### Lesson 22: Configuring Group Policy Preferences

MOAC 70-411: Administering Windows Server 2012



WILEY

### Overview

- Exam Objective 6.4: Configure Group Policy
   Preferences
- Using Group Policy Preferences

### Using Group Policy Preferences

Lesson 22: Configuring Group Policy Preferences

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# **Group Policy Preferences**

- Group Policy Preferences (GPP) are made up of more than 20 new Group Policy clientside extensions (CSEs) that expand the range of configurable settings in a Group Policy object (GPO).
- Examples of the new GPP extensions include Folder Options, Drive Maps, Printers, Scheduled Tasks, Services, and Start Menu.

### Configuring Preferences Settings

- When you create a GPO with preferences, the preferences options are configured much like using Control Panel and Windows Explorer options.
- When you need to configure Internet Options, for example, the options you configure will look exactly like the Internet Options found in the Windows Control Panel.

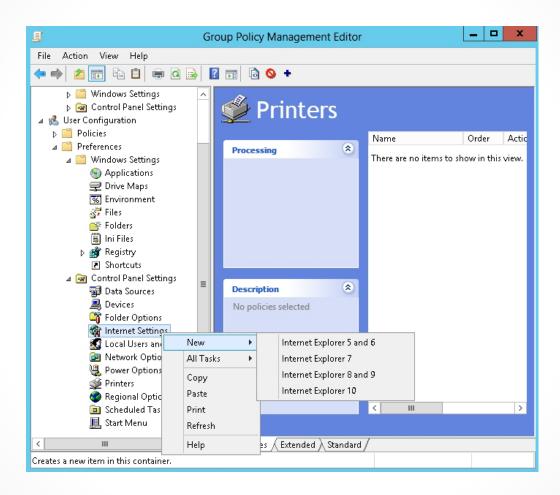
### **Configuring Preferences Settings**



	Internet	t Explorer 10	) Prope	rties	<b>_</b>
Progra	ns	Advanced			Common
General	Security	Privacy	Conte	ent	Connections
Home page -					
40	o create home http://www.go Use cu		e default		on its own line.
-	ith tabs from t	he last session			
🔾 Start w	ith home page				
Tabs ——— Change ho	w webpages a	are displayed in I	abs.		Tabs
Browsing his Delete tem form inforr	iporary files, h	istory, cookies,	saved pa	ssword	ds, and web
Delete	browsing histo	ry on exit			
		C	elete		Settings
Appearance					
Colors	Lang	guages	Fonts		Accessibility
	ОК	Cancel	ļ ļ	.pply	Help

#### Viewing GPP

### **Configuring Preferences Settings**



#### Creating a new preference

## Preferences that Support Editing States

- Start Menu settings
- Regional and Language settings
- Internet options
- Folder options
- Power options (to include Power Schemes)

## Actions for Preferences Settings

Most preferences settings include the following actions:

- **Create**: Create a new preferences setting for the user or computer.
- **Replace**: Delete and re-create a preferences setting for the user or computer. The result is that GPP replaces all existing settings and files associated with the preference item.
- **Update**: Modify an existing preferences setting for the user or computer.
- **Delete**: Remove an existing preferences setting for the user or computer.

### **Preference Actions**

J	Group Policy Management Editor	New Environment Properties
File Action View Help		General Common
🗢 🄿 🖄 🖬 🖬 🖬 🖉 🗟	🛓 🛛 🖬 🖻 💁 🕈	General Common
<ul> <li>Windows Settings</li> <li>Control Panel Settings</li> <li>Set Configuration</li> <li>Policies</li> <li>Preferences</li> <li>Windows Settings</li> <li>Applications</li> <li>Drive Maps</li> <li>Environment</li> <li>Files</li> <li>Folders</li> <li>Ini Files</li> <li>Shortcuts</li> <li>Control Panel Settings</li> <li>Control Panel Settings</li> <li>Data Sources</li> <li>Devices</li> <li>Folder Options</li> <li>Local Users and Groups</li> <li>Network Options</li> <li>Power Options</li> <li>Power Options</li> <li>Printers</li> </ul>	S Convironment Processing Description No policies selected	Original       Action:       Update         Create       Replace         Image: Intersection of the system variable       Delete         Name: Intersection of the system variable       PATH         Value: Intersection       Details         Update will replace the variable in the specified environment. If it doesn't exist, it will be created.
Regional Options	< <u> </u>	OK Cancel Apply Help
I Start Menu		
	Preferences (Extended) Standard	
Environment Variable		

