

Changing the DHCP, DNS, or BOOTP Server from System Consoles to CLIMs



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Edition: J06.05 and subsequent J-series RVUs and H06.16 and all subsequent H-series RVUs.

Legal Notice

See Appendix : Legal Notice (page 8) for legal notices.

About This Document

A more recent version of this procedure might exist online in the NonStop Service Procedures section of the Support and Service collection in the NonStop Technical Library (NTL) at <http://docs.hp.com>. Compare the dates in the About This Procedure pages to determine the latest version.

This procedure is used to move BOOTP, DHCP, and DNS server functionality for HP Integrity NonStop systems from the primary and backup NonStop system consoles to either one or two designated CLuster I/O Modules (CLIMs). The act of moving DNS/DHCP/BOOTP server functionality from system consoles to designated CLIMs applies to all NonStop systems configured on the same maintenance LAN. When DNS/DHCP/BOOTP services are enabled on the CLIMs, they are disabled on the system consoles; you cannot configure DNS/DHCP/BOOTP services on a per system basis for NonStop systems managed by the same system consoles.

Procedures for accommodating DNS/DHCP/BOOTP services apply to CLIMs on NS-series systems and NonStop BladeSystems even though the BOOTP portion of the services only exists on NonStop BladeSystems. Ignore references to HSS and BOOTP for NS-series servers.

Supported Release Version Updates (RVUs)

This topic supports J06.05 and all subsequent J-series RVUs and H06.16 and all subsequent H-series RVUs until otherwise indicated in a replacement publication.

Intended Audience

This procedure is written for those responsible for configuring NonStop systems.

New and Changed Information in This Edition

Version	Date	Changes
518604-002	24 April 2009	<ul style="list-style-type: none">• Changed the title of this document from <i>Changing the HSS BOOTP Server from System Consoles to CLIMs</i> to <i>Changing the DHCP, DNS, or BOOTP Server from System Consoles to CLIMs</i>.• Updated procedures to reflect that the DNS server might reside on the CLIM also.• Added text indicating that BOOTP services exist only on NonStop BladeSystems.• Updated to indicate that this procedure also supports H06.16 and all subsequent H-series RVUs.• Updated the reference for moving services functionality to system consoles to reflect the new title of that procedure.• In the Requirements section, updated the required version of the CLIM Boot Service Configuration Wizard to T0634 AAU or later which is delivered on NSC Installer DVD, S7X-SWV2/HNSC-SWV2, Update 9 or later. The AAS or later version described in the prior version of this procedure will not migrate the DNS server.• Updated the known problem with the CLIM Boot Service Configuration Wizard to indicate that it is fixed in OSM Console Tools, T0634 AAU and later.• The OSM Launch OA URL action has changed to Launch the Onboard Administrator.
518604-001	1 December 2008	None. New procedure.

Related Information

For information on the CLIM Boot Service Configuration Wizard, see the CLIM Boot Service Configuration Wizard online help.

For more information on OSM actions, see OSM online help.

To move DHCP, BOOTP, and DNS server functionality for NonStop systems from one or two designated CLIMs to the primary and backup system consoles, see *Changing the DHCP, DNS, or BOOTP Server from CLIMs to System Consoles*.

For NonStop Legal Notices, Important Safety Information, Safety and Compliance, and Waste Electrical and Electronic Equipment (WEEE) information, see the Safety and Compliance collection in NTL at <http://docs.hp.com/en/NSSafety.html>.



NOTE: NTL has moved to docs.hp.com (external view) and docs.fc.hp.com (internal view.)

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Changing the DHCP, DNS, or BOOTP Server from System Consoles to CLIMs

Overview



NOTE: How you configure BOOTP, DHCP, and DNS services applies to all NonStop systems configured on the same maintenance LAN. You can configure your environment to have DNS/DHCP/BOOTP server functionality on either two (primary and backup) system consoles or two designated CLIMs.

