

# Sterling Commerce Product Documentation



## **Connect:Direct<sup>®</sup> HP NonStop Version 3.4.03**

Release Notes

**First Edition**

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# Connect:Direct HP NonStop Version 3.4.03 Release Notes

The *Connect:Direct HP NonStop Version 3.4.03 Release Notes* document supplements Connect:Direct HP NonStop version 3.4 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 12 for instructions.

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## Product Requirements

Connect:Direct HP NonStop version 3.4.03 has the following requirements.

### Hardware and Software

Connect:Direct HP NonStop version 3.4.03 and related software require the following hardware and software.

Component or Functionality	Hardware	Software
Connect:Direct HP NonStop 3.4.03	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		<ul style="list-style-type: none"> <li>◆ HP NonStop Systems Network Architecture Exchange (SNAX/XF) product and an SNA communication link for use with SNAX</li> <li>◆ ICE from Insession, along with the appropriate hardware</li> </ul> <p><b>Note:</b> ICE is used for communicating between HP NonStop and OS/390 systems only.</p>
Transmission to an IBM OS/390, VSE, VM, UNIX, iSeries, OpenVMS, Windows, or another HP NonStop system using TCP/IP protocol		<ul style="list-style-type: none"> <li>◆ TCP/IP stacks</li> <li>◆ TCP/IP application license</li> </ul>
Connect:Direct Secure+ Option HP NonStop		<ul style="list-style-type: none"> <li>◆ Connect:Direct HP NonStop version 3.3.00 or later</li> <li>◆ Sterling Certificate Wizard version 1.0.02 or later (optional for generating certificates)</li> </ul>

## Additional Requirements

Connect:Direct HP NonStop has the following additional requirements.

## NETEX Product Requirements

Ensure that your system meets the following requirements before you install Connect:Direct HP NonStop to a NETEX system:

- ◆ 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

## 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.

The temporary and permanent license key file must be applied on the computer where Connect:Direct HP NonStop is installed. Refer to the *Connect:Direct HP NonStop Installation Guide* for instructions on installing and validating the permanent license key file.

When you purchase Connect:Direct HP NonStop, Connect:Direct Secure+ Option HP NonStop is installed but unavailable unless you have also purchased it. If you purchase Connect:Direct Secure+ Option HP NonStop after you purchase Connect:Direct HP NonStop, you must obtain a license key for Connect:Direct Secure+ Option HP NonStop. Refer to the *Connect:Direct HP NonStop Installation Guide* for instructions.

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## Features and Enhancements

Connect:Direct HP NonStop version 3.4 and its related software have the following features and enhancements.

<b>Product and Version</b>	<b>Feature or Enhancement</b>
Connect:Direct HP NonStop 3.4.03	Replaces the Certicom toolkit with the OpenSSL toolkit. The OpenSSL toolkit implementation is for use with Connect:Direct Secure+ Option HP NonStop.  Increases maximum key size compatibility from 2 KB to 4 KB.
Connect:Direct HP NonStop 3.4.02	Supports use with the H-series release for HP Integrity NonStop servers.  Replaces the Certicom toolkit with the OpenSSL toolkit on HP Integrity NonStop servers. The OpenSSL toolkit implementation is for use with Connect:Direct Secure+ Option HP NonStop.
Connect:Direct HP NonStop 3.4.00	The NETMAPCHECK global initialization parameter allows users to choose whether to validate the node names of adjacent nodes requesting TCP/IP sessions, or to ignore the node names.  The VOLUME parameter for adjacent nodes allows a Connect:Direct HP NonStop administrator to specify default destination volumes (directories) for those Connect:Direct sessions where no destination volume was provided in the Process COPY statements.  File name extension support allows a remote Connect:Direct user to specify a destination file name using the extension to control the type of file being created, without having to provide platform-specific SYSOPTS or TYPEKEY names. A new global initialization parameter provides this file name extension support when a node receives files.
Connect:Direct HP NonStop 3.4.00	The DOMAINSERVER global initialization parameter allows an administrator to define only one adjacent node as an NDM.DOMAIN type for a TCP/IP domain that contains multiple Connect:Direct systems instead of defining one adjacent node on the Connect:Direct HP NonStop system for each remote connection.  The OSSFILES global initialization parameter allows an administrator to give users the ability to send and receives files under OSS in addition to Guardian Enscribe files.

