BATCH : BATCH 85

LESSON : **Windows Server**

DATE : 22.07.2022

SUBJECT : **File Server**

techproeducation

techproeducation

techproeducation

techproeducation

techproedu

techproeducation.com info@techproeducation.com +1 (917) 768-7466

Module Overview

- Securing Files and Folders
- Protecting Shared Files and Folders by Using Shadow Copies
- Configuring Work Folders
- Configuring Network Printing

Lesson 1: Securing Files and Folders

- What Are File Permissions?
- What Are Shared Folders?
- Permissions Inheritance
- Effective Permissions
- What Is Access-Based Enumeration?
- What Is the Offline Files Feature?
- Demonstration: Creating and Configuring a Shared Folder

What Are File Permissions?

- File permissions control access for files and folders on NTFS or ReFS formatted storage volumes

- File Permissions:
  - Are configured for files or folders
  - Can be granted or denied
  - Are inherited from parent folders

- Permissions conflict precedence:
  1. Explicitly assigned Deny
  2. Explicitly assigned Allow
  3. Inherited Deny
  4. Inherited Allow

What Are Shared Folders?

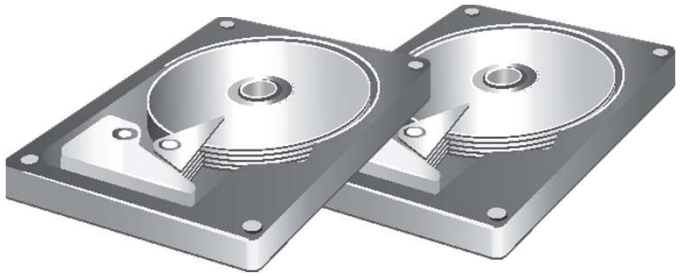
- Shared folders grant network access to their contents
- Folders can be shared, but individual files cannot
- Shared folders can be hidden by creating a share with a $ at the end of the share name
- Accessing a shared folder using the UNC path:
  - \\DC1\Sales (standard share)
  - \\DC1\Sales$ (hidden share)
- Administrative shares are hidden shares that allow administrators access to the root of every volume and special system folders, such as the operating system folder

Permissions Inheritance

- Inheritance is used to manage access to resources without explicitly assigning permissions to each object
- By default, permissions are inherited in a parent/child relationship
- Blocking inheritance:
  - You can block permission inheritance
  - You can apply blocking at the file or folder level
  - You can set blocking on a folder to propagate the new permissions to child objects

