

Sterling Commerce Product Documentation



Connect:Direct® for UNIX Version 3.8.00 Release Notes

Second Edition

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Connect:Direct for UNIX Version 3.8.00 Release Notes

The *Connect:Direct for UNIX Version 3.8.00 Release Notes* document supplements Connect:Direct for UNIX version 3.8 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 for UNIX. Read the document in its entirety before installation.

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

◆ CDs

CD	Contents
CD1	documentation/
	HP_PA-RISC/
	HP_Ianium/
	HP_Truc64/
	Sun_Solaris/
	Solaris_x86/
CD2	documentation/
	IBM/
	IBMS390_linux/
	RedHat_linux/
	SuSE_linux/

◆ File downloaded from the Sterling Commerce Electronic Software Distribution Portal
See *Installing Connect:Direct for UNIX from the ESD Portal* on page 18.

Product Requirements

Connect:Direct for UNIX has the following requirements.

Hardware and Software

Connect:Direct for UNIX offers two connectivity options: TCP/IP and LU6.2. Each option runs on specific platforms. For TCP connectivity, the system must support TCP/IP and Berkeley Software Distribution (BSD) or compatible sockets.

Connect:Direct for UNIX version 3.8.00 requires the following hardware and software:

Note: Connect:Direct for UNIX supports systems running in 32- or 64-bit mode.

Component or Functionality	Hardware	Software	RAM	Disk Space	
Connect:Direct for UNIX with TCP/IP connectivity	HP PA-RISC	HP-UX version 11i or 11iv2	64 MB	50 MB	
	HP Integrity system with Intel Itanium processor	HP-UX version 11iv2	64 MB	50 MB	
	IBM System p5	AIX 5L version 5.2 or 5.3	64 MB	50 MB	
	Sun SPARC system	Solaris version 9 or 10, including Solaris 10 Zones	64 MB	50 MB	
	Sun x64 system with AMD Opteron processor	Solaris version 10, including Solaris 10 Zones	64 MB	50 MB	
	x86 system		Solaris version 9 or 10, including Solaris 10 Zones	64 MB	50 MB
			SuSE SLES version 9 or 10	64 MB	50 MB
			Red Hat Advanced Server version 3 or 4	64 MB	50 MB
	Linux zSeries		SuSE SLES version 9 or 10	64 MB	50 MB
			Red Hat Advanced Server version 3 or 4	64 MB	50 MB
HP/Alpha Tru64 UNIX	Tru64 version 5.1 A		64 MB	50 MB	
Connect:Direct for UNIX with LU6.2 connectivity	HP PA-RISC	HP-UX version 11i or 11iv2	64 MB	50 MB	
	HP Integrity system with Intel Itanium processor	HP-UX version 11iv2	64 MB	50 MB	

Component or Functionality	Hardware	Software	RAM	Disk Space
	IBM System p5	AIX 5L version 5.2 or 5.3	64 MB	50 MB
	Sun SPARC system	Solaris version 9 or 10	64 MB	50 MB
File Agent	Same as requirements for Connect:Direct for UNIX	Same as requirements for Connect:Direct for UNIX Java 2 Platform, Standard Edition (J2SE) 1.4, installed with File Agent	64 MB	275 MB
Connect:Direct Secure+ Option	Same as requirements for Connect:Direct for UNIX	Same as requirements for <ul style="list-style-type: none"> ◆ Connect:Direct for UNIX version 3.8.00 ◆ Sun Microsystems Java 2 Runtime Environment, installed with Connect:Direct for UNIX 	64 MB	70 MB
SNA support using LU6.2 connectivity	IBM System p5	Install and configure Communications Server for AIX V6.		
SNAPplus2	HP PA-RISC	For HP-UX 11.00, you must install and configure both of the following: <ul style="list-style-type: none"> ◆ SNAPplus2 Link version R6.11.00 ◆ SNAPplus2 API version R6.11.00 		
SunLink SNA	Sun SPARC systems	Install and configure one of the following: <ul style="list-style-type: none"> ◆ SNAP-IX Gateway software Data Connection Limited ◆ Brixton PU2.1 SNA Server version 4.1 or later 		
High-Availability support	HP PA-RISC	HP MC/Service Guard		
	IBM System p5	IBM HACMP		
	Sun SPARC systems	SunCluster 2.2 and 3.0 Note: To use Connect:Direct for UNIX in a SunCluster environment, you must install a Sun C compiler.		

Additional Requirements

Connect:Direct for UNIX has the following additional requirements.

