Windows PowerShell Get-Help on Cmdlet 'Set-PSSessionConfiguration'

PS:\>Get-HELP Set-PSSessionConfiguration -Full

NAME

Set-PSSessionConfiguration

SYNOPSIS

Changes the properties of a registered session configuration.

SYNTAX

Set-PSSessionConfiguration [-Name] <System.String> [-AccessMode {Disabled | Local | Remote}] [-ApplicationBase <System.String>] [-Force]

[-MaximumReceivedDataSizePerCommandMB <System.Nullable`1[System.Double]>] [-MaximumReceivedObjectSizeMB <System.Nullable`1[System.Double]>] [-ModulesToImport

<System.Object[]>] [-NoServiceRestart] [-PSVersion <System.Version>] [-RunAsCredential <System.Management.Automation.PSCredential>] [-SecurityDescriptorSddl

<System.String>] [-SessionTypeOption <System.Management.Automation.PSSessionTypeOption>] [-ShowSecurityDescriptorUI] [-StartupScript <System.String>]

[-ThreadApartmentState {STA | MTA | Unknown}] [-ThreadOptions {Default | UseNewThread | ReuseThread | UseCurrentThread}] [-TransportOption

<System.Management.Automation.PSTransportOption>] [-UseSharedProcess] [-Confirm] [-WhatIf] [<CommonParameters>]

Set-PSSessionConfiguration [-Name] <System.String> [-AssemblyName] <System.String> [-ConfigurationTypeName] <System.String> [-AccessMode {Disabled | Local | Remote}]

[-ApplicationBase <System.String>] [-Force] [-MaximumReceivedDataSizePerCommandMB <System.Nullable`1[System.Double]>] [-MaximumReceivedObjectSizeMB

<System.Nullable`1[System.Double]>] [-ModulesToImport <System.Object[]>] [-NoServiceRestart] [-PSVersion <System.Version>] [-RunAsCredential

<System.Management.Automation.PSCredential>] [-SecurityDescriptorSddl <System.String>] [-SessionTypeOption <System.Management.Automation.PSSessionTypeOption>]

[-ShowSecurityDescriptorUI] [-StartupScript <System.String>] [-ThreadApartmentState {STA | MTA | Unknown}] [-ThreadOptions {Default | UseNewThread | ReuseThread |

UseCurrentThread}] [-TransportOption <System.Management.Automation.PSTransportOption>] [-UseSharedProcess] [-Confirm] [-WhatIf] [<CommonParameters>]

Set-PSSessionConfiguration [-Name] <System.String> [-AccessMode {Disabled | Local | Remote}] [-Force] [-MaximumReceivedDataSizePerCommandMB

<System.Nullable`1[System.Double]>] [-MaximumReceivedObjectSizeMB <System.Nullable`1[System.Double]>] [-NoServiceRestart] -Path <System.String> [-RunAsCredential

<System.Management.Automation.PSCredential>] [-SecurityDescriptorSddl <System.String>] [-ShowSecurityDescriptorUI] [-StartupScript <System.String>]

[-ThreadApartmentState {STA | MTA | Unknown}] [-ThreadOptions {Default | UseNewThread | ReuseThread | UseCurrentThread}] [-TransportOption

<System.Management.Automation.PSTransportOption>] [-UseSharedProcess] [-Confirm] [-WhatIf] [<CommonParameters>]

DESCRIPTION

The `Set-PSSessionConfiguration` cmdlet changes the properties of the session configurations on the local computer.

Use the Name parameter to identify the session configuration that you want to change. Use the other parameters to specify new values for the properties of the session

configuration. To delete a property value from the configuration, and use the default value, enter an empty string (`""`) or a value of `$Null` for the corresponding

parameter.

