



Power Systems Running Linux: Performance Management (PowerVM Base)  
Information

<b>Length:</b>	24.0 Hours
<b>Ref:</b>	LX034G
<b>Delivery method:</b>	ClassroomInstructor Led Online
<b>Price:</b>	AUD

Overview

This course is designed to teach performance monitoring skills for SUSE LINUX Enterprise Server, Red Hat Enterprise Linux, and Ubuntu server on POWER8 servers. This course teaches the skills that are needed to measure, analyze, and potentially tune Linux distributions for optimal performance on IBM POWER8 systems. In this course we focus on the features that relate to performance of the POWER8 processor, Linux kernel, and the special monitoring, configuring, and tuning needs of virtual servers. This course does not cover application monitoring and tuning.

You will work with traditional and IBM provided Linux performance analysis and tuning tools. Our objective is to learn which tools to use, when, and how they have been enhanced for the latest POWER8 technology. These skills are invaluable to individuals responsible for the performance of a POWER8 server.

Each lecture is reinforced with hands-on lab exercises to gain practical experience applicable to your performance management requirements.

Public

The audiences for this training include anyone who needs to create and manage partitions on IBM Power System servers, such as Linux or AIX technical support and consultants, Linux or AIX system administrators, or system architects and engineers

Prerequisites

Students attending this course are expected to have good Linux administration skills. These skills can be obtained by attending one of the following courses:

- Power Systems Running Linux: Red Hat Administration (PowerVM Base) (LX031G), or
- Power Systems Running Linux: Red Hat Storage Management (PowerVM Base) (LX041G) or
- Power Systems Running Linux: Ubuntu Server Administration (PowerVM Base) (LX051G)

## Objective

On Completion of this course, the student should be able to:

- Identify the system components to be monitored
- Define a basic performance monitoring strategy for Linux
- Identify open source, and IBM specific tools to monitor:
  - Processor
  - Memory
  - I/O
  - Network
- Interpret results and reports generated by standard Linux tools
- Structure a tuning strategy
- Describe features of the POWER8 architecture that are relevant to performance management
- Describe Virtual Server resource configuration guidelines

## Topics

### DAY 1

Unit 1: Performance objectives and PowerVM concepts

Lab exercise 1: Linux installation and Power virtualization

Unit 2: Power processor operations

Lab exercise 2: Focus on processor

### DAY 2

Unit 3: Power memory management

Lab exercise 3: Focus on memory

Unit 4: Power I/O

Lab exercise 4: Focus on I/O

Unit 5: Nigel's Monitor (nmon)

Lab exercise 5: nmon operations

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