Windows PowerShell Get-Help on Cmdlet 'New-NetNatTransitionConfiguration'

PS:\>Get-HELP New-NetNatTransitionConfiguration -Full

NAME

New-NetNatTransitionConfiguration

SYNOPSIS

Creates an instance of the NAT64 and its associated configuration on a computer.

SYNTAX

New-NetNatTransitionConfiguration [-AsJob] [-CimSession <CimSession[]>] [-Confirm] [-IPv4AddressPortPool <String[]>] [-InboundInterface <String[]>] -InstanceName

<String> [-OutboundInterface <String[]>] [-PolicyStore {PersistentStore | ActiveStore}] [-PrefixMapping <String[]>] [-State {Disabled | Enabled}]

[-TcpMappingTimeoutSeconds <UInt32>] [-ThrottleLimit <Int32>] [-WhatIf] [<CommonParameters>]

DESCRIPTION

The New-NetNatTransitionConfiguration cmdlet creates the NAT64 instance and the associated configuration on a computer.

PARAMETERS

-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

-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.

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

-IPv4AddressPortPool <String[]>

Specifies the list of IPv4 address and port ranges to be used by NAT64 for creating the mappings from IPv6 source address to IPv4 target address. The format is a

comma-separated list of <IPv4 address,Lowport-Highport>. Such as `"10.0.0.2,1024-3388","10.0.0.2,4000-49023"`. The port value must be between 1024 and 65535. The

wildcard character ( ) can be specified to use the whole port range, such as `10.0.0.1, `.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-InboundInterface <String[]>

Sets the interface on which the NAT64 is listening for the matching incoming IPv6 traffic.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-InstanceName <String>

Specifies the instance of the NAT64 which is being created.

Required? true

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-OutboundInterface <String[]>

Sets the interface on which the NAT64 sends the translated IPv4 traffic.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-PolicyStore <PolicyStore>

Specifies to which policy store the NAT64 configuration is applied. The acceptable values for this parameter are:

- PersistentStore

- ActiveStore

If this parameter is not specified, then the cmdlet operates on both active and persistent stores.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-PrefixMapping <String[]>

Sets the list of IPv6 address ranges to be translated by the NAT64. The format is a comma-separated list of <IPv6 prefix,IPv4 subnet>. Such as

`"69:FF9B::/96,0.0.0.0/0","66:FF9B::/96,192.2.0.0/8"`.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-State <State>

Sets the enabled state of the NAT64 configuration.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-TcpMappingTimeoutSeconds <UInt32>

Specifies the lifetime for a TCP mapping after which it is released by the NAT64. The minimum value is 1800 seconds.

The default value is 7200 seconds.

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 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.

Required? false

Position? named

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-WhatIf [<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

OUTPUTS

Microsoft.Management.Infrastructure.CimInstance#root\StandardCimv2\MSFT_NetNatTransitionConfiguration

The `Microsoft.Management.Infrastructure.CimInstance` object is a wrapper class that displays Windows Management Instrumentation (WMI) objects. The path after the

pound sign (`#`) provides the namespace and class name for the underlying WMI object.

NOTES

---------- Example 1: Create a NAT64 configuration ----------

PS C:\>$nat64Prefix = "2009:1:2:3:4:5::/96"

PS C:\> $prefixMapping = "$nat64Prefix,0.0.0.0/0"

PS C:\> $portPool = "33.0.0.1,6000-10000"

PS C:\> New-NetNatTransitionConfiguration -InstanceName "NAT64" -OutboundInterface "corpnet" -PrefixMapping $prefixMapping -IPv4AddressPortPool $portPool

These commands create a NAT64 configuration for the instance named NAT64.

RELATED LINKS

Online Version: https://learn.microsoft.com/powershell/module/networktransition/new-netnattransitionconfiguration?view=windowsserver2022-ps&wt.mc_id=ps-gethelp

Disable-NetNatTransitionConfiguration

Enable-NetNatTransitionConfiguration

Get-NetNatTransitionConfiguration

Get-NetNatTransitionMonitoring

Remove-NetNatTransitionConfiguration

Set-NetNatTransitionConfiguration