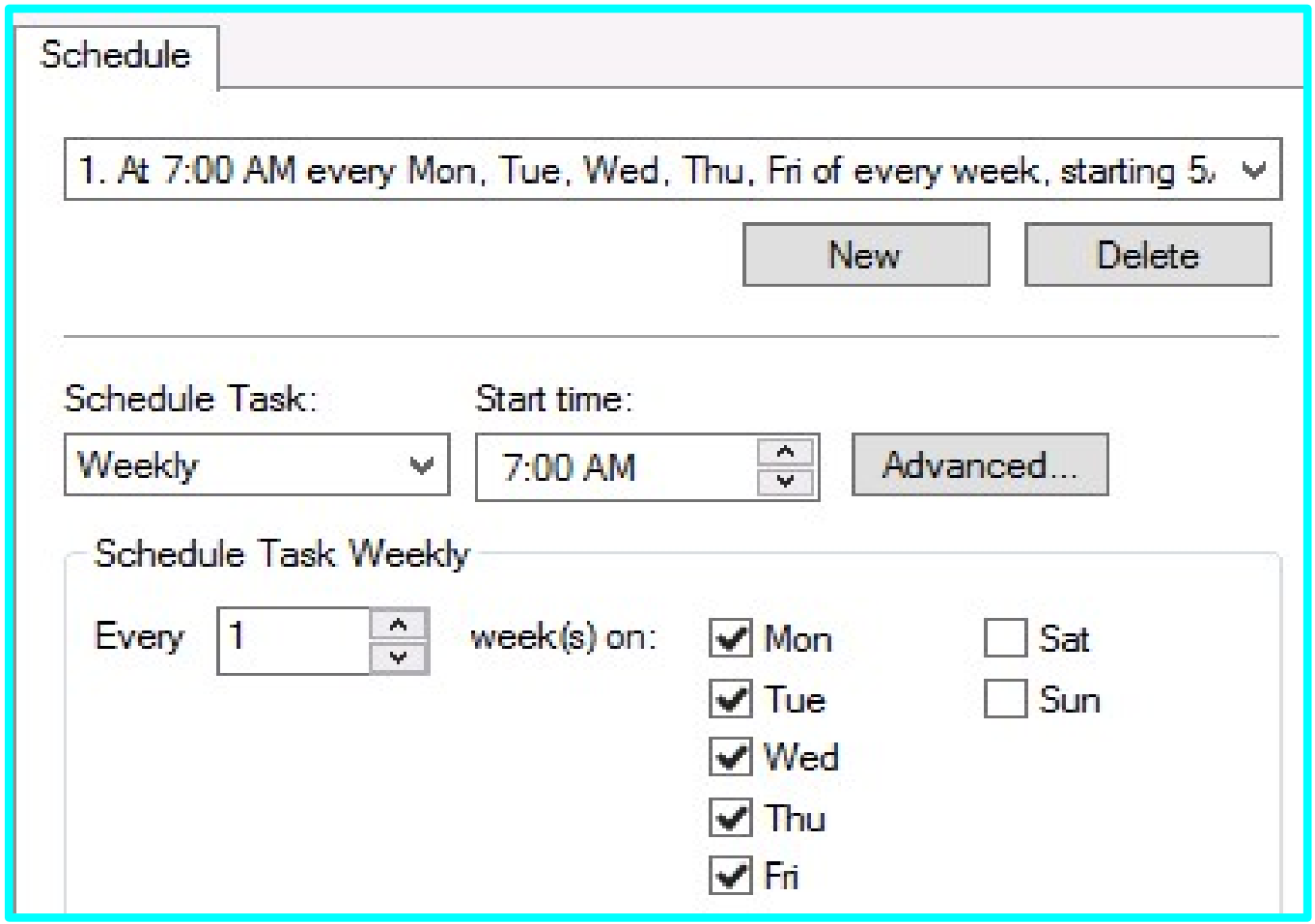
What Are Shadow Copies?

- Allow access to previous versions of files
- Are based on tracking disk changes
  - Disk space is allocated on the same volume
  - When the space is full, older shadow copies are removed
- Are not a replacement for backups
- Are not suitable for recovering databases



Considerations for Scheduling Shadow Copies

Default schedule is 7:00 A.M. and noon

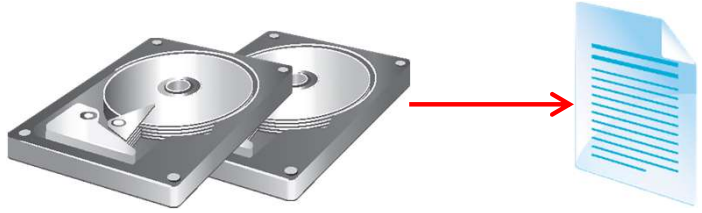


Create a shadow copy schedule based on:

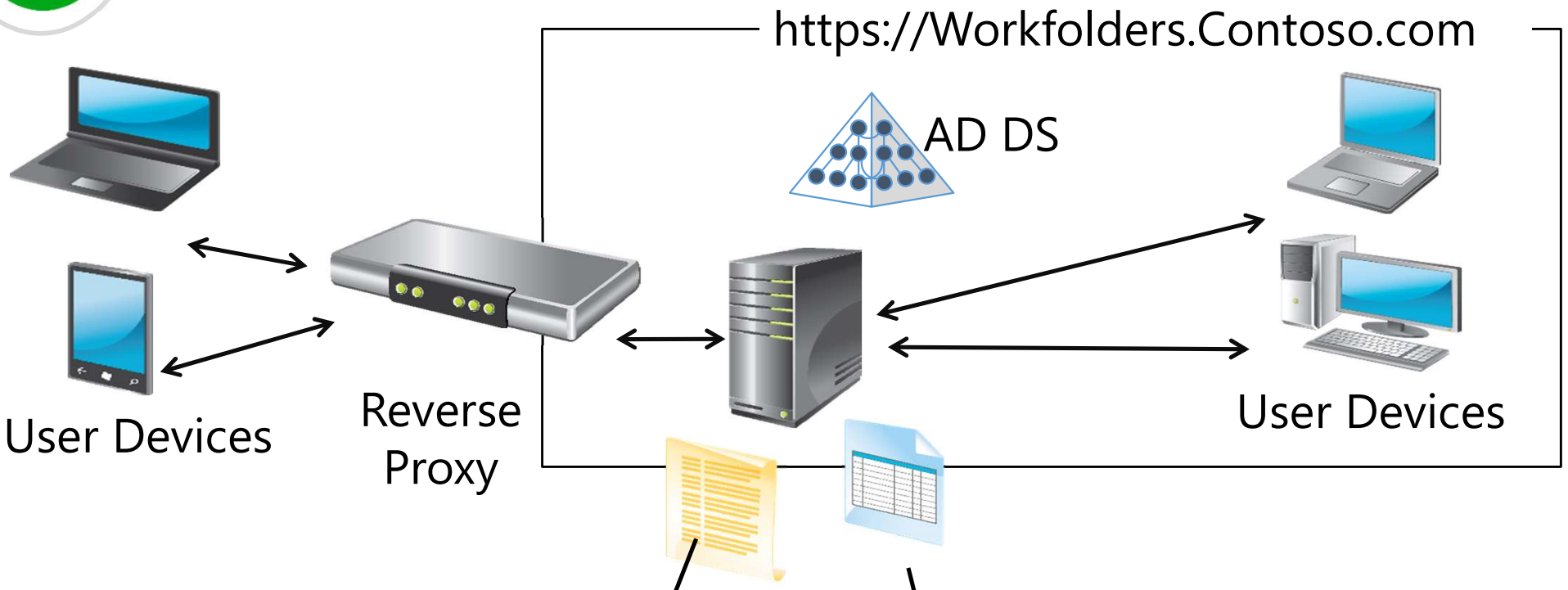
- Capacity of server
- Frequency of changes
- Importance of changes

Restoring Data from a Shadow Copy

- Previous versions are accessible from the Properties dialog box of a file or folder
  - Administrators can restore previous versions directly on the server
  - Users can restore previous versions over the network
- All users can:
  - Restore a file or folder
  - Browse previous versions to select the correct one
  - Copy a file or folder to an alternate location



What Is the Work Folders Role Service?



Security polices to enforce encryption, lock devices, and wipe corporate data off of devices

File management techniques:

- Quotas
- File screens
- Reporting
- Classification

Benefits and Limitations of Work Folders

- The benefits of Work Folders include:
  - Works on domain-joined devices and devices that are not domain-joined
  - Provides a single point of access to work files
  - Provides offline access to work files
  - Synchronizes files for users
  - Enables data encryption
  - Works with existing data management technologies

- The limitations of Work Folders include:
  - Works on Windows Server 2012 R2 and Windows 8.1 only
  - Does not support collaborative scenarios
  - Does not permit selective synchronization of files
  - Does not synchronize multiple file shares

Components of Work Folders

- Software requirements
  - Windows Server 2012 R2 file server
  - Windows 8.1 client
  - SSL certificates
  - NTFS or ReFS volume for both client and server
- Server components
  - Work Folders role service
  - File Server role service
  - Web Server (IIS) role
  - IIS Management Console role service
  - IIS Hostable Web Core role service
- Client components
  - Manual deployment using built-in Control Panel item
  - Automatic deployment via Group Policy, Configuration Manager, or Intune