



Certification Exam Guide

# SALESFORCE CERTIFIED TECHNICAL ARCHITECT

Winter '17



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## ABOUT THE SALESFORCE CERTIFIED TECHNICAL ARCHITECT CREDENTIAL

The Salesforce Certified Technical Architect program is designed for experienced technical architects who would like to demonstrate their knowledge, skills, and capabilities in assessing customer architecture; designing secure, high performance technical solutions on the Force.com platform; communicating technical solutions and design tradeoffs effectively to business stakeholders; and providing a delivery framework that ensures quality and success.

There are two ways in which a candidate can register for the Salesforce Certified Technical Architect Review Board Exam:

- Follow the New Architect Journey (announced in October 2016) with includes successfully earning both the Salesforce Certified Application Architect credential AND the Salesforce Certified System Architect credential

**OR**

- Previously passed Part II of the previous Architect Program AND hold the Salesforce Certified Force.com Developer or Salesforce Certified Platform App Builder credentials
  - If you have completed this path, it is HIGHLY recommended that you complete the New Architect Journey Specializations as it does provide extremely useful information and practice that will help you prepare for the Review Board Exam

### **The Salesforce Certified Technical Architect Review Board Exam:**

The final step to earning the credential is to pass the Salesforce Certified Technical Architect Review Board which is offered at scheduled times throughout the year.

<http://certification.salesforce.com/reviewboards>

The review board presentation is described below

- When candidates arrive at the review board, they receive a hypothetical scenario and instructions.
- Candidates are given 2 hours (120 minutes) to read, solution, design, and justify a detailed architectural solution for the hypothetical scenario.
- Candidates will then have 45 minutes to present their solution to the Review Board judges, followed by 40 minutes of Q&A and discussion.

The Salesforce Certified Technical Architect Certification will be granted to a candidate upon passing this exam.

## SECTION 1. PURPOSE OF THIS EXAM GUIDE

The Exam Guide is designed to help prepare the Salesforce Certified Technical Architect Review Board Exam. This guide provides information about the target audience for this exam, recommended training and documentation, and a complete list of exam objectives—all with the intent of enabling your success. To prepare 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 study guide.

## SECTION 2. AUDIENCE DESCRIPTION: SALESFORCE CERTIFIED TECHNICAL ARCHITECT

The candidate assesses the architecture environment and requirements; and designs secure, high-performing technical solutions on the Force.com platform. The candidate has experience communicating technical solutions and design tradeoffs to business stakeholders and providing a delivery framework for an end-to-end solution.

The candidate has the experience and skills outlined below:

- 5+ years of implementation experience, including development, across the full software development lifecycle
- 3+ years of experience in an architect role
- 2+ years of experience on the Force.com platform with at least one of those in a lead architect role, implementing Salesforce applications and technologies
- Has held a technical architect role on multiple complex deployments, OR has gained equivalent knowledge through participation and exposure to these types of projects
- Experience guiding a development team on the appropriate use of platform technology
- Identify and mitigate technical risks across the architecture
- Exposure to globalization considerations on a project
- Experience with object-oriented design patterns
- Awareness of platform-specific design patterns and limits
- Experience developing code on the Force.com platform
- Ability to identify development-related risks, considerations, and limits for the platform
- Experience with multiple development languages (e.g. .net, java, or ruby) and design frameworks
- Experience with common integration patterns; experience with integration on the Force.com platform

- Understanding of and ability to architect a solution to address security complexities, mechanisms, and capabilities on the Force.com platform as part of a functional security model
- Understanding of data migration considerations, design trade-offs, and common ETL tools
- Awareness of large data volume considerations, risks, and mitigation strategies
- Awareness of general mobile solutions and architecture and understanding of on-platform mobile solutions and considerations
- Experience with project and development lifecycle methodologies

### SECTION 3. ABOUT THE EXAM

The Salesforce Certified Technical Architect Review Board Exam has the following characteristics:

- Content: One hypothetical scenario which will be reviewed and presented to the panel of Review Board judges, followed by a question and answer interview-style session.
- Time allotted to complete the exam: 4 hours
- References: No hard-copy or online materials may be referenced during the exam.
- Prerequisites: Salesforce Certified Application Architect credential and Salesforce Certified System Architect credential; or Salesforce Certified Technical Architect Multiple Choice exam successfully completed and an active Salesforce Certified Force.com Developer or Platform App Builder credential.

## SECTION 4. RECOMMENDED TRAINING AND REFERENCES

To prepare 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 study guide.

