Sterling Commerce Product Documentation



Connect:Direct® HP NonStop Version 3.5.00

Release Notes



Connect:Direct HP NonStop Version 3.5.00 Release Notes

Third Edition

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Contents

Requirements	
Hardware and Software	
License Key File	6
Customer Center Portal User Name and Password	
Additional Requirements	
NETEX Product Requirements	7
What's New in This Release	8
	_
Features and Enhancements	
Improvements to Documentation	10
Obtaining Product Updates	11
Special Considerations	11
Connect:Direct HP NonStop	11
Temporary IPv6 Addresses Feature Not Supported by Connect:Direct HP NonStop	12
Naming Session Manager Processes	
Reserving LUs for Inbound and Outbound Sessions	
Transferring Files from UNIX to HP NonStop When UNIX is the PNODE	
Using a GDG with Connect:Direct for z/OS	
Improving Statistics Deletion Program Performance	
Using Extended Compression with Unstructured Files	
Connect:Direct Secure+ Option HP NonStop	
Configuring a Secure Connection with Connect:Direct Browser User Interface or Sterlin	-
Control Center	14

Known Restrictions	14
Connect:Direct HP NonStop	14 15
Installation Notes	15
Upgrade Considerations	16
Installing Connect:Direct HP NonStop from the ESD Portal	16
Downloading the Application File	16 17 18
Migrating Data Files from an Earlier Release	18
Documentation Updates	21
Connect:Direct HP NonStop Documentation	22

Connect:Direct HP NonStop Version 3.5.00 Release Notes

The Connect:Direct HP NonStop Version 3.5.00 Release Notes document supplements Connect:Direct HP NonStop version 3.5 documentation. Release notes are updated with each release of the product and contain last-minute changes and product requirements, as well as other information pertinent to installing and implementing Connect:Direct HP NonStop. Read the document in its entirety before installation.

The Connect:Direct HP NonStop package consists of the distribution media, a product key, and product publications. The Connect:Direct HP NonStop package application is distributed as follows:

- ◆ CD-ROM
- ◆ File downloaded from the Sterling Commerce Electronic Software Distribution Portal See *Installing Connect:Direct HP NonStop from the ESD Portal* on page 16 for instructions.

Requirements

Connect:Direct HP NonStop version 3.5.00 has the following requirements.

Hardware and Software

Connect:Direct HP NonStop version 3.5.00 and related software require the following hardware and software.

Component or Functionality	Hardware	Software
Connect:Direct HP NonStop	HP Integrity NonStop server	H-series release for the HP Integrity NonStop operating system, H06.04.00 or later.
	HP Himalaya NonStop server	HP NonStop D-Series operating system, version D46 or later, or G-Series version G06 or later.

Component or Functionality	Hardware	Software
Automated Installation and Management System (AIMS)	6500-series terminal or a workstation emulator running in 65xx emulation mode	
Transmission to an IBM mainframe, iSeries, or another HP NonStop system using SNA LU0		HP NonStop Systems Network Architecture Exchange (SNAX/XF) product and an SNA communication link for use with SNAX
		 ICE from Insession, along with the appropriate hardware
		Note: ICE is used for communicating between HP NonStop and z/OS systems only.
Transmission to an IBM z/OS, VSE,		TCP/IP stacks
VM, UNIX, iSeries, OpenVMS, Windows, or another HP NonStop system using TCP/IP protocol		TCP/IP application license
Connect:Direct Secure+ Option HP NonStop		Connect:Direct HP NonStop version 3.5 or later
		 Sterling Certificate Wizard version 1.0.02 or later (optional for generating certificates)

License Key File

The license key file identifies the product features that are available at a site. When you purchase the Connect:Direct HP NonStop application, a temporary key file is sent to you that enables operation of Connect:Direct HP NonStop for a limited time. You must replace the temporary key with a permanent key to continue running Connect:Direct HP NonStop. The temporary and permanent key files are supplied as text files named *nnnnn*.txt, where *nnnnn* is a number assigned by Sterling Commerce. Each key file is sent to you as an attachment to an e-mail.

A temporary or permanent license key file must be applied on the computer where Connect:Direct HP NonStop is installed.

Make a copy the temporary key license file and keep it in a safe place. To continue the installation process, follow the instructions in the section, *Upload the License Key*, in the *Installing and Configuring Connect:Direct HP NonStop* chapter in the *Connect:Direct HP NonStop Installation Guide*.

To request and apply the permanent key file:

- 1. Request the permanent license key file using one of the following methods:
 - Reply to the Sterling Commerce e-mail containing your temporary license key file and include the host name of the computer where Connect:Direct HP NonStop is installed. Use the TACL command SYSINFO to determine the system number.

