LAN Driver
Installation Guide
(Broadcom V15.6a/T7.2/T7.4)

September 2013
808-882328-291-A

Contents

1. Preface

Thank you very much for purchasing our product.

This installation guide explains how to set up the LAN Drivers.

The LAN Drivers is operated on the following the target server and software:

●Target server

Abbreviated designation	Server Production Name	Target LAN boards
Express5800/R120d-1M	NEC Express5800/R120d-1M	Standard network adapters (2x)
Express5800/R120d-2M	NEC Express5800/R120d-2M	Standard network adapters (2x)
Express5800/E110d-1	NEC Express5800/E110d-1	Standard network adapters (2x)
Express5800/GT110d	NEC Express5800/GT110d	Standard network adapters (2x)
Express5800/GT110d-S	NEC Express5800/GT110d-S	Standard network adapters (2x)
Express5800/R110d-1E	NEC Express5800/R110d-1E	Standard network adapters (2x)
Express5800/GT110e	NEC Express5800/GT110e	Standard network adapters (2x)
Express5800/GT110e-S	NEC Express5800/GT110e-S	Standard network adapters (2x)
Express5800/R110e-1E	NEC Express5800/R110e-1E	Standard network adapters (2x)
Express5800/R110d-1M	NEC Express5800/R110d-1M	Standard network adapters (4x)
Express5800/R120d-1E	NEC Express5800/R120d-1E	Standard network adapters (4x)
Express5800/R120d-2E	NEC Express5800/R120d-2E	Standard network adapters (4x)
Express5800/T110d	NEC Express5800/T110d	Standard network adapters (2x)
Express5800/T120d	NEC Express5800/T120d	Standard network adapters (2x)
Express5800/E120d-1	NEC Express5800/E120d-1	Standard network adapters (2x)
Express5800/E120d-M	NEC Express5800/E120d-M	Standard network adapters (2x)
Express5800/T110f-S	NEC Express5800/T110f-S	Standard network adapters (2x)
Express5800/R110f-1E	NEC Express5800/R110f-1E	Standard network adapters (2x)

●Target software

Abbreviated designation	Software Production Name
Windows Server 2008 (32Bit)	Microsoft® Windows Server® 2008 Standard (32Bit) Microsoft® Windows Server® 2008 Enterprise (32Bit)
Windows Server 2008 (64Bit)	Microsoft® Windows Server® 2008 Standard (64Bit) Microsoft® Windows Server® 2008 Enterprise (64Bit)
Windows Server 2008 R2	Microsoft® Windows Server® 2008 R2 Standard Microsoft® Windows Server® 2008 R2 Enterprise

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Windows Server 2012	Microsoft® Windows Server® 2012 Standard Microsoft® Windows Server® 2012 Datacenter

●Optional LAN boards

Model number	Production Name
N8104-132	Dual Port 1000BASE-T Adapter
N8104-133	Quad Port 1000BASE-T Adapter
N8104-134	1000BASE-T Adapter
N8104-135	Dual Port 1000BASE-T Riser Card
N8104-136	Dual Port 10GBASE-T Riser Card
N8104-137	Dual Port 10GBASE SFP+ Riser Card
N8104-138	1000BASE-T Adapter
N8104-141	Dual Port 1000BASE-T Riser Card
N8104-142	Dual Port 10GBASE SFP+ Riser Card
N8104-143	Dual Port 10GBASE-T Riser Card
N8104-128	10GBASE Adapter (SFP+/2ch)

* Above information is base on 2013/09.
  Refer the Server Configuration Guide for the latest information.
  The latest drivers, published on our Support Website
* Refer to the Server Configuration Guide for correspondence Optional LAN Board.

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2. Installation of Windows Driver

This Section explains how to install the Windows Driver.
Make sure “2.7 Notice(P.33)” are confirmed before begins.

In this section “LAN driver” is omission of LAN Controller Utility “BACS (Broadcom Advanced Control Suite)” and “network controller driver”.

Important **Logon the system by administrator account for execute the operation below**

Preparations:

1. Download the 421575-B01_xxxxxx.zip (xxxxxx is an expression of arbitrary numbers).

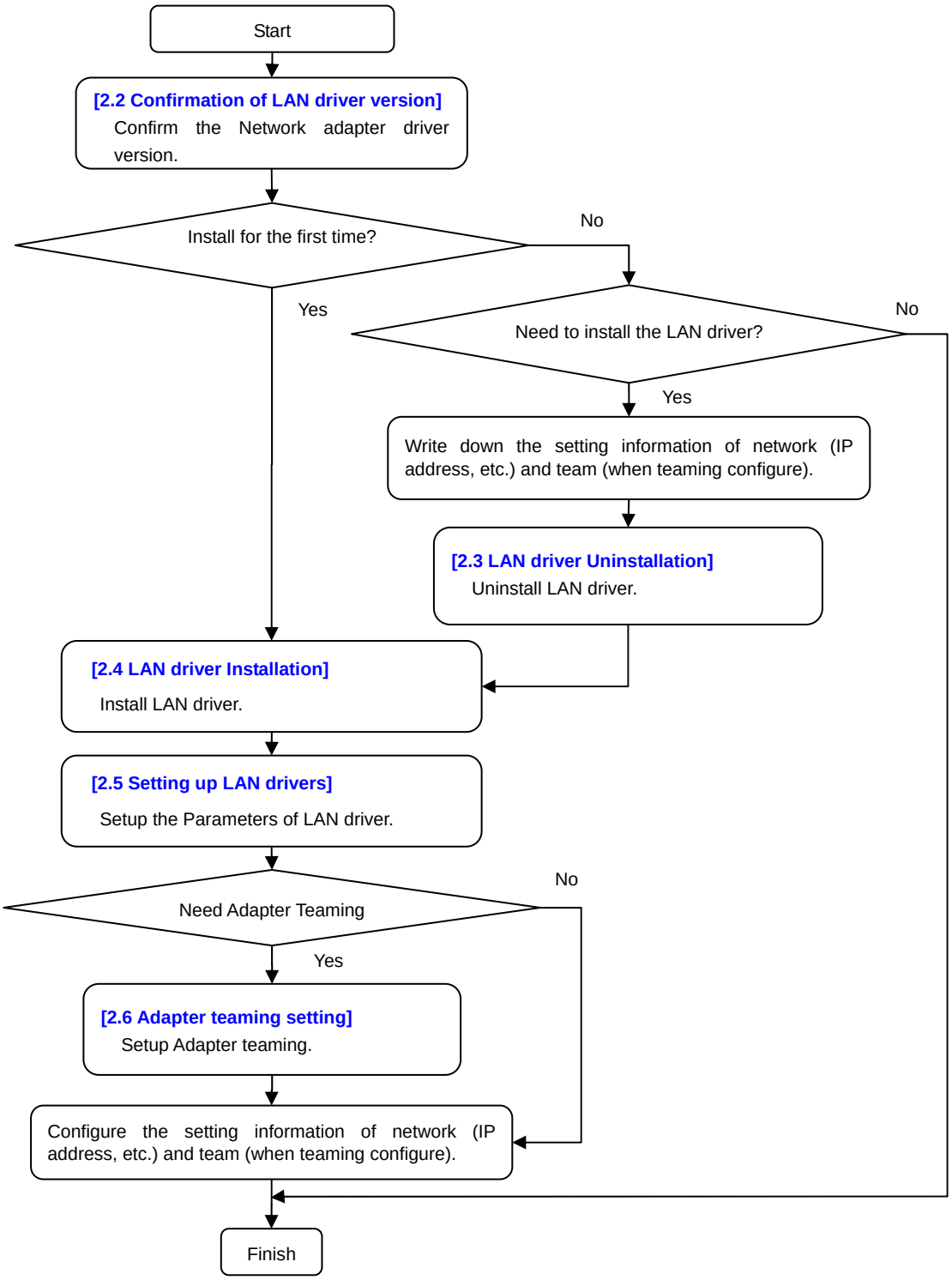
2. Create a “temp” folder directly under the system drive.
   (e.g., **C:\temp**)

