



Certification Exam Guide

# SALESFORCE CERTIFIED MOBILE SOLUTIONS ARCHITECTURE DESIGNER

Spring '17



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## ABOUT THE SALESFORCE CERTIFIED MOBILE SOLUTIONS ARCHITECTURE DESIGNER CREDENTIAL

The Salesforce Certified Mobile Solutions Architecture program is designed for mobile architects and seasoned mobile developers who want to demonstrate their knowledge, skills, and abilities to assess customer mobile architecture; design secure, high-performance mobile solutions while leveraging the Force.com mobile platform and SDKs. In addition, they must be able to articulate technical mobile solutions to technical stakeholders; and provide mobile solutions across a variety of devices and degrees of connectivity.

Here is what an Architect/Developer should be able to do in order to pass the exam:

- Design a mobile architecture solution that encompasses one or more mobile operating systems and many device types.
- Explain the capabilities provided by the Force.com platform to accelerate mobile development.
- Articulate design trade-offs, security considerations and device synching options.
- Articulate design considerations, benefits, and recommendations between Salesforce1 and custom mobile applications.

## SECTION 1. PURPOSE OF THIS EXAM GUIDE

This Exam Guide is designed to help candidates evaluate their readiness to pass the Salesforce Certified Mobile Solutions Architecture Designer exam. This guide provides information about the target audience for the certification exam, recommended training and documentation, and a complete list of exam objectives; all with the intent of helping candidates achieve a passing score. Salesforce highly recommends a combination of on-the-job experience, and self-study to maximize the likelihood of passing the exam.

## SECTION 2. AUDIENCE DESCRIPTION: SALESFORCE CERTIFIED MOBILE SOLUTIONS ARCHITECTURE DESIGNER

A Salesforce Certified Mobile Solutions Architecture Designer is able to assess the architecture environment and requirements, in order to design a secure, efficient, and scalable mobile solution on the Salesforce platform that meets the mobility requirements. The architect can communicate solutions and design trade-offs to business stakeholders; and explain technical concepts to IT stakeholders. The candidate is able to design solutions for multiple device types and devices that are not always connected. The candidate is able to design mobile solutions that meet enterprise security requirements.

A Salesforce Certified Mobile Solutions Architecture Designer has the following background:

- Two to three years developing in the Salesforce environment
- Two to three years developing in a mobile environment
- Three to four years working with the Salesforce Platform
- Experience designing and developing enterprise mobile apps built using the Salesforce Mobile SDK

Typical job roles may include:

- Technical Architect
- Senior Mobile Developer
- Enterprise Mobile Strategy Architect

The Salesforce Certified Mobile Solutions Architecture Designer candidate has the experience, skills, knowledge, and ability to:

- Describe the differences between Salesforce1, Native, HTML5 and Hybrid mobile architectures.
- Define how a customer can choose between a Salesforce1 solution and custom mobile solutions. If using custom mobile, define the decision path for choosing between an HTML5, Hybrid or Native application.
- Describe the key elements that make up a customer mobile strategy, including Device Strategy, Testing, Distribution, Security and Development Platforms.
- Identify key potential pain points in a mobile solution and be able to recommend key mitigation strategies for each.
- Define key use cases that can be mobile enabled (e.g. low data entry forms, push notifications, geolocation, offline storage and synchronization) and go through the key design considerations when designing a Mobile interactions.
- Define key considerations when choosing Salesforce as a Mobile Application platform and be able to define alternate solutions (e.g. Heroku) when Salesforce platform is not appropriate.

- Define key considerations of the authentication, authorization and device security choices available when developing a Salesforce enabled mobile solution.
- Deeply understand the Salesforce1 app and its configuration / customization options.
- Describe how mobile solution capabilities can be enhanced via connected devices (E.g. Wearables, iBeacons).
- Use the Salesforce Mobile SDK to leverage salesforce data, provide offline capabilities and perform push notifications.
- Describe distribution considerations for public and enterprise mobile applications.
- Describe how to secure mobile solutions.
- Assess architecture environment and requirements and design secure, efficient, and scalable mobile solutions to meet mobility requirements.
- Evaluate business use cases in terms of whether they are a good fit for mobilization.
- Effectively communicate architecture design to various stakeholders at many levels.
- Develop and maintain the architecture and technical design documentation for the solution.
- Define key considerations when designing and choosing application components, such as, JavaScript/CSS frameworks, Visualforce and Lightning Components.

