> extension. for more information.

• **Web SDK**: You can manually load the Web SDK libraries on your site if you do not want to use Adobe Experience Platform Data Collection. Reference the Web SDK library (alloy.js) on each page, and send the desired tracking calls to the Adobe Experience Platform **Edge Network** in a format convenient to your organization. The Edge Network forwards incoming data to Adobe Analytics in the correct format.



See <u>How to implement Adobe Analytics using the Adobe Experience Platform Web</u> SDK for more information.

• Analytics extension: Install the Adobe Analytics extension in Adobe Experience Platform Data Collection Tags. Place a loader tag on each page, and use the Adobe Analytics extension to determine how each variable is defined. Use this implementation method if you do want the convenience of Tags, but not want to use the Edge Network infrastructure.



See <u>How to implement Adobe Analytics using the Analytics extension</u> for more information.

• **Legacy JavaScript**: The historical manual method to implement Adobe Analytics. Reference the AppMeasurement library (AppMeasurement.js) on each page and then outline variables and settings used in an implementation.



This implementation method can be useful for implementations using custom code and is still recommended when you (want to) use:

• activity map data,

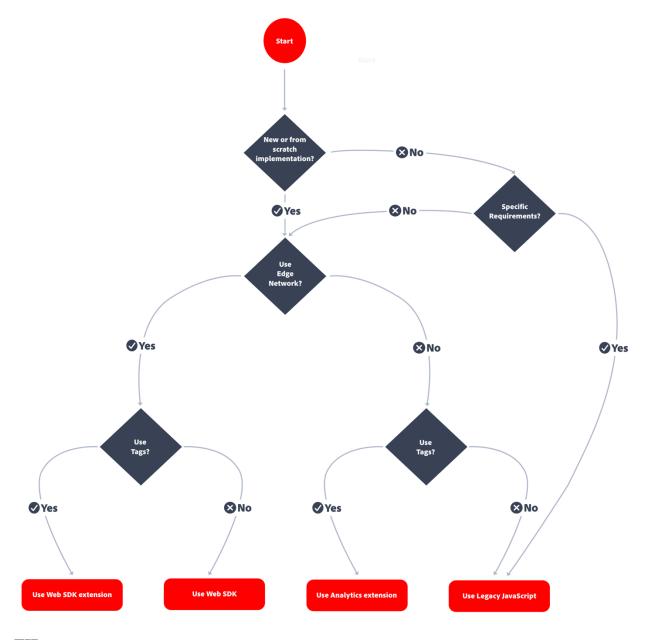
INFO

Using the latest Web SDK, Activity Map is supported. See <u>Enable Activity</u> <u>Map</u> for more information.

- streaming media measurement,
- livestream API or livestream triggers,
- AMP page tracking

See <u>Implement Adobe Analytics with AppMeasurement for JavaScript</u> for more information.

The following decision flow might help you select an implementation method:



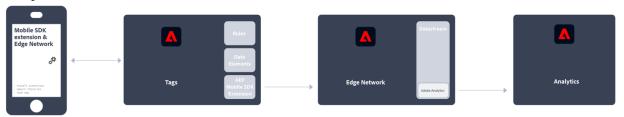
TIP

Please contact Adobe for advice and best practices on which implementation to choose based on your current situation.

Mobile app implementation methods

For your **mobile app**, the following implementation methods are available:

• Mobile SDK extension: The standardized and recommended method to implement Adobe Analytics in your mobile app. Use dedicated libraries to easily send data to Adobe from within your mobile app. Install the Adobe Experience Platform Mobile SDK extension in Adobe Experience Platform Data Collection Tags and implement the correct code in your app to import libraries, register extensions and load the tag configuration. This sends data to Adobe Experience Platform Edge Network in a format convenient to your organization. Experience Edge forwards incoming data to Adobe Analytics in the correct format.



See <u>Implement Adobe Analytics using the Adobe Experience Platform Mobile SDK</u> for more information.

• Analytics extension: Install the Adobe Analytics extension in Adobe Experience Platform Data Collection Tags, and implement the correct code in your application to import libraries, register extensions and load the tag configuration. Use the Analytics extension to determine how each variable is defined. Use this implementation method if you do want the convenience of Adobe Experience Platform Data Collection, but not want to use Adobe's Experience Platform Edge network infrastructure.



See <u>Implement Adobe Analytics using the Analytics extension</u> for more information.

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• <u>Variables, functions, methods, and plug-ins</u> <u>overview</u>

Analytics provides a number of variables to collect Analytics data. Variables in this section are split into several sections:

- **Page variables** are values that are typically used directly in reporting. Common page variables include props, eVars, and events.
- Config variables are settings values that help make sure the correct data reaches Adobe. Common config variables include trackingServerSecure, charSet, and linkTrackVars. Config variables typically do not populate dimension items.
- **Functions and methods** are pieces of code that perform a specific task when referenced. Common functions include t(), tl(), and clearVars().

Configuration Variables

Configuration variables control the way data is captured and processed in reporting. They do not typically contain dimension or metric values.