3. Unzip “421575-B01_xxxxxx.zip “ to the **temp** folder.
   (e.g., **C:\temp\BCOM156a**)

2.1. The flow of LAN driver installation process

The flow of LAN driver installation process

The installation process is executed by the following flow.



2.2. Confirmation of LAN driver version

Check the driver version by the procedure below. When the version is equal or latest than the following version in step 5 and 7, installation is not necessary.

If the previous driver version is installed, please uninstall the previous driver by the [2.3 LAN driver Uninstallation

(P.10)] procedure first, and then install the attached driver by [2.4 LAN driver Installation (P.12)] procedure.

1. Logon the system with administrative user.
2. Open [Control Panel].
3. Open [Administrative Tools] -> [Computer Management] -> [Device Manager].
4. Open the [Properties] of the appropriate devices existed under [System devices], [Network adapters] and [Storage controllers].
5. Open [Driver] tab and confirm the [Driver Version]. Confirm it is the same version as network controller driver information on the table below.

●1G network controller driver

OS	Device name	Driver file name	Version
Windows Server 2008 (32Bit)	Broadcom NetXtreme Gigabit Ethernet	b57nd60x.sys	15.6.0.10
Windows Server 2008 (64Bit)	Broadcom NetXtreme Gigabit Ethernet	b57nd60a.sys	15.6.0.10
Windows Server 2008 R2	Broadcom NetXtreme Gigabit Ethernet	b57nd60a.sys	15.6.0.10
Windows Server 2012	Broadcom NetXtreme Gigabit Ethernet	b57nd60a.sys	15.6.0.10

●10G network controller driver

OS	Device name	Driver file name	Version
Windows Server 2008 (32Bit)	Broadcom BCM5709C NetXtreme II GigE *1	bxvbdx.sys	7.2.1.0
	Broadcom BCM57711 NetXtreme II 10 GigE Broadcom BCM57810 NetXtreme II 10 GigE	evbdx.sys	7.2.18.0
	Broadcom BCM57711 NetXtreme II 10 GigE (NDIS VBD Client) Broadcom BCM57810 NetXtreme II 10 GigE (NDIS VBD Client) Broadcom BCM5709C NetXtreme II GigE (NDIS VBD Client) *1	bxnd60x.sys	7.2.8.0

	Broadcom BCM57711 NetXtreme II 10 GigE iSCSI Adapter *2	bxois.sys	7.2.2.0
Windows Server 2008 (64Bit)	Broadcom BCM5709C NetXtreme II GigE *1	bxvbda.sys	7.2.1.0
	Broadcom BCM57711 NetXtreme II 10 GigE Broadcom BCM57810 NetXtreme II 10 GigE	evbda.sys	7.2.18.0
	Broadcom BCM57711 NetXtreme II 10 GigE (NDIS VBD Client) Broadcom BCM57810 NetXtreme II 10 GigE (NDIS VBD Client) Broadcom BCM5709C NetXtreme II GigE (NDIS VBD Client) *1	bxnd60a.sys	7.2.8.0
	Broadcom BCM57711 NetXtreme II 10 GigE iSCSI Adapter *2	bxois.sys	7.2.2.0
Windows Server 2008 R2	Broadcom BCM5709C NetXtreme II GigE *1	bxvbda.sys	7.2.1.0
	Broadcom BCM57711 NetXtreme II 10 GigE Broadcom BCM57810 NetXtreme II 10 GigE	evbda.sys	7.2.18.0
	Broadcom BCM57711 NetXtreme II 10 GigE (NDIS VBD Client) Broadcom BCM57810 NetXtreme II 10 GigE (NDIS VBD Client) Broadcom BCM5709C NetXtreme II GigE (NDIS VBD Client) *1	bxnd60a.sys	7.2.8.0
	Broadcom BCM57711 NetXtreme II 10 GigE iSCSI Adapter *2	bxois.sys	7.2.2.0
Windows Server 2012	Broadcom BCM57711 NetXtreme II 10 GigE Broadcom BCM57810 NetXtreme II 10 GigE	evbda.sys	7.4.29.0
	Broadcom BCM57711 NetXtreme II 10 GigE (NDIS VBD Client) Broadcom BCM57810 NetXtreme II 10 GigE (NDIS VBD Client)	bxnd60a.sys	7.4.23.0
	Broadcom BCM57711 NetXtreme II 10 GigE iSCSI Adapter	bxois.sys	7.4.3.0

*1 Broadcom BCM5709C NetXtreme II GigE is 1000GBASE-T, but is included in 10G network controller driver.

*2 Broadcom BCM57711 NetXtreme II 10 GigE iSCSI Adapter is not displayed when you invalidate iSCSI Offload Engine.

6. Double click [Control Panel] -> [Broadcom Control Suite].
   Open [Broadcom Advanced Control Suite].
7. Select [Help] -> [About BACS] in menu bar, show “About BACS” window.
   Make sure indicate “BACS4, Version 15.6.28.0”.

- If the version of network controller driver or BACS is older, you need to install LAN driver by this installation guide.
  Go to [2.3 LAN driver Uninstallation(P.10)] procedure.
- **If 10G network controller driver versions are new or same, you do not need to install 10G network controller driver.**
  Execute the procedure of [In the case of using only 1G network controller] in the [2.3

LAN driver Uninstallation(P.10)] and [2.4 LAN driver Installation(P.12)].

- If “Ethernet Controller” is displayed in [Device Manager] and BACS is not installed, LAN driver is a new installation.
  Go to [2.4 LAN driver Installation(P.12)] procedure.