Product and Version	Feature or Enhancement
	The NDM.API adjacent node type and API Manager session manager type allow users to configure, control, and operate Connect:Direct HP NonStop from any host on a TCP/IP network.
	Connect:Direct/Plex support in a Connect:Direct HP NonStop system using the PLEXCLASS parameter allows Process redirection for distributing Connect:Direct Process execution across multiple Connect:Direct OS/390 Server Processes.
	The CRC global initialization parameter supports CRC checking, which provides the ability to validate data integrity during transfers between Connect:Direct nodes across a TCP/IP network. In addition, the CRC Override global initialization parameter gives users the ability to override the global CRC parameter using parameters on the PROCESS statement, SUBMIT command, or adjacent node level.
Connect:Direct Secure+ Option HP NonStop 3.0.0	With Connect:Direct HP NonStop version 3.4.02 and later, Connect:Direct Secure+ Option HP NonStop uses the OpenSSL toolkit, which enables private key lengths up to 4096 bits.

## 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 3.4.03 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 3.3.00 do not work with this version. Review *License Key File* on page 6 and the product installation instructions for information about installing and managing keys.
- ◆ The following parameters were removed from the product: BLOCKIO, LARGEIO, STDHIPIN, and STUHIPIN.



## 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 OS/390

When you plan to use a GDG with Connect:Direct OS/390 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 STATSRC0. 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:

- ◆ If you purchase Connect:Direct Secure+ Option HP NonStop at the same time that you purchase Connect:Direct HP NonStop, follow the instructions in the *Connect:Direct HP NonStop Installation Guide* to install Secure+ Option. If you purchase Connect:Direct HP NonStop separately from Connect:Direct, refer to the *Connect:Direct Secure+ Option HP NonStop Implementation Guide* for installation instructions.
- ◆ 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 server.
- ◆ 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 client.
- ◆ 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.
- ◆ Do not copy an SPNODES file from a node running an earlier version of Secure+ Option to the directory for the Secure+ Option version provided with Connect:Direct HP NonStop version 3.4.02. Use the Sync with NetMap option to create the SPNODES file by importing parameters from the Connect:Direct network map. Refer to the *Connect:Direct Secure+ Option HP NonStop Implementation Guide* for instructions.

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

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

### Using Exportable Ciphers with Secure+ Option

If you use Connect:Direct Secure+ Option with exportable (EXP) ciphers defined, refer to the following information:

- ◆ Connect:Direct automatically creates and uses a temporary cipher for the transfer when the negotiated cipher for Secure+ Option is an exportable cipher and all of the following conditions apply:
  - ◆ The TLS protocol (standard) is in use.
  - ◆ The SNODE is a Connect:Direct HP NonStop version 3.4.02 or 3.4.03 node.
  - ◆ The PNODE is running Connect:Direct HP NonStop 3.4.01 or earlier, Connect:Direct Windows 4.2 or earlier, or Connect:Direct UNIX 3.6.01 or earlier.

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**Caution:** Use of the temporary cipher causes noticeable increases in the overhead required for handshake. To ensure optimal operation and adequate key strength, use export-strength ciphers (from suites EXP-RC4-MD5 and EXP-DES-CBC-SHA) only when regulations or security policies require it.

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- ◆ Connect:Direct HP NonStop version 3.4.03 nodes do not support the use of EXP\_DES\_CBC\_SHA ciphers with Secure+ Option on OS/390.

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## 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 3.4.03 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.
- ◆ If you purchase Connect:Direct Secure+ Option HP NonStop after you purchase Connect:Direct HP NonStop, see *License Key File* on page 6.
- ◆ 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 Connect product support Web site at [www.sterlingcommerce.com](http://www.sterlingcommerce.com). See *Getting Support for Sterling Commerce Products* on page 24 for instructions.
- ◆ After completing the installation, test any programmatic interfaces, including APIs and IOEXIT programs. All API output handling should be carefully validated.
- ◆ Print and review *Connect:Direct Secure+ Option HP NonStop Implementation Guide*.
- ◆ Complete any worksheets prior to configuring Connect:Direct Secure+ Option HP NonStop.
- ◆ Verify that you have the current updates for Connect:Direct Secure+ Option HP NonStop. Access current update information, including instructions for applying updates containing product fixes and enhancements, from the Connect product support Web site at [www.sterlingcommerce.com](http://www.sterlingcommerce.com). See *Getting Support for Sterling Commerce Products* on page 24 for instructions.