Starting in PowerShell 3.0, you can use a session configuration file to define a session configuration. This feature provides a simple and discoverable method for

setting and changing the properties of sessions that use the session configuration. To specify a session configuration file, use the Path parameter of

`Set-PSSessionConfiguration`. For information about session configuration files, see about_Session_Configuration_Files (About/about_Session_Configuration_Files.md).

For information about how to create and modify a session configuration file, see the `New-PSSessionConfigurationFile` cmdlet.

Session configurations define the environment of remote sessions (PSSessions) that connect to the local computer. Every PSSession uses a session configuration. The

session configuration determines the features of the PSSession , such as the modules that are available in the session, the cmdlets that are permitted to run, the

language mode, quotas, and timeouts. The security descriptor of the session configuration determines who can use the session configuration to connect to the local

computer. For more information about session configurations, see about_Session_Configurations (About/about_Session_Configurations.md).

To see the properties of a session configuration, use the `Get-PSSessionConfiguration` cmdlet or the WSMan Provider. For more information about the WSMan Provider,

type `Get-Help WSMan`.

PARAMETERS

-AccessMode <System.Management.Automation.Runspaces.PSSessionConfigurationAccessMode>

Enables and disables the session configuration and determines whether it can be used for remote or local sessions on the computer. The acceptable values for this

parameter are:

- `Disabled`. Disables the session configuration. It cannot be used for remote or local access to the computer. This value sets the Enabled property of the

session configuration (`WSMan:<ComputerName>\PlugIn<SessionConfigurationName>\Enabled`) to `False`. - `Local`. Adds a Network_Deny_All entry to security

descriptor of the session configuration. Users of the local computer can use the session configuration to create a local loopback session on the same

computer, but remote users are denied access. - `Remote`. Removes Deny_All and Network_Deny_All entries from the security descriptors of the session

configuration. Users of local and remote computers can use the session configuration to create sessions and run commands on this computer.

The default value is Remote .

Other cmdlets can override the value of this parameter later. For example, the `Enable-PSRemoting` cmdlet enables all session configurations on the computer and

permits remote access to them, and the `Disable-PSRemoting` cmdlet permits only local access to all session configurations on the computer.

This parameter was introduced in PowerShell 3.0.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-ApplicationBase <System.String>

Specifies the path of the assembly file (`*.dll`) that is specified in the value of the AssemblyName parameter.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-AssemblyName <System.String>

Specifies the assembly name. This cmdlet creates a session configuration based on a class that is defined in an assembly.

Enter the filename or full path of an assembly `.dll` file that defines a session configuration. If you enter only the file name, you can enter the path in the

value of the ApplicationBase parameter.

Required? true

Position? 1

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-ConfigurationTypeName <System.String>

Specifies the type of the session configuration that is defined in the assembly in the AssemblyName parameter. The type that you specify must implement the

System.Management.Automation.Remoting.PSSessionConfiguration class.

This parameter is required when you specify an assembly name.

Required? true

Position? 2

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-Force <System.Management.Automation.SwitchParameter>

Suppresses all user prompts, and restarts the WinRM service without prompting. Restarting the service makes the configuration change effective.

To prevent a restart and suppress the restart prompt, use the NoServiceRestart parameter.

Required? false

Position? named

Default value False

Accept pipeline input? False

Accept wildcard characters? false

-MaximumReceivedDataSizePerCommandMB <System.Nullable`1[System.Double]>

Specifies the limit on the amount of data that can be sent to this computer in any single remote command. Enter the data size in megabytes (MB). The default is

`50`.

If a data size limit is defined in the configuration type that is specified in the ConfigurationTypeName parameter, the limit in the configuration type is used.

The value of this parameter is ignored.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-MaximumReceivedObjectSizeMB <System.Nullable`1[System.Double]>

Specifies the limits on the amount of data that can be sent to this computer in any single object. Enter the data size in megabytes. The default is `10`.

If an object size limit is defined in the configuration type that is specified in the ConfigurationTypeName parameter, the limit in the configuration type is

used. The value of this parameter is ignored.