2.3. LAN driver Uninstallation

Important

- **Logon the system by administrator account for execute the operation below.**
- **If team existed, remove the team first. And if Hyper-V virtual adapter bound, remove the Hyper-V bound first before remove the team.**
  If you do not uninstall the 10G network controller driver, and remove all the team.
- **Make note setting information of network(IP Address etc...) and teaming(when is team environment) and default gateway.**
  After LAN driver install or teaming setup (when was team environment), set it again.

Note

For installing the new LAN driver, go to Step [2.4 LAN driver Installation (P.12)].

(1) BACS(teaming driver) Uninstallation

1. Logon the system with administrative user.
2. Open [Program and Function].
   [Start] -> [Control Panel] -> [Program and Function]
3. Point to the “Broadcom Management Programs” in the list, right click and point to [Uninstall].
   Continue the installation according to the popup message.
4. Indicate the popup message for restart the system, and click [Yes].

Note

For Windows Server 2012 the operating system, go to Step [(2) Network controller driver Uninstallation (P.11)].

(2) Network controller driver Uninstallation

- In the case of using only 1G network controller

1. Logon the system with administrative user.
2. Open [Program and Function] or [Add or Remove Programs].
   [Start] -> [Control Panel] -> [Program and Function]
3. Point to the “ Broadcom Gigabit Integrated Controller ” in the list, right click and point to [Uninstall].
4. Continue the uninstallation according to the popup message.
5. Restart the system.

- In the case of using 1G network controller and 10G network controller

1. Logon the system with administrative user.
2. Open [Program and Function] or [Add or Remove Programs].
   [Start] -> [Control Panel] -> [Program and Function]
3. Point to the “ Broadcom Gigabit Integrated Controller ” in the list, right click and point to [Uninstall].
4. Continue the uninstallation according to the popup message.
5. Point to the “ Broadcom NetXtreme II Driver Installer ” in the list, right click and point to [Uninstall].
6. Continue the uninstallation according to the popup message.
7. Restart the system.

2.4. LAN driver Installation

Important **Logon the system by administrator account for execute the operation below.**

● In the case of using only 1G network controller

1. Logon the system with administrative user.
2. Enter the following command at the command prompt, and then specify the drive letter of System Drive (usually C drive).

   ☐ Windows Server 2008 (32Bit)

   cd C:\temp\BCOM156a\LAN\WS2008x86

   ☐ Windows Server 2008 (64Bit)

   cd C:\temp\BCOM156a\LAN\WS2008x64

   ☐ Windows Server 2008 R2

   cd C:\temp\BCOM156a\LAN\WS2008R2

   ☐ Windows Server 2012

   cd C:\temp\BCOM156a\LAN\WS2012

3. Enter the following, and then press <Enter> key.

   "**INSTALL2.bat**"

4. When the following message appears, restart the system.

   "Installation Completed!"

● In the case of using 1G network controller and 10G network controller

1. Logon the system with administrative user.
2. Enter the following command at the command prompt, and then specify the drive letter of System Drive (usually C drive).

    ☐ Windows Server 2008 (32Bit)

    cd C:\temp\BCOM156a\LAN\WS2008x86

    ☐ Windows Server 2008 (64Bit)

    cd C:\temp\BCOM156a\LAN\WS2008x64

    ☐ Windows Server 2008 R2

    cd C:\temp\BCOM156a\LAN\WS2008R2

    ☐ Windows Server 2012

    cd C:\temp\BCOM156a\LAN\WS2012

3. Enter the following, and then press <Enter> key.

    "**INSTALL.bat**"
4. When the following message appears, restart the system.

    "Installation Completed!"

2.5. Setting up LAN drivers

2.5.1.Setting up common

(1) Setting link speed

Important

- **The transfer rate and duplex mode of the network adapter must be the same as those of the switching hub.**
  Using N8104-128/136/137/142/143 default speed duplex (10Gb Full), there is no problem using switch with [Autonegotiation] speed duplex.

Follow the procedure below to specify the transfer rate and duplex mode.

1. Open the Device Manager.
2. Expand Network Adapters, and then double-click the name of the network adapter you want to set.
   The properties of the network adapter will be displayed.
3. Select the Advanced tab, and then set the Speed & Duplex values to the same as those of the switching hub.
4. Click [OK] in the Network Adapter Properties dialog box.
5. Restart the system.
   Setup is now completed.

(2) Flow Control

It is necessary to set the Flow Control parameter of the network adapter matching to the connected network equipment (switching hub etc.).
Please set Flow Control parameter by the following procedures.

Note

- Server Adapter and link partner must be configured by the same value.
  - Auto : Autonegotiation
    (Default / Recommended of 10G network controller)
    *Only 10G network controller
  - Disable : Disabled
  - Rx & Tx Enabled : Receive & Transmit Enabled
    (Default / Recommended of 1G network controller)
  - Rx Enabled : Receive Enabled
  - Tx Enabled : Transmit Enabled
- If one port is configured All port correspondence must be set to the same value by the step 3 to 5.

1. Open [Control Panel].
2. Open [Administrative Tools] -> [Computer Management] -> [Device Manager].
3. Open [Device Manager] -> [Network Adapter] -> [the setting target adapter] and right click to open the [Properties].
4. Open [Advanced] tab and click [Flow Control] to show [Value].
5. The value can be configures by the down-arrow button.
6. Restart the system.

(3) Jumbo Packet

It is necessary to set the Jumbo MTU parameter of the network adapter matching to the connected network equipment (switching hub etc.).

Please set Jumbo Packet parameter by the following procedures.

Important

- **If N8104-128/134 Flow Control is configure to not Disabled,**
  NEC recommends the following value,
  N8104-128, less than 4000byte ,
  N8104-134, less than 7000byte.
- **Set all Jumbo Packet to the same value to all adapters that composes the team.**

1. Open [Control Panel].
2. Open [Administrative Tools] -> [Computer Management] -> [Device Manager].
3. Open [Device Manager] -> [Network Adapter] -> [the setting target adapter] and right click to open the [Properties].
4. Open [Advanced] tab and click [Jumbo Packet] or [Jumbo Mtu] to show [Value].
5. Change the value by the up-arrow button or down-arrow button. And click [OK].
6. Restart the system.

2.5.2.Setting up Optional LAN boards

(1)Using N8104-128

Important

- **Using Windows Server 2012, you can't set to disable at iSCSI Offload Engine because Broadcom Advanced Control Suite is not installed.**

Using N8104-128 with the server, **iSCSI Offload Engine** must be disabled
Follow the procedure below to set it.

1. Double-click the **Broadcom Control Suite** icon on the Control Panel window.
   Broadcom Advanced Control Suite starts.
2. Set **Filter** to **ALL VIEW**, select **Broadcom BCM57711 NetXtreme II 10 GigE # xx** under **Explorer View** the **Adapter xx (BCM57711 A0) - Port x**.
3. Tab on **Configurations** at the right side screen and then expand **Resource Reservations**.
4. Click the [Configure] button on the **Click the button to configure**.
   The **Hardware and Resource Configuration Wizard** appears.
5. Remove a checkmark from [iSCSI] under **Protocols**, if checked.
   Select [Next], and then click the [Apply] button.
6. When the following message appears, click [OK].