- Request the license key file from Sterling Customer Center:
 - a. Log in to the Sterling Commerce Customer Center Web site. If you do not have a Customer Center user name and password, follow the instructions in *Customer Center Portal User Name and Password* on page 7.
 - b. Navigate to Support On Demand.
 - c. Under Product Family Support, click your product family name to display the available links and click **Key Request**. The Connect Product Key Request page is displayed.
 - d. Type the information in the required fields and click **Submit**.
 You will receive the permanent license key file through e-mail in approximately 24 to 48 hours.

To replace the installed key with a new one, follow the instructions in the section section, *Update the License Key*, in the *Installing and Configuring Connect:Direct HP NonStop* chapter in the *Connect:Direct HP NonStop Installation Guide*.

Customer Center Portal User Name and Password

Going live on December 15, our new Customer Center portal offers you a single location to administer everything associated with your Sterling Commerce products and services. Customer Center provides quick access to online tools, on-demand applications, community forums, product information, industry news, support updates, and support case management. We've combined into a single location the current content experience of our customer-facing portals—Innovation Gateway, STUN (Sterling Commerce Technical Users Network), and Support on Demand—and extended it across all of our products and applications within Customer Center.

If you have a Support On Demand user name and password, your account has already been migrated to the Customer Center single sign-on system. As a first-time user of Customer Center, you are required to create a new password for access to the Customer Center Web site. Go to https://cn.sterlingcommerce.com/createPassword.html to complete this process.

If you do not have a Support On Demand user name and password, click the following link to access the Customer Support login page at https://cn.sterlingcommerce.com and click **Join now**.

Additional Requirements

Connect:Direct HP NonStop has the following additional requirements.

NETEX Product Requirements

Before you install Connect:Direct HP NonStop to a NETEX system, be sure to install NETEX H367RS Release 5.0, which includes native versions of the NETEX API libraries used by Connect:Direct HP NonStop. The following native NETEX libraries must be present:

- NMGLIB
- NMTLIB
- NMUDEF

What's New in This Release

For the latest information on updates to the product and documentation, see *Features and Enhancements* on page 8 and *Improvements to Documentation* on page 10.

Features and Enhancements

Connect:Direct HP NonStop version 3.5 and its related software have the following features and enhancements.

Product	Feature or Enhancement	
Connect:Direct HP NonStop	With the improved TCP/IP buffer handling in Version 3.5 combined with HP's optimized TCP/IP handling in IPv6 enabled stacks, you may expect throughput performance enhancement from 0 to 1200%, depending on the type of files being transferred and buffer settings. The following network connectivity features improve performance and high availablity:	
	 Support for IPv6 protocol, allowing for a much larger address range than IPv4. Connect:Direct supports all valid notation formats for IPv4 and IPv6 addresses. For more information, see the Specifying IP Addresses, Host Names, and Ports appendix in the Connect:Direct HP NonStop Administration Guide. 	
	• Listen on multiple TCP/IP stacks including mixed IPv4 and IPv6 TCP/IP stacks.	
	 Support a list of IP addresses in IPv4, IPv6, or hostname format to expand the number of IP addresses a remote node can connect with on systems with multiple network interface modules. 	
	 Selectively resolve symbolic host name addresses when an inbound connection request cannot be matched to an existing netmap entry by using the new adjacent node parameter, dynamic.dns. 	
	 Restrict the use of a TCP LU to PNODE or SNODE sessions to help manage the availability of session managers by using the new USE parameter in LU definitions. 	
	 Relieve restrictions on the number of concurrently running session managers if starting Connect:Direct with a VHS subsystem as the home terminal. A VHS instance allows a maximum of 512 openers. Use the new TERM parameter in LU definitions to specify the LU's home terminal. 	

Product

Feature or Enhancement

Records more information to help monitor the system by:

- Logging information about all connection attempts from trading partners including non-fatal TCP/IP connection errors to diagnose complex network and configuration problems. The originating IP address will also be logged in the statistics file. To activate this feature, use the LOG-TCP-CONN-RQ initialization parameter.
- Collecting tracing information from a variety of sources such as the server, session managers, and API managers in memory and writing it to disk only when tracing is terminated, which minimizes the impact of troubleshooting on production data transfers. To activate this feature, use the new NDMTRACE program. For more information, see the Running Traces chapter in the Connect: Direct HP NonStop Administration Guide.
- Recording operator commands entered through NDMCOM or the browser user
 interface in statistics files to create an audit trail of events that may have affected
 the functionality of the product. To take advantage of this new option, specify
 INCLUDE=CMD in your SELECT STATISTICS command. For more information,
 see the Viewing System Files chapter in the Connect:Direct HP NonStop User
 Guide and Reference.
- Including CPU time with session statistics to assist with resource utilization planning by adding the new LOGCPUTIME parameter to your initialization parameter file.
- Accessing statistical information on a particular Connect:Direct Process more
 quickly using a wildcard to specify part of a Process name or secondary node
 name. To take advantage of this new option, use the * wildcard character in the
 partial name specified for the PNAME or SNODE. For more information, see the
 Viewing System Files chapter in the Connect:Direct HP NonStop User Guide and
 Reference.