Setting configuration variables

In implementations using the Web SDK extension or Analytics extension, configuration variables are typically found in the extension's settings:

- 1. Log in to Adobe Experience Platform Data Collection using your AdobeID credentials.
- 2. Click the desired tag property.
- 3. Click the Extensions tab, then Click Configure under the extension.

In JavaScript implementations using AppMeasurement.js, configuration variables are typically set at the top of the JS file.

- Prepare to implement Adobe Analytics
- Implement Adobe Analytics with Adobe Experience Platform Edge

Adobe Experience Platform Edge allows you to send data destined to multiple products to a centralized location. Experience Edge forwards the appropriate information to the desired products. This concept allows you to consolidate implementation efforts, especially spanning multiple data solutions.

• Implement Adobe Analytics using the Analytics extension

Through the lifetime of Adobe Analytics, Adobe has offered several different methods to implement code on your site for data collection. Adobe's current recommended method is through tags in Adobe Experience Platform.

• Implement Adobe Analytics with AppMeasurement for JavaScript

AppMeasurement for JavaScript has historically been a common method to implement Adobe Analytics. However, with increasing popularity of Tag Management Systems, using tags in Adobe Experience Platform is recommended.

- Implement Analytics on other platforms
- Implement Analytics for Mobile Devices

To implement Analytics for mobile devices, use the Adobe Experience Platform Mobile SDK.

- Implementation use cases
- Validate your implementation
- FAQs about Analytics implementation

Frequently asked questions about implementation, and links to more information.

• Review your implementation

1.2 Analytics Components Guide

Analytics components help you fine tune and empower your analysis of data. Components include:

- **Dimensions:** Reference for dimensions usable in Adobe Analytics.
- **Metrics:** Reference for metrics usable in Adobe Analytics.
- **Segmentation:** Focus on a subset of your data.
- **Calculated metrics:** Use simple formulas to combine metrics, or advanced functions for statistical analysis.
- **Virtual report suites:** Create a virtual silo of data based on a report suite. Allows the ability to cleanse or segment data for a better user experience. Some features can only be used in virtual report suites.
- Cross-Device Analytics: A special type of virtual report suite allows you do configure Cross-Device Analytics.
- Alerts: Receive notifications any time data goes above or below a threshold.
- Classifications: Reorganize and group dimensions to obtain additional insight.
- **Real-time reporting:** Get reports and trends the minute they are available.

• **Marketing channels:** Understand how visitors arrive to your site and determine which channels are most successful.

<u>Dimensions</u>

Dimensions are variables in Adobe Analytics that typically contain string values. Common dimensions include Page, Referring domain, or an eVar. In contrast, metrics contain numeric values that tie to a dimension. A basic report shows rows of string values (dimension), against a column of numeric values (metric).

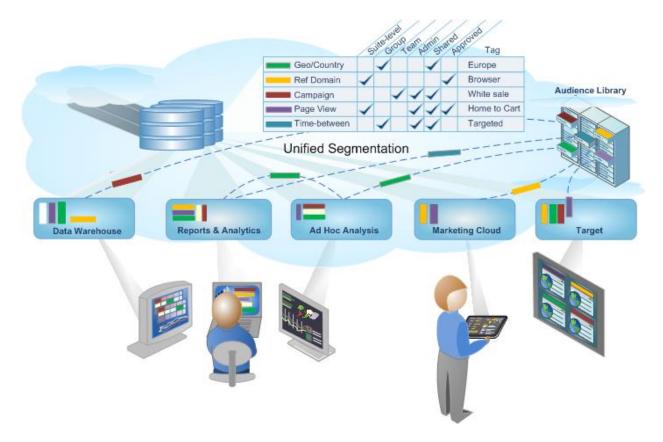
• Metrics

Metrics allow you to quantify dimension items, such as to see which pages on your site have the most page views. You can also trend metrics over time, such as to see how many orders visitors make on your site each day. A basic report shows rows of string values (dimension), against a column of numeric values (metric).

• 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 <u>Segment Builder</u> to construct segments and run a pre-test, and the <u>Segment Manager</u> 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 <u>unified segment workflow</u>.

• Calculated Metrics

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

• Virtual Report Suites

Virtual report suites segment your Adobe Analytics data so you can control access to each segment.

- Cross-Device Analytics
- Alerts
- Classifications
- Locations

The Locations manager allows you to create, edit, or delete locations.

- Calendar Events
- Scheduled reports queue
- Real Time Reporting
- Marketing Channels

1.3 Tags Overview

Tags in Adobe Experience Platform are the next generation of tag management capabilities from Adobe. Tags give customers a simple way to deploy and manage all of the analytics, marketing, and advertising tags necessary to power relevant customer experiences.

Tags empower anyone to build and maintain their own integrations, called *extensions*. These extensions are available to Adobe Experience Cloud customers in an app-store experience so they can quickly install, configure, and deploy their tags.

Tags are offered to Adobe Experience Cloud customers as an included value-add feature.