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## Upgrade Considerations

Observe the following guidelines when you perform the installation:

- ◆ Restore the files for Connect:Direct HP NonStop 3.4.03 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 3.4.03, 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 14 for instructions on 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 fails.

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## Installing Connect:Direct HP NonStop from the ESD Portal

These instructions contain procedures for downloading and installing the Connect:Direct HP NonStop 3.4.03 release, including documentation. The file you download from the Electronic Software Distribution (ESD) Portal is named cdhpns3403.zip.

### Downloading the Application File

These instructions assume that you download the cdhpns3403.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 cdhpns3403.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 3.4.03 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.

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**Note:** If Internet Explorer adds a number in brackets to the name of the downloaded file (for example, cdhpns3403[1].zip), rename the file on the Windows system before you transfer it in binary mode to the system where it will be installed.

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### Extracting and Uploading the Application File

The download file contains installation packages for both the MIPS platform and for the Integrity platform, store 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 cdhpns3403.zip file:

1. Open the cdhpns3403.zip file and extract the following files:

File	Description
pak3403	Contains binary file with Connect:Direct HP NonStop version 3.4.03 files in HP NonStop PAK format.
unpak	Contains binary file; UNPAK executable.
paklist.txt	Contains ASCII file that lists the application files in the pak3401 file that must be restored.

2. Using the IXF/FTP utility, upload the pak3403 file in binary mode to a temporary subvolume on your HP NonStop system.
3. Using the IXF/FTP utility, upload the unpak file in binary mode to the HP NonStop \$system.system subvol, if it is not present on your system.

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**Caution:** To prevent corruption of the binary files (pak3403 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 pak3403 file as a PAK file:

```
>FUP ALTER PAK3403, CODE 1729
```

5. From the TACL prompt, issue the following command to identify the uploaded unpak file as an unpak file:

```
>FUP ALTER UNPAK, CODE 100
```

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 $$.#PAKLIST/PAK3402,*.*.*,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 3.4.03 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 25 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.

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## Maintenance Updates

The following table describes the issues resolved for Connect:Direct HP NonStop 3.4.03. For the history of issues resolved prior to this release, see the Sterling Commerce Support On Demand Web site.

SR Number	Description
1355969	Error messages logged following a failure to open an IOEXIT process are unclear.
1352801	Decimal numeric suffix is used on session manager Process names. It should be Use hexadecimal. The fix also allows system-generated Process names if the server runs out of static names.

---

## Migrating Data Files from an Earlier Release

You can simplify configuration by copying files from Connect:Direct versions 3.4.01 and earlier to Connect:Direct HP NonStop version 3.4.03. Move files and change parameters as described to update the older version files for the new system.

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.

To migrate existing files to Connect:Direct HP NonStop version 3.4.03:

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**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 after uploading the PAK file extracted from the distribution data set.

2. Copy the NDMINIT file from the previous release to the 3.4.03 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 no longer used. 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 files specify 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.

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**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   <u>NO</u>	Enables use of DOMAIN records in the network map to define inbound connectivity for IP domains, instead of individual IP addresses.
NETMAPCHECK YES   <u>NO</u>	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.
CRC <u>ON</u>   OFF	Defines the default action regarding use of 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 <u>YES</u>   NO	Determines whether the default CRC setting can be overridden in a SUBMIT command, Process statement, or in an ADJ NODE definition.
OSSFILES YES   <u>NO</u>	Determines whether the application will allow reading and writing of files in the OSS file system.

Parameter	Description
FILENAMEEXT YES   <u>NO</u>	Determines whether the session manager (if OSSFILES is enabled) uses ASCII or BINARY mode when reading or writing an OSS file, based on default assumptions about the OSS file extension. Files with the extensions .c, .h, .cpp, .hpp, .txt, .html, and .java are treated as ASCII files by default; otherwise, they are treated as BINARY. The default treatment can be explicitly specified with the SYSOPTS parameter SET DATATYPE ASCII   BINARY.

