Implementacija i održavanje poslužiteljskih instalacijskih slika

8. PREDAVANJE

Algebra
visoka škola za
primijenjeno računarstvo

Module Overview

- Overview of Windows Deployment Services
- Managing Images
- Implementing Deployment with Windows Deployment Services
- Administering Windows Deployment Services

Lesson 1: Overview of Windows Deployment Services

- What Is Windows Deployment Services?
- Windows Deployment Services Components
- Why Use Windows Deployment Services?
- Discussion: How to Use Windows Deployment Services
- Discussion: How to Use Windows Deployment Services

What Is Windows Deployment Services?

Windows Deployment Services is a server role that is provided with Windows Server 2012

- Windows Deployment Services:
  - Enables you to perform network-based installations
  - Simplifies the deployment process
  - Supports deployment to computers with no operating system
  - Uses existing technologies, such as Windows PE, .wim, .vhd and .vhdx files, and image-based deployment

Windows Deployment Services Components

- Transport Server
  - Multicast engine
  - Windows PowerShell cmdlets for session management
- Deployment Server
  - PXE server
  - Image store
  - Windows Deployment Services client
  - TFTP server

Why Use Windows Deployment Services?

Consider the following scenarios:

- In a small network consisting of a single server and approximately 25 Windows XP computers, you want to expedite the upgrade process of the client computers to Windows 8.1

- A medium-sized organization wants to deploy multiple servers in branch offices that are geographically dispersed. It would be time-consuming and expensive to send experienced IT staff to each location to deploy the servers

Discussion: How to Use Windows Deployment Services

The A. Datum Corporation IT staff is about to deploy Windows Server 2012 to various branch offices. The following information has been provided to the IT staff by management:

- The configuration of the various branch office servers is expected to be fairly consistent.
- There is no requirement to upgrade settings from existing servers, as these are new branch offices with no current IT infrastructure in place.
- Automation of the deployment process is important, as there are many servers to deploy

How should you configure Windows Deployment Services?

Discussion: How to Use Windows Deployment Services

A. Datum Corporation wants to deploy several new servers in their head offices which will have Windows Server 2012 installed on them.

Following are the requirements provided to the IT staff:

- Configuration of the various servers is expected to vary slightly.
- The two basic server
- Configurations are: full server, and

Server Core installation

- Managing network traffic is critical, as the network is near capacity.

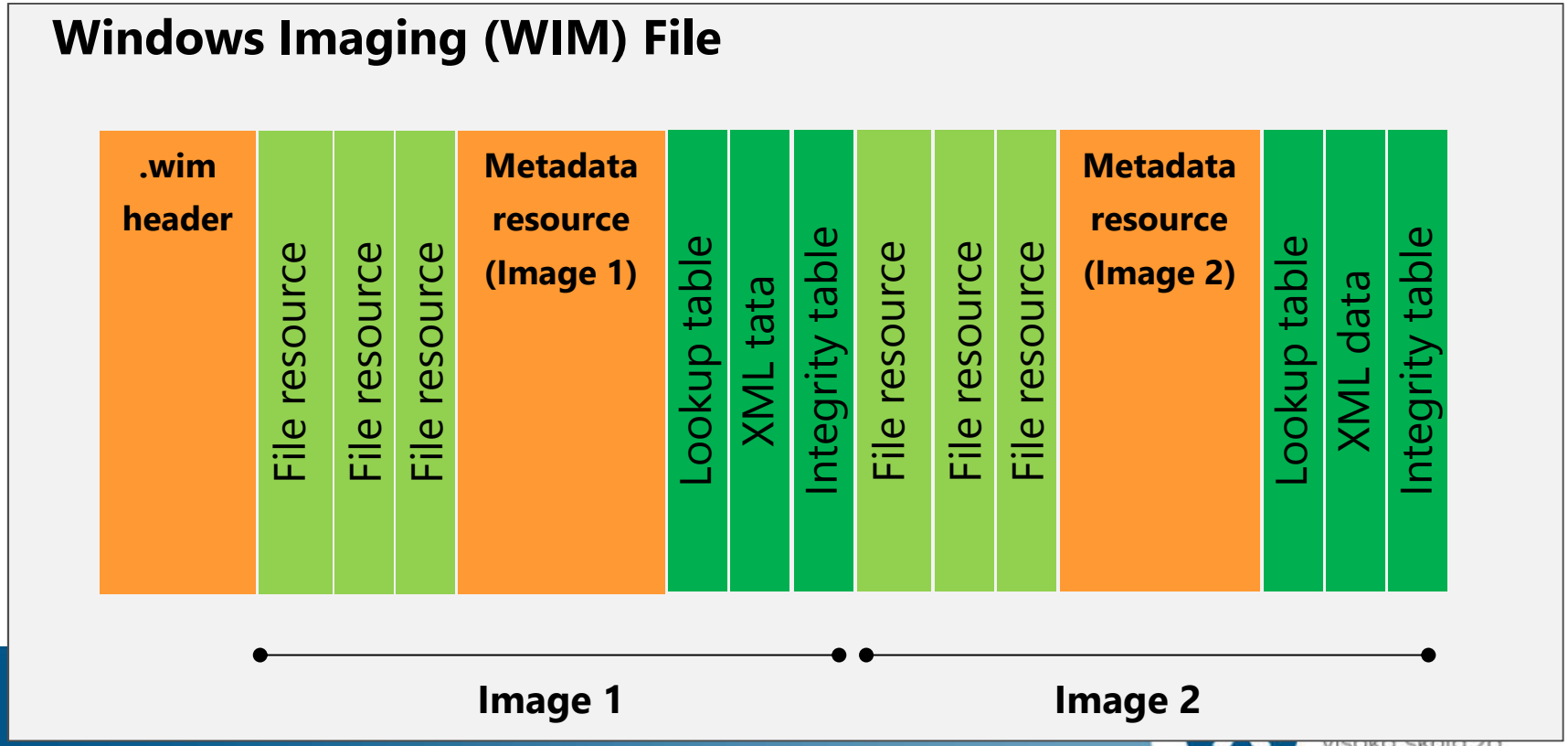
How should you configure Windows Deployment Services?