Key benefits

- Faster time to value.
- Trustworthy data through centralized collection, organization, and delivery using data elements.
- Compelling experiences through the integration of data and marketing technology using rule builder.

Key features

Extensions

An extension is a package of code (JavaScript, HTML, and CSS) that extends the tags functionality. Build, manage, and update your integrations using a virtually self-service interface. You can think of extensions as apps you use to achieve your tasks.

Extension catalog

Browse, configure, and deploy marketing/advertising tools built and maintained by independent software vendors.

Rule builder

Create robust rules that combine multiple events, sequenced in the way that you determine using if/then logic with conditions and exceptions. Rules provide options for:

- Events
- Conditions
- Exceptions
- Actions

The rule builder includes real-time error checking and syntax highlighting for your custom code.

When the criteria outlined in your rules are met and conditions are satisfied, the actions you define are executed in order.

Data elements

Collect, organize, and deliver data across web-based marketing and advertising technology.

Enterprise publishing

The publishing process enables teams to publish code to pages. Different people can create an implementation, approve it, and publish it on your pages.

- Changes to your code are encapsulated within the libraries you define.
- You specify where and when you want your code deployed.
- Multiple libraries can be built in parallel by different teams.
- Unlimited development environments.
- A deliberate, permission-based process for merging libraries together.

Open APIs

Automate implementations of individual technologies or a group of technologies.

- Tags interact with the Reactor API.
- Deployments can be automated through APIs.
- Integrate the APIs with your own internal systems.
- You can build your own user interface if desired.

Light, modular container tag

The content of your container is minified, including your custom code. Everything is modular. If you don't need an item, it is not included in your library. The result is an implementation that is fast and compact. See <u>Minification</u>.

Other highlights

Tags provide several improvements over similar systems, including:

- No use of document.write () where Chrome doesn't allow it.
- The Page Top and Page Bottom rules are bundled into the main library to minimize unnecessary HTTP calls.
- Custom action scripts within a rule can be loaded in parallel, but are executed sequentially.
- If you avoid Page Top and Page Bottom rules, the code is mostly asynchronous, with a path to getting fully async.
- Getting started
- **UI guides**
- Publishing
- Client-side information
- Event forwarding
- Administration
- Extensions
- Extension development
- Reactor API
- **FAQ**
- Terminology updates
- Deprecating support for Internet Explorer 10 and 11
- Release notes

1.4 Analytics Tech Notes

This guide provides helpful information on topics that don't belong to a specific analytics tool or component.

Adobe Analytics is a web analytics solution that enables businesses to measure, analyze and optimize their digital marketing activities. It is a cloud-based platform that provides real-time

insights into website and mobile app performance, customer behavior, and marketing campaign effectiveness.

The platform uses a variety of data sources, including web and mobile app data, third-party data, offline data, and CRM data, to deliver a complete view of customer interactions across multiple channels. Adobe Analytics offers a range of features that enable businesses to make data-driven decisions and drive digital transformation.

Some of the main features of Adobe Analytics include:

- Real-time data: Adobe Analytics provides real-time insights into customer behavior, enabling businesses to react quickly to changes in customer preferences or market trends.
- Segmentation: The platform allows businesses to segment their customer base by demographics, behavior, location, and other factors, making it easier to identify opportunities and target specific customer groups with personalized marketing campaigns.
- Data visualization: Adobe Analytics provides a range of data visualization tools, most prominently charts and graphs in Analysis Workspace and Analytics dashboards, which make it easy to interpret complex data sets and identify trends.
- Advanced analytics: The platform offers advanced analytics capabilities, including predictive analytics, machine learning, and AI-powered insights, which enable businesses to uncover hidden patterns and gain a deeper understanding of customer behavior.
- Attribution: Adobe Analytics includes attribution modeling tools that help businesses understand the impact of their marketing campaigns across different channels and touchpoints, enabling them to optimize their marketing spend and improve ROI.
- Reporting: The platform offers a range of reporting options, including scheduled reports, ad hoc reports, and customizable dashboards, which enable businesses to share insights with stakeholders and collaborate on data-driven decision making.

In summary, Adobe Analytics is a powerful web analytics solution that provides businesses with the tools they need to measure, analyze, and optimize their digital marketing activities. With real-time data, advanced analytics, and attribution modeling, businesses can make data-driven decisions that drive digital transformation and improve ROI.

- Analytics tech notes
- Adobe Analytics for Google Analytics users
- Analyze data impacted by events
- Client hints
- Cookies

- Data retention
- Exclude data
- IPs and domains used by Adobe Analytics
- Improved IP-to-geolocation mapping
- Latency
- Low-traffic value
- Migrate Mobile Services processing rules to Adobe Analytics
- Multi-currency support
- Privacy overview
- Processing order
- Progressive web apps
- Redirects and aliases
- Regional Data Collection
- Security resources
- Terms used (glossary)
- Timestamps Optional
- Troubleshoot logging in
- Troubleshoot getting logged out
- Unspecified, other, and unknown
- Visitor migration
- VISTA rules

1.5 Data Layer Manager