



# Adobe Analytics Developer

## Adobe Certified Expert Exam Guide

*Exam number: 9A0-411*

## About Adobe Certified Expert Exams

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To be an Adobe Certified Expert is to demonstrate expertise in helping clients realize value in an Adobe solutions.

Adobe's Certification exams follow industry-accepted procedures to ensure validity and reliability. We work with industry experts to create our exams, which represent real-world requirements and objectives for the job roles we certify.

This guide is designed to provide the recommendations needed to prepare for your Adobe Certified Expert exam, and help you determine when you are ready to take the exam. It will outline the knowledge and skills required of a "minimally qualified candidate" for a specific job role, which will be evaluated in the exam.

## How is the Adobe Analytics Developer Exam Structured?

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- Number of questions: 62
- Time limit: 93 minutes
- Passing score: All Adobe exams are reported on a scale of 300 to 700. The passing score for each exam is 550. For more information about scaled scoring, visit the [FAQs](#).

## How Do I Register for the Exam?

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Our exams are delivered worldwide by PSI.

- Exam name: Adobe Analytics Developer
- Exam number: 9A0-411
- Exam cost: \$180 (US Dollars)

To register for the exam at a PSI testing center:

1. Visit Adobe's [credential management system](#) login page. The login requires that you have an Adobe ID. If you do not have an Adobe ID, click the link for "Get an Adobe ID"
2. After logging on, if you have never taken an Adobe exam before, you will be instructed to create a Profile. After creating your Profile, you will be instructed to update your opt-in Settings..
3. Once logged on, click "Home" then click "Schedule your exam at PSI."
4. You will be directed to a new page within CertMetrics where you will click "Click here to log in to PSI."

5. You will be taken to a page hosted by our exam delivery vendor, PSI, that displays the available exams
6. Scroll through the list of available exams and press the "Schedule Exam" button for the exam you want to take.
7. Select a delivery mode for your exam by choosing either "Test Center" or "Remote Online Proctored Exam."
8. Select your exam language to see options for your exam.
9. Select an available date and start time.
10. Confirm schedule details to receive a booking confirmation.
11. Proceed to payment.
12. After payment is successful, you will receive an email confirmation your registration details and a receipt.

## What topics are covered on the Adobe Analytics Developer exam?

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The tasks measured on the exam are grouped into the following domains:

- Implementing Analytics
- Configuring Analytics
- Managing Dynamic Tag Management (DTM)
- Troubleshooting and Validating Analytics

Within each domain, there are specific tasks that you should be able to perform as an Adobe Analytics Developer:

- **Implementing Analytics**  
You should be able to recognize the required code to display, when given a digital asset. You should also be able to utilize the variables required for a base code Analytics configuration. In addition, you should be able to interpret a Solution Design Reference to develop efficient code for data capture.
- **Configuring Analytics**  
You should be able to apply procedural concepts for the configuration of Adobe Analytics non-report suite settings. You should also be able to apply procedural concepts for the configuration of Adobe Analytics report suite and variable settings.
- **Managing Dynamic Tag Management (DTM)**  
You should be able to recognize the proper type of DTM rules and data elements, as well as how to develop and deploy them, when given a situation. You should also be able to apply procedural concepts for the creation of DTM rule conditions and/or data elements using CSS selectors as well as choose the appropriate DTM rule types and the conditions in which they are applied. In addition, you should be able to apply procedural concept for the configuration of new DTM properties, for the approval and publishing of DTM rules, and to add and configure Adobe Analytics tool and Adobe Marketing Cloud ID Service.
- **Troubleshooting and Validating Analytics**  
You should be able to troubleshoot JavaScript errors, DTM rule execution, and Adobe Analytics variables. You should also be able to troubleshoot an Adobe Analytics server call from beacon, through processing, to reporting.

## Distribution of content covered on the exam:

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The questions on the exam are distributed as follows for each domain. (Note: each question carries the same weight and there is no partial credit for any question)

Domain	Percent of Exam
Implementing Analytics	19%
Configuring Analytics	8%
Managing Dynamic Tag Management (DTM)	44%
Troubleshooting and Validating Analytics	29%

## The Adobe Analytics Developer job role

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This exam is designed for individuals who are currently performing or have previous work experience with the job responsibilities of an Adobe Analytics Developer.

### The Minimally Qualified Candidate

To pass the exam, you must possess the minimum level of knowledge, skills, and abilities required of an Adobe Analytics Developer, which are outlined below.

