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

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

NAME

   Set-SmbServerConfiguration

SYNOPSIS

   Sets the Server Message Block (SMB) server configuration.

SYNTAX

       Set-SmbServerConfiguration   [-AnnounceComment <String>] [-AnnounceServer <Boolean>] [-AsJob]
[-AsynchronousCredits <UInt32>] [-AuditSmb1Access <Boolean>]

     [-AutoDisconnectTimeout <UInt32>] [-AutoShareServer <Boolean>] [-AutoShareWorkstation <Boolean>]
[-CachedOpenLimit <UInt32>] [-CimSession <CimSession[]>]

         [-DisableCompression   <Boolean>]   [-DisableSmbEncryptionOnSecureConnection   <Boolean>]
[-DurableHandleV2TimeoutInSeconds <UInt32>] [-EnableAuthenticateUserSharing

   <Boolean>] [-EnableDownlevelTimewarp <Boolean>] [-EnableForcedLogoff <Boolean>] [-EnableLeasing <Boolean>]
[-EnableMultiChannel <Boolean>] [-EnableOplocks <Boolean>]

    [-EnableSecuritySignature <Boolean>] [-EnableSMB1Protocol <Boolean>] [-EnableSMB2Protocol <Boolean>]
[-EnableSMBQUIC <Boolean>] [-EnableStrictNameChecking <Boolean>]

   [-EncryptData <Boolean>] [-EncryptionCiphers <String>] [-Force] [-IrpStackSize <UInt32>] [-KeepAliveTime <UInt32>]
[-MaxChannelPerSession <UInt32>] [-MaxMpxCount

<UInt32>] [-MaxSessionPerConnection <UInt32>] [-MaxThreadsPerQueue <UInt32>] [-MaxWorkItems <UInt32>] [-NullSessionPipes <String>] [-NullSessionShares <String>]

[-OplockBreakWait <UInt32>] [-PendingClientTimeoutInSeconds <UInt32>] [-RejectUnencryptedAccess <Boolean>] [-RequestCompression <Boolean>] [-RequireSecuritySignature

<Boolean>] [-RestrictNamedpipeAccessViaQuic <Boolean>] [-ServerHidden <Boolean>] [-Smb2CreditsMax <UInt32>] [-Smb2CreditsMin <UInt32>] [-SmbServerNameHardeningLevel

{0 | 1 | 2}] [-ThrottleLimit <Int32>] [-TreatHostAsStableStorage <Boolean>] [-ValidateAliasNotCircular <Boolean>] [-ValidateShareScope <Boolean>]

[-ValidateShareScopeNotAliased <Boolean>] [-ValidateTargetName <Boolean>] [-Confirm] [-WhatIf] [<CommonParameters>]

DESCRIPTION

The `Set-SmbServerConfiguration` cmdlet sets the Server Message Block (SMB) Service configuration. For more information on SMB server and protocol specifications, see

Overview of file sharing using the SMB 3 protocol in Windows Server (/windows-server/storage/file-server/file-server-smb-overview)and [MS-SMB2]:Server Message Block

(SMB) Protocol Versions 2 and 3 (/openspecs/windows_protocols/ms-smb2/5606ad47-5ee0-437a-817e-70c366052962).

> [!NOTE] > - The EncryptionCiphers parameter is available beginning with 2022-06 Cumulative Update for >   Microsoft server operating system version 21H2 for

x64-based Systems >   (KB5014665 (https://support.microsoft.com/help/5014665)), and Cumulative Update for Windows 11, >   version 22H2 (KB5014668

(https://support.microsoft.com/help/5014668)). > > - The DisableCompression and RequestCompression parameters are available beginning with >   2022-08 Cumulative

Update for Microsoft server operating system version 21H2 for x64-based >   Systems (KB5016693 (https://support.microsoft.com/help/5016693)), and Cumulative Update

for >   Windows 11, version 22H2 (KB5016691 (https://support.microsoft.com/help/5016691)).

PARAMETERS

-AnnounceComment <String>

Specifies the announce comment string.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-AnnounceServer <Boolean>

   Indicates that this server announces itself by using browser announcements.

   Required?   false

   Position?   named

   Default value   None

   Accept pipeline input?   False

   Accept wildcard characters? false

-AsJob [<SwitchParameter>]

   Runs the cmdlet as a background job. Use this parameter to run commands that take a long time to complete.

   Required?   false

   Position?   named

   Default value   False

   Accept pipeline input?   False

   Accept wildcard characters? false

-AsynchronousCredits <UInt32>

   Specifies the asynchronous credits.

