



Course Outline

VMware VI3.5 Ultimate Bootcamp & Official Certified Virtualization Expert® (CVE®)

Five Days – (Classroom)

Introduction

The 50 hour Ultimate Bootcamp® is taught by the top virtualization experts, with hands-on labs designed to expose the student to advanced virtualization concepts and VMware's VI3.5 Product. This comprehensive class prepares the student to become a professional virtualization expert with the certification Certified Virtualization Expert® (CVE®) to attest to their knowledge of the material and technology.

Ultimate Bootcamps are designed to give the student in-depth skills training through hands-on experience with state-of-the art equipment.

The focus of the VMware VI3.5 Ultimate Bootcamp is to instill the knowledge required for the student to do their job efficiently and effectively. To accomplish this, we provide a comprehensive Beginner to Advanced training experience, starting from the installation of the licensed product to real world troubleshooting scenarios. The course focus is not limited only to learning and harnessing the power of VMware® but the entire concept of virtualization and other 3rd party tools and technologies that will enhance VMware® capabilities and increase the student's virtualization expertise.

VMTraining is the only company to teach and perform labs on VMware® ESXi 3.5, VMware's newest addition to the VI 3.5 line of products and the future of the VI suite.

Course Summary

- Five (5) 10 hour days of intense instruction with no outside distractions.
- Personal access to the top virtualization experts in the industry.
- Each student is provided their own dedicated server for practice and application.
- 50 + labs to hone the student's skills and gain a 360° perspective on how to build and maintain virtual environments.
- Install, configure, deploy, secure, analyze, consolidate and design virtual networks from beginner to advanced levels.
- **Breakfast, Lunch, and snacks provided on each day of class.**
- Application of third party solutions to simplify processes and make the job easier.
- Post-mentoring from the best virtualization instructors in the industry.
- A higher market value for students becoming a Certified Virtualization Expert™.

Audience

System Administrators, Engineers, and Operators responsible for setup, support, and troubleshooting of ESX Server and/or VirtualCenter. The Ultimate Bootcamp is intended for IT Professionals with 1 or more years of server and infrastructure experience.

Course Objectives

To train the Ultimate virtualization expert through intense immersion in a five day accelerated VMware ESX training Ultimate Bootcamp.

This course includes all the content you would find in 5 of VMware's most popular courses:

- VMware I3 - What's New
- VMware I3 - Install and Configure
- VMware I3 - Deploy, Secure, and Analyze
- VMware I3 - P2V Assistant (converter)
- VMware I3 – Fast Track





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Upon the completion of the Ultimate Bootcamp, students will learn:

- About all of the new and exciting features of VMware Infrastructure 3.5
- Foundational terms and concepts concerning virtualization
- How to install, configure and support ESX server 3.5 and VirtualCenter 2.5
- How to configure Virtual Machines, templates, and clones
- How to configure Virtual Networking and how to support VMotion
- P2V, V2V, V2P, and P2P Methods and Techniques
- Server Consolidation Procedures and reasoning
- Tools to support a virtual infrastructure - VMware, Platespin, Vizioncore, Veeam, and more
- Vmotion, Update Manager, Power Management, Guided Consolidation, Clustering –DRS/HA, etc.
- Best Practices within a Virtual Enterprise
- How to perform backups in the ESX Environment - Service Console and Virtual Machines - VCB
- How to use the Command Line Interface for supporting ESX Servers - ESX commands
- How to install, configure, and troubleshoot ESX Licensing server.

Prerequisites

System administration experience on Microsoft Windows and/or Linux.

Essential Third Party Tools

Any job is easy when you have the right tools. In the VI3.5 Ultimate Bootcamp®, the student will be introduced to and learn how to apply third party tools that, when utilized in conjunction with VMware, will not only enhance the students' skills but simplify processes, optimize efficiency, and make the administrators job that much easier.

Quality "Resourceware" and Follow-up Continuing Education

With more than a 750 page course manual and a 250 page lab book, Ultimate Bootcamp® courseware is intuitively designed to help the student easily move through the chapters regardless of their level of experience and will serve as a reference source even after the class. This unique feature of all Ultimate Bootcamps is what attracts so many students looking for a great training experience.

Securing the Virtual Environment

Despite many advances in system security, most major operating systems remain plagued by security vulnerabilities. Special attention is given on how to secure the virtual environment by using advanced Virtual Server Architecture strategies, allowing innovation through design and exploiting a safe execution environment.

Course Outline

Chapter 1

Introduction

Chapter 2

Virtualization Overview



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Chapter 3

Installing ESX

1. ESX Server Install (HOL)
2. ESX Architecture and Boot process (HOL)
3. Planning ESX Server Deployment
4. *Expert Tips*

Chapter 4

Using Tools to Administer a VMware Environment (HOL)

Chapter 5

Patching and Upgrading ESX

1. Patching and Upgrading ESX Server
2. ESX Server 3.5 Scripted Upgrade (HOL)
3. Configuring ESX (HOL)
4. *Expert Tips*

Chapter 6

Configuring Networking

1. Creating & Modify Virtual Networks (HOL)
2. Create & Modify Virtual Networks using CLI (HOL)
3. *Expert Tips*

Chapter 7

Configuring Storage

1. Fiber Channel SAN Storage
2. iSCSI SAN Storage (HOL)
3. VMFS Datastores (HOL)
4. NAS Storage and NFS Datastores (HOL)
5. Raw Device Mapping (RDM) (HOL)
6. Storage Comparisons
7. *Expert Tips*



Chapter 8

VirtualCenter and License Server

1. License Server and Licensing (HOL)
2. VirtualCenter 2.5 Installation (HOL)
3. VirtualCenter Inventory (HOL)
4. Managing VirtualCenter
5. Planning VirtualCenter Deployment
6. *Expert Tips*

Chapter 9

VM Creation and Configuration & Snapshots

1. Create a VM (HOL)
2. Deploying Multiple VMs (HOL)
3. P2V and V2V Conversions (HOL)
4. Manage VMs (HOL)
5. Virtual Machine Startup/Shutdown (HOL)
6. Virtual Machine Snapshots (HOL)
7. Web Access for Management (HOL)
8. *Expert Tips*

Chapter 10

Security and Permissions

1. Security Overview (HOL)
2. Controlling VC and ESX User Access (HOL)
3. ESX Host AD Integration (HOL)
4. Service Console Firewall (HOL)
5. Controlling SSH Access (HOL)
6. Wheel Group and Sudo (HOL)
7. *Expert Tips*

Chapter 11

Advanced ESX and VirtualCenter Management

1. Configuring Resource Pools (HOL)
2. Configuring VMotion (HOL)
3. Distributed Resource Scheduler (DRS) (HOL)
4. Resource Pools in DRS Clusters (HOL)
5. Update Manager (HOL)
6. Storage VMotion (HOL)
7. Remote Command Line Interface (RCLI) (HOL)



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8. *Expert Tips*

Chapter 12

Disaster Recovery and Backup

1. High Availability (HA) (HOL)
2. Clustering and Network Load Balancing
3. Backup Overview
4. Using VCB Command Line Utilities (HOL)
5. Third Party Backups (HOL)
6. Disaster Recovery Scenarios
7. *Expert Tips*

Chapter 13

Server and VM Monitoring

1. Optimizing ESX Hosts and VMs
2. Monitoring VM and VC Performance (HOL)
3. Configuring Alarms (HOL)
4. *Expert Tips*

Chapter 14

Installing and Configuring ESXi

1. ESXi Server Install (HOL)
2. Managing ESXi with the VIC (HOL)
3. Managing ESXi through VirtualCenter (HOL)
4. *Expert Tips*