Product

Feature or Enhancement

Makes Connect: Direct easier to use by:

- Enabling you to display and update initialization parameters without restarting the Connect:Direct application. You can also write the modified parameters to the initialization file to make the new settings permanent so that the next time you restart Connect:Direct, the new settings will take effect. For more information on the new DISPLAY PARMS command, see the Connect:Direct HP NonStop User Guide and Reference, and for the UPDATE PARM command, see the Connect:Direct HP NonStop Installation Guide.
- Providing the ability to delete all Processes at once, by SNODE, instead of one by one. To take advantage of this new option, use the new DEST parameter in your DELETE PROCESS command. For more information, see the *Managing* Processes chapter in the Connect:Direct HP NonStop User Guide and Reference.
- Enhancing the CHANGE PROCESS command to include the new CLASS parameter, which allows Processes in the Transmission Control Queue (TCQ) to be delayed or expedited. For more information, see the Managing Processes chapter in the Connect:Direct HP NonStop User Guide and Reference.
- Adding the capability to reconstruct the source for a Process in the TCQ if the
 original script file has been lost. To take advantage of this new option, use the
 SOURCE parameter in your SELECT PROCESS command. For more
 information, see the Managing Processes chapter in the Connect:Direct HP
 NonStop User Guide and Reference.
- Allowing Connect:Direct to send a file that is open for update by an external application while controlling how such a transfer is reported. The transfer can be blocked immediately, or it can be allowed and reported with either a warning or a normal COPY termination using the new initialization parameter, SENDOPENFILE.
- Allowing Connect:Direct to transmit a file that is still being created (written to) by an external process, using the new SYSOPTS parameter, SET OPENFILEXMT. When this option is specified, Connect:Direct will transmit all available data and then monitor the file it is reading, keeping the session open until the file is closed. When the external process closes the file, Connect:Direct transmits the remaining data and terminates the COPY, thus allowing the transmitted file to be immediately available on the receiving node. The SYSOPTS parameter, SET OPENFILEXMT=YES, overrides the setting of the SENDOPENFILE initialization parameter for a particular Connect:Direct Process.

Supports Spooler Plus.

Improvements to Documentation

Sterling Commerce welcomes your comments and suggestions for improvements to our product documentation. You can submit suggestions for improvements to **ConnectDoc@stercomm.com**. As part of our continuing effort to improve the user experience and satisfaction with our documentation, the documentation for Connect:Direct HP NonStop version 3.5 has the following changes:

◆ The Process Guide web site has the following changes:

- Use of the powerful Google search engine so you can quickly find information. The search interface resembles the Google.com experience you are already familiar with, and you will get better results quicker than ever. You can now enter special characters, such as slashes (in a platform name, for example, z/OS) and ampersand signs which are used in symbolic variables, such as &DSN.
- A new SYSOPTS parameter, SET OPENFILEXMT=YES, in the FROM clause in a COPY statement enables you to override the new SENDOPENFILE initialization parameter for a particular Process. This new transfer feature allows Connect:Direct to transmit a file as it is being written to by an external process. A new example is also provided to illustrate this enhancement.

To review the Process Guide updates, use the following link:

http://www.sterlingcommerce.com/Documentation/Processes/WhatsNew.html.

Obtaining Product Updates

Product updates and update summaries, including issues resolved for previous versions of Connect:Direct HP NonStop, are available on the Support On Demand Web site.

To obtain product updates:

- 1. Log on to your Customer Center Web site.
- 2. From the **Support on Demand Product Support** menu on the left navigation bar, click **Connect>Product Updates/Download**.
- 3. Follow the links for your product until you locate the updates for your product and platform.

Special Considerations

This section contains considerations in addition to the procedures contained in this document and the other Connect:Direct HP NonStop and Connect:Direct Secure+ Option HP NonStop documents.