Supported Interfaces

Connect:Direct for UNIX supports the following interfaces:

- ◆ Ethernet
- ◆ Token ring
- ◆ SDLC
- ◆ X.25 (QLLC)

Password Storage

Connect:Direct for UNIX enables you to use any of the following for password storage:

- ◆ /etc/passwd file
- ◆ /etc/shadow file when supported by the operating system
- ◆ HP-UX trusted security
- ◆ Network Information Service (NIS), formerly known as Yellow Pages
- ◆ Digital UNIX Enhanced Security

Libraries

Ensure that you have the following libraries installed:

UNIX Platform	Software	Library
Linux zSeries	Red Hat Advanced Server	compat-libstdc++-33.3.2.3-47.3 (or later)
IBM System p5	AIX	IBM C Set ++ Runtime Libraries for AIX Note: After you install these libraries, re-run the Connect:Direct for UNIX installation program.

License Management Key File

The license management key file identifies the product features that are available at a site. When you purchase Connect:Direct for UNIX, a temporary key file is sent to you that enables operation of Connect:Direct for UNIX for a limited time.

The temporary key file is supplied as a text file named *nnnnnn.txt*, where *nnnnnn* is a number assigned by Sterling Commerce. Each key file is sent to you as an attachment to an e-mail. The temporary license key file must be applied on the computer where Connect:Direct for UNIX is installed.

The temporary key includes a Product-Software-Product (PSP) number. When you request a permanent key file, provide this PSP number, the CDSYSTEMID file, and whether the license is used for Production, Test, or Hot Standby. See step 3 on page 9 for instructions on requesting a permanent license key.

To apply the temporary and permanent key file:

1. Copy the license key file from the Sterling Commerce e-mail to the *d_dir/ndm/cfg/nodename* directory, where *d_dir* is the location of the Connect:Direct for UNIX installation and *nodename* is the name of the node you defined when you installed Connect:Direct for UNIX.
2. Rename the license key file to **license.key**.

Caution: Do not edit the *nnnnn.txt* file or the *license.key* file. Text editors may insert a carriage return or truncate lines, which will invalidate the key file.

Note: The following procedure relates to obtaining a license for the first time or replacing an expired license. It involves generating a CDSYSTEMID file that contains information about your system that is sent to Sterling Commerce to generate a CPU-ID. This new method for generating license management keys was introduced in Connect:Direct for UNIX version 3.7.00. Although earlier license management keys will not work with Connect:Direct for UNIX version 3.7.00, they will work if you are upgrading to Connect:Direct for UNIX version 3.8.00.

3. To obtain a permanent license key file:
 - a. From the *d_dir/etc* directory, type *hostid.sh*. This runs a program that identifies your host ID information and creates a file called, *CDSYSTEMID*, in the *d_dir/etc* directory.
 - b. Reply to the Sterling Commerce e-mail containing your temporary license key file, and attach the file called *CDSYSTEMID*. Identify the PSP number from your temporary license key and whether the license is used for Production, Test, or Hot Standby. (Do this for each permanent key requested.)

You will receive the permanent license key file, named by Connect:Direct *nodename*, through e-mail in approximately 1 to 2 business days.
4. Make a copy of the original permanent license key file and keep it in a safe place.
5. Repeat steps 1 and 2 to replace the temporary license key file with the permanent key file.

Features and Enhancements

Connect:Direct for UNIX version 3.8.00 has the following features and enhancements.

Product	Feature or Enhancement
Connect:Direct for UNIX	Combines the base installation and Secure+ Option installation into one installation script.
	Enables the use of JAI to manage Connect:Direct for UNIX asset protection key files using Sterling Control Center.
	Provides Process Interrupted (PRIN) records to indicate Process end when a Process is interrupted without fully completing.
	Eliminates world-write permission on the work directory for SOX compliance. This feature prevents unauthorized users from tampering with statistics; preserves auditability, the TCQ, temporary work files created and deleted as Processes are executed, and scheduling; and prevents workflow interruption.
	Supports Sterling Secure Proxy by supplying the SNODE name in FMH68 messages.
	Removes the 64K upper limit restriction on the comm.bufsize netmap parameter.
	Supports Pluggable Authentication Modules (PAM) for user authentication. PAM may be used to perform LDAP user authentication.
	Improves write-file buffering.
	Restricts the use of “\$; ” in the command line of a RunTask or RunJob statement through the “ restrict:cmd=Y parameter” in the <i>Miscellaneous Parameters</i> section of the Initialization Parameters file.
	Provides a new compression ratio that is the reduction in original size expressed as a percentage.
	Provides the new ALT.COMM.OUTBOUND parameter to specify an alternate communication path when Connect:Direct for UNIX initiates a Process.
	Adds statistics records to log the Signon statistic record (SGON) when a user signs on through the KQV Interface or the CLI and to log the Netmap Update statistic record (NMPR) for a netmap update operation through the KQV Interface.
	Releases retry Processes from the Timer queue in the order they were submitted.
	Updates Zlib to the latest version.
	Supports checkpoint restart in a load-balancing cluster environment.
	Changes the default behavior of the Strong Access Control List (SACL) to prevent a non-root user from gaining root access through Connect:Direct for UNIX.