- 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 3.4.03 node.
  - g. Check for any other system-specific parameters that need to be modified and make changes as required for the Connect:Direct HP NonStop version 3.4.03 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 3.4.03 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.

---

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
XLFFILE	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 3.4.03 on the current node.
  9. Run NDMCOM and OBEY the netsrc file to execute the commands to load the network map. The 3.4.02 application is now ready for use.

---

## Maintenance Updates

For a list of issues resolved for Connect:Direct HP NonStop version 3.4.03, see *Connect:Direct HP NonStop 3.4.03 Maintenance Updates*, which is available from the Documentation Library link on the Support On Demand Web site at [www.sterlingcommerce.com](http://www.sterlingcommerce.com). For the history of issues resolved prior to this release, see the Sterling Commerce Support On Demand Web site.

---

## Known Restrictions

Connect:Direct HP NonStop 3.4 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.

## Connect:Direct Secure+ Option HP NonStop

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

- ◆ Connect:Direct Secure+ Option HP NonStop version 3.0 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.

---

## Documentation Updates

This section describes last-minute updates to the documentation for Connect:Direct HP NonStop and its related products.

### Chapter 1, About Connect:Direct HP NonStop

Add the following sections to this chapter in the *Connect:Direct HP NonStop Installation Guide*, *Connect:Direct HP NonStop Management Programming Guide*, *Connect:Direct HP NonStop User Guide and Reference*, and *Connect:Direct HP NonStop Administration Guide*.

#### Connect:Direct Browser User Interface

Connect:Direct Browser User Interface allows you to build, submit, and monitor Connect:Direct Processes from an Internet browser, such as Microsoft Internet Explorer.

You can also perform Connect system administration tasks, such as viewing and changing the network map or initialization parameters, from Connect:Direct Browser. The specific administration tasks that you can perform depend on the Connect:Direct platform that your browser is signed on to and your security level.

Connect:Direct Browser is distributed on CD-ROM with Connect:Direct for OS/390, Connect:Direct for Windows, Connect:Direct for UNIX, and Connect:Direct for HP NonStop. It can also be downloaded from the Sterling Commerce Web site. Connect:Direct Browser is installed on a Web server and can be accessed by administrators and users through a URL. The following example shows the page used to graphically build a Process:



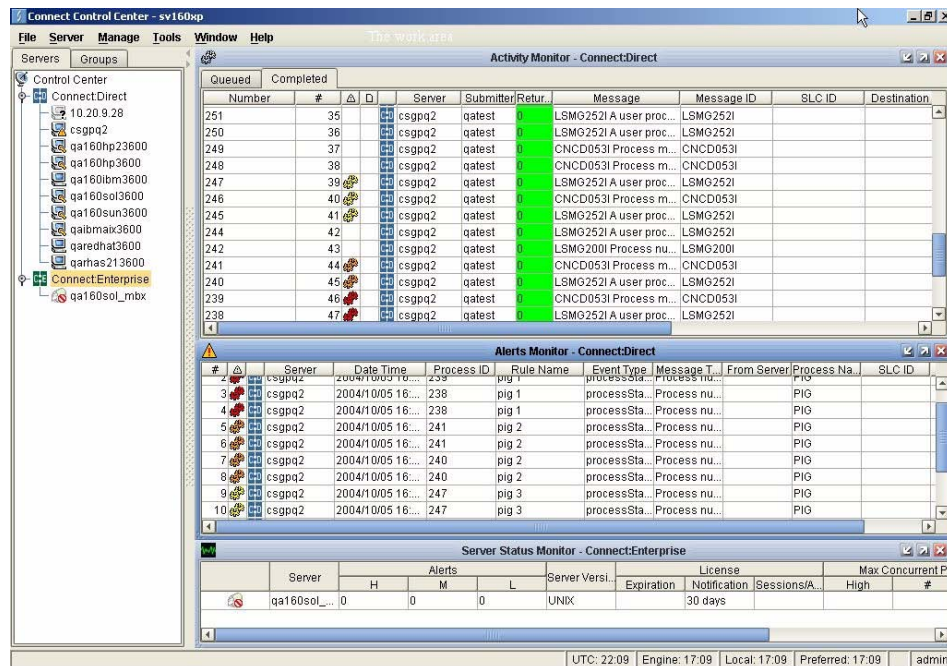
To learn more about Connect:Direct Browser, see the documentation on the Connect:Direct Browser CD-ROM or available online from the Sterling Commerce Documentation Library.