Connect:Direct HP NonStop

Refer to the following notes before installing the product:

- ◆ Connect:Direct HP NonStop Version 3.5.00 failures can occur when an HP Integrity NonStop server does not recover properly after a CPU fails. When the primary of a TACL process pair is running on a CPU that fails, the backup TACL process may be left with an invalid home terminal after it takes over as the primary process. Some processes, including NDMCOM, will immediately abend if they are started from a TACL in this state. Workarounds include using a different TACL and stopping and restarting the TACL before attempting to use it again. This problem has been reported to HP Support under cases 060419-7438 and 060419-7440.
- ♦ Review your network definitions when installing the product. It is critical that the initial values and any subsequent changes be reviewed by the administrators of both local and adjacent nodes. Worksheets are included in the *Connect:Direct HP NonStop Installation Guide* to assist you in gathering values required for the installation procedure.

- ♦ The implementation of license keys has changed. License keys from releases prior to Version 3.3.00 do not work with this version. For more information on installing and managing keys, see the *Connect:Direct HP NonStop Installation Guide*.
- ◆ The following parameters were removed from the product: BLOCKIO, LARGEIO, STDHIPIN, and STUHIPIN.

Temporary IPv6 Addresses Feature Not Supported by Connect:Direct HP NonStop

A section of the IPv6 specification has defined "temporary addresses," which are a security feature of IPv6. It describes the automatic generation of temporary IPv6 addresses by the operating system, which are used only for outbound connections. These addresses have a short life span and are replaced by other temporary outbound addresses.

This feature is not supported by Connect:Direct HP NonStop. If the outgoing address of the PNODE randomly changes, the SNODE may fail the connection because the PNODE's IP would never match the IP configured in the SNODE's network map.

For more information on temporary addresses, see RFC 3041 (http://tools.ietf.org/html/rfc3041).

Naming Session Manager Processes

The SMNAME initialization parameter allows you to specify a constant prefix for creating session manager process names. Prior to Version 3.5, session manager processes were created by combining the user-supplied prefix with a numeric suffix that was generated as a decimal string. In addition, if the server ran out of available names, additional LUs could not be resumed until others were shut down. Starting with Version 3.5, the numeric suffix is generated as a hexadecimal string instead of a decimal string, which yields a larger "pool" of available process names. Also, if the server exhausts all available names, it will use system-generated process names for session managers.

Caution: Do not use the following prefixes for the SMNAME initialization parameter because they are reserved for use by the operating system: \$DM, \$SIM, \$X, \$Y, and \$Z.

Reserving LUs for Inbound and Outbound Sessions

Prior to Version 3.5, when an adjacent (remote) node submitted a Process to Connect:Direct HP NonStop, there was no way to restrict which LUs on the local node were used to establish the session. Connect:Direct HP NonStop has a CLASS/PARESESS defined to reserve threads for outbound emergency jobs; however, when the remote node submits Processes, it gets the first available thread even though Connect:Direct HP NonStop has it defined as being reserved. You can now manage the availability of session managers by restricting the use a TCP LU to PNODE or SNODE sessions using the new USE parameter in LU definitions.

When a remote node has been related to a single LU and this session manager has its use set to SNODE, any Process submitted for the node stays in the Wait Queue indefinitely since no LU is available for the PNODE session. This can be avoided by relating another LU to this same node with its use set to ANY or PNODE.

When a remote node is related to a single LU with its use set to PNODE, no SNODE sessions are accepted from the node. Any connection attempt from the remote node to the system is rejected with a "no LU available" message. This can be avoided by relating another LU to this same node with its use set to ANY or SNODE.

Transferring Files from UNIX to HP NonStop When UNIX is the PNODE

Refer to the following notes when transferring files from a UNIX node to an HP NonStop node:

- ◆ For Connect:Direct UNIX nodes, the security user IDs and passwords typed in the SNODEID parameter are case-sensitive. SNODEID is a valid parameter for the PROCESS and SUBMIT statements and the SUBMIT command.
- ◆ Do not define the SYSOPTS parameter with continuation marks. Type the text in a continuous string, with a space separating each subparameter. SYSOPTS is a valid parameter for the COPY statement.
- ♦ When you copy files from UNIX to HP NonStop, use the DCB parameter to allocate destination files. Define any additional options using the SYSOPTS parameter. DCB and SYSOPTS are valid parameters for the COPY statement.
 - Defining the DCB parameter ensures that the attributes of the file being sent match the attributes of the file that is created on the remote node. If you do not define the DCB parameter, default file types on the destination node are as follows:
 - If you are transferring a text file and do not define the DCB parameter on the COPY TO statement, the file type on the HP NonStop node defaults to an unstructured file, code 101.
 - If you are transferring a binary file and do not define the DCB parameter on the COPY TO statement, the file type on the HP NonStop node defaults to an unstructured file, code 0.
- ♦ When you copy files from HP NonStop to UNIX, use the SYSOPTS parameter to allocate destination files.