Product	Feature or Enhancement
Connect:Direct Secure+ Option for UNIX	Adds the capability to configure the .SEAServer record for the SSL/TLS protocol for sessions with the Sterling External Authentication Server.
	Provides an updated version of the Java Run-time Environment (JRE) bundled with Connect:Direct for UNIX.
	Secure+ Option is available on all platforms supported by Connect:Direct for UNIX.
	Adds the capability to configure remote node records to use external authentication.
	Provides the capability to use the Local Connection Utility (LCU) to create an LCU file that contains encrypted passwords for use in the Secure+ CLI so that passwords are not displayed in plain text.
	Adds the capability to configure external authentication with the Secure+ Admin Tool and Secure+ CLI.
	Adds Secure+ Option certificate auditing information about the identity certificate and its signing certificate used in an SSL/TLS session to the statistics log in the Session Start record (SSTR) and Copy Termination record (CTRC).
	Provides Secure+ Option audit trails/logs when changes are made to Secure+ Option, which identify the user making the change and the change made.

Special Considerations

Successfully implementing the Connect:Direct for UNIX application requires taking into account the considerations described here in addition to the procedures contained in this document and the other Connect:Direct for UNIX documents. Refer to the following notes before installing the product.

Special Process Naming Considerations Across Platforms

Although Connect:Direct for UNIX Process names can be up to 256 characters long, some Connect:Direct platforms, such as Connect:Direct for OS/390 limit Process names to eight characters. Processes running between UNIX and platforms that limit Process names to eight characters can have unpredictable results if longer names are specified.

Cipher No Longer Supported

Secure+ Option no longer supports the cipher, `SSL_RSA_WITH_NULL_SHA`. If the cipher is defined in a previous parameters file, it is ignored.

Migrating from PA-RISC to HP Integrity

If you install Connect:Direct for UNIX on an HP Integrity system, you cannot use the Secure+ Option parameter file generated on a PA-RISC computer. You must create a new parameter file.

Negotiating to the Most Secure Handshake Protocol

Defining SSL as the preferred protocol in the Secure+ Option parameter file does not always result in the use of SSL as the handshake-verification method. If both nodes have the ability to use TLS for authentication, Secure+ Option determines the most secure handshake available at both nodes and uses the most secure protocol. You can view the statistics record to determine which protocol was used to verify each node.

Special Considerations for Connectivity with the HP NonStop Kernel Operating System

This version of Connect:Direct for UNIX offers connectivity to Connect:Direct HP NonStop Kernel version 3.2.00 or later using TCP/IP. Refer to the following notes when transferring files from the UNIX operating system to the HP NonStop Kernel operating system:

- ◆ Do not define the `sysopts` parameter with continuation marks. Type the text in a continuous string, with blanks separating each subparameter. The `sysopts` parameter is valid for the copy statement.
- ◆ When copying files from the UNIX operating system to the HP NonStop Kernel operating system, define the `dcb` parameter to allocate destination files. Define any additional options using the `sysopts` parameter. The `dcb` and `sysopts` parameters are valid for the copy statement.

Use of 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, the default file types on the destination node are as follows:

- ◆ If you are transferring a text file, the file type on the HP NonStop Kernel node defaults to an unstructured file, code 101.
- ◆ If you are transferring a binary file, the file type on the HP NonStop Kernel node defaults to an unstructured file, code 0.
- ◆ When copying files from the HP NonStop Kernel operating system to the UNIX operating system, define the `sysopts` parameter to allocate destination files.

For syntax and parameter descriptions for Process statements, see the Connect:Direct Processes Web site at <http://www.sterlingcommerce.com/documentation/processes/processhome.html>.

Special Considerations for Connect:Direct for UNIX Running on HP-UX

If you are installing Connect:Direct for UNIX for the first time and intend to use an SNA connection, install the SNA stack (SNAplus2) before you install Connect:Direct for UNIX.

Connect:Direct for UNIX requires the PA-RISC 2.0 CPU to run. Create and run the following shell script to determine which PA-RISC microprocessor is installed on your HP system:

```
#!/bin/sh
grep $(getconf _SC_CPU_VERSION | awk '{printf("0x%x", $0)}' ) /usr/include/sys/unistd.h
```

Installation Notes

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

- ◆ Review *Connect:Direct for UNIX Version 3.8.00 Release Notes* for last-minute product information and pre-installation tasks.
- ◆ If you have purchased Connect:Direct Secure+ Option for UNIX, print and review the *Connect:Direct Secure+ Option for UNIX Implementation Guide* for pre-installation tasks.
- ◆ Print and review *Connect:Direct for UNIX Getting Started Guide* from the product CD or the ESD download file.
- ◆ Complete any worksheets prior to installing Connect:Direct for UNIX.
- ◆ Review your security configuration to ensure compatibility with Connect:Direct for UNIX before proceeding with the installation. Refer to the *Connect:Direct for UNIX Getting Started Guide* for security options.
- ◆ Verify that you have the current updates for Connect:Direct for UNIX. 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. See *Getting Support for Sterling Commerce Products* on page 25 for instructions.
- ◆ When File Agent is installed on a Compaq Tru64 computer (with SuSE SLES Version 10), the InstallAnywhere application reports exceptions to the installation; however, the installation completes successfully.
- ◆ Do *not* install Connect:Direct for UNIX on a Network File System (NFS) resource. Install Connect:Direct for UNIX on a local drive.