#### Selecting an action for a preference

### **Preference Actions**

<u>I</u>	Group Policy Management Editor	New Environment Properties
File Action View Help		General Common
	[2]      [1]      [2]      [2]      [2]     [2	
<ul> <li>Mindows Settings</li> <li>Mindows Settings</li> <li>Control Panel Settings</li> <li>Suser Configuration</li> <li>Policies</li> <li>Preferences</li> <li>Mindows Settings</li> <li>Applications</li> <li>Drive Maps</li> <li>Environment</li> <li>Files</li> <li>Folders</li> <li>In Files</li> <li>Registry</li> <li>Sontcuts</li> <li>Control Panel Settings</li> <li>Data Sources</li> <li>Devices</li> <li>Folder Options</li> <li>Local Users and Groups</li> <li>Network Options</li> <li>Power Options</li> <li>Power Options</li> <li>Power Options</li> <li>Scheduled Tasks</li> <li>Start Menu</li> </ul>	For the selected       Processing     Name     Order     Actic       Processing     There are no items to show in this view.       Description     No policies selected	Options common to all items         Stop processing items in this extension if an error occurs         Run in logged-on user's security context (user policy option)         Remove this item when it is no longer applied         Apply once and do not reapply         Item-level targeting         Description         OK         Cancel       Apply         Help
III         >           Environment Variable	Preferences (Extended ) Standard /	

#### Configuring common settings

## Configuring Windows Settings

Preference extensions under Windows Settings include:

- Applications extension: Configure settings for applications.
- **Drive Maps extension**: Create, modify, or delete mapped drives, and configure the visibility of all drives.
- **Environment extension**: Create, modify, or delete environment variables.
- Files extension: Copy, modify, or delete files or change the attributes of the files.
- Folders extension: Create, modify, or delete folders.

### Configuring Windows Settings

Preference extensions under Windows Settings include (continued):

- Ini Files extension: Add, replace, or delete sections or properties in configuration settings (.ini) or setup information (.inf) files.
- Network Shares extension: Create, modify, or unshare shared folders.
- **Registry extension**: Copy registry settings and apply them to other computers. Create, replace, or delete registry settings.
- Shortcuts extension: Create, modify, or delete shortcuts.

## Configuring Network Drive Mappings

For Drive Maps extensions, the type of preference item provides a choice of four actions:

- Create
- Replace
- Update
- Delete

#### Create a Mapped Drive Preference Item

New Drive Properties
General Common
Action: Update V
Location:
Reconnect: Label as:
Drive Letter
○ Use first available, starting at:
Connect as (optional)
Password: Confirm password:
Hide/Show this drive Hide/Show all drives
No change     No change
Hide this drive     Hide all drives
O Show this drive
OK Cancel Apply Help

Creating a new drive preference item

## Performing File and Folder Deployment

File Preference item provides a choice of four actions:

- Create
- Replace
- Update
- Delete

#### Copy, Replace, Update, or Delete Files

	New File Properties
General Common	
Action:	Delete
Source file(s):	
Delete file(s):	
	Suppress errors on individual file actions
	Attributes
	☐ Read-only ☐ Hidden ✔ Archive
c	K Cancel Apply Help

Creating a new file preference item

### Create, Replace, Update, and Delete Folders and Their Content

	New Folder Properties
General Common	
Action:	Create 🗸
Path:	C:\Users\Administrator.WIN2012SRV.000\Favo
	Attributes
	Read-only
	Hidden
	Archive
	Delete this folder (if emptied)
	Recursively delete all subfolders (if emptied)
	Delete all files in the folder(s)
	Allow deletion of read-only files/folders
	Ignore errors for files/folders that cannot be deleted
	OK Cancel Apply Help

Creating a folder preference item

## Performing Shortcut Deployment

This type of preference item provides a choice of four actions:

- Create
- Replace
- Update
- Delete

### Create a Shortcut Item

	New Shortcut Properties
General Common	
Action:	Update 🗸
Name:	
Target type:	File System Object 🗸 🗸
Location:	<specify full="" path=""> 🗸</specify>
Target path: Arguments:	
Start in:	
Shortcut key:	None
Run:	Normal Window
Comment:	
Icon file path: Icon index:	0
0	K Cancel Apply Help

Creating a shortcut preference item

### Preference Extensions under Control Panel Settings

- Data Sources extension
- Devices extension
- Folder Options extension
- Internet Settings extension
- Local Users and Groups
   extension
- Network Options
   extension

- Power Options extension
- Printers extension
- Regional Options
   extension
- Scheduled Tasks
   extension
- Services extension
- Start Menu extension

### Configuring Printer Settings

- Similar to adding a printer to Windows, you can add a shared printer, a TCP/IP printer, or a local printer.
- The Printers preference extension allows you to create, configure, and delete local printers, TCP/IP printers, and Shared Printers Printer preference item.