Required? false

Position? named

Default value 10

Accept pipeline input? False

Accept wildcard characters? false

-ModulesToImport <System.Object[]>

Specifies the modules and snap-ins that are automatically imported into sessions that use the session configuration. Enter the module and snap-in names.

By default, only the Microsoft.PowerShell.Core module is imported into sessions, but unless the cmdlets are excluded, you can use the `Import-Module` and

`Add-PSSnapin` cmdlets to add modules and snap-ins to the session.

The modules specified in this parameter value are imported in additions to modules specified in the session configuration file (`New-PSSessionConfigurationFile`).

However, settings in the session configuration file can hide the commands exported by modules or prevent users from using them.

The modules specified in this parameter value replace the list of modules specified with the ModulesToImport parameter of the `Register-PSSessionConfiguration`

cmdlet.

This parameter was introduced in PowerShell 3.0.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-Name <System.String>

Specifies the name of the session configuration that you want to change.

You cannot use this parameter to change the name of the session configuration.

Required? true

Position? 0

Default value None

Accept pipeline input? True (ByPropertyName)

Accept wildcard characters? false

-NoServiceRestart <System.Management.Automation.SwitchParameter>

Does not restart the WinRM service, and suppresses the prompt to restart the service.

By default, when you run `Set-PSSessionConfiguration`, you are prompted to restart the WinRM service to make the new session configuration effective. Until the

WinRM service is restarted, the new session configuration is not effective.

To restart the WinRM service without prompting, use the Force parameter. To restart the WinRM service manually, use the `Restart-Service` cmdlet.

Required? false

Position? named

Default value False

Accept pipeline input? False

Accept wildcard characters? false

-Path <System.String>

Specifies the path of a session configuration file (`.pssc`), such as one created by the `New-PSSessionConfigurationFile` cmdlet. If you omit the path, the

default is the current directory.

For information about how to modify a session configuration file, see the help topic for the `New-PSSessionConfigurationFile` cmdlet.

This parameter was introduced in PowerShell 3.0.

Required? true

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-PSVersion <System.Version>

Specifies the version of PowerShell in sessions that use this session configuration.

The value of this parameter takes precedence over the value of the PowerShellVersion key in the session configuration file.

This parameter was introduced in PowerShell 3.0.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-RunAsCredential <System.Management.Automation.PSCredential>

Specifies credentials for commands in the session. By default, commands run with the permissions of the current user.

This parameter was introduced in PowerShell 3.0.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-SecurityDescriptorSddl <System.String>

Specifies a different Security Descriptor Definition Language (SDDL) string for the configuration.

This string determines the permissions that are required to use the new session configuration. To use a session

configuration in a session, users must have at

least `Execute(Invoke)` permission for the configuration.

To use the default security descriptor for the configuration, enter an empty string (`""`) or a value of `$Null`. The default is the root SDDL in the `WSMan:`

drive.

If the security descriptor is complex, consider using the ShowSecurityDescriptorUI parameter instead of this one. You cannot use both parameters in the same

command.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-SessionTypeOption <System.Management.Automation.PSSessionTypeOption>

Specifies type-specific options for the session configuration. Enter a session type options object, such as the PSWorkflowExecutionOption object that the

`New-PSWorkflowExecutionOption` cmdlet returns.

The options of sessions that use the session configuration are determined by the values of session options and the session configuration options. Unless

specified, options set in the session, such as with the `New-PSSessionOption` cmdlet, take precedence over options set in the session configuration. However,

session option values cannot exceed maximum values set in the session configuration.

This parameter was introduced in PowerShell 3.0.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-ShowSecurityDescriptorUI <System.Management.Automation.SwitchParameter>

When this parameter is used the cmdlet opens a property sheet that helps you create a new SDDL for the session configuration. The property sheet appears after you

run the `Set-PSSessionConfiguration` command and then restart the WinRM service.