Upgrading to Connect:Direct for UNIX Version 3.8.00

This section provides instructions on upgrading to Connect:Direct for UNIX version 3.8.00 and special considerations for performing an upgrade.

Upgrade Considerations

If you are upgrading from an existing version of the Connect:Direct for UNIX application, observe the following guidelines:

- ◆ Change the ownership on the statistics files in your work directory so that these files are owned by the user who starts the `cdpmgr` daemon. Use the following command sequence to change the ownership of the statistics files:

```
$ su root
Password: root_password
# cd cddir/work/node
# chown user_who_starts_cdpmgr S*.*??
```

The following variable definitions apply:

Variable	Definition
<code>root_password</code>	Root user's password
<code>cddir</code>	Directory in which Connect:Direct is installed
<code>node</code>	Your Connect:Direct node name
<code>user_who_starts_cdpmgr</code>	User name of the user who will start the <code>cdpmgr</code> daemon

- ◆ If you are upgrading to Connect:Direct for UNIX from any version prior to version 3.3.00, you must replace the TCQ file with a file in a new format. The upgrade process automatically converts the existing TCQ file to the new format and preserves existing TCQ information. The program to convert the existing TCQ file is included on the installation media. This program, `tcq_convert`, is extracted to the `d_dir/etc/` directory, where `d_dir` is the directory where Connect:Direct for UNIX is installed and is automatically invoked by the installation script. You can also run this program manually from the system prompt, as described in the sections that follow.

Assuming that the `d_dir/etc/` directory is in your path, the format for the `tcq_convert` program follows:

```
tcq_convert input_filename output_filename
```

Provide the following required parameters:

Parameter	Description
<code>input_filename</code>	TCQ file in the format from a previous version of Connect:Direct for UNIX
<code>output_filename</code>	TCQ file in the format for Connect:Direct for UNIX version 3.8

The following example converts the TCQ file (tcqhdr.ind) from a previous version of Connect:Direct for UNIX, to a file in the new format, tcqhdr.new:

```
tcq_convert tcqhdr.ind tcqhdr.new
```

The following table shows the error messages that are generated by the tcq_convert program:

Error Message	Description
input_filename is not a valid TCQ file.	The input file is not a valid TCQ file or the TCQ file is corrupted.
input_filename is correct format. No conversion performed.	The input file is already in the new format. The tcq_convert program exits and leaves the input file intact.

Upgrade Procedure

If you want to upgrade Connect:Direct for UNIX to version 3.8.00 and retain your current configuration, perform this procedure. To upgrade the server software and install additional components of Connect:Direct for UNIX version 3.8.00 at the same time, refer to the installation procedure outlined in the *Connect:Direct for UNIX Getting Started Guide*.

To upgrade Connect:Direct for UNIX version 3.8.00:

1. Log on to the UNIX system with the privileges required to install software. You can create an account specifically for this purpose.

Caution: Do not install as root.

2. If Connect:Direct for UNIX is running, stop the server before continuing the upgrade.
 - ♦ If you have the product CDs, select the CD for your platform. Type the following command and press **Enter** to change to the CD-ROM drive and the directory that correspond to the UNIX platform:

```
cd /cdrom/<platform directory>
```

Refer to the following table for the name of the platform directory for each platform.

UNIX Platform	Platform Directory Path
HP PA-RISC	HP_PA-RISC
HP-UX Itanium	HP_Itanium
IBM System p5	IBM

UNIX Platform	Platform Directory Path
Sun SPARC systems	Sun_Solaris
Red Hat	RedHat_linux
SuSE	SuSE_linux
HP/Alpha Tru64 UNIX	HP_Tru64
Linux zSeries	IBMS390_linux
Solaris/x86	Solaris_x86

- ◆ If you downloaded the product from the ESD Portal, type the following command and press **Enter** to change to the location of the product download:

```
cd /<location of product download>
```

3. Type the following command to invoke the installation script and press **Enter**:

```
cdinstall
```

The following screen is displayed:

```
=====
Sterling Commerce, Inc.,(TM) Connect:Direct(TM) for UNIX(TM)
Installation Procedure

You are beginning the Connect:Direct for UNIX Installation
Procedure. You will be asked to specify a directory (called
the destination directory) where the Connect:Direct for UNIX
files will be stored.

Please follow the Getting Started Guide and/or Release Notes for the
proper Media Name.

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of Sterling Commerce, Inc. in the U.S.A. and other countries.

UNIX is a registered trademark of The Open Group
=====

Press ENTER when ready.
```