Applying the changes will temporarily interrupt the network connection. The process may take several minutes and the connection will resume afterwards. Do you want to continue?

7. Complete steps 2 to 6 for each N8104-128 network adapter.
   Then, close the **Broadcom Advanced Control Suite**.
8. Restart the system.
   Setup is now completed.

(2) Using N8104-132/133/135/138/141

This following procedure execution is indispensable when using N8104-132/133/135/138/141 or when the following conditions are fulfilled.

- Added the optional LAN boards.
- Changed the mounting position of the optional LAN boards
- Replaced the optional LAN boards.

1. Double-click to the following file.
   - ☐ Windows Server 2008 (32Bit)
     C:\temp\BCOM156a\LAN\WS2008x86\lan\pgdyavd_Disable.vbs
   - ☐ Windows Server 2008 (64Bit)
     C:\temp\BCOM156a\LAN\WS2008x64\lan\pgdyavd_Disable.vbs
   - ☐ Windows Server 2008 R2
     C:\temp\BCOM156a\LAN\WS2008R2\lan\pgdyavd_Disable.vbs
   - ☐ Windows Server 2012
     C:\temp\BCOM156a\LAN\WS2012\lan\pgdyavd_Disable.vbs
2. When the following message appears, click [OK].

Configuration Completed [Option:PopUp RLV Disabled(Action:Done)] Reboot the system

Tips If it shows Action:Non is already set.

3. Restart the system.

Setup is now completed.

2.6. Adapter teaming setting

Important

- **When using Smart Load Balancing and Failover (without Standby Member), be sure to setup LiveLink at creation of team.**
  When using Smart Load Balancing and Failover (with Standby Member), setup for LiveLink is not essential.
- **For remove an adapter teaming, refer to [2.6.4 Procedure for deleting team(P.31)]. Please verifies the following notification for remove an adapters teaming.**
  - **Once an adapter teaming is configured, before replace Mother board or optional LAN boards, removed the adapter teaming first.**
  - **If team existed, remove the team first. And if Hyper-V virtual adapter bound, remove the Hyper-V bound first before remove the team.**
- **Be sure to specify the same Jumbo Mtu (Jumbo Packet) setting to all the adapters that compose a team.**
- **Do not configure the Teaming on Adapter which using iSCSI function.**

2.6.1. About Team Type

You can create three types of load balance teams:

- **Smart Load Balance and Failover (Without standby adapter)**

  All adapters composes in this team will participates to the communication.

  When interference is generated, other adapters that compose the team will continue communicating.

  When the adapter that has caused interference recovers, it returns to the team, and it participates in the communication again.

- **Smart Load Balancing (Auto-Fallback Disable) (With standby adapters)**

  All adapters composes in this team accept standby member will participates to the communication.

  When interference is generated, standby members that compose the team will continue communicating.

  When the adapter that has caused interference recovers, it returns to the team, and continue with standby status.

- **FEC/GEC Generic Trunking**

  The combination of multiple adapters into a single channel to provide greater bandwidth.

  Important

  - **LiveLink is not available for this team mode.**
  - **FEC/GEC modes requires switch support.**

2.6.2.About LiveLink

LiveLink is a feature of BASP (Broadcom Advanced Server Program, BASP is the Broadcom teaming software for the Windows family of operating systems.) that is available only for the Smart Load Balancing type of teaming. The purpose of LiveLink is to detect link loss beyond the switch and to route traffic only through team members that have a LiveLink. This function is accomplished though the teaming software. The teaming software periodically probes (issues a link packet from each team member) one or more specified target network device(s). The probe target(s) responds when it receives the link packet. If a team member does not detect the response within a specified amount of time, this indicates that the link has been lost, and the teaming software discontinues passing traffic through that team member. Later, if that team member begins to detect a response from a probe target, this indicates that the link has been restored, and the teaming software automatically resumes passing traffic through that team member. LiveLink works only with TCP/IP

2.6.3.Setting up team

Important

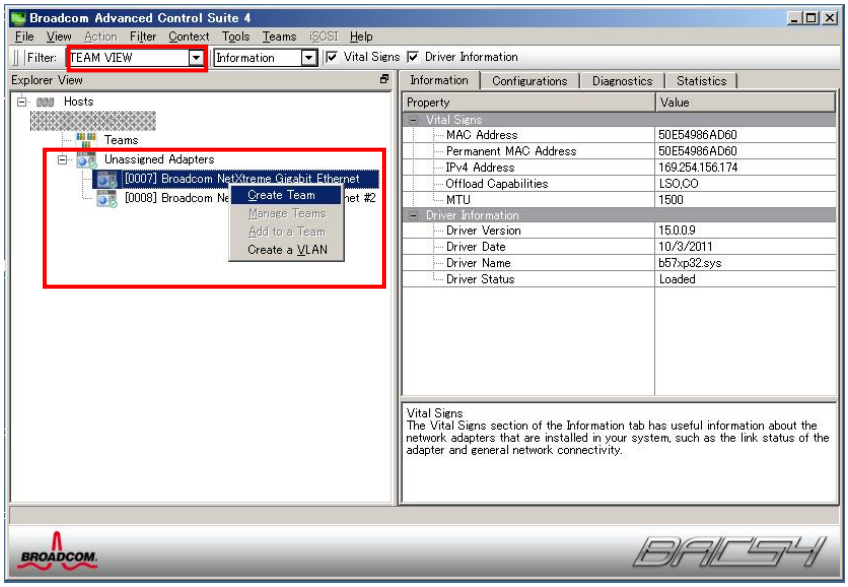
Available combinations of network adapters that compose the team are as follows.

- The number of adapters that composes the team is up to four.
  - Between standard network adapters.
  - Between LAN boards including N8104-132/133/134/135/138/141.
  - A standard network adapter and LAN boards including N8104-132/133/134/135/138/141.
- The number of adapters that composes the team is up to two.
  - Between N8104-128 adapters.
  - Between N8104-136 adapters.
  - Between N8104-137 adapters.
  - Between N8104-142 adapters.
  - Between N8104-143 adapters.
  - N8104-128 adapters and N8104-137 adapters and N8104-142 adapters.