A candidate for this exam will likely need assistance with:

- Integrating and configuring with Mobile Device Management (MDM) solutions.
- Implementing UI/UX best practices.
- Integrating and configuring Single Sign-on (SSO).
- Developing a complete Enterprise mobility strategy.

A candidate for this exam is not expected to know how to do the following:

- Code an actual fully functional mobile SDK app.
- Develop UI/UX strategy and graphic design for a mobile SDK app.

## SECTION 3. ABOUT THE EXAM

The Salesforce Certified Mobile Solutions Architecture Designer exam has the following characteristics:

- Content: 60 multiple-choice/multiple-select questions\*
- Time allotted to complete the exam: 120 minutes
- Passing Score: 68%
- Registration fee: USD 400; Retake fee: USD 200
- Delivery options: Proctored exam delivered onsite at a testing center or in an online proctored environment. Click [here](#) for information in scheduling an exam.
- References: No hard-copy or online materials may be referenced during the exam.
- Prerequisite: None

\*Please note that on occasion, Salesforce Certification may place a small number of unscored questions on an exam in order to gather data on question performance. These unscored exam questions are in addition to the 60 scored questions on your exam, and have no impact whatsoever on your final exam score.

## SECTION 4. RECOMMENDED TRAINING AND REFERENCES

As preparation for this exam, Salesforce University recommends a combination of: hands-on experience, training course completion, Trailhead trails, and self-study in the areas listed in the Exam Outline section of this exam guide.

To access the most comprehensive training list, download a copy of our Salesforce Guide to Certification available [here](#).

To enroll in instructor-led courses and launch online training from your Salesforce application, click the **Help & Training** link in the upper right corner of the screen (requires login) and search for the desired courses. Non-Salesforce customers can register for instructor-led courses [here](#).

To review online Documentation, Tip Sheets, and User Guides – search for the topics listed in the Exam Outline section of the exam guide and study the information related to those topics. Documentation, Tip Sheets, and User Guides can also be accessed through **Help & Training**. Documentation is also available in PDF format [here](#).

Trailhead trails can be accessed [here](#).



## SECTION 5. EXAM OUTLINE

The Salesforce Certified Mobile Solutions Architecture Designer exam measures a candidate's knowledge and skills related to the following objectives. A candidate should have hands-on experience with Integration Architecture application and demonstrate the knowledge and expertise in each of the areas below.

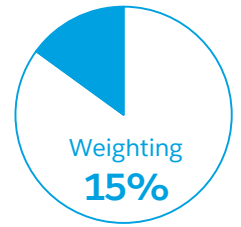
### MOBILE STRATEGY AND DESIGN

- Describe the design considerations, trade-offs, and risks for mobile solutions and recommend the appropriate mobile platform: HTML5, Native (iOS/android/Windows Mobile), Hybrid solutions, or Salesforce1 Mobile App.
- Given a scenario, develop the most appropriate Mobile Architecture (HTML5, Native, Hybrid or Salesforce1).
- Describe the risks and organizational considerations associated with the choice of a Mobile Architecture (HTML5, Native, Hybrid or Salesforce1).
- Articulate the key capabilities of the Mobile SDK, including authentication/authorization [including SSO], offline storage, use cases, and synch capabilities.
- Describe how the push notification capability of Salesforce can be used to support specific customer scenarios.
- Given a customer scenario, define the most appropriate Salesforce1 solution.
- Define the key elements of the Salesforce1 solution that will be used to support a solution.
- Describe how the push notification capability (Chatter notifications) in Salesforce1 can be used to address specific customer scenarios.
- Describe how the offline capability of Salesforce1 may be leveraged to support a specific customer scenario.
- Identify scenarios where Salesforce1 offline capability may not be viable given its limitations.
- Identify scenarios where JavaScript remoting can address specific performance problems.
- Describe where Visualforce optimizations such as minimizations of view state and lazy loading can enhance mobile application performance.
- Given a scenario, describe how Lightning components may be used in a Mobile solution.
- Develop the high level architecture for connected devices / wearables use case.
- Describe the appropriate platform components that may be used in connected devices / wearables solution architecture.