#### Create a New Local Printer Preference Item

	New Local Printer Properties	x
General Common		
Action:	Update	~
Name:		
Port:		~
Printer path:		
	Set this printer as the default printer	
Location:		
Comment:		Ξ.
		_
	OK Cancel Apply Help	2

Creating new local printer preference item

### Create a New TCP/IP Printer Preference Item

1	New TCP/IP Printer Properties
General Port Sett	ings Common
Action:	Update 🗸
	Delete all IP printer connections
IP Address:	0.0.0.0
	Use DNS name
Local Name:	
Printer path:	
	Set this printer as the default printer
Location:	
Comment:	
	OK Cancel Apply Help

Creating new TCP/IP printer preference item

### Create a New Shared Printer Preference Item

Ne	w Shared Printer Properties	x
General Common		
Action:	Update	~
_	printer connections	
Shared printer		
Share path:		
	Set this printer as the default printer	
	only if a local printer is not present	
Map to local port (o	optional)	
Local port:	~	
	Reconnect	
	Unmap all local ports	
ОК	Cancel Apply Help	

Creating new shared printer preference item

## Configuring Custom Registry Settings

The Registry preference extension allows you to:

- Copy registry settings from one computer to another, and to create, replace, or delete an individual registry value.
- Create an empty key, delete a key, or delete all values and subkeys in a key.
- Create collections or folders to organize the Registry preference items.

#### Create a New Registry Preference Item

	New Registry Properties
General Common	]
Action:	Update 🗸
Hive:	HKEY_CURRENT_USER
Key Path:	
Value name	
Default	
Value type:	REG_SZ V
Value data:	
	OK Cancel Apply Help

Creating a registry preference item

### Configuring Power Options

- The Power Options extension allows you to create and configure Power Plan, Power Options, and Power Scheme preference items.
- Power Options and Power Schemes are used with Windows XP and Windows Vista, and Power Plan is used with Windows Vista and later.

#### Create a New Power Options Preference Item

	ew Power Options (Windows XP) Properties
wer Op	tions
	Select the power-saving settings you want to use.
Option	S
	ays show icon on the taskbar
Pro	mpt for password when computer resumes from standby
	able hibernation
Power	buttons
When	I close the lid of my portable computer:
When Stand	I close the lid of my portable computer:
When Stand When	I close the lid of my portable computer: by I press the power button on my computer:
When Stand	I close the lid of my portable computer: by I press the power button on my computer:
When Stand When Shutd	I close the lid of my portable computer: by I press the power button on my computer:
When Stand When Shutd	I close the lid of my portable computer:          I by          I press the power button on my computer:          I own          I press the sleep button on my computer:
When Stand When Shutd When	I close the lid of my portable computer:          I by          I press the power button on my computer:          I own          I press the sleep button on my computer:
When Stand When Shutd When	I close the lid of my portable computer:          I by          I press the power button on my computer:          I own          I press the sleep button on my computer:

Creating a new power options (Windows XP) preference item

#### Create a New Power Scheme Preference Item

ver Scheme Commo	n	
Action: Up	odate	v
Power schemes		
Home/Office Desk		~
🖌 Make this the acti	ve Power Scheme	
Settings for Home/Of	fice Desk power scheme.	
When computer is:	Rlugged in	Bunning on batteries
Turn off monitor:	After 20 mins 🛛 👻	After 5 mins 🛛 🗸
Turn off monitor: Turn off hard disks:	After 20 mins v	After 5 mins V After 10 mins V

Creating a new power scheme preference item

### Create a New Power Plan Preference Item

New Power Plan (At least Windows 7) Properties
Advanced settings Common
Select the power plan that you want to customize, and then choose settings that reflect how you want your computer to manage power.
Action: Update 🗸
Balanced
Set as the active power plan
Additional settings
🗷 Hard disk
I Sleep
Power buttons and lid
PCI Express
Processor power management
T Display
Battery
Restore plan defaults
OK Cancel Apply Help

Creating a new power plan preference item

## Configuring Internet Explorer Settings

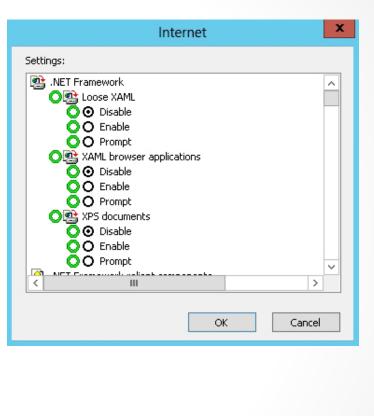
The Internet Settings preference extension allows you to