## Connect Control Center

Connect Control Center is a centralized management system that provides operations personnel with continuous enterprise-wide business activity monitoring capabilities for Connect:Direct OS/390, UNIX, Windows, HP NonStop, and OS/400 (iSeries) servers. Connect Control Center enables you to:

- ◆ Manage multiple Connect:Direct servers
  - ◆ Groups individual servers into server groups for a single view of system-wide activity
  - ◆ View status and statistics on active or completed processing
  - ◆ Suspend, release, and delete Connect:Direct Processes on OS/390, UNIX, Windows, and HP NonStop platforms
  - ◆ Stop Connect:Direct servers on OS/390, UNIX, Windows, and HP NonStop platforms
- ◆ Monitor service levels

- ◆ View processing across Connect:Direct OS/390, UNIX, Windows HP NonStop, and OS/400 (iSeries) servers within your network and retrieve information about active and completed processing



- ◆ Receive notification of data delivery events that occur or do not occur as scheduled
  - ◆ Define rules that, based on processing criteria, can generate an alert, send an e-mail notification, generate a Simple Network Management Protocol (SNMP) trap to an Enterprise Management System (ESM), run a system command, or issue a Connect:Direct server command
  - ◆ Monitor for alerts, such as a server failure or a Process not starting on time
  - ◆ Create service level criteria (SLC) that define processing schedules, monitor Processes, files within Processes, and file transfers for compliance with these schedules, and generate alerts when the schedules are not met
  - ◆ Analyze key operational metrics
  - ◆ Create customized reports to document and analyze processing activity, based on criteria you define
  - ◆ Validate the authenticity of a user logging on to Connect:Direct HP NonStop, using one or more of four authentication methods including password validation, host name identification, Windows domain, and TCP/IP address
  - ◆ Identify additional Connect:Direct servers that may need to be monitored based on communications with a currently monitored server using the Guided Node Discovery feature
- Connect Control Center enhances operational productivity and improves the quality of service by:
- ◆ Ensuring that critical processing windows are met
  - ◆ Reducing impact on downstream processing by verifying that expected processing occurs
  - ◆ Providing proactive notification for at-risk business processes

- ◆ Consolidating information for throughput analysis, capacity planning, post-processing operational or security audits, and workload analysis
- ◆ Reducing the risk of errors associated with manual system administration, including eliminating individual server logon to view activity, and the need to separately configure each server for error and exception notifications

Connect Control Center is available for purchase as a separate product. Contact your Sterling Commerce representative to learn more about Connect Control Center.

## Connect:Direct HP NonStop Installation Guide

The following updates apply to *Connect:Direct HP NonStop Installation Guide*.

### Chapter 3, Installing and Configuring Connect:Direct HP NonStop

Apply the changes as follows.

Replace the note on page 45 with the following note:

---

**Note:** The last option on the Main Menu, Secure+ Administration, is displayed only if Secure+ Option is activated in the license key.

---

Add the following note below the Set Initialization Parameters panel on page 55:

---

**Note:** The last entry field on this panel, SECURE+, is displayed only if Secure+ Option is activated in the license key.

---

Add the following note to the description of the SECURE+ field on page 56:

---

**Note:** This field is used only if Secure+ Option is activated in the license key.

---

Add the following note below the Enter Adjacent Node Information panel on page 62:

---

**Note:** The SECURE field on this panel is displayed only if Secure+ Option is activated in the license key.

---

Add the following note to the description of the SECURE field on page 64:

---

**Note:** This field is used only if Secure+ Option is activated in the license key.

---

Add the following note below the License Verification Panel in Steps 3 and 4 on pages 76 and 77:

---

**Note:** The Secure+ field on this panel is displayed only if Secure+ Option is activated in the license key.

---

Add the following note to the description of the Secure+ field on page 77:

---

**Note:** This field is used only if Secure+ Option is activated in the license key.

---

Replace steps 2 and 3 of *Starting Connect:Direct HP NonStop* on page 80 with the following updated information.