Moving DNS/DHCP/BOOTP server functionality for NonStop systems from system consoles to CLIMs includes:

1. Making sure the system consoles meet all Requirements to perform the process
2. Preparing to Migrate BOOTP to CLIMs
3. Configuring CLIMs for DHCP, BOOTP, and DNS Server Functionality
4. Performing Follow-Up Steps

Requirements

To move the BOOTP, DHCP and DNS server functionality for NonStop systems from system consoles to CLIMs, you must have these minimum product versions installed on your system console:

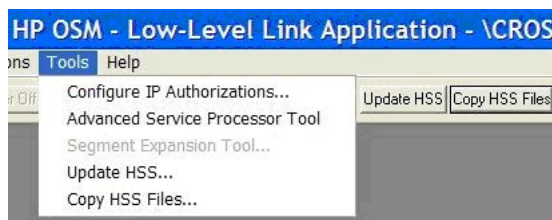
- CLIM Boot Service Configuration Wizard (part of OSM Console Tools, T0634 AAU or later)
- OSM Low-Level Link, T0633 ABE or later
- PuTTY (part of Console CLIM Utilities, T0697 H01 AAA or later)

These products are all available on NonStop System Console (NSC) Installer DVD, S7X-SWV2/HNSC-SWV2, Update 9 or later. Updates to Halted State Services (HSS) firmware for NonStop systems (T8004) are also downloaded from the NSC Installer DVD, as needed.

Preparing to Migrate BOOTP to CLIMs

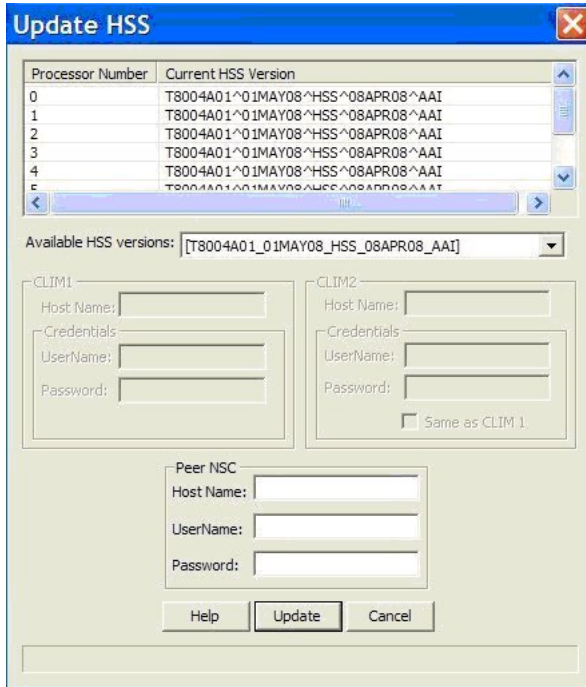
These steps will ensure that you have the appropriate HSS firmware file configured for each NonStop system on the shared maintenance LAN. Depending on your environment, you may not need to perform all of the steps described in this section. This step applies only to NonStop BladeSystems.

1. Check the HSS version currently running on the processor blades in each system. Use the **Update HSS** or **Copy HSS Files** actions in the OSM Low-Level Link to compare the HSS version on all processors in the system against each other and also against versions available on the console. These actions are launched from the Tools menu or, before system discovery, from the toolbar:



You should also check the latest NSC DVD for possible HSS updates. If a newer version is available, download it to the C:\HSS\T8004 directory on the system console, as described in the *NonStop System Console Installer Guide*. After this version is downloaded to the system

console, it will also appear in the Available HSS versions drop-down menu in the Update HSS dialog box and can be selected during an Update HSS or Copy HSS Files action:



If a newer version is available, the Update HSS or Copy HSS Files actions also allow you to update HSS files for the system you are logged on to. Both the Update HSS and Copy HSS Files actions copy and rename the specified HSS file from C:\HSS\T8004\vmproc id \HPILDR.efi to C:\Images\NBsystem serial number.efi on the system console. Update HSS also prompts you to reset all blades after the file copy/rename, whereas Copy HSS Files does not. Repeat the process for each system on the LAN. For more information, see the OSM Low-Level Link online help.