4. Read the information and press **Enter**. The following screen is displayed:

```
Enter the FULL path of the directory where
Connect:Direct for UNIX 3.8.00 will be installed.
You can use $HOME to shorten the name:[$HOME/cdunix]
```


5. Type the path name of the directory where Connect:Direct for UNIX will be installed and press **Enter**. The following message is displayed:

```
WARNING: "/directory structure of Connect:Direct Installation" : Directory exists
Files in /directory structure of Connect:Direct Installation could be overwritten by the
installation. Do you want to continue [Y/n]y
```

6. Press **Enter**. The following message is displayed:

```
Installed components detected in this directory.

Currently installed C:D for UNIX version is less than the version being installed.

There may be additional installation options available in the full installation
procedure. Would you like this procedure to detect and upgrade your
currently installed options with minimal interaction?

Caution: If upgrading from C:D for UNIX version 3.4 or 3.5 with no maintenance
          or an early version of maintenance, existing Processes in the
          TCQ will not run. They will need to be deleted and resubmitted.

Specify yes to continue with the upgrade procedure, or
no to run the full installation procedure: [Y/n]y
```

7. Press **Enter** to continue the upgrade process. The following screen is displayed:

```
Enter the path and filename where the installation file is mounted
or where the ESD portal download is extracted(e.g. /cdrom/IBM/cdunix):
```

8. Type the location of the installation file and press **Enter**. The following message is displayed:

```
Has the C:D UNIX server been stopped?[Y/n]n
Please ensure the C:D UNIX server has been stopped and then rerun cdinstall.
```

9. Type **y** and press **Enter** to continue. The following message is displayed:

```
Would you like to back up your existing C:D for UNIX installation before proceeding with
the upgrade? (you will need the root password to do this)[Y/n]
```

10. Do one of the following:

- ◆ To continue the upgrade without backing up your files, type **n** and press **Enter**.
- ◆ To back up your files, type **y** and press **Enter**.

If you type **y** to back up your files, the following message is displayed:

```
This option requires root password. Please enter the root password.
Password:
```

11. If necessary, type the root password and press **Enter**.

The installation searches the disk to determine if enough free disk space is available for the installation. If the destination directory does not have enough free disk space, the script suggests you delete enough files to provide the necessary disk space and then exits.

The installation script copies files from the distribution media to the destination directory and verifies that the correct number of files and blocks are copied.

12. If you are upgrading from version 3.4 or earlier, you are prompted to create an SACL file.

Installing Connect:Direct for UNIX from the ESD Portal

These instructions contain procedures for downloading and installing Connect:Direct for UNIX version 3.8.00, which includes Connect:Direct Secure+ Option for UNIX version 3.8.00.

The exact name of the file you download from the Sterling Commerce Electronic Software Distribution (ESD) Portal depends on your operating system and platform and the product you want to download. In the following instructions, the term ESD file refers to one of the following files:

UNIX Platform	ESD Product Download File Name
HP Integrity system with Intel Itanium processor	CDUnix3800_HP_Itanium.tar.Z
HP PA-RISC series	CDUnix3800_HP_PA-RISC.tar.Z
HP/Alpha Tru64 UNIX	CDUnix3800_HP_Tru64.tar.Z
IBM System p5	CDUnix3800_IBM.tar.Z
Linux zSeries	CDUnix3800_IBMS390_linux.tar.Z
Red Hat Linux	CDUnix3800_RedHat_linux.tar.Z
Solaris/x86	CDUnix3800_Solaris_x86.tar.Z
SuSE	CDUnix3800_SuSE_linux.tar.Z
Sun Solaris (includes SunLink SNA)	CDUnix3800_Sun_Solaris.tar.Z

Downloading Product Files

These instructions assume that you download the ESD file to a computer running the Windows operating system (OS) and transfer it to the system where you will install it, unless the Windows OS is the target system.

To download the ESD 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 for UNIX version 3.8.00 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, CDUNIX3800_OSPlatform[1]3.8.00.bin), rename the file on the Windows system before you transfer it in binary mode to the system where it will be installed.

5. Transfer the ESD file to the system where you will install it.

Caution: Upload the ESD file to the target system in **binary** mode.

Extracting Files

To extract the application files:

1. Change the current working directory to the directory where you transferred the Connect:Direct for UNIX download file on the target system.
2. Perform one of the following actions to uncompress the .tar file:
 - ◆ On Linux systems, type the following command:

```
gzip -d ESD file
```

- ◆ On HP 9000 series, IBM System p5, and Sun SPARC systems, type the following command:

```
uncompress ESD file
```

3. Type the following command to retrieve the files from the archive:

```
tar xvf ESD file
```

The compressed tar file contains the following files:

File Name	Description
cdinstall	Contains the Connect:Direct installation script.
cdunix	Contains the installation cpio file.

Documentation is extracted from the archive into the /documentation directory.

Installing the Application

1. Review *Connect:Direct for UNIX Version 3.8.00 Release Notes* for last-minute product information and installation requirements.
2. To install Connect:Direct for UNIX, follow the instructions in the *Connect:Direct for UNIX Getting Started Guide*.