- Configure specific configuration of Internet settings, or
- Configure an initial configuration of Internet settings, but allow end users to make changes

	New Interr	net Explorer	10 Pro	perti	es	X				
Progra	ms	Advanced			Common					
General	Security	Privacy	Conte	ent	Connection	s				
Home page	o create home	page tabs, type	each ad	dress o	n its own line.	-				
	Use cu	rrent Us	e default		Use new tab					
Startup —						.				
<ul> <li>Start v</li> </ul>	vith tabs from t	ne last session								
🔾 Start v	vith home page									
Tabs						-				
Change ho	ow webpages a	re displayed in t	abs.		Tabs					
Browsing his	tory —									
Delete ten form infori		story, cookies, :	saved pa	ssword	ls, and web					
🗌 Delete	browsing histor	'y on exit								
		D	elete		Settings	]				
Appearance						-				
Colors	Lang	juages	Fonts		Accessibility					
	OK	Cancel		\pply	Help					

Creating new Internet settings preference item

١	lew Interne	et Explorer	10 Prope	erties	x
Programs	5	Advanced		Common	
General	Security	Privacy	Content	Connec	tions
Select a zone t	o view or chan	$\checkmark$	6		
Inter	net		5100	,,,	
excep restri	cone is for Inter ot those listed i cted zones.		[	Sites	]
	for this zone -				
	content - Maximum sa	for websites th	- nat might ha	ave harmful	
🖌 Enable	Protected Mod	de (requires res	tarting Inte	ernet Explorer)	)
		Custom Lev	vel	Default Level	
		Rese	t all zones t	o default level	
	ОК	Cancel	App	ly F	lelp



Configuring Security zones

	ams	Advanced		Common
General	Security	Privacy	Content	Connections
ettings —				
elect a seti	ting for the Inte	ernet zone.		
	Medium			
	privacy policy - Blocks third information v - Restricts fir identifiable in	-party cookies th vithout your impl st-party cookies iformation.	nat use persona icit consent	ally identifiable
<sup></sup> physical	ow websites to location ker	request your		Clear Sites
 Z Turn on I	Pop-up Blocker		[	Settings
nPrivate -				-
🖊 Disable t	oolbars and ext	tensions when Ir	nPrivate Browsi	ng starts

Pop-up Blocker Settings		x
Exceptions Pop-ups are currently blocked. You can allow pop-ups websites by adding the site to the list below.	from specific	
Address of website to allow:	Add	
Allowed sites:	Hud	
	Remove	
	Remove all	
Notifications and filter level		
Play a sound when a pop-up is blocked.		
Show Information Bar when a pop-up is blocked.		
Filter level:		
Medium: Block most automatic pop-ups	~	'
	Close	]

#### Configuring Privacy settings

Interne	t Explorer 10	Propert	ies
Programs	Advanced		Common
General Security	Privacy	Content	Connections
To set up an Inter Setup. Vial-up and Virtual Private		L	Setup
			Add
			Add VPN
			Remove
Choose Settings if you ne server for a connection.	ed to configure a	a proxy	Settings
O Never dial a connectio	n		
🔾 Dial whenever a netw	ork connection is	not presen	t
Always dial my default	t connection		
Current None			Set default
ocal Area Network (LAN)	settings		
LAN Settings do not apply Choose Settings above fo			LAN settings
ОК	Cancel		Jy Help

Local Area Network (LAN) Settings	x
Automatic configuration Automatic configuration may override manual settings. To ensure the use of manual settings, disable automatic configuration.  Automatically detect settings Use automatic configuration script Address:	
Proxy server ✓ Use a proxy server for your LAN (These settings will not apply to dial-up or VPN connections). Address: Port: Advanced Bypass proxy server for local addresses OK Cancel	

Configuring Connections options

	Internet	Explorer 10	Prop	perties		×
General Progran	Security	Privacy Advanced	Cor	ntent	Conne Commo	ections In
	sibility Always expa Enable Caret Move system Play system Reset text si Reset zoom l sing Automatically Close unused Disable scripl	e rendering insta nd ALT text for : Browsing for n n caret with focu	image: ew win us/selei ndows ndows oage la ory and iernet l	s dows and ction cha windows and tabs and tabs yout erro I Favorite	d tabs nges and tabs ors with C es*	
<	1	III			>	F.
Reset Interne Resets Inte condition.	et Explorer sett ernet Explorer'	restart Internet [ tings s settings to the f your browser i	Resto eir defa	ore advar oult	Reset e state.	
[[	OK	Cancel		Apply		Help

Configuring Advanced options

### **Item-Level Targeting Item-level targeting** is used to change the scope of individual preference items so that the preference items apply to only selected users or computers.