## MOBILE SECURITY

- Articulate how to secure a mobile application and its data, including offline data encryption.



## SECTION 6. SAMPLE EXAM QUESTIONS

The following questions are representative of those on the Salesforce Certified Mobile Solutions Architecture Designer exam. These questions are *not* designed to test your readiness to successfully complete the certification exam, but should be used to become familiar with the types of questions on the exam. The actual exam questions may be more or less difficult than this set of questions.

1. In their Salesforce1 configuration, Universal Containers (UC) would like to add a Lightning Page containing an interactive commission calculator for sales reps. The calculator should not be accessible to employees who are not assigned to the Sales Rep profile. All employees have access to Salesforce1.

How should access to the page be restricted to just sales reps?

*Choose one answer*

- A. Restrict access to the tab in the Navigation menu by assigning access to just the Sales Rep profile.
  - B. Restrict access to the Lightning page by assigning access to just the Sales Rep profile.
  - C. Write some code in the Lightning page that checks if the user is in the Sales Rep profile.
  - D. Create a separate Salesforce1 Navigation menu, and assign it to the Sales Rep profile.
2. Universal Containers (UC) is building a new Hybrid web application for the iOS platform using the Salesforce Mobile SDK. The application needs to make a number of calls to Salesforce to create and retrieve information. The Architect would like to use an HTML5 interface and leverage existing Apex code in the solution. The Architect would also like to minimize the amount of JavaScript code that is written.

Which approach should the Architect recommend for the application's Visualforce pages?

*Choose one answer*

- A. JavaScript remoting
- B. The Apex:actionFunction tag
- C. The Apex:remoteObjects tag
- D. The JavaScript REST toolkit (ForceTK)

3. Universal Containers (UC) is promoting the use of Salesforce1 to all its employees and has recently enabled the desktop Lightning Experience for all its employees. The IT department is keen to use identical code / logic for both desktop and mobile custom Salesforce development.

Which two re-use strategies should the Architect recommend?

*Choose two answers*

- A. Server-side actions
- B. Lightning Components
- C. Non-responsive Visualforce
- D. Responsive Visualforce

4. Universal Containers is developing an enterprise mobile app and is concerned about sensitive customer information being captured in a screenshot after the application has moved to the background on iOS devices.

What is the optimal approach to mitigate this concern?

*Choose one answer*

- A. Override the `applicationWillResignActive` method to provide an obscured or blank view when the app is sent to the background.
- B. Develop a user control that allows the user to blur the screen before the app is sent to the background.
- C. Configure iOS to prevent screenshots from automatically being taken as the app is sent to the background.
- D. Use the Salesforce Mobile SDK for iOS, which obscures sensitive information by default when the app is sent to the background.

5. Universal Containers is developing a Native mobile application using SmartStore and would like to use a global SmartStore soup to store some information.

What characteristic of the global soup must the Architect be aware of?

*Choose one answer*

- A. The global soup is not encrypted, as it is shared between all users.
- B. The global soup cannot be indexed and has poor query performance.
- C. The global soup is deleted every time the application is closed.
- D. The global soup is not deleted when a user logs out of the application.

## SECTION 7. ANSWERS TO SAMPLE EXAM QUESTIONS

1. C
2. B
3. A, B
4. D
5. D

## SECTION 8. MAINTAINING A CERTIFICATION

One of the benefits of holding a Salesforce credential is always being up to date on new product releases. Our release exams are designed to ensure you have the latest information you need to be a successful Salesforce Certified expert.

Click [here](#) for information regarding requirements and cost to maintain your Salesforce certification.

If you earned the Salesforce Certified Development Mobile Solutions Architecture Designer credential on or before March 23, 2017 you are required to pass the Salesforce Certified Mobile Solutions Architecture Designer – Spring '17 Release Exam. Click [here](#) for details about the release exam objectives, number of questions, recommended preparation, and registration information.

### ABOUT SALESFORCE UNIVERSITY

Salesforce University offers a comprehensive catalog of courses and certifications to help you administer, develop, and use your organization's Salesforce environment. Whether you need a customized private course for your whole team or an in-depth instructor-led classroom experience for one person, Salesforce University can help you take the next steps on your journey to success. Contact us today to learn how we can help you get the most out of your Salesforce investment.

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