   Required?   false

   Position?   named

   Default value   None

   Accept pipeline input?   False

   Accept wildcard characters? false

-AuditSmb1Access <Boolean>

Enables auditing of SMB version 1 protocol in Windows Event Log.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-AutoDisconnectTimeout <UInt32>

Specifies the auto disconnect time-out.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-AutoShareServer <Boolean>

Indicates that the default server shares are shared out.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-AutoShareWorkstation <Boolean>

Indicates whether the default workstation shares are shared out.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-CachedOpenLimit <UInt32>

Specifies the maximum number of cached open files.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-CimSession <CimSession[]>

Runs the cmdlet in a remote session or on a remote computer. Enter a computer name or a session object, such as the output of a New-CimSession

(/powershell/module/cimcmdlets/new-cimsession)or   Get-CimSession (/powershell/module/cimcmdlets/get-cimsession)cmdlet. The default is the current session on the

local computer.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-DisableCompression <Boolean>

Indicates that the SMB server should never compress files even if client or application requested it.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-DisableSmbEncryptionOnSecureConnection <Boolean>

Specifies that SMB encryption will also be used if configured on the SMB server. By default, QUIC encryption only is used in order to avoid double encryption

affecting performance unnecessarily. If a client requires SMB encryption using `Set-SmbClientConfiguration -ForceSMBEncryptionOverQuic $true` then the

DisableSmbEncryptionOnSecureConnection value is ignored and SMB encryption occurs.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-DurableHandleV2TimeoutInSeconds <UInt32>

Specifies the durable handle v2 time-out period, in seconds.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-EnableAuthenticateUserSharing <Boolean>

Indicates whether authenticate user sharing is enabled.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-EnableDownlevelTimewarp <Boolean>

Indicates whether down-level timewarp support is disabled.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-EnableForcedLogoff <Boolean>

Indicates whether forced logoff is enabled.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-EnableLeasing <Boolean>

Indicates whether leasing is disabled.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-EnableMultiChannel <Boolean>

Indicates whether multi-channel is disabled.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-EnableOplocks <Boolean>

Indicates whether the opportunistic locks are enabled.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-EnableSecuritySignature <Boolean>

Indicates whether the security signature is enabled.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-EnableSMB1Protocol <Boolean>

Indicates whether the SMB1 protocol is enabled.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-EnableSMB2Protocol <Boolean>

Indicates whether the SMB2 protocol is enabled.

Required?   false

    Position?   named

    Default value   None

    Accept pipeline input?   False

    Accept wildcard characters? false

-EnableSMBQUIC <Boolean>

    Specifies that the SMB over QUIC protocol is enabled.

    Required?   false

    Position?   named

    Default value   None

    Accept pipeline input?   False

    Accept wildcard characters? false

-EnableStrictNameChecking <Boolean>

    Indicates whether the server should perform strict name checking on incoming connects.

    Required?   false

    Position?   named

    Default value   None

    Accept pipeline input?   False

    Accept wildcard characters? false

-EncryptData <Boolean>

    Indicates whether the sessions established on this server are encrypted.

    Required?   false

    Position?   named

    Default value   None

    Accept pipeline input?   False

    Accept wildcard characters? false

-EncryptionCiphers <String>

Specifies the encryption ciphers used by the SMB server and the preferred order.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-Force [<SwitchParameter>]

Forces the command to run without asking for user confirmation.

Required?   false

Position?   named

Default value   False

Accept pipeline input?   False

Accept wildcard characters? false

-IrpStackSize <UInt32>

Specifies the default IRP stack size.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-KeepAliveTime <UInt32>

Specifies the keep alive time.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-MaxChannelPerSession <UInt32>

Specifies the maximum channels per session.

  Required?   false

  Position?   named

  Default value   None

  Accept pipeline input?   False

  Accept wildcard characters? false

-MaxMpxCount <UInt32>

Specifies the maximum MPX count for SMB1.

  Required?   false

  Position?   named

  Default value   None

  Accept pipeline input?   False

  Accept wildcard characters? false

-MaxSessionPerConnection <UInt32>

Specifies the maximum sessions per connection.

  Required?   false

  Position?   named

  Default value   None

  Accept pipeline input?   False

  Accept wildcard characters? false

-MaxThreadsPerQueue <UInt32>

Specifies the maximum threads per queue.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-MaxWorkItems <UInt32>

   Specifies the maximum SMB1 work items.

   Required?   false

   Position?   named

   Default value   None

   Accept pipeline input?   False

   Accept wildcard characters? false

-NullSessionPipes <String>

   Specifies the null session pipes.

