

HP Education Services Course Overview

Build and Secure Your First Cloud (H9P46s)



This two-day hands-on course aims to provide students with the key knowledge and experience in implementing secure cloud environment in public cloud from cloud user perspective. Associated risks and security concerns of implementing the cloud model will be highlighted.

Why Education Services From HP?

- Hands-on practice
- Customized on-site delivery
- More than 80 training locations worldwide
- Online instructor-led and self-paced training at www.hp.com/education
- Comprehensive student materials
- Experienced and best-in-the-field HP instructors
- Focus on job-specific skills
- State-of-the-art classroom facilities

Audience

- Anyone who interested in deploying and securing IT systems in public cloud environment.

Course Title:	Build and Secure Your First Cloud
HP Product Number:	H9P46s
Category/Subcategory:	CLOUD Computing
Course Length:	2 Days
Level:	Basic
Delivery Language:	English
To Order:	In HK, please contact HP Education Services on (852) 3070-6692 or email at hp-education.hk@hp.com or visit www.hp.com.hk/education Other countries please visit www.education.hp.com

Prerequisites

- Basic understanding on cloud computing.

Key topics

1. Introduction to Cloud Computing

- What is Cloud Computing?
 - Cloud Computing definition and terms
 - Cloud Computing infrastructure
 - Various Cloud Service model and delivery model
 - Usage and benefit of public IaaS cloud
- Which services are appropriate to move to Public Cloud
 - Security, resilience and availability considerations
 - Capacity management
 - Application compatibility
 - Data migration and control
- How companies are using Cloud Computing as Cloud Consumer
 - Implementing applications and services in the Cloud
 - Using your company's services vs. the Cloud Provider
- Business case for going to Public Cloud as Cloud Consumer
 - Cloud Computing companies
 - Products and services provided by Cloud Computing companies
 - Rewards and benefits from Cloud implementation
 - Evaluation of cloud solution providers

2. Getting started on Public Cloud environment

- Design of cloud environment from IaaS's Cloud Consumer aspects
 - Runtime environment for IaaS
 - Virtual machine deployment
 - Application storage
- Implementation of cloud environment from Cloud Consumer aspects
 - Difference between Amazon AWS and Microsoft Azure cloud
 - Setup of the cloud environment

- Account creation
- Instance creation
- Configuration using RDP session
 - Hands on setup of WordPress environment in Amazon AWS and Microsoft Azure
- Setup web and application servers
- Setup database server and storage environment
- Firewall groups
- Encryption engine

3. Risks and challenges of Public Cloud implementation

- Understand Federation and Identity Management solutions in Public Cloud
- Setup of Identity management environment in Public Cloud based
- Design and Implementation of the 3-tier architecture in public cloud
- Implementing encryption solutions in public cloud environment
- Setting up log servers in cloud environment
- Deployment of cloud monitoring solutions

4. Systems' hardening in Public Cloud environment

- System securing principles & approaches
- Systems' architectures & configurations
- Firewall and network controls in Public Cloud
- Operating Systems
- Event management and log analysis

5. Security review and audit in Public Cloud environment

- Standards of security in the Cloud
 - Confidentiality, Integrity, and Availability
 - Authentication and Authorization
- Accountability
 - Regulations for privacy
 - Security protocols
- Baseline for deployment of secure IaaS environment
- Compliance requirements of public cloud
- Audit criteria based on CSA GRC stack

