IBM Sterling Connect:Direct for OpenVMS Version 3.6

Release Notes

This edition applies to the 3.6 Version of IBM® Sterling Connect:Direct® for OpenVMS and to all subsequent releases and modifications until otherwise indicated in new editions.

Before using this information and the product it supports, read the information in *Notices* on page 13.

Contents

Contents

IBM Sterling Connect:Direct for OpenVMS Version 3.6 Release Notes

The *IBM® Sterling Connect:Direct® for OpenVMS Version 3.6 Release Notes* document supplements Sterling Connect:Direct for OpenVMS version 3.6.00 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 Sterling Connect:Direct for OpenVMS. Read the document in its entirety before installation.

Important Updates

The following feature was added in version 3.6.0:

✦ Alpha platform support was discontinued on September 30th, 2021.

Requirements

Your use of Sterling Connect:Direct for OpenVMS version 3.6.00 has the following requirements:

Hardware and Software for Server Installations

Sterling Connect:Direct for OpenVMS and its related software require the following hardware and software.

Component or Functionality	Hardware	Software	Disk Space
Sterling Connect:Direct for OpenVMS	HP Integrity server (Itanium)	HP OpenVMS Industry Standard 64 Version 8.4 or later	At least 50,000 blocks of disk space to install the Sterling Connect:Direct product and for work files, including the network map file, two statistics files, and two Transmission Control Queue files

Component or Functionality	Hardware	Software	Disk Space
Sterling Connect:Direct for OpenVMS	HP Alpha Server	HP OpenVMS Industry Standard 64 Version 8.4 or later	At least 30,000 blocks of disk space to install the Sterling Connect:Direct product and for work files, including the network map file, two statistics files, and two Transmission Control Queue files
	Alpha AXP computer HP Integrity server	HP SSL for OpenVMS toolkit version 1.4 Note: This toolkit is required even if Sterling Connect:Direct Secure Plus is not enabled in the license key.	At least 45,000 blocks of disk space to install the toolkit and after installation, at least 40,000 blocks of disk space to occupy
Sterling Connect:Direct Sterling Connect:Direct Secure Plus	Same as requirements for Sterling Connect:Direct for OpenVMS	License Management Key with Secure_Plus and Secure_SSL enabled	
TCP/IP Installations	Alpha AXP computer	HP TCP/IP Services for OpenVMS Version 5.5 or later	
	HP Integrity server	HP TCP/IP Services for OpenVMS Version 5.6 or later	
		TGV MultiNet for OpenVMS, version 4.0 or later (UCX option enabled with latest MultiNet and UCS fixes applied)	

Hardware and Software for Client Installations

Sterling Connect:Direct for OpenVMS requires the following hardware and software for client installations.

Note: You must apply the latest patches to the operating system for all client installations. See *Hardware and Software for Server Installations* on page 5 for specific information on patches.

Component or Functionality	Hardware and Software
Sterling Connect:Direct for OpenVMS	HP Integrity Server with HP OpenVMS Industry Standard 64 Version 8.3 or later
	An Alpha AXP computer with HP OpenVMS Alpha Version 7.3-2 or later

What's New in This Release

The following feature was added in version 3.6.00:

Cyclic Redundancy Checking (CRC)

CRC is a method used to validate data integrity during data transfers between Sterling Connect:Direct nodes across a TCP/IP network. CRC can be controlled using any of the following options:

✦ A global initialization parameter

✦ A Process statement parameter

Use the following parameters to configure CRC:

Parameter	Description	Where to Configure
CRC=ON | OFF	Indicates whether Cyclic Redundancy Checking (CRC) is enabled for this node. The default for the initialization parameter is ON. The default in the Process statement is Off.	• Initialization parameters • Process statement
CRCOVERRIDE=YES | NO	Determines if PROCESS statement can override the global CRC parameter: • YES—Can override global CRC parameter. This is the default. • NO—Cannot override global CRC parameter.	• Initialization parameters

Special Considerations

Review the following considerations before installing the product:

✦ Sterling Connect:Direct for OpenVMS version 3.3 is the last release to support the SNA protocol and VAX hardware. Sterling Connect:Direct for OpenVMS version 3.6.00 does not run on a VAX computer nor support the SNA protocol.

