EDUCATION PROGRAMS

VMware Infrastructure: Design

Overview

This hands-on training course explores the foundations of designing VMware Infrastructure architectures.

Course Objectives

At the end of the course, you should understand the principles involved in designing VMware Infrastructure architectures:

- Implementing best practices and evaluating design considerations to meet business needs
- Distributing resources across ESX clusters automatically and ensuring high availability
- Architecting remote and branch offices
- Designing to support certain enterprise applications

Target Audience

System architects, system administrators, IT managers, and individuals responsible for designing VMware Infrastructure architectures.

Prerequisites

Required
Achievement of a passing score on a short, online pretest.

Recommended
Completion of **VMware Infrastructure 3: Install and Configure**, or equivalent experience with VMware ESX and VirtualCenter, and administration experience with Microsoft Active Directory, Microsoft SQL Server, and Microsoft Exchange Server.

Note on Certification

This course is not required for the VMware Certified Design Expert (VCDX) certification. The content of the course is a subset of the knowledge tested in the VCDX examinations. Therefore, the course is most appropriate for persons who are new to designing virtual infrastructures and who intend to gain further hands-on design experience before beginning the VCDX process.

Course Outline

Module 1: Introduction

- **Fundamental design principles**

Module 2: Designing for Manageability

- **Designing for lower cost of administration**

Module 3: Designing for Availability

- **Fault-tolerant, resilient, and highly available architectures**

Module 4: Designing for Scalability

- **Trade-offs between scaling up versus scaling out resources**

Module 5: Designing Based on Analytical Tools

- **Designing templates based on inventory analysis**
- **Sizing a virtual infrastructure based on capacity analysis**

Module 6: Designing for Remote and Branch Offices

- **Centralized and distributed remote office architectures**
- **Making remote office information more available**

Module 7: Designing for Microsoft SQL Server

- **Design considerations for online transaction processing (OLTP) versus decision support systems (DSS)**
- **Deciding between VMFS, RDM, and a hybrid combination**

Module 8: Designing for Microsoft Active Directory

- **Designing virtual domain controllers to minimize management while maximizing performance**

Module 9: Designing for Microsoft Exchange Server

- **Including Exchange 2003 and Exchange 2007 server roles**

Pricing and Scope

- Four (4) days of instructor-led, classroom training
- Classroom training consists of 50% lecture and 50% design exercises.
- Individual enrollment available at convenient locations worldwide at http://www.vmware.com/education
- Contact your VMware representative for pricing information. Onsite training is available for companies that prefer the benefits of instructor-led classes without travel.
- Contact VMware Education to discuss facility requirements for onsite training at education@vmware.com.

VMware warrants that it will perform these workshop services in a reasonable manner using generally accepted industry standards and practices. THE EXPRESS WARRANTY SET FORTH ABOVE IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE WITH RESPECT TO THE SERVICES AND DELIVERABLES PROVIDED BY VMWARE, OR AS TO THE RESULTS WHICH MAY BE OBTAINED THEREFROM, AND VMWARE DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. VMWARE WILL NOT BE LIABLE FOR ANY THIRD-PARTY SERVICES OR PRODUCTS IDENTIFIED OR REFERRED TO CUSTOMER BY VMWARE. VMWARE WILL NOT BE LIABLE FOR ANY LOST PROFITS OR BUSINESS OPPORTUNITIES, LOSS OF USE, BUSINESS INTERRUPTION, LOSS OF DATA, OR ANY OTHER INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING UNDER THIS AGREEMENT UNDER ANY THEORY OF LIABILITY, WHETHER BASED IN CONTRACT, TORT, NEGLIGENCE, PRODUCT LIABILITY OR OTHERWISE, REGARDLESS OF WHETHER VMWARE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. VMWARE'S AGGREGATE LIABILITY UNDER THIS AGREEMENT WILL NOT, IN ANY EVENT, EXCEED THE FEES PAID BY CUSTOMER TO VMWARE UNDER THIS AGREEMENT. All materials provided under this workshop are copyrighted by VMware ("Workshop Materials"). VMware grants the customer of this workshop a license to use and make reasonable internal company copies of any Workshop Materials strictly for the purpose of facilitating such company's understanding, utilization and operation of its licensed VMware product(s). Except as set forth expressly in the sentence above, there is no transfer of any intellectual property rights or any other license granted under the terms of this workshop. If Customer issues a purchase order or other ordering document, the terms and conditions of which are in addition to or inconsistent with the terms and conditions of this Agreement, the terms and conditions of such purchase order or other ordering document will not be binding and will not modify this Agreement.

VMware, Inc. 3401 Hillview Ave Palo Alto CA 94304 USA Tel 650-475-5000 Tel 877-486-9273 Fax 650-475-5001

© 2008 VMware, Inc. All rights reserved. Protected by one or more of U.S. Patent Nos. 6,075,938, 6,397,242, 6,496,847, 6,704,925, 6,711,672, 6,725,289, 6,735,601, 6,785,886, 6,789,156, 6,795,966, 6,880,022, 6,944,699, 6,961,806, 6,961,941, 7,069,413; 7,082,598, 7,089,377, 7,111,086, 7,111,145, 7,117,481, 7,149,843, 7,155,558, 7,222,221, 7,260,815, 7,260,820, 7,269,683, 7,275,136, 7,277,998, 7,277,999, 7,278,030, 7,281,102, 7,290,253, 7,356,679, 7,409,487, 7,412,702, 7,412,492, 7,424,710, 7,428,636, 7,434,002, and 7,433,951 patents pending. VMware, the VMware "boxes" logo and design, Virtual SMP and VMotion are registered trademarks or trademarks of VMware, Inc. in the United States and/or other jurisdictions. All other marks and names mentioned herein may be trademarks of their respective companies.

VMware SKU: EDU-DESIGN-OE Rev. 10/2008