To access the most comprehensive training list, download a copy of our Salesforce Guide to Certification available here: <https://www.salesforce.com/form/services-training/certification-journey-ebook.jsp>

To enroll in instructor-led courses and launch online training from your Salesforce application by clicking the **Help & Training** link in the upper right corner of the screen (requires login) and searching for the desired courses, listed above. Non-Salesforce customers can register for instructor-led courses here: <http://www.Salesforce/training>.

To review online Documentation, Tip Sheets, and User Guides – search for the topics listed in the Exam Outline section of the study 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: <https://na1.salesforce.com/help/pdfs/en/sf.pdf>.

Trailhead trails can be accessed here: <https://trailhead.salesforce.com>

The Architect Journey eBooks can be accessed here:  
<https://www.inkling.com/store/salesforce-university/>

## SECTION 5. REVIEW BOARD EXAM OUTLINE

The Salesforce Certified Technical Architect Review Board Exam measures a candidate's knowledge and skills related to the objectives listed below. A candidate should have hands-on experience as a Salesforce Technical Architect on the Force.com platform, and have demonstrated the application of each of the features/functions below.

### SYSTEM ARCHITECTURE

- Given a scenario, determine the appropriate mix of systems, including both on and off-platform components, taking into consideration the Salesforce platform capabilities, constraints, and limits.
- Given a scenario, describe the design and platform considerations, trade-offs, and risks for reporting and analytics.
- Given a scenario, describe the architectural considerations when planning, defining, or working within a single or multi-org environment.
- Given a scenario, describe the design considerations, trade-offs, and risks for mobile solutions and recommend the appropriate mobile platform.
- Given a set of requirements, recommend the correct mix of required license types taking into account the capabilities, trade-offs and constraints.
- Given a set of requirements, describe the capabilities, trade-offs, and constraints to determine the appropriate document management solution.

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### SECURITY

- Given a set of requirements, architect a solution that utilizes the appropriate platform security mechanisms.
- Given a scenario, identify the security considerations and risks, and leverage the appropriate security capabilities to design a secure portal architecture including access by both internal and external users.
- Given a scenario, identify the declarative platform security features that can be used to meet record-level security requirements.
- Given a scenario, identify the programmatic platform security features that can be used to meet security requirements.
- Given a scenario, describe how to incorporate the platform security features into a solution to give users the appropriate object and field access permissions.
- Given a set of requirements, design and justify an end-to-end identity management solution.

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### DATA

- Given a scenario, describe the platform architecture considerations, platform impact and optimization methods used when working with large data volumes.
- Given a scenario, describe data modeling concepts and implications of database design and modeling.
- Given a scenario, determine the data migration strategy, considerations, and appropriate tools to use.

## **SOLUTION ARCHITECTURE**

- Given a set of business requirements, describe the appropriate combination of declarative and programmatic functionality within a solution.
- Given a scenario, describe the benefits, considerations, and trade-offs of incorporating external applications into an optimal solution architecture.

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## **INTEGRATION**

- Given a set of requirements, recommend the appropriate enterprise integration landscape and describe associated risks, trade-offs, and business and technical considerations within a customer environment.
- Given a scenario, describe the capabilities of the appropriate technology and justify their use as part of the overall integration architecture.
- Given a scenario, recommend and justify the appropriate integration strategy and the use of common integration patterns.
- Given a scenario, recommend and justify the appropriate platform-specific integration technology used to integrate with external systems and describe the capabilities, limitations and trade-offs.

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## **DEVELOPMENT LIFECYCLE AND DEPLOYMENT PLANNING**

- Given a scenario, identify the project risks and mitigation strategies.
- Given a customer project environment and development methodology, identify the technical considerations, risks, and impact on the technical work streams.
- Given a scenario, recommend an appropriate comprehensive test strategy and discuss how testing mitigates any project risks.
- Given a scenario, describe the considerations, stakeholders, and impact of decisions around a technical solution relative to customer project governance.
- Given a scenario, describe the platform tools, use cases, limitations, and best practices for environment management.
- Describe the common tools, benefits, and rationale for using source control and continuous integration for release management.

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## **COMMUNICATION**

- Articulate the benefits, limitations, considerations, and design choices for a solution architecture and handle objections related to the design.
- Demonstrate how visualization and documentation tools can be used to articulate the technical solution.
- Demonstrate the ability to handle unexpected roadblocks and determine the appropriate next steps.



## SECTION 6. 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 Platform App Builder credential on or before October 26, 2016 or you hold the Force.com Developer credential, you are required to pass the specific Salesforce Winter '17 Release Exam that matches the credential that you hold. For details about the release exam objectives, number of questions, recommended preparation, and registration information, visit the [Platform App Builder](#) or [Force.com Developer](#) Winter '17 Release Exam articles.

### 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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