Adobe Analytics Developer you should be able to perform the following tasks without any assistance:

- Interpret a solution design document
- Activate Adobe Analytics (DTM, etc.) and create and configure rules within DTM
- Test and validate data capture
- Configure the Adobe Analytics environment to accept data
- Utilize a data layer within a deployment

You should also be familiar with Web and mobile debugging tools, all options available within the AA Admin console, Adobe DTM, and working in the front-end web developer environment.

## What is the typical job experience for minimally qualified candidates taking this exam?

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A minimally qualified Adobe Analytics Developer typically has the following work experience:

- Front end web development (e.g. JavaScript, CSS, HTML, jQuery Selector).
- 1 - 2 years of experience deploying and configuring Adobe Analytics.
- 6+ months with Dynamic Tag Management (DTM).

- Understanding of mobile SDKs, Adobe APIs, and corresponding features.

## What training is available to help me prepare for the exam?

### Is training required?

You are not required to complete training before taking the exam; however, training can significantly increase your knowledge of and skills with Adobe Analytics. It is important to note that training alone will not provide you with the knowledge and skills required to pass an exam. Successful, on-the-job experience is critical to providing you the knowledge needed to pass the exam.

### Training for Adobe Partners

A variety of training and resources are available for Adobe Solution Partners. To access these resources, you will need to login to the [Solution Partner Portal](#) with your Adobe ID and visit the [Training landing page](#). From there you can select your solution of interest and access on-demand, instructor led, and onsite training options.

- On-demand Training: All Partners have access to on-demand training resources for sales, technical and delivery roles. This includes self-paced learning modules, eSeminar videos, quizzes, exams, and test outs to help measure comprehension - All at no cost!
- Virtual Instructor Led Training: Partners at the Business and above levels can access Virtual Instructor Led Training through the learning management system. These trainings are 100% subsidized.
- In-person Instructor Led Training: Partners also have access to training delivered through Adobe Digital Learning Services (ADLS). Adobe Digital Learning Services offers comprehensive, hands-on courses across all job roles. Learn from Adobe experts in a virtual classroom or live in-person at any Adobe training center globally. Courses come with a cost and Partners receive a discount (15-30%) based on their Partner level in the Solution Partner Program.
- On-site Training: Get your team up-to-speed quickly with on-site training where we can come to your location or you can bring your team to one of our training centers. Adobe Digital Learning Services offers flexible, convenient instructor-led training for teams virtually or in-person. Content can be customized to match your unique learning requirements.

Partners also have access to Certification Learner Journeys, Certification Paths, and free Certification Prep courses. Please visit the [Solution Partner Portal Certification page](#) to access these valuable resources.

Not registered for the Solution Partner Portal? Please follow [these instructions](#) to get registered.

## Training Courses Available to the Public

The following courses are relevant to the Adobe Analytics Developer job role. Compare the course descriptions to your current knowledge and skill level to determine which courses are best for you.

- [Adobe Analytics](#)

## How do I know if I am ready to take the exam?

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Nothing can guarantee that you will pass your test, however; the more practical work experience you have and the more training you complete, the better your chances are to pass the test. Use the self-assessment preparation worksheet (below) to evaluate your level of readiness.

## On-the-Job Experience

Since Adobe exams measure knowledge and skills for a specific job role, one of the best ways to prepare for the exam is to ensure you have the minimum work experience, as described in this guide.

## Self-Assessment Preparation Worksheet

Use the following worksheet to review the exam topics, and assess your own readiness. If you need to prepare more for a certain topic, determine if you need training, on-the-job-experience, or both.

Topic	Yes	No
<b>Implementing Analytics</b>		
I can recognize the required code to deploy, when given a digital asset		
I can utilize the variables required for a base code Analytics configuration		
I can interpret a Solution Design Reference to develop efficient code for data capture		
Topic	Yes	No
<b>Configuring Analytics</b>		
I can apply procedural concepts for the configuration of Adobe Analytics non-report suite settings		
I can apply procedural concepts for the configuration of Adobe Analytics report suite and variable settings		
Topic	Yes	No
<b>Managing Dynamic Tag Management (DTM)</b>		
I can recognize the proper type of DTM rules and data elements, as well as how to develop and deploy them, when given a situation		
I can apply procedural concepts for the creation of DTM rule conditions and/or data elements using CSS selectors		
I can choose the appropriate DTM rule types and the conditions in which they are applied		
I can apply procedural concept for the configuration of new DTM properties		
I can apply procedural concepts for the approval and publishing of DTM rules		
I can apply procedural concepts to add and configure Adobe Analytics tool and Adobe Marketing Cloud ID Service		
Topic	Yes	No
<b>Troubleshooting and Validating Analytics</b>		
I can troubleshoot JavaScript errors		
I can troubleshoot DTM rule execution		
I can troubleshoot Adobe Analytics variables		
I can troubleshoot an Adobe Analytics server call from beacon, though processing, to reporting		



