Cloud Technology Associate Certification

Syllabus

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What is the CCC Cloud Technology Associate certification?

The Cloud Technology Associate certification defines cloud computing and virtualization, and explains the benefits and applications. The course provides a basic introduction to cloud technologies. Participants are also introduced to the risks of cloud computing and methods for managing these risks. The final part of the course enables participants to analytically form a decision making process for the adoption of cloud, breaking down cloud service management in detail.

This certification enables IT professionals to operate effectively in a cloud environment, demonstrating an understanding of the key concepts and relevant terminology. Furthermore, it provides the foundation needed in order to successfully complete subsequent technical training/certification programs. The CTA also acts as a baseline for the subsequent CCC Professional level certifications though it is not a requirement.

Who is this certification for?

- IT Specialists (Analysts, Developers, Architects, Testers, etc.)
- IT Administrators (Network, System, Database, etc.)
- IT Provisioning and Maintenance (Hardware, Network, Storage, etc.)
- IT Managers
- IT Project Managers
- Other functions affected by cloud (Sales, Purchase, Audit, Legal, etc.)

Syllabus - Cloud Technology Associate

Module 1: Introduction

- Fundamental Concepts of Cloud Computing and Virtualization. Business Benefits of Cloud Computing and (high-level) Technical Aspects of Virtualization
- Technical Challenges and Mitigation Measures in Cloud Computing and Virtualization
- Characteristics of Cloud Applications
- Steps to Successfully Adopt Cloud Services
- Cloud Security, Risks and Mitigation Measures
- Factors in Implementation of Cloud Models

Module 2: Introduction to Cloud Service Models

- Challenges and Concerns of Traditional Computing Methodologies
- NIST, Gartner and ISO Definitions of Cloud Computing
- Evolution of Cloud Computing and Early Examples
- Cloud Characteristics, Service Models and Deployment Models
- NIST's Cloud Taxonomy (Service Providers, Consumers, Auditors, Carriers, Brokers), Service Provider vs Consumer Responsibility Model
- Business Value, Challenges and Limitations of Traditional and Cloud Computing
- Cloud Computing Benefits and Challenges
- Application Profile Types and Compatibility with Cloud Computing
- Common Cloud Terminologies and Examples

Module 3: Introduction to Virtualization: The Backbone Technology of Cloud Computing

- Definition, History, and Fundamental Concepts of Virtualization and the Relationship with Cloud Computing
- Benefits, Challenges, Risks, and Suitability of Virtualization to Organizations
- Hypervisors Role in Virtualization and Types
- Leading Hypervisor Manufacturers and Service Providers Who Use Them
- Virtualization Terminologies
- Types of Virtualization (Server, Storage, Network, Desktop)

Module 4: Overview of Cloud Technologies and Applications

- Concepts, Benefits, Challenges and Strategies of Bring Your Own Device (BYOD), Mobile Device Management (MDM) and Enterprise Mobility Management (EMM) at the Workplace
- Concepts, Components, Benefits, Challenges and Growth of Software Defined Networking (SDN)
- Concepts, Approach and Architecture of Network Functions Virtualization (NFV) and its relation to Software Defined Networking (SDN)
- Big Data, Big Data Analytics and Non-relational
- Databases (NoSQL, NewSQL) Concepts, Characteristics and Types
- Internet of Things (IoT) and Types

Module 5: Cloud Security, Risk, Compliance and Governance

- IT Security, Risk and Risk Management
- Role of IT Compliance and Audits
- Impact of Cloud Characteristics on Business Value and Risk
- Impact of Cloud Service Models on Business Value and Risk
- Impact of Cloud Deployment Models on Business Value and Risk
- Common Cloud Attack Vectors and Remediating Controls

Module 6: Preparing for Cloud Adoption

- Steps to Successful Adoption of Cloud Computing Services
- Solution Architectures for Service and Deployment Models
- Organizational Capabilities for Realizing Cloud Benefits
- Roles, Capabilities and Dependencies on Cloud Computing Providers and Vendors
- Approaches for Migrating Applications

Module 7: Cloud Service Management (CSM)

- CSM Fundamentals
- CSM Reference Architecture, Lifecycle and Actors
- CSM Business Support
- CSM Provisioning and Configuration
- CSM Portability and Interoperability
- CSM Products

Exam Details

Cloud Technology Associate Certification Exam	
Exam Type	Multiple Choice
No. of Questions	40
Duration	60 minutes
Additional Time Provisions	15 minutes additional time for candidates who speak English as a second language.
Prerequisite	The CCC Associate level certifications do not have required prerequisites. It is recommended participants possess intermediate knowledge (6+ months of experience) in internet/web technologies. Basic knowledge of storage and network technologies is a plus.
Supervised (Proctored)	Yes (Live/Web)
Open Book	No
Pass Score	65%
Delivery	Online

Cloud Credential Council

The Cloud Credential Council (CCC) is an international member-based organization mandated to drive cloud readiness through effective competence development. The CCC has established critical cloud certifications for key IT roles in order to cultivate cloud-ready IT professionals. The certification scheme was developed after several years research investment in over 20 roles led by industry experts in conjunction with the leading technology vendors in the cloud computing arena.