2. Whether or not you updated or copied HSS files in Step 1, check the C:\Images directory on the system console to make sure there is an HSS file for each NonStop system on the maintenance LAN in the form NBsystem serial number.efi.



NOTE: To determine the serial number for a system, you can log on to the OSM Low-Level Link and check the System Serial Number attribute, located under the System object.

If no such file exists for one or more NonStop systems– or, if you did not use one of the Low-Level Link actions and are not sure whether the firmware files in the C:\Images directory are of the desired HSS version – log on to each of those systems in turn with the OSM Low-Level and use the **Copy HSS Files** action to create an HSS file of the appropriate version for each system. Only after you have verified that for each NonStop system configured on the maintenance LAN there is a corresponding HSS firmware in C:\Images named NBsystem serial number.efi should you invoke the CLIM Boot Service Configuration Wizard.

Configuring CLIMs for DHCP, BOOTP, and DNS Server Functionality

After completing the steps under Preparing to Migrate BOOTP to CLIMs , use the CLIM Boot Service Configuration Wizard to configure DNS/DHCP/BOOTP server functionality on the CLIMs.

3. Launch the CLIM Boot Service Configuration Wizard from the Windows Start menu:
All Programs > HP OSM > CLIM Boot Service Configuration Wizard

Click the Help ([?]) button in the welcome dialog box, navigate to the **Configuring BOOTP, DHCP, and DNS Servers on CLIMs** topic, and follow the instructions provided for configuring CLIMs for DNS/DHCP/BOOTP server functionality.



NOTE: There is a known problem in versions prior to AAU when using the CLIM Boot Service Configuration Wizard from a second (peer) system console after previously running the wizard from the other (primary) console. When you launch the wizard from the console that was previously considered the peer console and you indicate that there is a peer system console installed, you should make sure that the pre-populated IP address displayed for that console is correct. From the wizard's perspective, there is an active system console—the system console from which you are running the wizard—and another (inactive) one that is called the peer system console. You should always specify the inactive system console as the peer, so that the changes you make to the BOOTP configuration using the wizard are reflected in the configuration files on both system consoles (failure to do so may result in the configuration files on the two system consoles being out of synch, or showing different BOOTP configuration information).

Follow-Up Steps

After completing the steps under Configuring CLIMs for DHCP, BOOTP, and DNS Server Functionality using the CLIM Boot Service Configuration Wizard, you are referred back to this procedure for these steps to ensure that all devices on the LAN that depend on DHCP-assigned IP addresses have received them.

4. Log on to one of the NonStop systems with the OSM Service Connection, select the Enclosure object, and perform the **Launch the Onboard Administrator** action.
 - In the navigation pane of the HP Onboard Administrator interface, click **Active Onboard Administrator**.
 - On the Virtual Buttons tab, click **Reset** to reset the active Onboard Administrator.
 - Confirm that the OA comes up after OSM updates the new Active OA IP address.
5. In the navigation pane, click **Standby Onboard Administrator** and repeat the reset process.
6. If you have a second blade enclosure in the system, repeat Step 1 and Step 2 on that enclosure.
7. From the OSM Service Connection, select one of the CLIM objects and perform the **Invoke iLO** action to launch the Integrated Lights-Out interface.
 - On the System Status tab, click the Diagnostics link.
 - Click **Reset**.
8. Repeat Step 4 for all CLIM iLOs.
9. Launch the management interface for any other device on the Maintenance LAN that is configured for DHCP. If you are not able to reach any of the web interfaces or feel that you are getting connected to a different CLIM iLO, then reboot the CLIM(s) configured for DNS/DHCP/BOOTP server functionality.
10. Repeat these follow-up steps for each system on this maintenance LAN, except for objects common to all systems, such as maintenance switches, UPS, etc.

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