When you set permissions to the configuration, remember that users must have at least `Execute(Invoke)` permission to use the session configuration in a session.

You cannot use the SecurityDescriptorSDDL parameter and this parameter in the same command.

Required? false

Position? named

Default value False

Accept pipeline input? False

Accept wildcard characters? false

-StartupScript <System.String>

Specifies the startup script for the configuration. Enter the fully qualified path of a PowerShell script. The specified script runs in the new session that uses

the session configuration.

To delete a startup script from a session configuration, enter an empty string (`""`) or a value of `$Null`.

You can use a startup script to further configure the user session. If the script generates an error, even a non-terminating error, the session is not created and

the `New-PSSession` command fails.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-ThreadApartmentState <System.Threading.ApartmentState>

Specifies the apartment state of the threading module to be used. Acceptable values are:

- `Unknown`

- `MTA`

- `STA`

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-ThreadOptions <System.Management.Automation.Runspaces.PSThreadOptions>

Specifies the thread options setting in the configuration. This setting defines how threads are created and used when a command is executed in the session. The

acceptable values for this parameter are:

- `Default`

- `ReuseThread`

- `UseCurrentThread`

- `UseNewThread`

The default value is `UseCurrentThread`.

For more information, see PSThreadOptions Enumeration (/dotnet/api/system.management.automation.runspaces.psthreadoptions).

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-TransportOption <System.Management.Automation.PSTransportOption>

Specifies the transport options for the session configuration. Enter a transport options object, such as the WSManConfigurationOption object that the

`New-PSTransportOption` cmdlet returns.

The options of sessions that use the session configuration are determined by the values of session options and the session configuration options. Unless

specified, options set in the session, such as with the `New-PSSessionOption` cmdlet, take precedence over options set in the session configuration. However,

session option values cannot exceed maximum values set in the session configuration.

This parameter was introduced in PowerShell 3.0.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-UseSharedProcess <System.Management.Automation.SwitchParameter>

Use only one process to host all sessions that are started by the same user and use the same session configuration. By default, each session is hosted in its own

process.

This parameter was introduced in PowerShell 3.0.

Required? false

Position? named

Default value False

Accept pipeline input? False

Accept wildcard characters? false

-Confirm <System.Management.Automation.SwitchParameter>

Prompts you for confirmation before running the cmdlet.

Required? false

Position? named

Default value False

Accept pipeline input? False

Accept wildcard characters? false

-WhatIf <System.Management.Automation.SwitchParameter>

Shows what would happen if the cmdlet runs. The cmdlet is not run.

Required? false

Position? named

Default value False

Accept pipeline input? False

Accept wildcard characters? false

<CommonParameters>

This cmdlet supports the common parameters: Verbose, Debug,

ErrorAction, ErrorVariable, WarningAction, WarningVariable,

OutBuffer, PipelineVariable, and OutVariable. For more information, see

about_CommonParameters (https:/go.microsoft.com/fwlink/?LinkID=113216).

INPUTS

None

You can't pipe objects to this cmdlet.

OUTPUTS

Microsoft.WSMan.Management.WSManConfigLeafElement

NOTES

To run this cmdlet, start PowerShell by using the Run as administrator option.

The `Set-PSSessionConfiguration` cmdlet does not change the configuration name and the WSMan provider does not support the `Rename-Item` cmdlet. To change the

name of a session configuration, use the `Unregister-PSSessionConfiguration` cmdlet to delete the configuration and then use the `Register-PSSessionConfiguration`

cmdlet to create and register a new session configuration.

You can use the `Set-PSSessionConfiguration` cmdlet to change the default `Microsoft.PowerShell` and `Microsoft.PowerShell32` session configurations. They are not

protected. To revert to the original version of a default session configuration, use the `Unregister-PSSessionConfiguration` cmdlet to delete the default session

configuration and then use the `Enable-PSRemoting` cmdlet to restore it.

