

Professional Cloud Solutions Architect

Duration 3 Days



PROFESSIONAL
CLOUD
SOLUTIONS ARCHITECT

COURSE DESCRIPTION

This certification is designed for technology professionals who architect the technology solutions that support the changing requirements due to the adoption of cloud computing, and help organizations leverage the opportunities that cloud is creating. Solution Architects need to understand the impact that cloud is having on business and information architecture, application design, data management, and security architecture—and be very familiar with the topology and ecosystems that are being created as a result of increasing adoption of cloud technologies and operating models.

AUDIENCE

The Professional Cloud Solutions Architect course will be of interest to:

- Technology Architects
- Application Architects
- System Architects
- Cloud Strategy Consultants
- Enterprise Architects
- Senior Developers

LEARNING OBJECTIVES

At the end of this course, the participant will gain competencies in and be able to:

- Explain the history of Cloud Computing and its impact on business and IT Architecture
- Demonstrate the key engineering concepts of operating “as a Service”
- Explain the impact of Cloud Computing on Service Management
- Understand Consumer & Provider Perspectives on Setting Up Cloud Environments
- Evaluating a Cloud Solution Architecture
- Migrating and transitioning to a Cloud environment

PREREQUISITES

The CCC Professional level certifications do not have required prerequisites. It is recommended that participants have achieved the Cloud Technology Associate certification (or its equivalent) from the Cloud Credential Council (and that participants are conversant with cloud concepts and vocabulary). It is further recommended that participants are TOGAF Certified (or its equivalent).

ABOUT THE EXAM

- **Exam Format:** Web based, Closed Book
- **Question:** 25 questions
- **Pass score:** 65%
- **Duration:** 75 minutes. For non-native English speakers an additional 15 minutes is available.



OUTLINE

Module 1. History of Cloud Computing

- Why Cloud - Shift from Computing to Cloud Computing
- Basics of Cloud Computing
- SOA and Cloud

Module 2. Impact of Cloud Computing

- Impact on Business and IT Models
- Impact on Change – Business, IT Transition, and Transformational Drivers
- New Business Models – Custom Versus Product
- Comparison of Make, Buy, and Rent
- Value and Monetization Impact
- Security, Risk, and Compliance Impact

Module 3. Technology Engineering of Cloud Computing

- Protocols, Interfaces, and Frameworks
- Web of Devices and Web of Services
- Internet, Internetworking, and Telecommunications
- Data Centers, Facilities, and Fabric
- Cloud Technology Components

Module 4. Cloud Computing Solution Architectures

- The Architecture Layers
- Cloud Solution Architectures: XaaS
- Cloud Reference Architecture Principles
- Consumer and Provider Reference Architecture
- Cloud Security Reference Architectures
- Industry Reference Architecture Standards

Module 5. Cloud Service Lifecycle

- Key Concepts of Cloud Service Lifecycle
- Key Cloud Computing Lifecycle
- Sourcing and Provisioning Lifecycle
- Product and Custom Service Lifecycle
- DevOps Lifecycle
- Service Management Lifecycle
- Cloud Governance Lifecycle

Module 6. Service Transition and Service Transformation

- Benefits, Challenges, Opportunities, and Barriers

- Investors' and Stakeholders' Expectations
- TCO Models
- Impact of Cloud on Business Operating Models
- Impact of Cloud on Legacy IT
- Impact of Cloud on Migration and Transformation
- Cloud Transformation and Innovation

Module 7. Consumer Perspective on Setting Up Cloud Environments

- Key Consumer Processes for Cloud
- Consumer Usage Models and Scenarios
- Key Consumer Solution Architecture Features

Module 8. Provider Perspective on Setting Up Cloud Environments

- Cloud provider processes to set up a cloud environment
- Cloud provider usage models and scenarios
- Cloud provider solution architecture features

Module 9. Cloud Ecosystem

- Cloud Ecosystem – Introduction
- Internet of Things
- Business and Technology Ecosystems and Drivers
- Entities and Ecosystems – Cloud Interactive Ecosystem Language

Module 10. Types of XaaS Solutions

- XaaS Solutions and the Architecture Landscape
- XaaS Solution Definitions
- Make, Buy, Subscribe, and Reuse Options Analysis
- Cloud ROI and TCO Models

Module 11. Targeting the Right Solution Architecture

- Cloud Solution Requirements
- Cloud Fit Selection
- Cloud Solution Architecture Specification
- Cloud Business Case
- Cloud Implementation Roadmap