✦ To optimize throughput and responsiveness, assign OpenVMS priorities in the following manner:

- Set the priority for the statistics writer to the highest value, so that statistics records are written as quickly as possible following completion of an event.

- Set the priority for the server to next highest value to give optimum responsiveness to user commands and to allow the server to efficiently initiate and respond to session events and changes in the Process queue.

- Set the priority for sessions managers to the lowest value in the Sterling Connect:Direct application.

The following example illustrates this recommendation:

```
NDM$$SM_PRI                       4
NDM$$SRV_PRI                      6
NDM$$STAT PROCESS PRIORITY        8
```

✦ The NDM$$LOG_SELECT_STATISTICS and NDM$$NOLOG_SELECT_STATISTICS are obsolete and no longer used. For more information on statistics logicals, see *Documentation Updates* on page 11.

Known Restrictions

Sterling Connect:Direct for OpenVMS version 3.6.00 has the following restrictions related to the use of third-party hardware or software with Sterling Connect:Direct for OpenVMS:

✦ Sterling Connect:Direct for OpenVMS does not support access to the OpenVMS system proxy database by the authorize utility to resolve proxy references. You must now use the Sterling Connect:Direct for OpenVMS proxy database to resolve all proxy references (ndm_proxy.dat).

✦ The use of TCP/IP probe/monitor utilities on ports designated for use by Sterling Connect:Direct for OpenVMS is strongly discouraged.

✦ The Requester for Windows Extension (RWX) to Sterling Connect:Direct for OpenVMS is obsolete and is no longer supported.

✦ The PXI interface API is obsolete and is no longer supported.

✦ Sterling Connect:Direct for OpenVMS does not support the checkpoint/restart feature with the VM and VSE platforms.

✦ The NDM_PROCSYNC.COM command and SUBMIT/WAIT qualifier are obsolete and are no longer supported.

✦ A number of problems have been observed in environments which employ NFS, including excessive timeout failures, inconsistent lock management, and $CLOSE errors. For best results, do not use NFS with Sterling Connect:Direct for OpenVMS due to inconsistent results and lack of fidelity to standard OpenVMS constructs.

♦ A number of problems have been reported in environments which employ disk defragmentation and cache optimization utilities with Sterling Connect:Direct for OpenVMS. For best performance, do not use defragmentation and cache utilities on any system or device that Sterling Connect:Direct for OpenVMS accesses or uses concurrently.

♦ When file transfers from OpenVMS to z/OS use the z/OS authorization file to define security, unless case=yes has been specified, all letters in the passwords are converted to uppercase. To specify OpenVMS passwords in the z/OS authorization file, the z/OS administrator must update the authorization file to specify case=yes.

♦ COPY to HP NonStop unstructured file type 0 and type 101 works only with SYSOPTS. This command must be coded as follows:

```
STEP01 COPY FROM                                                   -
          (DSN=DISK$SUP:[CHELI1.TANDEM.SOURCEDATA]EDIT.DAT         -
           PNODE)                                                  -
        TO                                                         -
         (DSN=\CLX.$QA1.FRVMS.PSUN                                 -
          DISP=RPL                                                 -
          SYSOPTS=                                                 -
            "'SET CODE 0'                                          -
             'SET TYPE U'                                          -
             'SET BLOCK 4096'"                                     -
          SNODE)
```

Installation Notes

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

> **Note:** Sterling Connect:Direct for OpenVMS Version 3.6 is a complete replacement for 3.5 and 3.4.xx. You can install it as an upgrade to or or as a new installation.

♦ Review *IBM Sterling Connect:Direct for OpenVMS Version 3.6 Release Notes* for last-minute product information and pre-installation tasks.

♦ Review your security configuration to ensure compatibility with Sterling Connect:Direct for OpenVMS before proceeding with the installation. Refer to the Sterling Connect:Direct for OpenVMS installation guide, implementation guide, or getting started guide for security options.