The properties of a session configuration object vary with the options set for the session configuration and the values of those options. Also, session

configurations that use a session configuration file have additional properties.

You can use commands in the `WSMan:` drive to change the properties of session configurations. However, you cannot use the `WSMan:` drive in PowerShell 2.0 to

change session configuration properties that are introduced in PowerShell 3.0, such as OutputBufferingMode . Windows PowerShell 2.0 commands do not generate an

error, but they are ineffective. To change properties introduced in PowerShell 3.0, use the `WSMan:` drive in PowerShell 3.0 or later.

--------- Example 1: Change the thread apartment state ---------

PS C:\> Set-PSSessionConfiguration -Name "MaintenanceShell" -ThreadApartmentState STA

This command changes the thread apartment state in the MaintenanceShell configuration to STA. The change is effective when you restart the WinRM service.

----- Example 2: Create and change a session configuration -----

Register-PSSessionConfiguration -Name "AdminShell" -AssemblyName "C:\Shells\AdminShell.dll" -ConfigurationTypeName "AdminClass"

Set-PSSessionConfiguration -Name "AdminShell" -StartupScript "AdminConfig.ps1"

Set-PSSessionConfiguration -Name "AdminShell" -StartupScript $Null

---------- Example 3: Display results ----------

Set-PSSessionConfiguration -Name "IncObj" -MaximumReceivedObjectSizeMB 20

WSManConfig: Microsoft.WSMan.Management\WSMan::localhost\Plugin\IncObj\InitializationParameters

ParamName ParamValue

--------- ----------

psmaximumreceivedobjectsizemb 20

"Restart WinRM service"

WinRM service need to be restarted to make the changes effective. Do you want to run the command "restart-service winrm"?

[Y] Yes [N] No [S] Suspend [?] Help (default is "Y"): y

--------- Example 3: Display results in different ways ---------

Set-PSSessionConfiguration -Name "MaintenanceShell" -StartupScript "C:\ps-test\Maintenance.ps1"

WSManConfig: Microsoft.WSMan.Management\WSMan::localhost\Plugin\MaintenanceShell\InitializationParameters

ParamName ParamValue

--------- ----------

startupscript c:\ps-test\Mainte...

"Restart WinRM service"

WinRM service need to be restarted to make the changes effective. Do you want to run

the command "restart-service winrm"?

[Y] Yes [N] No [S] Suspend [?] Help (default is "Y"): y

Get-PSSessionConfiguration MaintenanceShell | Format-List -Property *

xmlns : http://schemas.microsoft.com/wbem/wsman/1/config/PluginConfiguration

Name : MaintenanceShell

Filename : %windir%\system32\pwrshplugin.dll

SDKVersion : 1

XmlRenderingType : text

lang : en-US

PSVersion : 2.0

startupscript : c:\ps-test\Maintenance.ps1

ResourceUri : http://schemas.microsoft.com/powershell/MaintenanceShell

SupportsOptions : true

ExactMatch : true

Capability : {Shell}

Permission :

Get-ChildItem WSMan:\localhost\Plugin\MaintenanceShell\InitializationParameters

ParamName ParamValue

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PSVersion 2.0

startupscript c:\ps-test\Maintenance.ps1

RELATED LINKS

Online Version:

https://learn.microsoft.com/powershell/module/microsoft.powershell.core/set-pssessionconfiguration?view=powershell-5.1&WT.mc_id=ps-gethelp

Disable-PSSessionConfiguration

Enable-PSSessionConfiguration

Get-PSSessionConfiguration

New-PSSessionConfigurationFile

New-PSSessionOption

New-PSTransportOption

New-PSWorkflowExecutionOption

Register-PSSessionConfiguration

Test-PSSessionConfigurationFile

Unregister-PSSessionConfiguration

WSMan Provider

about_Session_Configurations

about_Session_Configuration_Files