Maintenance Updates

The following table describes the issues resolved for Connect:Direct for UNIX version 3.8.00. For a history of maintenance prior to this release, see the Sterling Commerce Support On Demand Web site.

SR Number	Explanation
976200	Version information is not provided in cdver on the cdstatm and ndmumgr modules.
1348773	cdver output on Linux 390 binary indicated Intel x. makeident.sh did not distinguish between the Intel and s390 Linux.
1349417	A stop of the transfer of data needs to be available when the remote site is not entitled to send data.
1350005	A Process spawned by smgr is going into defunct status when a large number of Processes are executing between two servers.
1350123	When parameter "pstmt.upload_dir" is set in the userfile.cfg and sysopts=":pipe=yes" is coded in the Process, the following error occurs: Error XCPS002I.
1350403	The conn.retry.stattempts global parameter is not honored.
1350742	The submitted Process number is not logged from CLI/ submit within a Process.
1351439	When the CRC parameter is added to the UNIX Process, the following message occurs on the mainframe: SXDR999E—on OS/390 when UNIX sends FMH68 for a Process with CRC and the Process is placed in the UNIX retry queue. The additional info in RPLERRCK is "DMGFM68 XDR DECODE ERROR - IP ADDRESS = 26705;90.115.104.12". The mainframe init parm contains CRC=(OFF,YES).
1351544	If NDMAPICFG gets set to a long, invalid string, the CLI performs a core dump.
1352686	With netmap checking is enabled, the send from the remote node succeeds even when the IP address entry for a remote node has an incorrect value. Netmap checking is only validating the name of the node and not the IP.
1352771	STARTT is not honored when it is submitted with maxdelay.
1352894	No capability exists to select statistics with previous day starttime, which is possible with Connect:Direct for OS/390 using "SEL STAT STARTT(YESTER)."

SR Number	Explanation
1352944	<p>Large UNIX system running approximately 400 'ps -elf' commands causes 99% CPU load, which results in system critical performance problems that continue for 2 hours and require a forced crash of the system.</p> <p>Connect:Direct starts numerous Processes running the following UNIX commands:</p> <pre>sh -c netstat -s cksum awk '{printf(\$1)}';ps -elf cksum awk '{print \$1}' ps -elf</pre>
1352949	Connect:Direct for UNIX does not return all user entries to Connect:Direct Browser UI. Only one is displayed.
1353042	<p>Connect:Direct for UNIX is not logging statistics properly.</p> <p>A Process was submitted with "maxdelay=unlimited" to copy a file to the SNODE and returned rc 0, but there is no trace of this Process in the statistics files and the file was not copied to the SNODE. The submitted Process script never executed.</p>
1353111	If the 'umask' is set to Prohibit Other Access, then Connect:Direct usage experiences a series of errors.
1353796	A parsing exception occurs on a Run Task that is submitted via the Java Application Interface (JAI) using the pipe () symbol.
1354107	Whenever Sterling Control Center polls Connect:Direct for UNIX for the license key information, the stat write records unreadable characters in the S2006 file: lpc001@LPS002 RECI=¼ÿ%¼õ\$ RECC=CAEV MSGT=BEGN=APKY:END =APKY
1354535	The ndmapi_connect function needs to use the timeout value specified in the ndmapi.cfg file, rather than a hard-coded 90 seconds that it currently uses.
1354953	Connect:Direct for UNIX cannot send more than 2 GB files to a remote node from a SUN Solaris 10 system using Connect:Direct for UNIX version 3.6.01.
1354981	Without world-write permission on the work/{node} directory, users who are not the installer or in the installer's group could not submit Processes. An XSQF009I error occurs when opening the Process work file in the work/{node} directory.
1355537	When you copy files using wildcards, directory restrictions are not enforced until the actual copy step. As a result, remote users are able to get a list of all files in an arbitrarily chosen directory.
1356100	Some of the Sterling Control Center queries do not display the submitter.
1356640	When a Process is submitted on Connect:Direct for Windows (using the Submit statement), it causes a Process to run on Connect:Direct for UNIX. The Windows Process attempts to pass a variable that contains spaces to the UNIX Process. These spaces result in a syntax error, and the Process fails.
1356970	When File Agent version 1.0.07 is installed along with the Connect:Direct for UNIX version 3.6.01 maintenance release from 12JUN2006, cdinstall replaces the newer version of File Agent during the upgrade.
1357195	The server becomes unresponsive and generates many XLKL004I messages when a PNODE with a large session capacity has many Processes in the TCQ for an SNODE with a small session capacity.
1357346	A file cannot be uniquely renamed when it is copied to the staging.directory.

