

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".

Supported Distributions:

Debian 5.0.3 (Lenny)
SUSE Linux Enterprise 11
Red Hat Enterprise Linux 5

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