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PowerShell Get-Help on command 'Get-SmbMultichannelConnection'

PS C:\Users\wahid> Get-Help Get-SmbMultichannelConnection

NAME

   Get-SmbMultichannelConnection

SYNOPSIS

   Retrieves the SMB connections made between the SMB client network interfaces

   and the SMB server network interfaces.

SYNTAX

   Get-SmbMultichannelConnection [[-ServerName] <String[]>] [-AsJob] [-CimSession

   <CimSession[]>] [-IncludeNotSelected] [-SmbInstance {Default | CSV | SBL |

   SR}] [-ThrottleLimit <Int32>] [<CommonParameters>]

DESCRIPTION

   The Get-SmbMultichannelConnection cmdlet retrieves the Server Message Block

   (SMB) connections made between the SMB client network interfaces and the SMB

   server network interfaces. This cmdlet provides information about how the SMB

   multi-channel pairs the client and the server network interfaces and which

   pairs are selected to use for the SMB connections.

PARAMETERS

  -AsJob [<SwitchParameter>]

    Runs the cmdlet as a background job. Use this parameter to run commands

    that take a long time to complete.

  -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

    (https://go.microsoft.com/fwlink/p/?LinkId=227967) or

    [Get-CimSession](https://go.microsoft.com/fwlink/p/?LinkId=227966)cmdlet.

    The default is the current session on the local computer.

  -IncludeNotSelected [<SwitchParameter>]

    Indicates the client and server network interface combinations which are

    not selected are used by SMB are also enumerated.

  -ServerName <String[]>

    Specifies that the multi-channel connections made to the given server are

    enumerated.

  -SmbInstance <SmbInstance>

    Specifies the input to this cmdlet. You can use this parameter, or you can

    pipe the input to this cmdlet.

  -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 PowerShellr 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.

<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).

------------------ Example 1: Get connections ------------------

PS C:\>Get-SmbMultichannelConnection

Server Name	Selected	Client IP	Server IP	Client Interface Index	Server Interface Index	Client RSS Capable	Client RDMA Capable
Contoso-SO	True	192.168.102.13	192.168.102.11	15	15	False	True
Contoso-SO	True	192.168.101.13	192.168.101.11	12	12	False	True
Contoso-FS	True	192.168.101.13	192.168.101.22	12	12	False	True
Contoso-FS	True	192.168.102.13	192.168.102.22	15	15	False	True
Contoso-FS1	True	192.168.102.13	192.168.102.22	15	15	False	True
Contoso-FS1	True	192.168.101.13	192.168.101.22	12	12	False	True

This command retrieves the SMB connections made between the SMB client network interfaces and the SMB server network interfaces.

------- Example 2: Get connections for a specific server -------

```
PS C:\>Get-SmbMultichannelConnection -ServerName "Contoso-SO"

Server Name    Selected    Client IP       Server IP      Client
Server      Client RSS    Client RDMA
                                     Interface
Interface    Capable     Capable
                                     Index
Index
-----------    --------     ---------     ---------    --------------
-------------- -------------- --------------
Contoso-SO    True         192.168.102.13 192.168.102.11 15          15
        False        True
Contoso-SO    True         192.168.101.13 192.168.101.11 12          12
        False        True
```

This command retrieves the SMB connections made between the SMB client network

interfaces and the SMB server network interfaces for the SMB server named

Contoso-SO.

Example 3: Get properties for connections for a specific server

```
PS C:\>Get-SmbMultichannelConnection -ServerName "Contoso-SO" | Select
-Property *
ClientInterfaceFriendlyName : RDMA2
ClientInterfaceIndex     : 15
ClientIpAddress          : 192.168.102.13
ClientLinkSpeed          : 32000000000
ClientRdmaCapable        : True
ClientRSSCapable         : False
CurrentChannels          : 2
Failed              : False
FailureCount          : 0
MaxChannels          : 2
Selected             : True
```

```
ServerInterfaceIndex      : 15

ServerIpAddress           : 192.168.102.11

ServerLinkSpeed           : 32000000000

ServerName                : Contoso-SO

ServerRdmaCapable         : True

ServerRSSCapable          : False

PSComputerName            :

CimClass                  :
ROOT/Microsoft/Windows/SMB:MSFT_SmbMultichannelConnection

CimInstanceProperties     : {ClientInterfaceFriendlyName,
ClientInterfaceIndex, ClientIpAddress, ClientLinkSpeed...}

CimSystemProperties       :
Microsoft.Management.Infrastructure.CimSystemProperties


ClientInterfaceFriendlyName : RDMA1

ClientInterfaceIndex      : 12

ClientIpAddress           : 192.168.101.13

ClientLinkSpeed           : 32000000000

ClientRdmaCapable         : True

ClientRSSCapable          : False

CurrentChannels           : 2

Failed                    : False

FailureCount              : 0

MaxChannels               : 2

Selected                  : True

ServerInterfaceIndex      : 12

ServerIpAddress           : 192.168.101.11

ServerLinkSpeed           : 32000000000

ServerName                : Contoso-SO

ServerRdmaCapable         : True

ServerRSSCapable          : False

PSComputerName            :

CimClass                  :
```

ROOT/Microsoft/Windows/SMB:MSFT_SmbMultichannelConnection

CimInstanceProperties   : {ClientInterfaceFriendlyName,
ClientInterfaceIndex, ClientIpAddress, ClientLinkSpeed...}
CimSystemProperties   :
Microsoft.Management.Infrastructure.CimSystemProperties

This command retrieves all of the information about the SMB connections made
between the SMB client network interfaces and the SMB server network
interfaces for the SMB server named Contoso-SO.

----- Example 4: Get all connections for a specific server -----


```
PS C:\>Get-SmbMultichannelConnection -ServerName "Contoso-SO"
-IncludeNotSelected
```

Server Name	Selected	Client IP	Server IP	Client Interface Index	Server Interface Index	Client RSS Capable	Client RDMA Capable
Contoso-SO	True	192.168.102.13	192.168.102.11	15	15	False	True
Contoso-SO	False	192.168.102.13	192.168.102.11	15	15	True	False
Contoso-SO	True	192.168.101.13	192.168.101.11	12	12	False	True
Contoso-SO	False	192.168.101.13	192.168.101.11	12	12	True	False
Contoso-SO	False	192.168.100.13	192.168.100.11	14	14	False	False
Contoso-SO	False	172.30.182.10	192.168.102.11	32	15	False	False

Contoso-SO	False		172.30.182.10	192.168.102.11	32	15
False	False					
Contoso-SO	False		172.30.182.10	192.168.100.11	32	14
False	False					
Contoso-SO	False		172.30.182.10	192.168.101.11	32	12
False	False					
Contoso-SO	False		172.30.182.10	192.168.101.11	32	12
False	False					

This command retrieves the all of the connections made between the SMB client
network interfaces and the SMB server network interfaces for the SMB server
named Contoso-SO.

REMARKS

To see the examples, type: "get-help Get-SmbMultichannelConnection -examples".

For more information, type: "get-help Get-SmbMultichannelConnection -detailed".

For technical information, type: "get-help Get-SmbMultichannelConnection
-full".

For online help, type: "get-help Get-SmbMultichannelConnection -online"