2. Press **F1** to select option 1. This option enables you to map required Connect:Direct components to the executable files that use these components to run Connect:Direct. The Resolve User Library References panel is displayed:

```

=====
03.06.2006          Connect:Direct HP NonStop          10:14:15 AM
3.5.00             Automated Installation & Management System (AIMS)

=====
Current Option -> 2.1  Resolve User Library References  Quick Path -> 2.2

It is necessary to execute this step after installing or updating
any Connect:Direct object module(s), or fatal errors will result!.

NOTE:  1. All Connect:Direct Processes must be stopped
        2. The user executing NDMAIMS must have WRITE
           access to the Connect:Direct executables.

CDLIB           : $WORK02.NDMOBJ.CDLIB
NDMMON Object Name : $WORK02.NDMOBJ.NDMMON
Server Object Name  : $WORK02.NDMOBJ.NDMSRVR
NDMCOM Object Name  : $WORK02.NDMOBJ.NDMCOM
NDMMMSG Object Name : $WORK02.NDMOBJ.NDMMSG
NDMXLATE Object Name : $WORK02.NDMOBJ.NDMSPL
NDMSPL Object Name  : $WORK02.NDMOBJ.NDMSPL
CDLIBRES File      : $WORK02.NDMINSTL.CDLIBRES
Lib Res OUT File   : $S.#LIBOUT

-----
SF1=Help SF2=Execute SF3=Prev Option SF4=Main Menu SF5=Print SF16=Exit
                                     <F16>=Quick Path
    
```

3. Identify the location of the following files:

Entry Field	Description
CDLIB	Specifies the location of the Connect:Direct object library.
NDMMON Object Name	Specifies the location of the Monitor Program.
Server Object Name	Specifies the location of the Server Program.
NDMCOM Object Name	Specifies the location of the Command Interface Program.
NDMMMSG Object Name	Specifies the location of the Message Utility Program.
NDMXLATE Object Name	Specifies the location of the Translation Program.
NDMSPL Object Name	Specifies the location of the print process module.

Entry Field	Description
CDLIBRES File	Contains RUN commands (MIPS platforms) or ELD commands (HP Integrity platform) that update the user library reference in each Connect:Direct application module to point to the locally-installed CDLIB module.
Lib Res OUT File	Specifies the TACL output file showing the resolution of the preceding objects.

## Connect:Direct Secure+ Option HP NonStop Implementation Guide

Apply the following changes to update information in the *Connect:Direct Secure+ Option HP NonStop Implementation Guide*.

### Chapter 2, Installing and Setting Up Connect:Direct for HP NonStop Secure+ Option

In *Configuring Nodes for Secure+ Option*, add the following Caution after the last bullet of step 4 (default security option activation for a node):

---

**Caution:** Due to differences in the negotiation of the common cipher suite between Connect:Direct nodes with SSL or TLS enabled, order the ciphers from strongest to weakest when you configure nodes for Secure+ Option. This configuration ensures that the strongest available cipher suite has precedence and will always be negotiated as the common suite, even when nodes have different protocols enabled.

---

### Cipher Suite Name Changes for Connect:Direct HP NonStop Version 3.4.03

With Connect:Direct HP NonStop version 3.4.03, the Secure+ Option Administration panel you access from the Automated Installation and Management System (AIMS) displays industry-standard cipher suite names. In earlier versions of Connect:Direct, these cipher suites are identified with longer, security toolkit-specific names.

Use the following table to identify cipher suite names used with Connect:Direct HP NonStop version 3.4.01 (and earlier releases) and the corresponding industry-standard cipher suite name used in Connect:Direct HP NonStop version 3.4.03.