Using a GDG with Connect:Direct for z/OS

When you plan to use a GDG with Connect:Direct for z/OS COPY Processes, you must allocate the GDG base prior to the copy.

Improving Statistics Deletion Program Performance

Due to the structure of a key-sequenced file, running the statistics deletion program called NDMSTDL can cause fragmentation of the statistics files over a period of time. This fragmentation reduces the efficiency of the NDMSTDL in reclaiming space from the statistics files. Use the FUP RELOAD command to defragment STATFILE, STATSRCH, and STATSRCO. Either run this command at a routine time interval or when the average percentage slack is greater than 50% on any statistics file as displayed by a FUP INFO file name STATISTICS command. You can use the RELOAD command on open files and the RATE parameter to control the CPU time used by the RELOAD command. Refer to the *HP NonStop File Utility Program* documentation for syntax and usage considerations.

Using Extended Compression with Unstructured Files

Certain types of unstructured files, such as sparsely populated object files, may pose problems if you are using extended compression. The Process may stop with a message indicating that the decompressed record size does not match the original record length. To prevent this from occurring, use either standard compression or no compression for files that meet these criteria.

Connect:Direct Secure+ Option HP NonStop

Refer to the following notes before installing Connect:Direct Secure+ Option HP NonStop:

- ♦ When the SSL protocol is enabled, the cipher used to encrypt data is determined based on the preferences identified in the parameters file at the SNODE.
- ♦ When the TLS protocol is enabled, the cipher used to encrypt data is determined based on the preferences identified in the parameters file at the PNODE.
- ♦ SSL and TLS use different methods to negotiate ciphers. If a trading partner identifies more than one cipher to use for encryption, SSL uses the cipher with the strongest encryption method, whereas TLS uses the cipher with the weakest encryption method.

Configuring a Secure Connection with Connect:Direct Browser User Interface or Sterling Control Center

Using NDMAIMS in Connect:Direct HP NonStop, configure all Secure+ Option connections with Connect:Direct Browser User Interface and Sterling Control Center to use the SSL protocol. This enables Connect:Direct Browser User Interface or Sterling Control Center to use either the TLS or SSL protocol for the secure connection.

Known Restrictions

Connect:Direct HP NonStop Version 3.5 and its related software have the following known restrictions.

Connect:Direct HP NonStop

Connect:Direct HP NonStop has the following known restrictions:

- ♦ LU6.2 is not supported.
- ♦ When transferring an RRDS file between two Connect:Direct HP NonStop nodes, relative record positioning is preserved. For example, if the sending file has a record in slot 3, no record in slot 4 (empty or deleted), and a record in slot 5, the receiving file retains the respective positioning of records 3 and 5. Between Connect:Direct HP NonStop and all other platforms, transfers between two relative files are treated as a sequential file transfer. Relative record positioning is not preserved.
- ◆ The Connect:Direct server Process and the NDMAIMS application no longer accept prefix values of:
 - ◆ \$DM
 - \$SIM

- ♦ \$X
- ♦ \$Y
- **♦** \$Z

If the application is started with one of these values in the SMNAME or APINAME parameters, the value will be defaulted to \$SM and \$AM, respectively. For related information, see *Naming Session Manager Processes* on page 12.

Connect:Direct Secure+ Option HP NonStop

Connect:Direct Secure+ Option HP NonStop has the following known restrictions:

- ◆ Connect:Direct Secure+ Option HP NonStop version 3.3 is not compatible with Connect:Direct Secure+ Option OS/400 version 1.0.
- ◆ For Connect:Direct HP NonStop version 3.4.01 and earlier, the Certicom Tool Kit included for use with Connect:Direct Secure+ Option does not handle key lengths over 1024 bits.
- ♦ The SPNODES file created by Connect:Direct HP NonStop version 3.4.01 or earlier cannot be used with version 3.4.03 or later. However, a conversion utility is available on the SupportXchange server in the /cdtandem directory. The download file is Convert_SNODES.zip and contains the conversion program and instructions that explain how to install and use the utility.

Installation Notes

Before you install Connect:Direct HP NonStop, read all the information in this section and follow the guidelines.