Tips

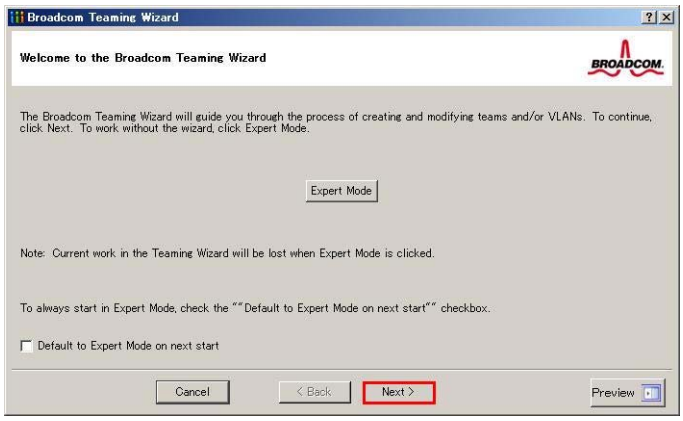
To edit a team, right-click on the BACS team, and then select **Edit Team**. Then refer to step 3 to edit the team.

1. Double-click the [**Broadcom Control Suite**] icon on the Control Panel window.
   Broadcom Advanced Control Suite starts.
2. Set a **Filter** in a **TEAM VIEW**, right-click the adapter to be used for the team, and then select [**Create a Team**] from the short-cut menu.



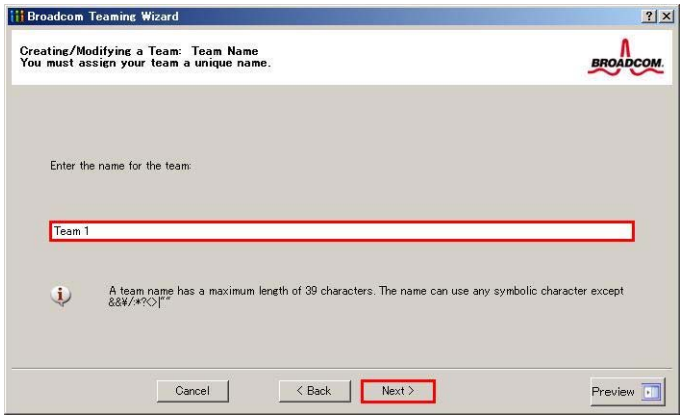
The **Broadcom Teaming wizard** appears.

3. Click [Next].

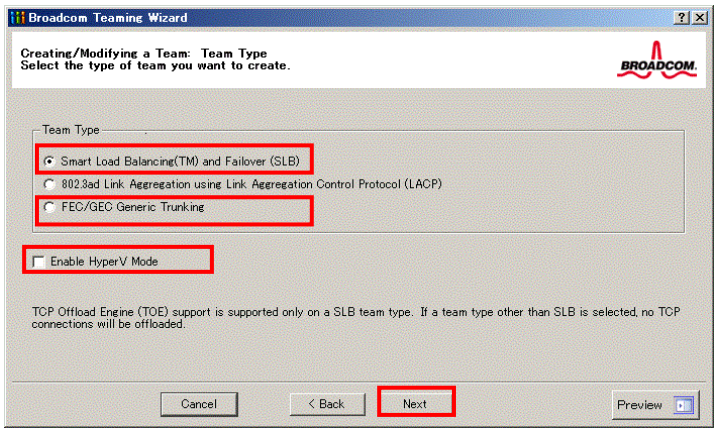


Important	**Do not use Expert Mode.**

4. Enter any name into the team name entry column, and then click [Next].



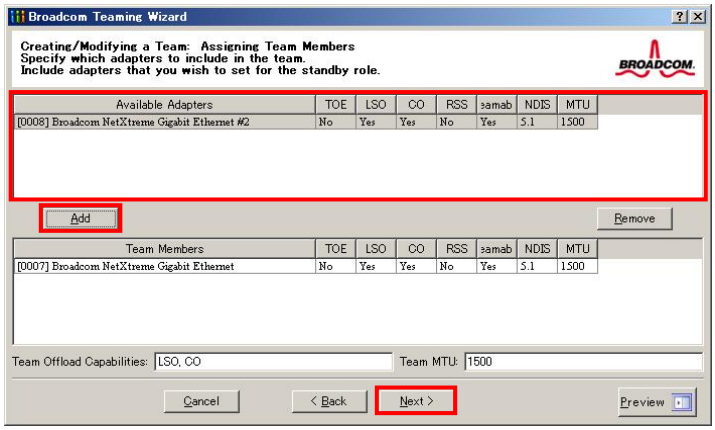
5. Team Type select the type of team you want to create, and then click [Next].



Note

- When the **FEC/GEC Generic Trunking selected**.
  The following message will appears, select [OK].
  "Verify that the network switch connected to the team members is configured correctly for the team type."
- When using Hyper-V, check to "Enable HyperV Mode".

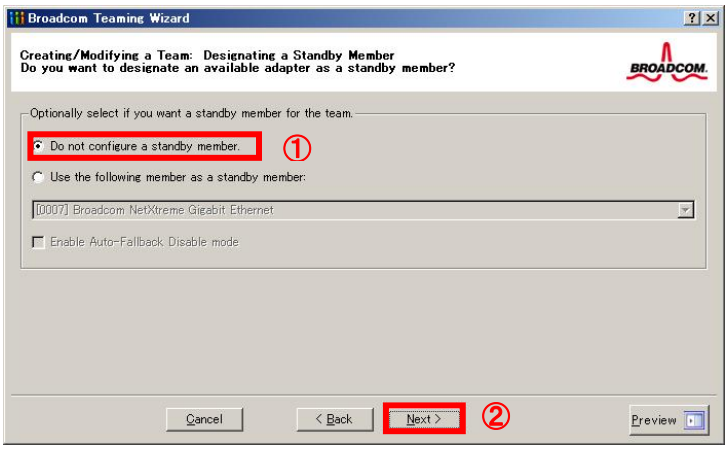
6. Select the adapters that compose the team, click [Add] to add them to the **Team Members** area, and then click [Next].



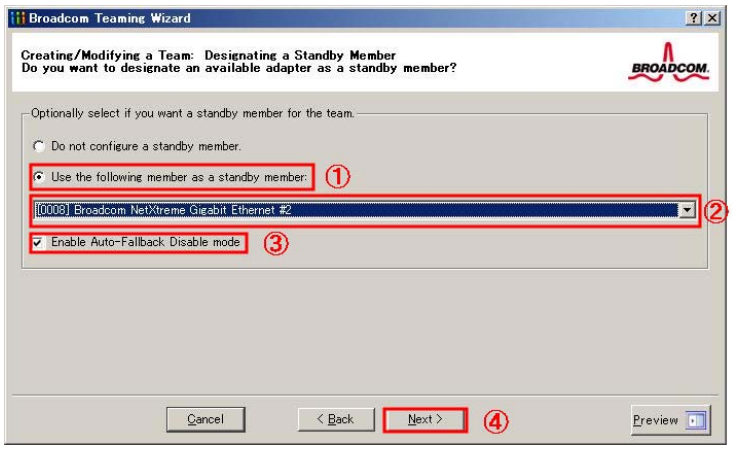
Note When selecting **FEC/GEC Generic Trunking,** skip to step 15.