## Sample questions

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Try out these practice questions to get a feel for the types of questions on the exam. Please note that **your performance here does not indicate how you will do on the actual exam**. To fully prepare for the exam, closely review the topic areas and objectives in this Exam Guide. You will find the correct answers at the end of the exam guide.

**1. In which situation should a developer utilize the Data Feeds API?**

- A. to get the status of existing data feeds
- B. to feed data from a comma separated value (CSV) file into Adobe Analytics
- C. to feed data from a mobile app into Adobe Analytics
- D. to feed classification data into Adobe Analytics

**2. An Adobe Analytics Developer needs to tag an existing native iOS app with Adobe Analytics.**

**Which steps should the developer take to tag the app?**

- A. Create and configure a new DTM property for mobile iOS and distribute the SDK embed codes to the iOS developer.
- B. Create and configure the Adobe Analytics report suite and distribute the iOS appMeasurement s\_code.
- C. Create and configure custom code to interface with the Adobe Mobile API and configure the required processing rules.
- D. Create and configure the app in Adobe Mobile Services and download the iOS app SDK and configuration JSON.

3. An Adobe Analytics Developer needs to measure internal search usage via the following requirements within a solution design reference (SDR).

Variable	Set When/Where	Business Requirement
event3	Internal Search Event	Increment this custom event each time a visitor completes an internal search
eVar6	Internal Search Phrase	Set on the completion of an internal search with the phrase that was used by the site visitor

Which code should be used for a successful search for the phrase "red socks?"

- A. `s.events="event3"`  
`s.eVar6 = "red socks"`
- B. `s.event3="1"`  
`s.eVar6 = "red socks"`
- C. `s.event3`  
`s.eVar6 = "red socks"`
- D. `s.event6="red socks"`

4. Within an e-commerce website, a visitor can view a shirt offered in three different sizes. A developer needs to capture the product view that accounts for the different size variations of the shirt.

If the shirt has a parent product SKU of "15001", what is a valid way to capture a product view of the small-sized shirt into the products variable?

- A. `s.products = ";15001;small"`
- B. `s.products = "15001;small"`
- C. `s.products = "15001,small"`
- D. `s.products = ";15001-small"`

5. Using the predefined commerce events, a developer needs to track any time the shopping cart is viewed as well as any time a visitor opens a shopping cart for the first time.

Which line of code should be used when the shopping cart is opened for the first time?

- A. `s.events = "scOpen,scAdd"`
- B. `s.events = "scOpen"`
- C. `s.events = "scAdd"`

```
D.s.events = "scOpen,scView"
```

- 6. As part of the configuration for the Adobe Analytics tool within Dynamic Tag Management, a developer notices the option to enable Automatic Configuration.**

**What is the purpose of this setting?**

- A. When properly configured, this setting automatically creates commonly used event-based rules within the property.
- B. When selected, this setting automatically enables EU compliance for Adobe Analytics.
- C. When properly configured, this setting automatically retrieves the Adobe Analytics variable configuration.
- D. When selected, this setting automatically configures the Adobe Marketing Cloud ID Service within the property.

- 7. A developer is using Adobe's content delivery network (CDN) to host Dynamic Tag Management (DTM). Many DTM rule updates will occur and need to be rolled out to various environments as quickly as possible.**

**Which hosting option should the developer use to ensure timely delivery of DTM updates and changes?**

- A. Akamai
- B. FTP delivery
- C. Amazon S3
- D. Library download

- 8. A developer needs to track clicks for several links that open content in a new window. After applying an event-based rule to account for multiple links, these link clicks are NOT always captured. The new window opens too quickly.**

**What property configuration change should be made to allow the link tracking clicks to be captured consistently?**

- A. Apply custom link tracking directly to the links.
- B. Modify the tag timeout setting to delay the link activation.
- C. Configure the delay link activation setting on the event-based rule.
- D. Configure the page load rule to delay the link activation.

