Course Code: QZC30G

Course Title: IBM PowerVC Workshop

Description:

This course will get you the skills you need to efficiently manage an IBM Power private cloud environment. Organizations of all kinds use IBM Power servers to run their mission critical applications. In this course, you'll be introduced to the world of private cloud through hands-on curriculum developed by experts at IBM. The material covers a deep-dive of IBM PowerVC, HMC and NovaLink - the kind you will not find anywhere else. With direct access to our live, cloud-based lab environment, learners can quickly and easily apply the concepts they are learning in a real-world setting. Upon completion of this course, you will earn an IBM digital badge that recognizes your skills and knowledge in this area.

Objectives:

After completing this course, you should be able to:

- Summarize IBM PowerVC's key features and benefits
- Perform IBM PowerVC installation and configuration, including upgrading to newer versions
- Recognize IBM PowerVC's hardware and software requirements
- Summarize IBM PowerVC's architecture
- Show that you understand cloud computing from a technological standpoint
- Summarize the key OpenStack components and their functions
- Demonstrate your ability to use and interact with IBM PowerVC's graical and command line interfaces
- Summarize the concepts of new project creation, users, network configuration, and other cloud-related properties
- Summarize the primary administrative tasks that must be completed in an IBM PowerVC environment
- Summarize the IBM PowerVM NovaLink architecture
- Integrate IBM PowerVC with your existing virtualization environment and IBM PowerVM NovaLink

Prerequisites:

Students must already know the basics of configuring and managing a virtual I/O server and virtual devices as well as know how to use the HMC to manage partitions. This prerequisite can be met by attending the following course:

- AN30G Power Systems for AIX - PowerVM I: Implementing Virtualization

Duration:

32 Hrs

Topics:

Day 1:

- Course Administration and Introduction (00:15)
- Unit 1: Introduction to IBM PowerVC and OpenStack (01:00)

- Unit 2: Planning for IBM PowerVC (01:00)
- Unit 3: Installation and Upgrade of IBM PowerVC (01:00)
- Exercise period 1 (03:15)
- Exercise 1. Verification of Prerequisites (01:00)
- Exercise 2. Installation of IBM PowerVC (01:30)
- Exercise 3. Adding Hosts and Virtual Machines to IBM PowerVC (00:45)

Day 2:

- Unit 4: IBM PowerVC User Interfaces (01:00)
- Unit 5: IBM PowerVC Administrative Tasks (02:00)
- Exercise period 2 (03:30)
- Exercise 4. Using the IBM PowerVC User Interfaces (01:00)
- Exercise 5. IBM PowerVC Administration (01:00)
- Exercise 6. Working with OpenStack Projects, Policies and Users (01:30)

Day 3:

- Unit 6: Transitioning to Cloud Computing (01:30)
- Unit 7: Features of IBM PowerVC (00:45)
- Unit 8: Managing Images and Virtual Machines with IBM PowerVC (01:15)
- Exercise period 3 (03:00)
- Exercise 7. Live and Regular Capture to Create Images and Deploy Templates (01:00)
- Exercise 8. Self-service Provisioning with IBM PowerVC (01:00)
- Exercise 9. Metering and REST APIs (00:30)
- Exercise 10. Stopping and removal of Resources (00:30)

Day 4:

- Unit 9: Introduction to IBM PowerVM NovaLink (01:00)
- Unit 10: Planning and Installing IBM PowerVM NovaLink (01:30)
- Unit 11: Using IBM PowerVM NovaLink with IBM PowerVC (01:00)
- Exercise period 4 (03:00)
- Exercise 11. (Shared Exercise) Installation of IBM PowerVM NovaLink (01:30)
- Exercise 12. (Shared Exercise) Integration of IBM PowerVC with IBM PowerVM NovaLink (00:30)
- Exercise 13. (Shared Exercise) Capture and Deploy using IBM PowerVM NovaLink and IBM PowerVC Upgrade (01:00)

Audience:

This course is open to all interested learners, regardless of their experience. Typical students include customers, IBM technical personnel, business partner technical personnel, and IT engineers and architects.