- ♦ Review *Connect:Direct HP NonStop Version 3.5.00 Release Notes* for last-minute product information and pre-installation tasks.
- ♦ Complete any worksheets prior to installing Connect:Direct HP NonStop.
- ◆ Before proceeding with the installation, review your security configuration to ensure compatibility with the following products:
 - Connect:Direct HP NonStop. Refer to the *Connect:Direct HP NonStop Installation Guide* for security options.
 - Connect:Direct Secure+ Option HP NonStop. Refer to the *Connect:Direct Secure+ Option HP NonStop Implementation Guide* for security options.
- ◆ Verify that you have the current updates for Connect:Direct HP NonStop. Access current update information, including instructions for applying updates containing product fixes and enhancements, from the Customer Center Web site at https://cn.sterlingcommerce.com. See Obtaining Product Updates on page 11 for instructions.
- ◆ After completing the installation, test any programmatic interfaces, including APIs and IOEXIT programs. All API output handling should be carefully validated.

Upgrade Considerations

Observe the following guidelines when you perform the installation:

- ◆ Restore the files for Connect:Direct HP NonStop Version 3.5.00 to a volume that is not part of a production system.
- ◆ Determine whether you need to migrate data files from an earlier version of Connect:Direct HP NonStop server. After you install Connect:Direct HP NonStop Version 3.5.00, you can streamline configuration by copying files from an earlier version of Connect:Direct HP NonStop. See *Migrating Data Files from an Earlier Release* on page 18 for instructions explaining how to move and update data files.
- ♦ If you need to use programs written for Connect:Direct HP NonStop version 3.2.03 or earlier, you must recompile all IOEXIT programs and include the EXITCBH header file. This file defines the new structure definition and changes the structure length from 58 to 62 bytes. This header file is included in the NDMSAMP subvolume. IOEXIT programs written in TAL should be recompiled using the header file EXITCBT. Failure to recompile older IOEXIT programs results in the error "IOXT009I, RC="8", FDBK="58", and the IOEXIT will fail.

Installing Connect:Direct HP NonStop from the ESD Portal

These instructions contain procedures for downloading and installing the Connect:Direct HP NonStop version 3.5.00 release, including documentation. The file you download from the Electronic Software Distribution (ESD) Portal is named cdhpns3500.zip.

Downloading the Application File

These instructions assume that you download the cdhpns3500.zip file to a computer running the Windows operating system (OS) and transfer it to the system where you will install it.

To download the cdhpns3500.zip file:

- 1. Log in to the ESD Portal using the instructions in *Access the ESD Portal* in your Order Confirmation e-mail from Sterling Commerce. The Download Area is displayed.
- 2. Find Connect: Direct HP NonStop version 3.5.00 and click **Download**.
- 3. In the **File Download** dialog box, click **Save**.
- 4. When the **Save As** dialog box opens, specify the location to save the file, or save the file to your desktop.

Note: If Internet Explorer adds a number in brackets to the name of the downloaded file (for example, cdhpns3500[1].zip), rename the file on the Windows system before you transfer it in binary mode to the system where it will be installed.

Extracting and Uploading the Application File

The download file contains installation packages for both the MIPS platform and for the Integrity platform, stored in separate folders. The folders in the downloaded .zip file or on the CD-ROM are:

Directory	Description
\Installation-Integrity	The installation files for installing on an HP Integrity NonStop server.
\Installation-MIPS	The installation files for installing on an HP Himalaya NonStop server.
\Product Documentation	Connect:Direct HP NonStop user documentation.

To extract and upload the cdhpns3500.zip file:

1. Open the cdhpns3500.zip file and extract the following files:

File	Description
pak3500	Contains binary file with Connect:Direct HP NonStop Version 3.5.00 files in HP NonStop PAK format.
unpak	Contains binary file; UNPAK executable.
paklist.txt	Contains ASCII file that lists the application files in the pak3500 file that must be restored.

- 2. Using the IXF/FTP utility, upload the pak3500file in binary mode to a temporary subvolume on your HP NonStop system.
- 3. If the UNPAK utility is not resident on your system, use the IXF/FTP utility to upload the unpak file in binary mode to the HP NonStop system.

```
Caution: To prevent corruption of the binary files (pak3500 and unpak) during upload, ensure that the transfer mode is set to binary.
```

4. From the TACL prompt, issue the following command to identify the uploaded pak3500 file as a PAK file:

```
>FUP ALTER PAK3500, CODE 1729
```

- 5. From the TACL prompt, issue one of the following commands to identify the uploaded unpak file as an unpak file.
 - For Himalaya systems, type:

```
>FUP ALTER UNPAK, CODE 700
```

For Integrity systems, type:

>FUP ALTER UNPAK, CODE 800

6. To restore the application files, type the following command, where \$vol\$ is the disk volume where you want to restore the files, and press **Enter**.

>UNPAK /OUT \$S.#PAKLIST/PAK3500,*.*.*,VOL \$vol,LISTALL,MYID

7. Compare the application files listed in the PAKLIST.TXT file with the files restored in step 6 to verify the installation files.