# **Targeting Items**

- Computer name
- CPU speed
- Date match
- Disk space
- Domain
- IP address range
- Network connection •
- Operating system

- Portable computer
- RAM
- User
- Terminal session
- LDAP query
- Time range
- WMI query

# **Targeting Items**

- Each targeting item results in a value of either true or false.
- You can apply multiple targeting items to a preference item and select the logical operation (AND or OR) by which to combine each targeting item with the preceding one.
- If the combined value is false, then the settings in the preference item are not applied to the user or computer.

### **Configuring Item-Level Targeting**

New Internet Explorer 10 Properties	<b>v</b>		Targeting Editor
General Security Privacy Content Connections	New	Item 👻 Add Collection 🛛 It	em Options + 🔺 🖈 👗 🛍 🛍 🔻 🗙 Delete 🛛 🥑 Help
Programs Advanced Common	2 <u>©</u>	Battery Present	
		Computer Name	"New Item" button to create a new targeting item
Options common to all items	MHZ	CPU Speed	
Stop processing items in this extension if an error occurs	8	Date Match	
Run in logged-on user's security context (user policy option)		Disk Space	
Remove this item when it is no longer applied	6 <b>9</b>	Domain	
	96	Environment Variable	
Apply once and do not reapply		File Match	
✓ Item-level targeting Targeting	<u>s</u>	IP Address Range	
Description	<b>a</b>	Language	
Description	A	LDAP Query	
<u>^</u>	E E	MAC Address Range	
	缦	MSI Query	
	<b>\$</b>	Network Connection	
	20	Operating System	
	2	Organizational Unit	OK Cancel
	5	PCMCIA Present	
	1	Portable Computer	
	E	Processing Mode	
	4.	RAM	
×	<b>@</b> ]	Registry Match	
	<b>S</b>	Security Group	
	(ji)	Site	
	<b>C</b>	Terminal Session	
	<b>(</b> )	Time Range	
	2	User	
	<u></u>	WMI Query	
OK Cancel Apply Help			

#### Using item-level targeting

### **Configuring Item-Level Targeting**

New Inter	net Explorer 10	Propert	ies 🛛 🗙		
General Security Programs	Privacy C Advanced	ontent	Connections	1	
Options common to all iter					
Stop processing items		n error occ	urs	Y	
Run in logged-on use				New Item 👻	А
Remove this item whe			,	🦉 a batte	
Apply once and do no				🚅 AND ti a 🖓 OR the	
Item-level targeting		Tar	geting		
Description					
				Product	-
				Edition	
				Release	
				Computer Ro An Operating	
				the processin those specific	ig
			~		
ОК	Cancel	Apply	Help		

		Targeting Edite	or	
Vew Item 👻 🖌	Add Collection   Item Option	ns 🕶 🔺 🗮 👗	🗈 📖 🗝 🗙 Delete	🕜 Help
	y is present e IP address range is 172.24.1. operating system is Windows			
Product	Windows 8	~		
Edition Release	Any	~		
Computer Rol	Any	~		
the processing	System targeting item allows computer's operating syster I in the targeting item. <u>Addit</u>	m's product name,	release, edition, or corr	
				OK Canc

Using the targeting editor

## Lesson Summary

- Group Policy Preferences (GPP) are made up of more than 20 new Group Policy client-side extensions (CSEs) that expand the range of configurable settings in a Group Policy object (GPO) that were not available before.
- Although Group Policy settings cannot be modified, GPP writes preferences to the same locations in the registry that the application or operating system feature uses to store the setting.
- GPP can be configured on domain controllers running Windows Server 2008 or higher.
- GPP are supported by client computers running Windows Vista SP2, Windows 7 or higher, or Windows Server 2008 or higher.

# Lesson Summary

- For most preferences settings, you right-click the option that you want to configure, select New, and select the preference item that you want to create.
- An editing state specifies whether the option will be delivered and processed by the client.
- Most preferences settings include the following Actions: create, replace, update, and delete.
- GPP are divided into two sections: Windows Settings and Control Panel Settings. Windows Settings are commonly used configuration settings that are performed in Windows, but are not done in the Control Panel.
- Item-level targeting is used to change the scope of individual preference items so that the preference items apply only to selected users or computers.

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