SR Number	Explanation
1357899	License_check() needs to verify that a non-null value is returned by read_netmap_local_node(). Signal 11 and core dump.
1358008	Message XSMG275I is being logged into the statistics at the end of wildcard copy step, which may insert unintelligible characters.
1358759	When attempting to make a TLS connection between Connect:Direct for OS/390 and Connect:Direct for UNIX, XIPT012I and CSPA202E have the comm.buffer set at 4K in the .Local node record, which causes the handshake to fail.

Known Restrictions

Connect:Direct for UNIX version 3.8.00 has the following restrictions:

- ◆ If you are using a certificate that was created with an older version of Sterling Certificate Wizard, the certificate may contain a blank line between the "BEGIN" and "END" statements that define a private key. This version cannot process the blank line, resulting in an error. If a certificate generates an error, delete the blank line in the certificate.
- ◆ If you are using the file allocation retry function when communicating with a remote node on an operating system that is not UNIX, identify operating system retry codes using formats and code values defined by the remote node.
- ◆ A copy operation from Connect:Direct for UNIX to Connect:Direct OS/400 completes successfully, but generates an SNA error in the iSeries log.
- ◆ If you use the Hummingbird Exceed terminal emulator to access a Solaris workstation, you may not have all of the fonts needed to use Connect:Direct Secure+ Option. Add the following command to the spadmin.sh file:

```
xset fp default
```

Insert this command before the following line of code:

```
java -classpath $CLASSPATH:/SCI/USERS/... com.stercomm.csg.spadmin.spadmin
```

This command maps all unknown fonts to a default value and prevents Connect:Direct from performing a core dump if it is unable to locate a font.

- ◆ The administration of Secure+ Option is achieved through Java and a graphical user interface (GUI). The standard UNIX telnet server does not support a GUI client session. To use the UNIX GUI you must be connected to the UNIX server via an X Windows client session, such as xterm. If you are connected to the UNIX server using a telnet session, you will not be able to run the GUI sessions required to install and administer Connect:Direct.
- ◆ Secure+ Option does not support server gated crypto (SGC) certificates.
- ◆ The Secure+ Option Command Line Interface does not support using \$HOME or the tilde (~) to specify the path to your home directory.

- ◆ When using the Secure+ Option Command Line Interface on the Solaris platform, command entries may be limited by the buffer size. To resolve this limitation, add line breaks to a command entry. For example, enter the following command with line breaks:

```
SslTlsEnableCipher=(TLS_RSA_WITH_AES_256_CBC_SHA,
TLS_RSA_WITH_AES_128_CBC_SHA,SSL_RSA_WITH_RC4_128_MD5,
SSL_RSA_WITH_RC4_128_SHA, SSL_RSA_WITH_3DES_EDE_CBC_SHA,
SSL_RSA_WITH_DES_CBC_SHA,SSL_RSA_EXPORT_WITH_RC4_40_MD5,
SSL_RSA_EXPORT_WITH_DES40_CBC_SHA,SSL_RSA_WITH_NULL_MD5);
```

- ◆ On the HP-UX, IBM System p5, and Linux platforms, when a run task defines an invalid UNIX command, the operating system return code is 127 and the completion code (CCOD) reported by Connect:Direct for UNIX is displayed in hexadecimal (7F) in the statistics output. This return code is correct for the error received, even though most return codes are defined as 0, 4, 8, or 16.
If the return code value of 127 is the highest step return code, the Process End (PRED) statistics record message ID is set to the Message ID of the run task step. On other platforms, the run task return code is 1, resulting in the message ID of XSMG252I in the PRED statistics record.
- ◆ On the Linux platform, you must use the C functions in the ndmapi.h file for name-mangling schemes. If your compiler uses a different name-mangling scheme, the C++ functions will not work on the Linux platform.
- ◆ The following features are not supported for Connect:Direct for UNIX running on Linux Red Hat or SuSE:
 - ◆ SNA
 - ◆ SNMP
- ◆ Connect:Direct Browser User Interface is not supported for Connect:Direct for UNIX running on HP Integrity systems with Intel Itanium processors.
- ◆ Typically, the AIX operating system is enabled for large file support. If you disable large file support, Connect:Direct for UNIX will not install.

Documentation Updates

This section describes last-minute updates to the Connect:Direct for UNIX documentation.

Note: Any references to Connect:Direct for OS/390 also include Connect:Direct for z/OS.

Connect:Direct for UNIX Process Parameters

The following change applies to page 8 of the *Connect:Direct for UNIX Process Parameters* document available on the Sterling Commerce Customer Support Web site, Support On Demand:

portnumber | ***pathname*** identifies the communications port for the Connect:Direct software. The ***portnumber*** is a decimal number from 1024–5535. The default is **1364**. This is applicable only for TCP/IP.

