ProTech protechtraining.com *"Charting the Course ...*

... to Your Success!"

Cloud Technology Associate

Course Summary

Description

Cloud computing is not just a technology, but also a new model for organizing, contracting and delivering information technology systems. This model has great potential for benefits but also new risks.

Professional Cloud Technology Associate starts with proper definitions of cloud computing and virtualization, and explains the benefits and applications. Technology is explained, but mostly in a vendor neutral way. A lab activity is included which enables participants to understand the cloud in a practical manner. Besides, the course is contemporary with the inclusion of latest cloud technologies and applications.

Subsequently, the risks of cloud computing are pointed out as well as ways of managing these risks. In the final part of the course the process of making choices in the adoption process of cloud is explained and cloud service management is broken down into details.

The course is an excellent way to prepare professionals who are considering cloud computing in their organizations.

Objectives
By the end of this course, participants will be able to:

- Identify the fundamental concepts of cloud computing and virtualization including business benefits of cloud computing and technical aspects (high-level) of virtualization.
- Identify the technical challenges and the mitigation measures involved in cloud computing and virtualization.
- Identify the characteristics of cloud applications.
- Identify the steps to successfully adopt cloud services.
- Understand cloud security and identify the risks involved in cloud computing as well as the risk mitigation measures.
- Understand the factors involved for implementation of different cloud models.

Topics

- Introduction to the Cloud Business Model
- Introduction to Virtualization - the Backbone Technology of Cloud Computing
- Overview of Cloud Technologies and Applications
- Cloud Security, Risk and Governance
- Preparing for Cloud Adoption
- Cloud Service Management
- Exam Preparation Guide

Cloud Technology Associate

Course Summary (con't)

Audience

Primary audience:

- IT Managers and solution consultants
- IT Specialists (Analysts, Developers, Architects, Testing, etc.)
- IT Administrators (System, Database, etc.)
- IT Provisioning and Maintenance (Hardware, Network, Storage, etc.)

Secondary audience includes Sales, Purchase, Audit and Legal

Prerequisites

There are no formal prerequisites; however, it is recommended that participants have:

- 6+ months of experience in Internet/web technologies,
- Some basic knowledge of storage and network technologies (preferred)

Duration

Three days

Cloud Technology Associate

Course Outline

I. Introduction to the Cloud Business Model
- A. Review Traditional Computing Challenges and Concerns
- B. Cloud Computing Concept, History, and Definitions
- C. Cloud Computing Benefits and Challenges, Best and Least Suited Application Profiles and APIs
- D. Cloud Reference Architecture and Common Terminologies

II. Introduction to Virtualization - the Backbone Technology of Cloud Computing
- A. Virtualization: Definition, Concepts, History, and Relationship to Cloud Computing
- B. Virtualization: Benefits, Challenges, Risks, and Suitability to Organizations
- C. Hypervisor: Role and Purpose in Virtualization and the Various Hypervisor Types
- D. Virtualization: Terminologies and the different Types of Virtualization

III. Overview of Cloud Technologies and Applications
- A. Bring Your Own Device (BYOD) and MDM + EMM
- B. Software Defined Networking (SDN)
- C. Network Functions Virtualization (NFV)
- D. Big Data, Analytics, NoSQL, NewSQL, HTML5

IV. Cloud Security, Risk and Governance
- A. Risk and Governance Definitions
- B. Impact of Cloud Essential Characteristics
- C. Impact of Cloud Service Models
- D. Impact of Cloud Deployment Models
- E. Risk Management and Governance

V. Preparing for Cloud Adoption
- A. Cloud Strategy and Roadmap Preparation
- B. Solution Architectures: For Various Services, Deployment Models, and Organizational Capabilities
- C. Cloud Service Provider, SLA, and Cloud Migration
- D. Cloud Governance and Risk

VI. Cloud Service Management
- A. Cloud Service Management (CSM) Overview: Definition, Architecture, Lifecycle, Actors
- B. CSM: Business Support
- C. CSM: Provisioning/Configuration
- D. CSM: Portability/Interoperability

VII. Exam Preparation Guide

VIII. Mock Exam