

**Course Length:** 2 days

**Prerequisites:**

This course requires a good understanding of Linux services and networking. These skills are taught in the GL250 "Red Hat Linux Systems Administration" and GL275 "Red Hat Linux Network Services".

**Course Outline:**

**Module 1: Introduction to Virtualization**

- What is virtualization?
- Why is virtualization important?
- Types of virtualization
- Basic architecture of Xen virtualization

**Module 2: Basic Paravirtualized Domain Installation**

- Preparing for domain installation
- Basic installs using virt-manager
- Configuring domains to automatically start at boot

**Module 3: Virtual Machine Management**

- Using generic libvirt-based utilities
- Using native Xen utilities

**Module 4: Advanced Installation and Configuration**

- Syntax of Xen domain configuration files
- Virtual Block Devices and types of block storage
- Xen and bridged networking
- Manual and command-line domain installation

**Module 5: Live Migration**

- Live migration of Xen paravirtualized domains
- Advanced configuration of xend
- Live migration issues

**Module 6: Troubleshooting**

- Differences from a standard environment
- Viewing hypervisor log messages and log files
- Accessing domain virtual block devices
- Common issues

**Module 7: Hardware-assisted Virtualization**

- Fully-virtualized vs. paravirtualized domains
- Installing unmodified OSes