Certification Exam Guide

SALESFORCE CERTIFIED TECHNICAL ARCHITECT

Winter '19

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ABOUT THE SALESFORCE CERTIFIED TECHNICAL ARCHITECT CREDENTIAL

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

SECTION 1. PURPOSE OF THIS EXAM GUIDE

This Exam Guide is designed to help prepare you for 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. To prepare for this exam, Salesforce recommends a combination of: hands-on experience, training course completion, Trailhead trails, Trailmixes, and self-study in the areas listed in the Recommended Training and Resource Section in this study guide.

SECTION 2. AUDIENCE DESCRIPTION: SALESFORCE CERTIFIED TECHNICAL ARCHITECT

The Technical Architect candidate can assess the architecture environment and requirements; and design secure, high-performing technical solutions on the Lightning 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 Lightning 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 Lightning Platform

- Understanding of and ability to architect a solution to address security complexities, mechanisms, and capabilities on the Lightning 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

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SECTION 3. ABOUT THE EXAM

The Salesforce Certified Technical Architect Review Board Exam is outlined below:

- Exam Prerequisites:
    - o Salesforce Certified Application Architect credential AND
    - o Salesforce Certified System Architect credential

- Format
    - o Candidate will review and solve a hypothetical scenario and then present to a panel of CTA judges. The presentation is followed by a question and answer session with the judges.

- Time allotted to complete the exam:
    - o 2 hours for scenario review and solution preparation
    - o 45 minutes for scenario presentation
    - o 40 minutes for scenario Question and Answer session

- An exam facilitator and proctor will be onsite during the exam.

- The following materials are provided to the candidate at the review board. No other materials are allowed.
    - o Computer with PowerPoint, Word and Excel
    - o Flip chart paper
    - o Blank paper – for candidate notes only
    - o Pens, highlighters, and markers
    - o A timer

- Restrictions:
    - o No hard-copy or online materials may be referenced during the exam.
    - o Smart devices (watches, phones) must be removed and stored prior to starting the exam.

- Review Board Schedule
    - o Exam spots for upcoming Review Boards will be prioritized for those candidates demonstrating commitment to preparation. Factors such as Salesforce Platform experience, mentorship and additional work toward exam preparation will be taken into consideration.

SECTION 4. RECOMMENDED TRAINING AND REFERENCES

To prepare for this exam, Salesforce recommends a combination of: hands-on experience, training course completion, Trailhead trails, Trailmixes, and self-study in each of the exam domain focus areas. Below are some key resources to assist you in your preparation;

Trailhead Trailmix

The [Architect Journey Trailmix](#) is a compilation of architect domain specific Trailmixes to help build, hone and practice your skills. Not only should you use these Trailmixes to help you prepare for the Architect Designer credential exams, we strongly recommend that you use them in your preparation for the CTA Review Board exam.

Certified Technical Architect Preparation Workshop

This participant-centered workshop will help you internalize the exam objectives while reinforcing your knowledge of key topics. You'll hone your ability to craft solutions that address real-world customer requirements (using actual scenarios used on previous exams) and create a personal action plan for exam preparation, all the while receiving coaching from your CTA facilitator.

Take a look at the available [Workshop Schedule](#).

Architect Trailblazer Community

For additional information and community collaboration on your #JourneytoCTA, please join and leverage the [Architect Trailblazer Community](#). In the community you will find:

- Sample Scenarios

- Content links

- Self-paced learning

- Other related communities

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 an Architect on the Lightning 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.

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.

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.

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.

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.

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.

Bookmark these useful resources for maintaining your credentials:

▪ Maintenance Exam Due Dates

▪ Verify Your Certification Status

▪ Overall Maintenance Requirements

Don't let your hard-earned credential expire! Once you earn the credential, if you do not complete all maintenance requirements by the due date, your credential will expire, or in some cases, become suspended. For more information, click here.

ABOUT TRAILHEAD

Trailhead is your path into the Salesforce economy. It's the fun way to learn the skills you need to transform your company, earn credentials that grow your career, and connect with a global movement of Trailblazers to continue learning together.

The fun way to learn Salesforce

LEARN
Learn at your own pace, from our experts, and your peers.

EARN
Earn points, badges, and skill-based credentials that grow your resume.

CONNECT
Connect with fellow Trailblazers to learn, inspire, and blaze new trails.

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