

# IBM eX5 Enterprise Servers Architecture and Virtualization

XTR52G



**Delivery Type:** Classroom

**Duration:** 4 days

## Overview

The IBM eX5 product portfolio represents the fifth generation of servers built upon Enterprise X-Architecture which leverages decades of mainframe server design to deliver an open and affordable, industry-standard x86 server platform.

The first half of the course details IBM eX5 Enterprise X-Architecture, Intel Nehalem microarchitecture, and server features that are featured in the System x3690 X5, System x3850 X5, and BladeCenter HX5. IBM systems innovations such as MAX5, eXFlash, and FlexNode are also discussed. The second half of the course presents an overview of IBM virtualization solutions for the IBM System x Enterprise server line with an in depth look at Microsoft Windows Server 2008 with Hyper-V and Citrix XenServer. Additional topics include an overview of virtualization, virtualization history and terminology, hypervisor architectures, and virtualization management. Hands-on lab procedures include the IBM virtualization solutions Microsoft Windows Server 2008 with Hyper-V and Citrix XenServer.

## Pre-Requisites

The prerequisite for this course is System x Technical Principles (Enhanced) (XTR11GB). It is also recommended that students have some experience with Intel-based computer hardware and Windows or Linux operating systems.

## Objectives

- ✓ List the features of IBM X-Architecture
- ✓ Recognize the System x and BladeCenter portfolio
- ✓ Recognize the IBM eX5 enterprise systems
- ✓ Summarize the history of X3 and eX4 technology
- ✓ Summarize the highlights of the IBM System x3690 X5
- ✓ Detail the features of the IBM BladeCenter HX5
- ✓ Detail the features of the IBM BladeCenter HX5 two-node
- ✓ Detail the features of the IBM System x3850 X5
- ✓ Detail the features of the IBM System x3950 X5
- ✓ Detail eX5 systems innovations including MAX5, eXFlash, and FlexNode
- ✓ Articulate IBM Smarter Planet

- ✓ Describe how System x and virtualization play a key role in IBM Smarter Planet
- ✓ Articulate ex5 enterprise systems hardware virtualization support
- ✓ Using the memory subsystem, list the three IBM technologies and paraphrase their contributions to a virtualization environment
- ✓ List three IT issues that helped virtualization become popular
- ✓ List three benefits of using virtualization
- ✓ Identify the key differences between Type 1 and Type 2 hypervisors
- ✓ List the key differences between server and storage consolidation
- ✓ List the IBM virtualization offerings available today

### **Target Audience**

This is an intermediate course for individuals who are involved in the planning, installation, configuration and upgrading of System x Enterprise servers.