Lesson 2: Managing Images

- The Role of Images in Windows Deployment Services
- Windows ADK Tools for Image Management
- Image Types
- Creating an Install Image
- Managing and Maintaining Images
- Demonstration: Using DISM to Configure an Image

Three types of image files in Windows Deployment Services are used as boot or install images

- wim, .vhd, and .vhdx



Windows ADK Tools for Image Management

Windows ADK includes the following tools

- Windows SIM
- Windows PE
- USMT
- DISM
- Windows PowerShell module for DISM

Image Types

- Thin Image
  - Contains only the operating system and possibly a few agents, such as Configuration Manager 2012 agent
- Thick Image
  - Contains every application required by an end-user
- Hybrid Image
  - Contains some of the applications required by most users

Creating an Install Image

- The process of creating an install image can be summarized as follows:
  - Create a capture image
  - Install Windows on a reference computer
  - Customize settings on the reference computer
  - Generalize the reference computer
  - Capture the reference image

Managing and Maintaining Images

Use DISM to manage and maintain images including:

- Apply updates, drivers, and language packages
- Add, remove, or enumerate packages and drivers
- Enable or disable Windows features
- Configure locale settings
- Upgrade an image to a different edition of Windows

Lesson 3: Implementing Deployment with Windows Deployment Services

- Understanding Windows Deployment Services Components
- Installing and Configuring Windows Deployment Services
- Managing Deployments with Windows Deployment Services

Understanding Windows Deployment Services Components

- Windows Deployment Services prerequisites include:
  - AD DS
  - DHCP
  - DNS
  - NTFS/ReFS volume
- Use Windows Assessment and Deployment Kit to create answer files for automated deployment

Installing and Configuring Windows Deployment Services

Install and configure Windows Deployment Services by:

- Installing the Windows Deployment Services server role
  - Install the Deployment Server or Transport Server role service
  - Perform post-installation configuration of Windows Deployment Services by:
    - Specifying an image store location
    - Configuring the DHCP server options, if required
    - Configuring PXE server configuration

Managing Deployments with Windows Deployment Services

- To service client computers with Windows Deployment Services, you must:
  - Configure boot settings
  - Configure install settings
  - Configure transmission settings
  - Configure drivers

Lesson 4: Administering Windows Deployment Services

- Common Administration Tasks
- Demonstration: How to Administer Images
- Automating Deployments
- Demonstration: How to Configure Multicast Transmission

Common Administration Tasks

- Tasks
  - Configure DHCP
  - Create and service images
  - Manage the boot menu
  - Prestage client computers
  - Automate deployment
  - Configure transmission
- Tools
  - Windows Deployment Services console
  - WDSUtil.exe
  - Dism.exe
  - Sysprep.exe
  - ImageX.exe
  - Windows SIM

To automate the Windows Setup process:

1. Create the Unattend.xml file
2. Copy the file to the Windows Deployment Services server
3. View the properties of the appropriate install image
4. Enable unattended mode and select the answer file

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