7. Proceed according to your desired team type.

- **Smart Load Balancing and Failover(**without Standby Member**)**
  - **I.** Select **Do not configure a standby member**.
  - **II.** Click [Next].

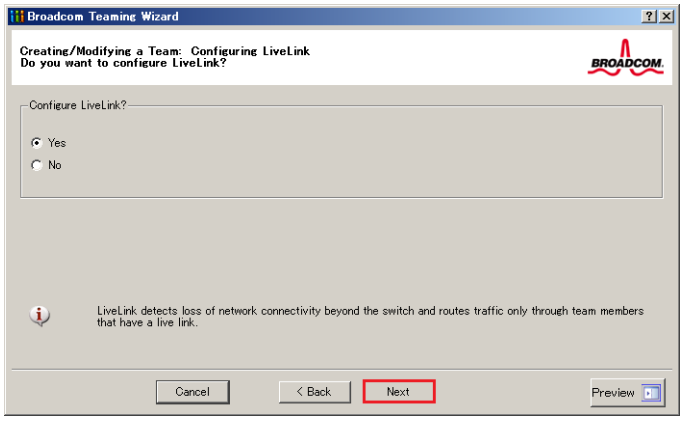


- **Smart Load Balancing (Auto-Fallback Disable)(** with Standby Member**)**
  - **I.** Select **Use the following member as a standby member**.
  - **II.** Select the adapter that is to be a standby member from the drop-down list.
  - **III.** Select **Enable Auto-Fallback Disable mode**.
  - **IV.** Click [NEXT].

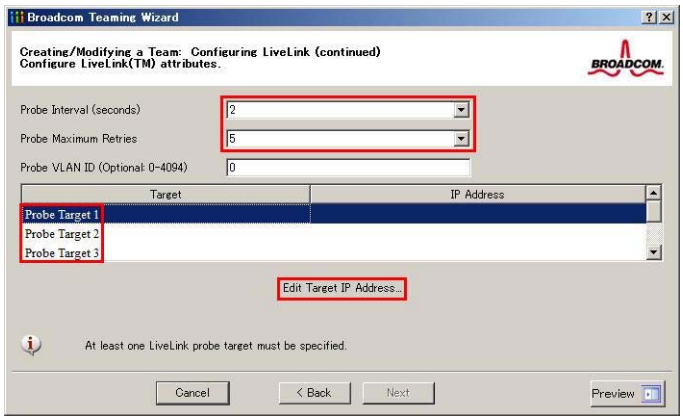


Important **Enable Auto-Fallback Disable mode is cleared while editing the team. Select it again.**

8. When configure LiveLink, select **Yes** and click [Next] and go to step 9.
   When LiveLink is unnecessary, select **No** and click [Next] and then go to step 15.



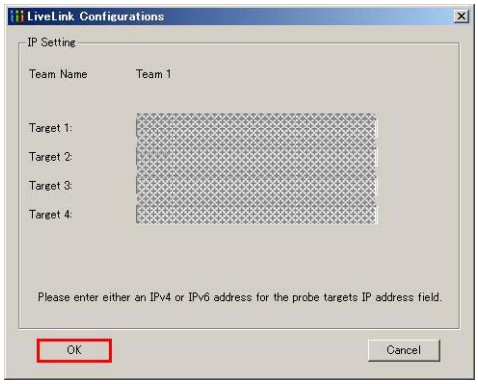
9. You can use the default setting for **Probe interval** and **Probe maximum retries**. If you change these values, select a value from each drop-down list, click the target probe (**Probe Target *xx***), and then click [Edit Target IP Address…].



Tips

- The setting range of Probe interval (link packet transmission interval) is 1 to 60(units: seconds).
- The setting range of Probe maximum retries (link packet retry count) is 1 to 10(times).
- Switching a path upon detection of a communication path error by LiveLink takes (Probe maximum retries + 1) x Probe interval (seconds) at maximum.
  If detects that a link is down, failover occurs immediately after the link goes down.
  It takes the time specified for Probe interval (seconds) to recover from the link going down.
- When using Tagged VLAN, input VLAN ID to “Probe VLAN ID”.

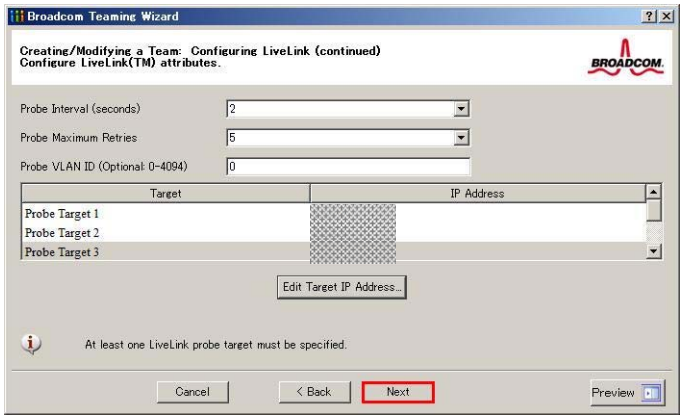
10. In the **Target *xx*** text box, enter the IP address of the alive monitoring server, and then click [OK].



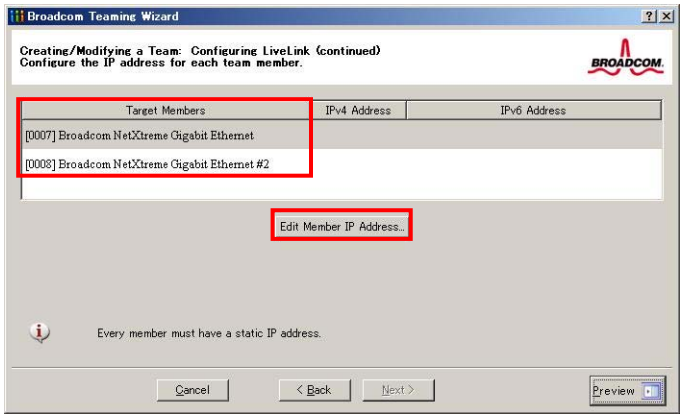
Important

- *Target xx* must be the same broadcast domain as that specified for the data communication IP and LiveLink communication IP (described in step 13). Specify an IP address that exists on the network and with which communication is possible.
- If communication with the IP address specified in *Target xx* is not possible, the team will also be unable to communicate. It is therefore recommended that you specify multiple IP addresses using *Probe Target*. Up to four IP addresses can be specified.

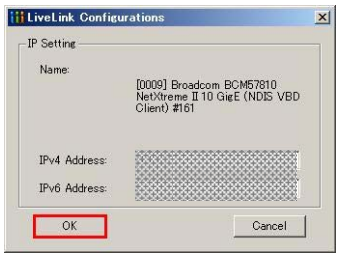
11. Click [Next].