Installing the Application

To install Connect:Direct HP NonStop:

- 1. Review *Connect:Direct HP NonStop Version 3.5.00 Release Notes* for last-minute product information and installation requirements.
- 2. Print and review Connect:Direct HP NonStop installation documentation from the ESD download file. See *Connect:Direct HP NonStop Documentation* on page 22 for details.
- 3. Refer to *Connect:Direct HP NonStop Installation Guide* for directions to complete the installation.
- 4. See Connect:Direct HP NonStop Administration Guide for configuration instructions.
- 5. Refer to the *Connect:Direct Secure+ Option HP NonStop Implementation Guide* for configuration options.

Migrating Data Files from an Earlier Release

You can simplify configuration by copying files from Connect:Direct versions 3.4.03 and earlier to Connect:Direct HP NonStop Version 3.5.00. The migration instructions use the Connect:Direct HP NonStop default names for files and subvolumes. If you used different names during installation, you should substitute your site-specific information during migration.

Caution:

The SPNODES file created by Connect:Direct HP NonStop version 3.4.01 or earlier cannot be used with version 3.4.03 or later. A conversion utility is available on the SupportXchange server in the /cdtandem directory. The download file is Convert_SNODES.zip and contains the conversion program and instructions on how to install and use the utility.

To migrate existing files to Connect:Direct HP NonStop version 3.5.00:

Note: The following procedure does not retain the content of the INFOFILE (dynamic status information), CKPTFILE (saved checkpoint records), TCQ (process queue), or the statistics (STATxxxx) files.

- 1. UNPAK the application files as shown in *Extracting and Uploading the Application File* on page 17.
- 2. Copy the NDMINIT file from the previous release to the version 3.5.00 NDMINSTL directory and make the following changes to the file:
 - a. Delete the NDMKEY parameter (only applies to 3.2.00 and earlier). This parameter is obsolete. Versions 3.3 and later store the key in a separate file named LICENSE.
 - b. If you are using Secure+ Option for the first time, add the SECUREPL parameter. The format is SECUREPL *\$vol.subvol*, where *\$vol.subvol* specifies the location in which the Secure+ Option configuration file (SPNODES file) and certificate files will be maintained.
 - c. Delete the BLOCKIO and LARGEIO parameters. These initialization parameters are obsolete. Files being sent are always read in the most efficient manner available. When files are received, large mode I/O is the default, with the following exceptions:
 - ESDS (entry-sequenced) and RRDS (relative) data sets can have the SYSOPTS statement for the TO file specified as NO BLOCKIO or NO LARGEIO. Specify NO BLOCKIO or NO LARGEIO only if you want to populate an alternate key file as the file is written.

Tip: To populate an alternate key file while writing a file, you can also copy the file in large mode, then execute a FUP LOADALTFILE as a separate step (RUN TASK). This can also be done outside of Connect:Direct.

- KSDS (key-sequenced) data sets are always written in record mode (NO BLOCKIO), unless FAST.LOAD is used.
- UNSTR (unstructured) files are always written in large mode.
- EDIT files are written using the EDITIO functions.
- d. Add the parameters described in the following table. Default values are underlined.

Parameter	Description
DOMAINSERVER YES NO	Enables use of DOMAIN records in the network map to define inbound connectivity for IP domains, instead of individual IP addresses.
NETMAPCHECK YES NO	If YES, the node name in an inbound FMH68 (when another node initiates a TCP connection) must be defined in the netmap, or the connection request will be rejected. If NO, only the originating IP address must match something in the netmap. The name is not checked. Releases prior to 3.4.01 did not perform netmap checking.

Parameter	Description
CRC <u>ON</u> OFF	Defines the default action regarding use of Cyclic Redundancy Checking (CRC) validation when for the PNODE in a session over TCP. CRC validation checks the integrity of each RU exchanged in a TCP session using a 32-bit CRC hash calculation.
CRCOVERRIDE YES NO	Determines whether the default CRC setting can be overridden in a SUBMIT command, Process statement, or in an ADJ NODE definition.
OSSFILES YES NO	Determines whether Connect:Direct enables reading and writing of files in the OSS file system.
FILENAMEEXT YES NO	If YES, enables use of filename extensions for ENSCRIBE type destination files. To specify file attributes, you can combine and use these extensions with the adjacent node type to point to a type record.

