

VMware vSphere 5.0, optimization and advanced administration



MR-157 5 Days (35 Hours)

Description

This course will show you how to optimize and implement the advanced features of VMware vSphere 5. Optimize the configuration of VMs, identify problems related to CPU, memory, network and storage performance. Set up "Distributed Switches" and use their advanced features.

Who is this training for ?

For whom

System administrators and architects.

Prerequisites

Aucune

Training objectives

- Understand CPU, memory, network and storage resource allocation Optimize the configuration of VMs in a vSphere 5
- 0 environment Identify key CPU, memory, network, and storage performance issues Set up Distributed Switches and use their advanced features Improve the deployment and configuration of ESXi servers

Training program

Performance

- Performance factors in a virtual environment.
- Performance monitoring with vCenter and resxtp.
- Practical work Performance visualization with vMA and resxtp, the client vSphere.

vSphere Management Assistant (vMA)

- Deploy, configure, administer vMA.
- Esxcli, vicfg commands.
- Access ESXi using SHELL and SSH.
- The log files (ESXi, vCenter server).
- Centralize logs with vMA.

Les Distributed Virtual Switches (dvSwitch)

- Creation, configuration and management.
- Migration of standard virtual switches.
- Network configuration using command lines.
- Understand NetFlow and Port Mirroring.
- Private VLANs.
- QoS with Network I/O Control.

Performance réseau

- Set up a network traffic analyzer.
- The features of network adapters.
- Monitor network performance metrics.
- Troubleshoot network performance issues.

Accès, performance et évolutivité du stockage

- Storage performance factors (protocols, VMFS, Load Balancing).
- Identify and troubleshoot key storage performance issues.
- Configure Multipathing storage.
- Understanding VAAI and VASA storage drivers.
- Using storage profiles for VMs.
- Datastore Clusters.
- Configuring Storage DRS and Storage IO Control.

Déploiement, gestion optimisée des serveurs

- Maintain compliance and deploy ESXi with VMware Host Profile.
- Centralized management of multiple vCenters with VMware vCenter Linked Mode.
- Image Builder: create an image ESXi installation.
- vSphere Auto Deploy: deploy ESXi hosts.

Performance processeur et mémoire

- CPU Scheduler features.
- Monitor CPU resources, memory related metrics.
- CPU performance issues.
- Memory.
- Memory management techniques on an ESXi.

Performance des VMs et des Clusters

- Performance at the DRS Cluster level, resource pools, resource allocation settings.
- Troubleshoot startup problems with virtual machines, DRS Clusters and HA.