12. Select an adapter from the **Team Members** area, and then click [Edit Member IP Address…].



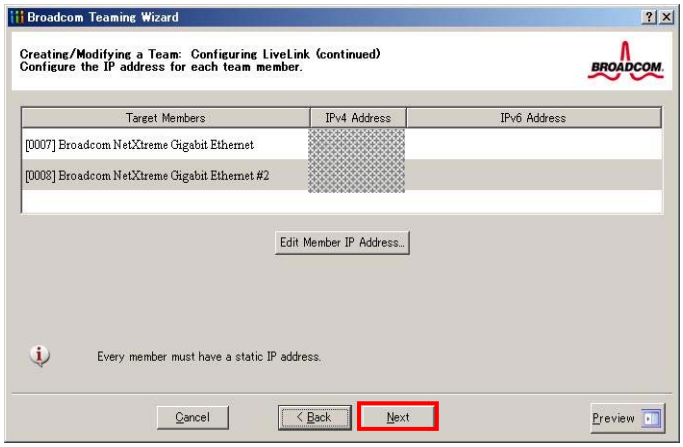
13. Enter the IP address used for LiveLink communication, and then click [OK].



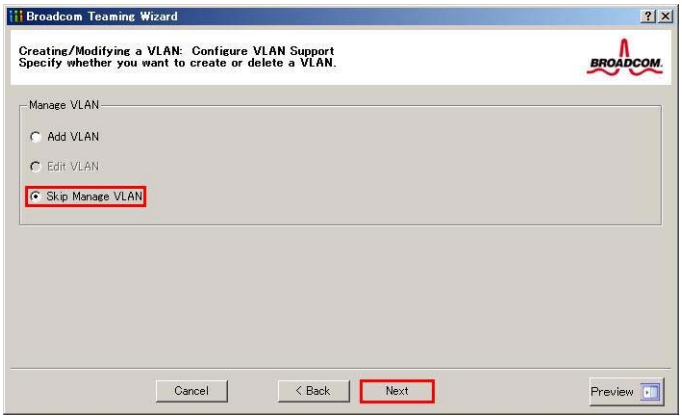
Important

- Be sure to specify an IP address for LiveLink communication for all the adapters that compose the team. The address specified here is the IP address for LiveLink communication. Specify a different IP address for data communication.
- For *Target xx*, specify an IP address that is unique on the network and with which communication is possible.

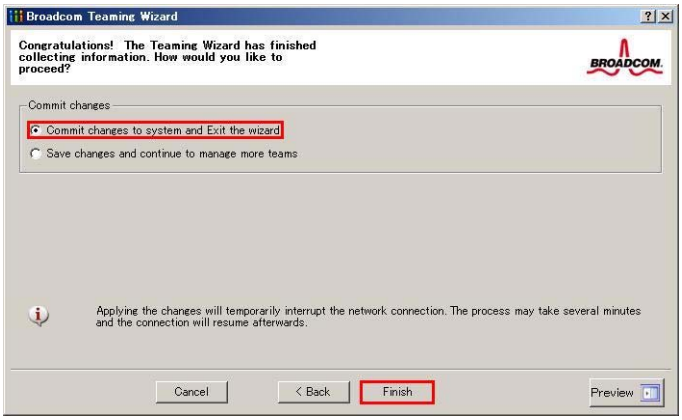
14. Click [Next].



15. Make sure that **Skip manage VLAN** is selected under **Manage VLAN**, and then click [Next].
    It is an example of if you do not want to use the **VLAN**.



16. Make sure that **Commit changes to system and Exit the wizard** is selected under **Commit changes**, and then click [Finish].



Note

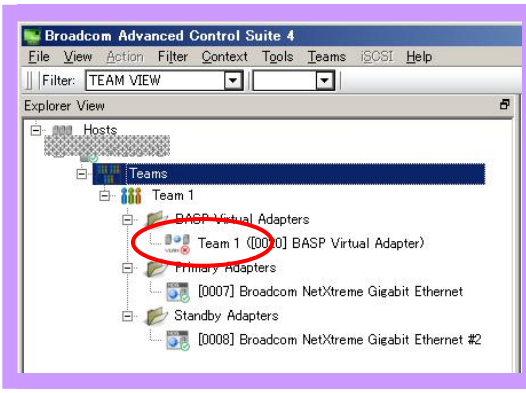
When the message below appears, select [Yes].

"Applying the changes will temporarily interrupt the network connection.
The process may take several minutes and the connection will resume afterwards.
Do you want to continue?"

Tips

After creating a team, if the teaming adapter displays like the following image, perform steps 8 through 14 again and correct the LiveLink settings.

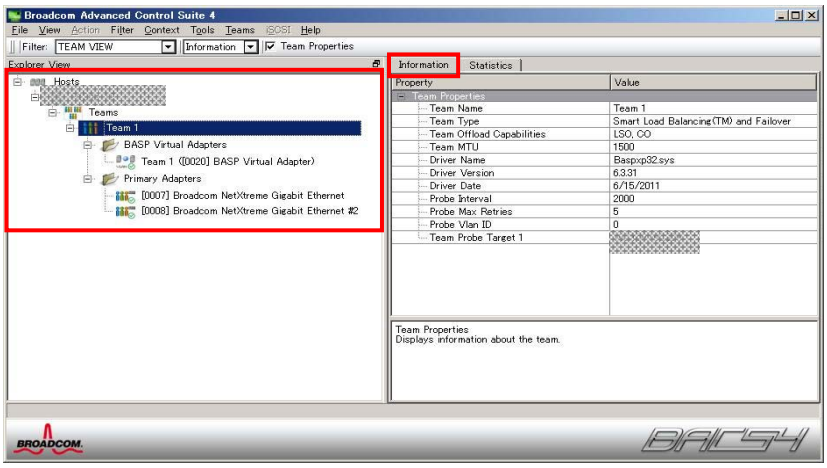
There will displayed as the following when all network adapter which configure team link down. Please confirm the adapter is link up.



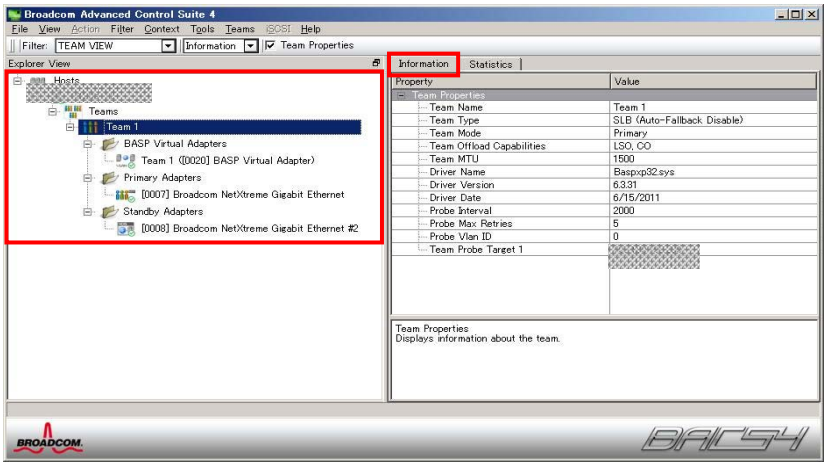
17. Restart the system.