- e. Update the object file and data file location parameters for the current system.
- f. Modify the TCPNAME, PORT, and TCPLISTEN parameters as needed to match the TCP stacks on the Connect:Direct HP NonStop Version 3.5.00 node.
- g. If you have specified \$DM, \$SIM, \$X, \$Y, or \$Z as the constant prefix for the SMNAME or APINAME initialization parameters, change this value. These values are reserved for use by the operating system. For related information, see *Naming Session Manager Processes* on page 12.
- h. Check for any other system-specific parameters that need to be modified and make changes as required for the Connect:Direct HP NonStop Version 3.5.00 node.
- 3. Put the new license key in the same subvolume as your INIT file; use FTP or IXF to upload the file to the node in ASCII/TEXT mode (creates a code 101 file.) The FTP or IXF transfer must allow a maximum record length of at least 150 bytes to prevent truncation of the digital signature.
 - The license key must be in a file named LICENSE.
- 4. Modify the CDLIBRES file to point to the Connect:Direct HP NonStop version 3.5.00 object files and CDLIB module. OBEY the CDLIBRES file to resolve the user library references in all of the executables.

Note: In the HP Integrity environment, the linker utility ELD must be used to permanently set the LIB attribute in an executable. It cannot be done with a RUN command. The CDLIBRES obey file contains RUN commands for MIPS installations and -ELD commands for Integrity installations.

5. Create the application data files. Edit the file NDMFUPIN and modify the VOLUME command to specify the desired location (\$vol.subvol) in which to create the files. Then, from the TACL prompt, issue the following command to create your application files:

>FUP/IN NDMFUPIN/

6. Use FUP COPY to migrate data in the following application files.

File Name	Description
AUTHFILE	Defines user authorization information
SECFILE	Defines proxy information for Secure Point of Entry
TYPEFILE	Defines type record definitions
XLFILE	Defines translation tables

7. Export the network map from the source node and import it to the new node. Update system names on the LU definitions and relation records as required.

Note: If you are migrating from a 3.4.01 node that contains adjacent node entries of type NDM.API and/or API Manager (AMGR) entries, first download and apply the latest fix pack for your 3.4.01 node from the SupportXchange FTP server. The fix pack is named fix3401.zip and may be found in the /cdtandem folder on the FTP server.

a. At an NDCOM prompt on the earlier node, type the following command to export the network map as a series of INSERT and RELATE commands:

CD.2.>SEL NET SOURCE OUT \$vol.subvol.netsrc

- b. Edit the output file and replace occurrences of the old system name (\oldsys) with the current system name (\newsys).
- c. Change the local node name, if necessary, and any other parameter values that may not be appropriate on the new system (for example, the CPU and TCPNAME parameter values).
- d. Copy the network map source file, netsrc, to the current node.
- 8. Start Connect:Direct HP NonStop version 3.5.00 on the current node.
- 9. Run NDMCOM and OBEY the netsrc file to execute the commands to load the network map. The 3.5.00 application is now ready for use.

Documentation Updates

The Connect:Direct HP NonStop version 3.5 documentation requires no last-minute updates.

Connect: Direct HP NonStop Documentation

The Connect:Direct HP NonStop documentation is available on the product media or the documentation CD-ROM. You can view or download documentation from the Customer Center Web site at https://cn.sterlingcommerce.com. You need a Support Customer Center user name and password. See *Customer Center Portal User Name and Password* on page 7 for instructions on obtaining your user name and password.

Access to PDF files requires the latest version of Adobe Reader, which you can download at www.adobe.com. You can search for a specific word or phrase in the text of an open Adobe PDF document or a set of PDF documents in a specified location. See the Adobe Reader Help for instructions on using the Search feature. The search lists all instances of the specified string.

The Connect:Direct HP NonStop documentation consists of:

- ◆ Connect:Direct HP NonStop Installation Guide
- ♦ Connect:Direct HP NonStop Administration Guide
- ◆ Connect:Direct HP NonStop User Guide and Reference
- ◆ Connect:Direct HP NonStop Management Programming Guide
- ♦ Connect:Direct Secure+ Option HP NonStop Implementation Guide
- **♦** *Understanding Connect:Direct Processes*

Documentation for the following supplemental products is available on additional distribution media and from the Documentation Library on the Sterling Commerce Support On Demand web site:

- ◆ Connect: Direct Browser User Interface
- ♦ Sterling Certificate Wizard

The latest updates to and information about Connect:Direct Processes are available from the Connect:Direct Processes web site at:

http://www.sterlingcommerce.com/documentation/processes/processhome.html.

The Connect:Direct Compatibility and Connectivity Chart contains the latest information about currently supported versions and platforms of Connect:Direct and their compatibility and connectivity. This document is available as a PDF file from the Customer Center Support On Demand Documentation Library. After you log in to the Customer Center web site, use the following links on the left-hand navigation bar to access the file: Support On Demand > Product Support > Connect > Connect Documentation > Connect:Direct.