Toolkit-Specific Cipher Suite Name (Connect:Direct HP NonStop version 3.4.01 or earlier)	Industry-Standard Cipher Suite Name (Connect:Direct HP NonStop version 3.4.03)
SSL_RSA_WITH_NULL_MD5	NULL_MD5
SSL_RSA_EXPORT_WITH_RC4_40_MD5	EXP-RC4-MD5
SSL_RSA_WITH_RC4_128_MD5	RC4-MD5
SSL_RSA_WITH_RC4_128_SHA	RC4-SHA
SSL_RSA_EXPORT_WITH_DES40_CBC_SHA	EXP-DES-CBC-SHA
SSL_RSA_WITH_DES_CBC_SHA	DES-CBC-SHA

Toolkit-Specific Cipher Suite Name (Connect:Direct HP NonStop version 3.4.01 or earlier)	Industry-Standard Cipher Suite Name (Connect:Direct HP NonStop version 3.4.03)
SSL_RSA_WITH_3DES_EDE_CBC_SHA	DES-CBC3-SHA
TLS_RSA_WITH_AES_128_CBC_SHA	AES128-SHA
TLS_RSA_WITH_AES_256_CBC_SHA	AES256-SHA

Cipher suite names are referenced on the following pages:

- ◆ *Installing and Setting Up Connect:Direct Secure+ Option HP NonStop*
  - ◆ *Defining SSL or TLS Options*, step 3 on page 25
  - ◆ *Secure+ Administration Panel Information*, page 27
- ◆ *Maintaining Secure+ Option*
  - ◆ *Viewing the Secure+ Node List*, page 30
  - ◆ *Disabling SSL or TLS Options*, page 32
- ◆ *Accessing Secure+ Option Statistics and Troubleshooting*
  - ◆ *Select Statistics Output*, page 40
  - ◆ *Select Process Display*, page 41

Be sure to update cipher suite names on the applicable worksheets. Refer to *Modifying a Secure+ Option Configuration* if you need to change the cipher suites enabled for Connect:Direct Secure+ Option HP NonStop.

## Getting Support for Sterling Commerce Products

Sterling Commerce provides intuitive technical products and superior Help and documentation to enable you to work independently. However, if you have a technical question regarding a Sterling Commerce product, use the Sterling Commerce Customer Support Web site, Support On Demand.

The Sterling Commerce Customer Support Web site at [www.sterlingcommerce.com](http://www.sterlingcommerce.com) is the doorway to Web support, information, and tools. This Web site contains several informative links, including a solutions database, an issue tracking system, fix information, documentation, workshop information, contact information, sunset and retirement schedules, and ordering information. Refer to the *Customer Support Reference Guide* available from the Sterling Commerce Customer Support Web site for specific information on getting support for Sterling Commerce products.

You need a Support On Demand user name and password for access to the information and services provided on the Sterling Commerce Customer Support Web site.

To obtain a Support On Demand user name and password:

1. Open your Web browser and go to <http://www.sterlingcommerce.com> to display the Sterling Commerce Web site main page.
2. Highlight **Customer Support** and click **Support On Demand** to display the Login page.



3. Click the link under **New to the Site?**
4. Read the Legal Agreement and click **Agree**.
5. Type the information required to register and click **Submit**.

Your Support On Demand user name and password will be sent to you in an e-mail.

---

## Connect:Direct HP NonStop Documentation

The Connect:Direct HP NonStop documentation, including supplemental documentation, is available on the product media or the documentation CD-ROM. You can view or download documentation from the Sterling Commerce Support On Demand Web site at [www.sterlingcommerce.com](http://www.sterlingcommerce.com). You need a Support On Demand user name and password. See *Getting Support for Sterling Commerce Products* on page 24 for instructions on obtaining your user name and password.

Access to PDF files requires the latest version of Adobe Acrobat Reader, which you can download at [www.adobe.com](http://www.adobe.com).

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*
- ◆ *Connect:Direct Compatibility and Connectivity Chart*

Documentation for the following supplemental products is available on additional distribution media:

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

Maintenance updates are available in HTML format on the Sterling Commerce Support on Demand Web site or in release notes. Release notes are available in hard copy and in HTML format on the Support on Demand Web site.

Information on Connect:Direct Processes is available from the Connect:Direct Processes Web site at <http://www.sterlingcommerce.com/documentation/processes/processhome.html>.



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zlib.h -- interface of the 'zlib' general purpose compression library  
version 1.1.2, March 19th, 1998

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The data format used by the zlib library is described by RFCs (Request for Comments) 1950 to 1952 in the files ftp://ds.internic.net/rfc/rfc1950.txt (zlib format), rfc1951.txt (deflate format) and rfc1952.txt (gzip format).