18. After the system starts, follow step 1 to start **Broadcom Control Suite**(Double-click the [Broadcom Control Suite] from [Control Panel) and confirm that a team has been created. Confirm the team settings on the **Information** window to the right.

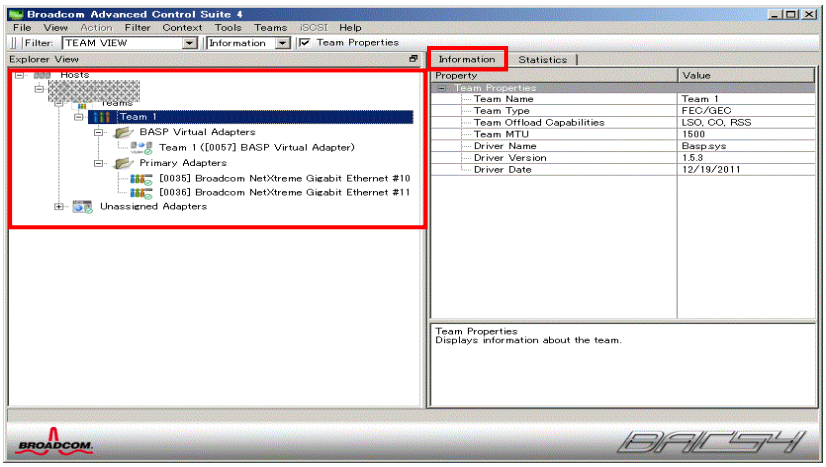
- **Smart Load Balancing and Failover(**without Standby Member**)**



- **Smart Load Balancing (Auto-Fallback Disable)(** with Standby Member**)**



- **FEC/GEC Generic Trunking**

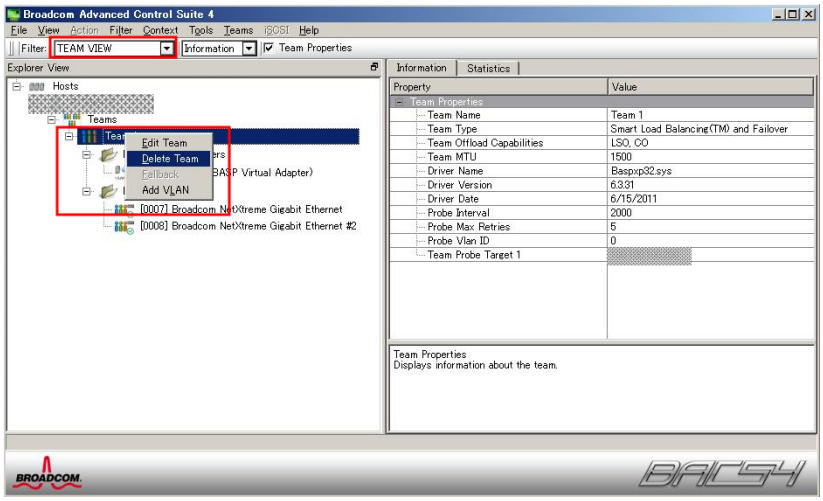


Team setup is now complete.

2.6.4.Procedure for deleting team

Important	**You must delete teams from Broadcom Control Suite.** **You cannot delete the team from the team adapter displayed in the Device Manager.**

1. Double-click the **Broadcom Control Suite** icon on the Control Panel window.
   Broadcom Advanced Control Suite starts.
2. Set a **Filter** in a **TEAM VIEW**, right-click the adapter to be used for the team, and then select **Delete Team** from the short-cut menu.



Note	When the message below appears, select [Yes]. “The selected team will be deleted from system, do you want to proceed? NOTE: Applying the changes will temporarily interrupt the network connection. The process may take several minutes and the connection will resume afterwards.”

3. Double-click to the following file.

☐ Windows Server 2008 (32Bit)

C:\temp\BCOM156a\LAN\WS2008x86\lan\AddLVlanStats.vbs

☐ Windows Server 2008 (64Bit)

C:\temp\BCOM156a\LAN\WS2008x64\lan\AddLVlanStats.vbs

☐ Windows Server 2008 R2

C:\temp\BCOM156a\LAN\WS2008R2\lan\AddLVlanStats.vbs

4. When the following message appears, click [OK].

Registry Addition Completed Reboot the system.

5. Restart the system.

Team remove is now complete.

2.7. Notice

This section describes notice of LAN driver. Read the following notes or information before installing.

2.7.1.About the operation by remote desktop

To Operation that has been described to this document, log on to the system from a local console using an administrator account.

Remotely changing the settings by using the operating system's remote desktop feature is not supported.

2.7.2.About the figure affixed to the end of the adapter name

The figure affixed to the end of the adapter name might be displayed by a large figure of two digits or more. There is no problem in the quality and operation as the network communication.

Example: Broadcom BCM57711 NetXtreme II 10 GigE (NDIS VBD Client) #54
Broadcom BCM57810 NetXtreme II 10 GigE (NDIS VBD Client) #297

2.7.3.Windows Server 2008 (32Bit)/(64Bit) Error Log

The following error log occurs in Windows Server 2008(32BIT/64BIT) Service Pack1, SNP enabled.

This error does not affect system operation.

Update to Service Pack2 when using SNP.

Source	ebdrv
Type	Error
ID	15
Description	um_bdrv.c xxxx (chain_cnt >= pdev->interrupt_info.dynamic_affinity_rss_chain_cnt) : An assertion happened. Please note provider of this module

2.7.4.Windows Server 2008 R2 Error Log

If install the LAN driver to the N8104-134.

The following log may be registered.

This error does not affect system operation.

Source	l2nd
Type	Error
ID	24
Description	Broadcom BCM5709C: Network controller failed to exchange exchange interface with the bus driver.

2.7.5.Windows Server 2008 (32Bit)/(64Bit)/R2 Error Log

After deleting the team,

The following log may be registered.

This error does not affect system operation.

Source	ebdrv
Type	Error
ID	11
Description	lm_sp.c 2450 (ECORE_SUCCESS != ecore_status): An assertion happened. Please note provider of this module.

2.7.6.Communication performance of an optional LAN board is degraded

If the setting of Flow Control of the N8104-128/134 is not Disabled,

NEC recommends that below setting,

N8104-128 is less 4000byte than the value of the (Jumbo Packet),

N8104-134 is less 7000byte than the value of the (Jumbo Packet).

2.7.7.About Wake On LAN (WOL)

Wake On LAN (WOL) is only supported on standard network adapters.