

Windows Server® 2022

NIC Teaming (LBFO) Setup Guide

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Introduction

This document provides for setup information of Windows Server 2022 NIC Teaming on Express5800 Series servers.

Latest editions

This document was created based on the information available at the time of its creation. The screen images, messages and procedures may differ from the actual screens, messages and procedures. Substitute as appropriate when content has been modified.

The most recent version of this document, as well as other related documents, is also available for download from the following website.

http://www.58support.nec.co.jp/global/download/w2022/index.html

Setup of Windows Server 2022 NIC Teaming (LBFO)

Set up the network adapter teaming feature as shown below.

Launching the NIC teaming setup tool

- 1. Launch Server Manager.
- 2. Select Local Server.
- In the Properties window, click Enable or Disable for NIC teaming. The NIC teaming setup tool will launch.

NOTE : The NIC teaming setup tool can also be launched by opening the **Run** dialog box, typing <lbfoadmin /server .>, and then pressing the <Enter> key.

Creating a team

Create a team by using the NIC teaming setup tool.

1. In the **Servers** section, select the name of the server to set up.

If there is only one server connected, the name of the server is selected automatically.

- 2. In the Teams section, under Tasks, select New Team. The New Team wizard then starts.
- 3. Type the name of the team to create, and then select the network adapter to include in the team from the **Member adapters** list.
- 4. Click Additional properties.
- 5. Specify the required settings, and then click **OK**.

Teaming mode

| Static Teaming | Configures static aggregation between the NIC and switches. | |
|-----------------------|--|--|
| Switch Independent | Configures teaming on the NIC side without depending on the switch settings. | |
| LACP | Configures dynamic aggregation between the NIC and switches. | |

Load balancing mode

| Address Hash | Distributes the load based on IP addresses and port numbers. |
|--------------|--|
| Hyper-V Port | Distributes the load to each of the virtual switch ports used by the virtual machines. |
| Dynamic | Distributes the load based on IP addresses and port numbers in sending. Distributes the load same to "Hyper-V Port" in receiving. |

Standby adapter

Select one adapter to be set to standby mode from the adapters in the team.

Setting all adapters to active mode is also possible.

Primary team interface

Any VLAN ID can be specified for the primary team interface.

Removing a team

Remove a team by using the NIC teaming setup tool.

- In the Servers section, select the name of the server to set up.
 If there is only one server connected, the name of the server is selected automatically.
- 2. In the **Teams** section, select the team to remove.
- 3. In the Teams section, under Tasks, select Delete.
- 4. The message box to confirm appears, then click **Delete team**.

Notes and restrictions

- NIC teaming on a guest OS is not supported.
- Teaming of Virtual NICs on the host OS is not supported in the Hyper-V environment.
- When STP (Spanning Tree Protocol) is enabled on network switch ports to which network adapters of the team are connected, network communications may be disrupted. Disable STP, or configure "PortFast" or "EdgePort" to the ports.

* About setting the network switch of the connection destination, see the manual of the network switch.

- All NICs in a team must connect to the same subnet.
- Teaming of different speed NICs is not supported.
- Teaming of different vendor's NICs is not supported.
- When teaming is configured in a Network Load Balancing(NLB) environment, you should select multicast mode on the NLB cluster.
- When a team is removed, the following error message may be logged in the system event log. You can safely ignore this error message.

| Level | Error |
|---------------|--|
| Source | Microsoft-Windows-NDIS |
| Event ID | 10317 |
| Task Category | PnP |
| Description | Miniport Microsoft Network Adapter Multiplexor Driver, {xxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx}, had event Network Interface deleted while PNP Device still exists. Note that this event is provided for informational purpose and might not be an error always (Eg: In case of vSwitch which was recently un-installed or a LBFO team was removed) |

In a Windows Server Failover Cluster environment, heartbeat interruption or failover may occur if you
configure Active-Standby teaming. To avoid this, you should configure multiple NICs in Active Mode in
a team so that all the NICs do not fail simultaneously.

- In Hyper-V environments, binding a teaming adapter to the virtual switch is deprecated.
 Please use SET(Switch Embedded Teaming) when you use teaming in combination with a virtual switch.
- The hostname must be 15 characters or less. If it exceeds 16 characters, NIC Teaming will not function correctly.

Document Revision History

| Document revision mistory | | | | |
|---------------------------|--------------|--------------------------------|--|--|
| Date | Revision No. | Notes | | |
| Mar 1, 2022 | 1 | The first edition | | |
| May 24, 2024 | 1.1 | Updated Notes and restrictions | | |
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