   Required?   false

   Position?   named

   Default value   None

   Accept pipeline input?   False

   Accept wildcard characters? false

-NullSessionShares <String>

   Specifies the null session shares.

   Required?   false

   Position?   named

   Default value   None

   Accept pipeline input?   False

   Accept wildcard characters? false

-OplockBreakWait <UInt32>

Specifies how long the create caller waits for an opportunistic lock break.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-PendingClientTimeoutInSeconds <UInt32>

Specifies the pending client time-out period, in seconds.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-RejectUnencryptedAccess <Boolean>

   Indicates whether the client that doesn't support encryption is denied access if it attempts to connect to an encrypted

share.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-RequestCompression <Boolean>

Indicates if SMB server should always request compression even if client or application didn't specify it.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-RequireSecuritySignature <Boolean>

Indicates whether the security signature is required.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-RestrictNamedpipeAccessViaQuic <Boolean>

  Specifies that named pipes are allowed when using SMB over QUIC. A value of `$true` prevents use of named pipes and is the default.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-ServerHidden <Boolean>

Indicates whether the server announces itself.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-Smb2CreditsMax <UInt32>

Specifies the maximum SMB2 credits.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-Smb2CreditsMin <UInt32>

Specifies the minimum SMB2 credits.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-SmbServerNameHardeningLevel <UInt32>

Controls the level of validation that a server performs on the service principal name (SPN) that is provided by the client device when the client establishes a

session using Server Message Block (SMB). The acceptable values are:

- `0`: Don't enforce SPN check.

- `1`: Allow clients who didn't provide the target, but fail those who do provide the target and it

doesn't match. - `2`: Only allow clients who supply matching targets.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-ThrottleLimit <Int32>

Specifies the maximum number of concurrent operations that can be established to run the cmdlet. If this parameter is omitted or a value of `0` is entered, then

Windows PowerShell calculates an optimum throttle limit for the cmdlet based on the number of CIM cmdlets that are running on the computer.

The throttle limit applies only to the current cmdlet, not to the session or to the computer.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-TreatHostAsStableStorage <Boolean>

Indicates whether the host is treated as the stable storage.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-ValidateAliasNotCircular <Boolean>

Indicates whether the aliases that aren't circular are validated.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-ValidateShareScope <Boolean>

Indicates that the existence of share scopes is checked during share creation.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-ValidateShareScopeNotAliased <Boolean>

Indicates whether the share scope being aliased is validated.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-ValidateTargetName <Boolean>

Indicates whether the target name is validated.

Required?   false

Position?   named

Default value   None

Accept pipeline input?   False

Accept wildcard characters? false

-Confirm [<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 [<SwitchParameter>]

Shows what would happen if the cmdlet runs. The cmdlet isn't 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

OUTPUTS

None

NOTES

--------- Example 1: Set the SMB Service configuration ---------

```
Set-SmbServerConfiguration -MaxChannelPerSession 16 -Confirm:$false
```

This command sets the SMB Service configuration without user confirmation.

-------- Example 2: Turn on SMB signing and encryption --------

```
$Parameters = @{

    RequireSecuritySignature = $true

    EnableSecuritySignature = $true

    EncryptData = $true

    Confirm = $false

}
Set-SmbServerConfiguration @Parameters
```

This command turns on SMB signing and encryption without user confirmation. This example uses splatting to pass parameter values from the `$Parameters` variable to

the command. Learn more about Splatting (/powershell/module/microsoft.powershell.core/about/about_splatting).

Example 3: Turn off the default server and workstations shares

```
Set-SmbServerConfiguration -AutoShareServer $false -AutoShareWorkstation $false -Confirm:$false
```

This command turns off the default server and workstations shares without user confirmation.

----------- Example 4: Turn off server announcements -----------

```
Set-SmbServerConfiguration -ServerHidden $false -AnnounceServer $false -Confirm:$false
```

This command turns off server announcements without user confirmation.

------------------- Example 5: Turn off SMB1 -------------------

```
Set-SmbServerConfiguration -EnableSMB1Protocol $false -Confirm:$false
```

This command disables SMB1 on the SMB server without user confirmation.

------------ Example 6: Specify encryption ciphers ------------

Set-SmbServerConfiguration -EncryptionCiphers "AES_128_GCM, AES_256_GCM" -Confirm:$false

This command specifies the encryption ciphers used by the SMB client, and the preferred order without user confirmation.

RELATED LINKS

Online Version:

Get-SmbServerConfiguration

Reset-SmbServerConfiguration