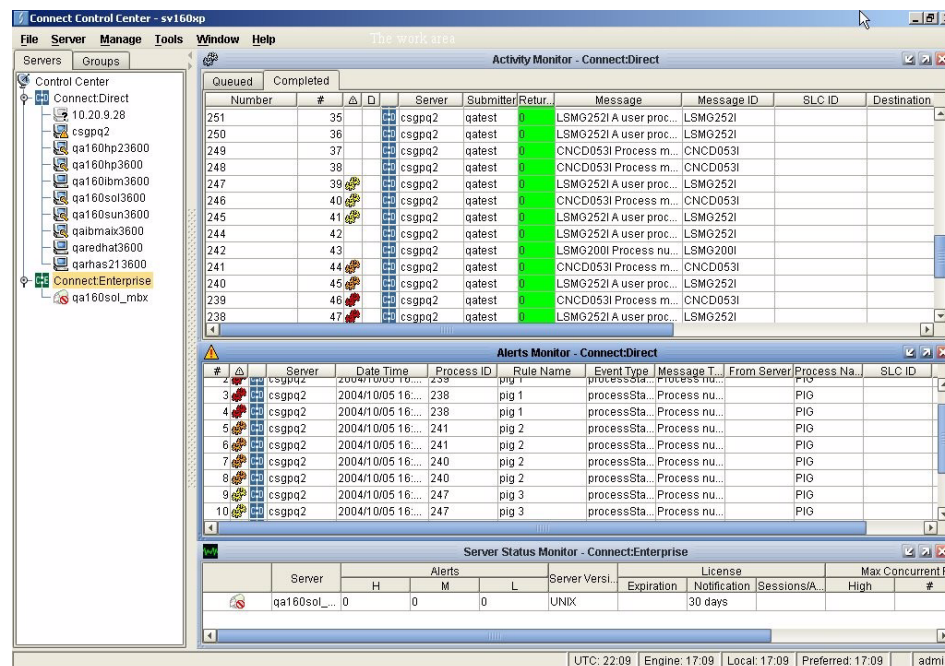
About Connect:Direct for UNIX

The following change applies to pages 10-11 of the *Sterling Control Center* section of the *About Connect:Direct for UNIX* chapter of the *Connect:Direct for UNIX User's Guide, Administration Guide, and Getting Started Guide*.

Sterling Control Center

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

- ◆ Manage multiple servers
 - ◆ Group 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 handle Connect:Direct Processes on z/OS or OS/390, UNIX, Windows, Select, and HP NonStop platforms
 - ◆ Stop Connect:Direct servers on z/OS or OS/390, Windows, HP NonStop, and UNIX platforms
- ◆ Monitor service levels
 - ◆ View processing across Connect:Direct for z/OS or OS/390, UNIX, Windows, HP NonStop, OS/400 (iSeries), Connect:Direct Select, and GIS servers, and Connect:Enterprise for UNIX and Connect:Enterprise for z/OS 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 based on processing criteria that 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 server command
- ◆ Monitor for alerts, such as a server failure or a Process not starting on time
- ◆ Create service level criteria (SLCs) 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 through reports to document and analyze processing activity
- ◆ Create customized reports to document and analyze processing activity based on criteria you define
- ◆ Validate the authenticity of a user logging on to Sterling Control Center, using one or more of four authentication methods, including password validation, host name identification, Windows domain, and TCP/IP address
- ◆ Identify additional servers that may need to be monitored based on communications with a currently monitored server using the Guided Node Discovery feature

Sterling Control Center enhances operational productivity and improves the quality of service by:

- ◆ Ensuring that critical processing schedules 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:Direct and Connect:Enterprise for UNIX do not require any modifications to communicate with Sterling Control Center. Connect:Enterprise for z/OS requires simple changes to the Logging application agent and Scheduler application agent rules to communicate with Sterling Control Center. See the *Sterling Control Center Getting Started Guide* for more information.

GIS requires simple modifications in order to communicate with Control Center. See the *Sterling Control Center Version 4.1.00 Release Notes* and the version 4.2 GIS documentation for more information.

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

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 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 for UNIX Documentation

The Connect:Direct for UNIX 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. You need a Support On Demand user name and password. See *Getting Support for Sterling Commerce Products* on page 25 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. 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. Open a PDF document and click the **Search** icon on the **File** toolbar or click **Edit>Search** to open the Search PDF window. Type the word or phrase to search in the text box, specify whether to search the current PDF document or all PDF documents in a specific location, and click **Search**. The search lists all instances of the specified string.

The Connect:Direct for UNIX documentation consists of:

- ◆ *Connect:Direct for UNIX Getting Started Guide*
- ◆ *Connect:Direct for UNIX Administration Guide*
- ◆ *Connect:Direct for UNIX User's Guide*
- ◆ *Connect:Direct for UNIX SNMP Agent System Guide*
- ◆ *Connect:Direct File Agent Help*
- ◆ *Connect:Direct Secure+ Option for UNIX Implementation Guide*
- ◆ *Connect:Direct Compatibility and Connectivity Chart*
- ◆ *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
- ◆ Sterling External Authentication Server

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.

The latest updates to and information on 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 Support On Demand Documentation Library at <https://support.sterlingcommerce.com/content/documentation/connectdirect/Nov06CompatChart.pdf>.

