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Whats new in Group Policy Windows Server 2012 R2

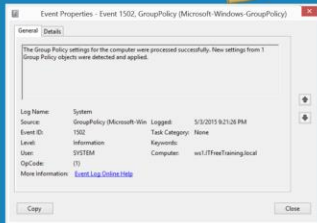
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What's new in Group Policy in Windows Server 2012 R2

In this video, we will be looking at the new Group Policy features in Windows Server 2012 R2. Windows Server 2012 R2 offers feature improvements in 3 different areas for Group Policy.

What's New In Group Policy

IPv6



- IPv6 Support
- Policy caching
- Detailed event logging

What's New in Group Policy

0:15 – The first area of improvement is IPv6 support. Additional support has been added in 3 areas for IPv6 in Group Policy- we'll get to more on that in a few moments.

The next area is Policy Caching. This feature will reduce the amount of time it takes for workstations to log users in. The last feature is detailed event logs. Group Policy is now capable of logging more information in the Event Viewer than before, making it much easier to troubleshoot Group Policy. We will now take a look at each of these features in more depth.

IPv6

- IPv6 support for TCP/IP printers in preferences
- IPv6 Item-level targeting in preferences
- VPN connections

IPv6

0:45 – Windows Server 2012 R2 adds additional support for IPv6. The first new IPv6 feature is an additional option in Group Policy Preferences for IPv6 support. If we now open the Group Policy Management Editor, we can find this new option under User Configuration, Preferences, Control Panel Settings and Printers. Next we will right click Printers and then select New > TCP/IP Printer. Notice that the version displayed by default is IPv4 and that we have to check the box for 'Use an IPv6 address' to enable IPv6 and allow us to enter in an IPv6 address. If you were to have a printer with an IPv6 address, it is just a matter of adding it here.

The next feature is IPv6 item-level targeting in Preferences. This applies to all Group Policy settings and allows them to be targeted towards a specific range of IPv6 addresses. To illustrate this feature, we'll go back to the Group Policy Management Editor. We will enter in an IPv6 address and a printer name as this setting requires them to proceed. Once entered, we will select the common tab at the top of the dialog. This common tab is available for *all* Group Policy preference settings, so the setting we're about to look at it is available for all *other* Group Policy Preference settings. We'll now check the checkbox for 'Item-Level targeting and press the button named 'Targeting'. This new window is the 'Targeting Editor' and it has a large number of settings that can be configured. If we select the 'New Item' drop down, we'll be interested in selecting the 'IP Address Range' option. Like the previous setting, we'll need to select the 'Use IPv6' check box. Once that box is checked, all we need to do is enter the IPv6 address and then the prefix length. If you were utilizing IPv6 on your network, this would allow you to better target Group Policy preferences settings to meet your business requirements.

The last IPv6 setting that we will take a look at is in VPN Connections. This enables the administrator to configure Group Policy settings for IPv6 VPN connections. To access the setting, right click Network Options under User Configuration > Preferences > Control Panel Settings > Network Options. After you right click Network Options, select the 'VPN Connect' under the New menu. Just like before, to change the IPv4 address entry into the IPv6 entry box you will need to select the check box to check it on. That is all the changes for IPv6 in Group Policy and you can see that the new options are easy to use and configure.

Policy Caching

- Stores copy of Group Policy on local computer
- Used during start up making booting faster
 - Recent changes may not be applied

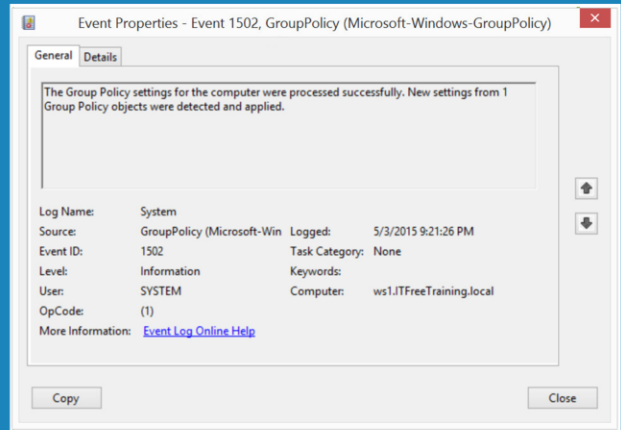


Policy Caching

3:35 – The next new feature is Policy Caching. Policy Caching stores a copy of the group policy settings on the local machine so that it does not need to refer to the server every time. To understand how this works and how it benefits the user login time, consider what happens when a computer starts up. When the computer is booted, a copy of Group Policy is downloaded from the domain controller. This policy is then applied to the workstation. If policy caching is enabled, this process changes. Instead of downloading it during boot, it now stores a copy locally and that local copy is used during start up and log in instead of having to retrieve it from the domain controller every time. This will allow the computer to start up more quickly because it does not need to wait for the Group Policy to be downloaded. The caveat with caching however is that recent changes may not be reflected immediately. The changes will only be applied upon a Group Policy refresh which will happen automatically, but can also be scheduled. The only problem with this is that some changes may require a restart to the workstation before they can take effect. If the Group Policy is downloaded during start up, this restart is not required.

Event Logging

- More detailed event logging
 - Download times
 - Processing times
 - WMI processing



Event Logging

4:40 – The last feature is more detailed event logging. This improved logging includes information on download and processing times as well as WMI processing. This extra information will assist the administrator in resolving any Group Policy issues.

We hope you enjoyed the video from ITFreeTraining and found it informative.

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References

"What's New in Group Policy in Windows Server" [https://technet.microsoft.com/en-us/library/dn265973\(v=ws.11\)](https://technet.microsoft.com/en-us/library/dn265973(v=ws.11))

"Synchronous and Asynchronous Processing" <https://technet.microsoft.com/en-us/library/cc978253.aspx>

Credits

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