9. As part of the initial setup of the Adobe Analytics tool, several custom JavaScript "plugins" (i.e., Time Parting, Days Since Last Visit) must be deployed. The App Measurement library is currently set to be managed by Adobe.

**How should the "plugins" be added to the implementation so they will be set on every page view?**

- A. Add the do\_plugins function and call each plugin by using \_satellite.getVar on a global page view.
  - B. Add the do\_plugins function and JavaScript plugins directly to the app measurement file.
  - C. Add the do\_plugins function and JavaScript plugins to the "Customize Page Code" section of the Adobe Analytics tool.
  - D. Add the do\_plugins function and JavaScript plugins to a direct call rule.
10. A developer needs to implement an Adobe Analytics solution for a mobile application. The application's analytics solution cannot be easily updated after it is pushed to production.
- Why might the developer decide to implement Context Data Variables given this scenario?**
- A. To allow the developer to use the Classification Rule Builder to make changes to classifications in the future
  - B. To allow the developer to more easily work with a data layer
  - C. Dynamic Tag Management is capable of coding Context Data Variables
  - D. To allow the developer to use Processing Rules to make changes to variable and event assignment in the future

11. A developer creates a custom event-based rule that tracks the "Next" button click of a Grand Canyon photo slide show. Within the Adobe Analytics section of the rule, the developer sets eVar1 with the description of the click action and eVar2 with the name of the photo gallery. In addition, event5 is set on each button click and prop5 is set as a pathing variable with the number of each photo viewed.

The custom code within the Adobe Analytics section is as follows:

```
s.linkTrackVars ="eVar1,eVar2,prop5"  
s.linkTrackEvents = "event5"  
s.eVar1 ="Photo Gallery:Next"  
s.eVar2 ="Photo Gallery:Grand Canyon"  
s.events = "event5"
```

After initial testing of the rule, the developer can see the eVar and prop values of the button click in the reports but the event5 count is missing.

What is causing this issue?

- A. s.linkTrackVars should include reference to the "s" object: s.linkTrackVars ="s.eVar1,s.eVar2,s.prop5,s.events".
- B. s.linkTrackEvents should include reference to the "s" object: s.linkTrackEvents ="s.event5".
- C. s.linkTrackVars should be set within the "do\_plugins" section of app measurement and should contain "events" as part of the linkTrackVars list.
- D. s.linkTrackVars should include "events" as part of the linkTrackVars list: s.linkTrackVars ="eVar1,eVar2,prop5,events".

12. A developer creates a custom event-based rule that tracks the "Next" button click of a Justin Bieber album cover slide show. Within the Adobe Analytics section of the rule, the developer sets eVar11 with the description of the click action and eVar12 with the name of the album cover. In addition, event50 is set on each button click and prop25 is set as a pathing variable with the number of each album cover slide viewed.

The custom code within the Adobe Analytics section is as follows:

```
s.linkTrackVars ="eVar11,eVar12,prop25,events"  
s.linkTrackEvents = "event50"  
s.eVar11 ="Slide Show:Next"  
s.eVar12 ="Slide Show:Justin Bieber Album Covers"  
s.events = "event50"
```

After saving the rule and testing with the staging script in DTM, the developer notices that the prop25 values are quickly available in the report. eVar11, eVar12, and event50 are missing.

What is causing this issue?

- A. Code is correct but real-time reporting is NOT available for page events.
  - B. Code is correct but Adobe Analytics will take longer to process conversion variables.
  - C. Code is incorrect. s.linkTrackVars should include reference to the "s" object: s.linkTrackVars ="s.eVar1,s.eVar2,s.prop5,s.events".
  - D. Code is incorrect. It is NOT necessary to pass prop25 in linkTrackVars because it is set as a pathing variable.
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## Answer key

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Try out these practice questions to get a feel for the types of questions on the exam. Please note that **your performance here does not indicate how you will do on the actual exam**. To fully prepare for the exam, closely review the topic areas and objectives in this Exam Guide. You will find the correct answers at the end of the exam guide.

1. In which situation should a developer utilize the Data Feeds API?

Correct Answer: A. to get the status of existing data feeds

2. An Adobe Analytics Developer needs to tag an existing native iOS app with Adobe Analytics.

Which steps should the developer take to tag the app?

Correct Answer: D. Create and configure the app in Adobe Mobile Services and download the iOS app SDK and configuration JSON.

3. An Adobe Analytics Developer needs to measure internal search usage via the following requirements within a solution design reference (SDR).

