

REVIEW LESSON

MTA Course: 98-365 Windows Server® Administration Fundamentals

Lesson name: Understanding Active Directory 3.4

Topic: Understand Group Policy

(One 50-minute class period)

File name: WinServerFund_RL_3.4

Lesson Objective

3.4: Understand Group Policy. *This objective may include but is not limited to:* group policy processing; Group Policy Management Console; computer policies; user policies; local policies.

Preparation Details

Prerequisite student experiences and knowledge

This MTA Certification Exam Review lesson is written for students who have learned about Windows® Server Administration fundamentals. Students who do not have the prerequisite knowledge and experiences cited in the objective will find additional learning opportunities using resources such as those listed in the Microsoft® resources and Web links at the end of this review lesson.

Students should have successfully performed a Windows Server 2008® R2 installation.

Students should have successfully performed a domain controller promotion.

Students should have created or modified Local Group Policy and Domain Group Policy Objects.

Instructor preparation activities

- Make copies of Student Activity WinServerFund_SA_3.4

- If available, use two virtual machines with the following specifications:
 - One with Windows 7® Professional installed. This system should be a member of an Active Directory Domain.
 - Microsoft® Remote Server Administration Tools (RSAT) should be installed. RSAT is available for download here:
<http://www.microsoft.com/downloads/details.aspx?FamilyID=7d2f6ad7-656b-4313-a005-4e344e43997d&displayLang=en>
 - One with Windows Server 2008 R2 and Active Directory Domain services installed.

Resources, software, and additional files needed for this lesson

- WinServerFund_PPT_3.4
- WinServerFund_SA_3.4
- WindowsServer2008R2andWindows7GroupPolicySettings.xlsx

Teaching Guide

Essential Vocabulary

Client-Side Extensions (CSE)—policy settings that make changes to the environment when applied to a user or computer.

Group Policy—an infrastructure that allows you to implement specific configurations for users and computers. Group Policy settings are contained in Group Policy Objects (GPOs), which are linked to the following Active Directory® Domain Services containers: sites, domains, or organizational units (OUs). The settings within GPOs are then evaluated by the affected targets, using the hierarchical nature of Active Directory.

Group Policy Management Console (GPMC) —unifies management of Group Policy across the enterprise. The GPMC consists of a MMC snap-in and a set of programmable interfaces for managing Group Policy.

Group Policy Preference—lets you manage drive mappings, registry settings, local users and groups, services, files, and folders. You can use preference items to reduce scripting and the number of custom system images needed, standardize management, and help secure your networks. By using preference item-level targeting, you can streamline desktop management by reducing the number of Group Policy Objects needed.

Group Policy Template (GPT)—a folder that resides in the Sysvol folder. This folder contains all the files that make up a Group Policy Object.

registry—a database repository for information about a computer's configuration. The registry is organized hierarchically as a tree, and it is made up of keys and their sub keys, hives, and entries.

Sysvol—a shared directory which stores the server’s copy of the domain’s public files, that are replicated among all domain controllers in the domain. The Sysvol contains the data in a GPO: the GPT, which includes Administrative Template-based Group Policy settings, security settings, script files, and information regarding applications that are available for software installation.

Winlogon—a component of the Windows operating system that provides interactive logon support. Winlogon is the service in which the Group Policy engine runs.

Lesson Sequence

Activating prior knowledge/lesson staging (Anticipatory Set: 10 minutes)

1. Student prompt (see PowerPoint® slide 3): On a sheet of paper, answer the following questions:
 - a. What are Group Policies?
 - b. What happens when a domain level policy conflicts with an OU policy? Who wins?
2. Give students a few minutes to respond, allowing them to work until they have finished.
3. As time permits, call on a few students to report to the group with their responses.

Lesson activity (40 minutes)

1. Teacher Instruction (20 minutes)
 - Use the included PowerPoint slideshow to review Group Policies.
 - At the end of the slideshow, ask the students to answer the Review Questions. Small-group discussions or a “think-pair-share” approach may be beneficial.
 - Show the question and give the students 1 minute to process the question and come up with answers.
 - Then give the students 2 minutes to discuss answers with a partner.
 - Finally, have each pair of students share their answers with the whole group.
 - Repeat for each additional question.
2. Guided Practice (20 minutes; please see the “Additional notes to the instructor” section regarding this assignment)
 - Students complete WinServerFund_SA_3.4, creating group policy objects and applying group policy settings to their workstation.
 - If time allows, you may review all or part of the worksheet.

Assessment/lesson reflection (10 minutes)

1. At the bottom of the activity's page, have the students write any questions they have or topics about which they would like more assistance.
2. After class, look through the student responses and follow up with any student requiring additional help.

Microsoft resources and Web links

- **Microsoft: Download Details: Group Policy Management Console**
<http://www.microsoft.com/downloads/details.aspx?FamilyID=0a6d4c24-8cbd-4b35-9272-dd3cbfc81887&displaylang=en>
- **Microsoft: Group Policy Settings Reference for Windows and Windows Server**
<http://www.microsoft.com/downloads/details.aspx?FamilyID=18c90c80-8b0a-4906-a4f5-ff24cc2030fb&displaylang=en>
- **Microsoft: Information about new Group Policy preferences in Windows Server 2008**
<http://support.microsoft.com/kb/943729>
- **Microsoft: Identifying Group Policy Client-Side Extensions**
<http://support.microsoft.com/kb/216357>
- **Microsoft: Remote Server Administration Tools for Windows 7**(*<http://www.microsoft.com/downloads/details.aspx?FamilyID=7d2f6ad7-656b-4313-a005-4e344e43997d&displayLang=en>*)**Microsoft TechNet: Active Directory Structure and Group Policy**
<http://technet.microsoft.com/en-us/library/cc978249.aspx>
- **Microsoft TechNet: Group Policy Collection: Group Policy**
[http://technet.microsoft.com/en-us/library/cc779838\(WS.10\).aspx](http://technet.microsoft.com/en-us/library/cc779838(WS.10).aspx)
- **Microsoft TechNet: What's New in Group Policy in Windows Server 2008 R2 and Windows 7**
[http://technet.microsoft.com/en-us/library/dd367853\(WS.10\).aspx](http://technet.microsoft.com/en-us/library/dd367853(WS.10).aspx)
- **Microsoft TechNet: Windows Server Group Policy Home**
<http://technet.microsoft.com/en-us/windowsserver/bb310732.aspx>

Suggested best practices

- Provide demonstrations of the same activities that the students will be doing in order to reinforce the concepts.
- It should be emphasized the importance that GPOs play in the role of a consistent and secure network environment.

Additional notes to the instructor:

- The student activity asks students to modify the local GPO by setting a default home page of *<http://support.microsoft.com>* and then creating a domain GPO that overwrites that policy setting. This is a great example of Group Policy processing due to the order in which policies are read and what happens when policies conflict.