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## Implementing a Desktop Infrastructure

**Duration: 5 Days**    **Course Code: M20415**

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### Overview:

This 5-day instructor-led course provides you with the skills and knowledge needed to plan, design, and implement a Windows 8 desktop infrastructure. The course provides guidance on planning and deploying desktops by using several technologies such as User State Migration Tool (USMT), Microsoft Deployment Toolkit (MDT), Virtual Desktop Infrastructure (VDI), and more. Additionally, the course describes how to protect desktops and monitor their health and performance.

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### Target Audience:

The course is primarily intended for IT Professionals who manage the desktop environments for organizations, and want to specialize in Windows 8 desktop deployments. These IT professionals typically work in complex computing environments of large to enterprise-sized organizations. In addition, the secondary audience for this course includes IT professionals who want to take the 70-415: Implementing an Enterprise Desktop and Device Infrastructure exam as a stand-alone, or as part of the requirement for the MCSE: Desktop Infrastructure certification.

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### Objectives:

- Assess and determine desktop deployment options.
  - Plan an image management strategy.
  - Implement desktop security.
  - Capture and manage a desktop operating system image.
  - Plan and implement User State Migration.
  - Plan and deploy desktops by using the Microsoft Deployment Toolkit.
  - Plan and deploying desktops by using System Center 2012 Configuration Manager.
  - Plan and implement a Remote Desktop Services infrastructure.
  - Manage user state virtualization for enterprise desktops.
  - Plan and implement an updates infrastructure to support enterprise desktops.
  - Protect enterprise desktops from malware and data loss.
  - Monitoring the performance and health of the desktop infrastructure.
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### Prerequisites:

- Solid understanding of TCP/IP and networking concepts
  - Solid knowledge of Windows and Active Directory Domain Services (AD DS)—for example, domain user accounts, domain vs. local user accounts, user profiles, and group membership
  - Good understanding of scripts and batch files
  - Solid understanding of security concepts such as authentication and authorization
  - Familiarity with the client administration capabilities of Windows Server
  - General knowledge of management tools such as System Center 2012 Configuration Manager, System Center 2012 Operations Manager, and System Center 2012 Data Protection Manager.
  - Familiarity with imaging, packaging, and operating system deployment concepts
  - Familiarity with certificates and Certification Authority (CA) implementation and configuration
  - Knowledge equivalent to Windows 2012 MCSA
  - Experience administering Windows Server in an environment that typically has the following characteristics: 2,500 to 50,000 or more users
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- Multiple physical locations and multiple domain controllers
  - Network services and resources such as messaging, databases, file and print, firewalls, Internet access, an intranet, and client computer management
  - Support for Windows 8 client desktops
  - Deployment and management of both physical and virtual applications
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## Content:

### Module 1: Assessing and Determining Desktop Deployment Options

- Overview of the Enterprise Desktop Life Cycle
- Assessing Hardware and Infrastructure Readiness for a Desktop Deployment
- Overview of Enterprise Desktop Deployment Methods
- Volume Activation Technologies for Enterprise Desktops
- Lab: Assessing and Determining Desktop Deployment Options

### Module 2: Planning An Image Management Strategy

- Overview of Windows Image Formats
- Overview of Image Management
- Lab: Planning an Image Management Strategy

### Module 3: Implementing Desktop Security

- Implementing a Centralized Desktop Security Solution
- Planning and Implementing BitLocker
- Planning and Implementing Encrypted File System
- Lab: Configuring Desktop Security
- Lab: Configuring File Encryption Using EFS

### Module 4: Capturing and Managing a Desktop Operating System Image

- Overview of Windows ADK
- Managing the Windows Preinstallation Environment
- Building a Reference Image Using Windows SIM and Sysprep
- Capturing and Servicing a Reference Image
- Configuring and Managing Windows Deployment Services
- Lab: Preparing the Imaging and Preinstallation Environment
- Lab: Building a Reference Image Using Windows SIM and Sysprep
- Lab: Capturing and Servicing a Reference Image
- Lab: Configuring and Managing Windows Deployment Services

### Module 5: Planning and Implementing User State Migration

- Overview of User State Migration
- Planning User State Migration by Using USMT
- Migrating User State by Using USMT
- Lab: Planning and Implementing User State Migration
- Lab: Migrating User State Using Hard-Link Migration

### Module 6: Planning and Deploying Desktops Using the Microsoft Deployment Toolkit

- Planning for the Lite Touch Installation Environment
- Implementing MDT 2012 for Lite Touch Installation
- Integrating Windows Deployment Services with MDT
- Lab: Planning and Deploying Desktops Using the Microsoft Deployment Toolkit

### Module 7: Planning and Deploying Desktops by Using System Center 2012 Configuration Manager

- Planning the Zero Touch Installation Environment
- Preparing the Site for Operating System Deployment
- Building a Reference Image Using a Configuration Manager Task Sequence
- Using MDT Task Sequences to Deploy Client Images
- Lab: Preparing the Environment for Operating System Deployment
- Lab: Using MDT and Configuration Manager to Perform a Zero-Touch Installation

### Module 8: Planning and Implementing a Remote Desktop Services Infrastructure

- Overview of Remote Desktop Services
- Planning the Remote Desktop Services Environment
- Configuring a Virtual Desktop Infrastructure Deployment
- Configuring a Session-Based Desktop Deployment
- Extending the Remote Desktop Services Environment to the Internet
- Lab: Planning and Implementing a Remote Desktop Services Infrastructure
- Lab: Extending Internet Access to the RDS Infrastructure

### Module 9: Managing User State Virtualization For Enterprise Desktops

- Overview of User State Virtualization
- Planning User State Virtualization
- Configuring Roaming Profiles, Folder Redirection, and Offline Files
- Implementing Microsoft User Experience Virtualization
- Lab: Deploying and Managing User State Virtualization

### Module 10: Planning and Implementing an Updates Infrastructure to Support Enterprise Desktops

- Planning an Updates Infrastructure for the Enterprise
- Implementing Configuration Manager 2012 to Support Software Updates
- Managing Updates for Virtual Machines and Images
- Using Windows Intune for Managing Software Updates
- Lab: Planning and Implementing an Updates Infrastructure

### Module 11: Protecting Enterprise Desktops from Malware and Data Loss

- Overview of System Center 2012 Endpoint Protection
- Configuring Endpoint Protection Client Settings and Monitoring Status
- Using Windows Intune Endpoint Protection
- Protecting Desktops by Using System Center 2012 Data Protection Manager
- Lab: Implementing Client Endpoint Protection
- Lab: Configuring Data Protection for Client Computer Data

### Module 12: Monitoring the Performance and Health of the Desktop Infrastructure

- Performance and Health Monitoring for the Desktop Infrastructure
- Monitoring the Virtual Desktop Infrastructure
- Lab: Monitoring the Performance and Health of the Desktop Infrastructure

## Further Information:

For More information, or to book your course, please call us on 00 971 4 446 4987

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