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eVar6	Internal Search Phrase	Set on the completion of an internal search with the phrase that was used by the site visitor

Which code should be used for a successful search for the phrase "red socks?"

Correct Answer: A. `s.events="event3"`  
`s.eVar6 = "red socks"`

4. Within an e-commerce website, a visitor can view a shirt offered in three different sizes. A developer needs to capture the product view that accounts for the different size variations of the shirt.

If the shirt has a parent product SKU of "15001", what is a valid way to capture a product view of the small-sized shirt into the products variable?

Correct Answer: D. `s.products = ";15001-small"`

5. Using the predefined commerce events, a developer needs to track any time the shopping cart is viewed as well as any time a visitor opens a shopping cart for the first time.

Which line of code should be used when the shopping cart is opened for the first time?

Correct Answer: `D. s.events = "scOpen, scView"`

- 6. As part of the configuration for the Adobe Analytics tool within Dynamic Tag Management, a developer notices the option to enable Automatic Configuration.**

**What is the purpose of this setting?**

Correct Answer: C. When properly configured, this setting automatically retrieves the Adobe Analytics variable configuration.

- 7. A developer is using Adobe's content delivery network (CDN) to host Dynamic Tag Management (DTM). Many DTM rule updates will occur and need to be rolled out to various environments as quickly as possible.**

**Which hosting option should the developer use to ensure timely delivery of DTM updates and changes?**

Correct Answer: A. Akamai

- 8. A developer needs to track clicks for several links that open content in a new window. After applying an event-based rule to account for multiple links, these link clicks are NOT always captured. The new window opens too quickly.**

**What property configuration change should be made to allow the link tracking clicks to be captured consistently?**

Correct Answer: C. Configure the delay link activation setting on the event-based rule.

- 9. As part of the initial setup of the Adobe Analytics tool, several custom JavaScript "plugins" (i.e., Time Parting, Days Since Last Visit) must be deployed. The App Measurement library is currently set to be managed by Adobe.**

**How should the "plugins" be added to the implementation so they will be set on every page view?**

Correct Answer: C. Add the `do_plugins` function and JavaScript plugins to the "Customize Page Code" section of the Adobe Analytics tool.

- 10. A developer needs to implement an Adobe Analytics solution for a mobile application. The application's analytics solution cannot be easily updated after it is pushed to production.**

**Why might the developer decide to implement Context Data Variables given this scenario?**

Correct Answer: D. To allow the developer to use Processing Rules to make changes to variable and event assignment in the future



11. A developer creates a custom event-based rule that tracks the "Next" button click of a Grand Canyon photo slide show. Within the Adobe Analytics section of the rule, the developer sets eVar1 with the description of the click action and eVar2 with the name of the photo gallery. In addition, event5 is set on each button click and prop5 is set as a pathing variable with the number of each photo viewed.

The custom code within the Adobe Analytics section is as follows:

```
s.linkTrackVars ="eVar1,eVar2,prop5"  
s.linkTrackEvents = "event5"  
s.eVar1 ="Photo Gallery:Next"  
s.eVar2 ="Photo Gallery:Grand Canyon"  
s.events = "event5"
```

After initial testing of the rule, the developer can see the eVar and prop values of the button click in the reports but the event5 count is missing.

What is causing this issue?

Correct Answer: D. s.linkTrackVars should include "events" as part of the linkTrackVars list:

```
s.linkTrackVars ="eVar1,eVar2,prop5,events".
```

12. A developer creates a custom event-based rule that tracks the "Next" button click of a Justin Bieber album cover slide show. Within the Adobe Analytics section of the rule, the developer sets eVar11 with the description of the click action and eVar12 with the name of the album cover. In addition, event50 is set on each button click and prop25 is set as a pathing variable with the number of each album cover slide viewed.

The custom code within the Adobe Analytics section is as follows:

```
s.linkTrackVars ="eVar11,eVar12,prop25,events"  
s.linkTrackEvents = "event50"  
s.eVar11 ="Slide Show:Next"  
s.eVar12 ="Slide Show:Justin Bieber Album Covers"  
s.events = "event50"
```

After saving the rule and testing with the staging script in DTM, the developer notices that the prop25 values are quickly available in the report. eVar11, eVar12, and event50 are missing.

What is causing this issue?

Correct Answer: B. Code is correct but Adobe Analytics will take longer to process conversion variables.

# Support

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For information on certification visit the [Solution Partner Portal](#) website. To contact us, please send an email to [Certification Support](#).



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