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

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

NAME

New-NetLbfoTeam

SYNOPSIS

Creates a new NIC team.

SYNTAX

New-NetLbfoTeam [-Name] <String> [-TeamMembers] <WildcardPattern[]> [[-TeamNicName] <String>] [[-TeamingMode] {Static | SwitchIndependent | Lacp}]

[[-LoadBalancingAlgorithm] {TransportPorts | IPAddresses | MacAddresses | HyperVPort | Dynamic}] [[-LacpTimer] {Slow | Fast}] [-AsJob] [-CimSession <CimSession[]>]

[-Confirm] [-ThrottleLimit <Int32>] [-WhatIf] [<CommonParameters>]

DESCRIPTION

The New-NetLbfoTeam cmdlet creates a new NIC team that consists of one or more network adapters. Teaming network adapters of different speeds is not supported. You

can create a team with network adapters of different speeds, but the network traffic distribution algorithms do not take the speed of each network adapter into

consideration when distributing traffic.

When you create a team, you can specify additional properties such as TeamingMode and LoadBalancingAlgorithm.

You must have administrator rights to use New-NetLbfoTeam .

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

-LacpTimer <LacpTimers>

Specifies how often inter-connected devices exchange LACP protocol data units (PDUs) or control messages.

Required? false

Position? 5

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-LoadBalancingAlgorithm <LBAlgos>

Specifies the load-balancing algorithm the new team uses to distribute network traffic between the interfaces.

You can specify one of the following load balancing algorithms:

- Dynamic. Uses the source and destination TCP ports and the IP addresses to create a hash for outbound traffic. Moves outbound streams from team member to team member as needed to balance team member utilization. When you specify this algorithm with the TeamingMode parameter and the SwitchIndependent value, inbound traffic is routed to a particular team member.

- TransportPorts. Uses the source and destination TCP ports and the IP addresses to create a hash and then assigns the packets that have the matching hash value to one of the available interfaces. When you specify this algorithm with the TeamingMode parameter and the SwitchIndependent value, all inbound traffic arrives on the primary team member.

- IPAddresses. Uses the source and destination IP addresses to create a hash and then assigns the packets that have

the matching hash value to one of the

available interfaces. When you specify this algorithm with the TeamingMode parameter and the SwitchIndependent value, all inbound traffic arrives on the primary

team member.

- MacAddresses. Uses the source and destination MAC addresses to create a hash and then assigns the packets that have the matching hash value to one of the

available interfaces. When you specify this algorithm with the TeamingMode parameter and the SwitchIndependent value, all inbound traffic arrives on the primary

team member.

- HyperVPort. Distributes network traffic based on the source virtual machine Hyper-V switch port identifier. When you specify this algorithm with the TeamingMode

parameter and the SwitchIndependent value, inbound traffic is routed to the same team member as the switch port's outgoing traffic.

Required? false

Position? 4

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-Name <String>

Specifies the name of the new NIC team.

Required? true

Position? 0

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-TeamMembers <WildcardPattern[]>

Specifies the names of the network adapters that are members of the new team. Specify multiple network adapter

names (or wildcard patterns) separated by a comma.

Required? true

Position? 1

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-TeamNicName <String>

Specifies the name of the new team interface. This is the name used to reference the teamed network adapters.

Required? false

Position? 2

Default value None

Accept pipeline input? False

Accept wildcard characters? false

-TeamingMode <TeamingModes>

Specifies the mode of the NIC teaming. You can specify one of the following three teaming modes:

- LACP. Uses the IEEE 802.1ax Link Aggregation Control Protocol (LACP) to dynamically identify links that are connected between the host and a given switch. (This

protocol was formerly known as IEEE 802.3ad draft.)

- Static. Requires configuration on both the switch and the host to identify which links form the team.

- SwitchIndependent. Specifies that a network switch configuration is not needed for the NIC team. Because the network switch is not configured to know about the

interface teaming, the team interfaces can be connected to different switches.

Required? false

Position? 3

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

This cmdlet takes no input objects.

OUTPUTS

MSFT_NetLbfoTeam

This cmdlet produces an MSFT_NetLbfoTeam object, corresponding to the newly created team.

NOTES

---------- Example 1: Create a team ----------

PS C:\> New-NetLbfoTeam -Name "Team1" -TeamMembers "NIC1","NIC2"

This command creates a team named Team1 with two team members named NIC1 and NIC2.

------ Example 2: Create a team with specified properties ------

PS C:\> New-NetLbfoTeam -Name "Team1" -TeamMembers "NIC1","NIC2" -TeamingMode LACP -LoadBalancingAlgorithm HyperVPort

This command creates a team named Team1 that consists of two team members named NIC1 and NIC2. The teaming mode is set to LACP and the load balancing algorithm is set

to HyperVPorts.

-------- Example 3: Create a team in a virtual machine --------

PS C:\> Set-VMNetworkAdapter -VMName <VMname> -AllowTeaming On

PS C:\> New-NetLbfoTeam -Name "Team2" -TeamMembers "NIC1","NIC2"

This set of commands allows teaming in virtual machines by using the AllowTeaming parameter of the Set-VMNetworkAdapter cmdlet and then creates a team named Team2 in

the virtual machine specified by VMName . You must run the following command in the host (parent partition) with administrator rights.

RELATED LINKS

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

Get-NetLbfoTeam

Remove-NetLbfoTeam

Rename-NetLbfoTeam

Set-NetLbfoTeam