♦ Verify that you have the current updates for Sterling Connect:Direct for OpenVMS. Access current update information, including instructions for applying updates containing product fixes and enhancements, from the Connect product support Web site at http://support.sterlingcommerce.com.

♦ The executable NDMUI shipped with Sterling Connect:Direct for OpenVMS version 3.6.00 is not compatible with Sterling Connect:Direct for OpenVMS servers at prior release levels. If users are running remote NDMUI executables, you must upgrade their NDMUI at the same time that you install or upgrade the product.

♦ For version 7.2 and later of the OpenVMS operating system, the OpenSSL toolkit calculates GMT based on routines defined in the C RTL function. For earlier versions of the OpenVMS

operating system, the value defined by the logical name SYS$TIMEZONE_DIFFERENTIAL is used to get the GMT.

On OpenVMS 6.2, the component of the OS responsible for setting up this logical name accepts the differential in hours but sets the logical to the equivalent value in seconds. In versions of the OpenVMS operating system earlier than 6.2 (1.5 AXP), it is necessary to define this system-wide logical name. The Connect Direct Sterling Connect:Direct Secure Plus installation procedure checks for this logical name and if it is not defined, prompts you to enter the difference in time zone from GMT, in hours. It will be converted to seconds and the logical name will be defined as the value in seconds. Also worth noting is that the value entered has a sign associated with it. For regions behind GMT, a negative value should be used. For an installation in the US Central time zone, you type a value of -4 when prompted by the Sterling Connect:Direct for OpenVMS installation, and the system-wide logical will appear as -14400.

Refer to the *Reviewing Additional Installation Considerations* chapter in the *IBM Sterling Connect:Direct for OpenVMS Installation and Administration Guide* for additional information pertaining to installing the product.

Upgrading to Sterling Connect:Direct for OpenVMS Version 3.6

Performing an upgrade is similar to performing an initial installation. For an upgrade, you can choose to retain some or all of the configuration and data files that were created by the initial installation or as a result of the last upgrade. Refer to *Sterling Connect:Direct for OpenVMS Installation and Administration Guide* for specific instructions and guidelines for upgrading to Sterling Connect:Direct for OpenVMS version 3.6.00.

If you are upgrading from version 3.3 and are implementing Sterling Connect:Direct Secure Plus, you must delete your old Sterling Connect:Direct Secure Plus parameters file and rebuild it. After you install the new version of Sterling Connect:Direct for OpenVMS version 3.6.00 and reconfigure your environment, an empty Sterling Connect:Direct Secure Plus parameters file is created. Follow the instructions in the *IBM Sterling Connect:Direct Secure Plus for OpenVMS Implementation Guide* to populate the Sterling Connect:Direct Secure Plus parameters file and customize your node records as needed.

In the earlier release of Sterling Connect:Direct Secure Plus, you specified three files when defining a node:

✦ The trusted root file which contains one or more trusted root certificates you use to authenticate ID certificates sent by your trading partners during the Sterling Connect:Direct Secure Plus protocol handshake.

✦ The private key file which is used to decrypt data that is encrypted with its complementary public key.

✦ The key certificate file which your trading partner uses to authenticate you during the Sterling Connect:Direct Secure Plus protocol handshake.

In Version 3.6, you specify only the trusted root file and key certificate file. Your key certificate file contains both your public (ID) certificate and your encrypted private key. The passphrase you

include in each node definition allows the private key to be decrypted and used during the data exchange.

Installing the Application

The download file for Sterling Connect:Direct for OpenVMS is in the form of an executable image, so you must restore the saveset file before you begin the installation.

To install Sterling Connect:Direct for OpenVMS:

1. To restore the saveset file named ndmsrv035.a, issue one of the following commands, depending on whether the system is an Integrity or Alpha system:

```
$ run Cdvmsint3500_srv.exe
```

```
$ run Cdvmsaxp3500_srv.exe
```

2. To obtain the necessary system profile information and license key to install and configure Sterling Connect:Direct for OpenVMS, see *License Key File* on page 7.

3. Go to *Step 3: Invoking VMSINSTAL* in Chapter 3 of *IBM Sterling Connect:Direct for OpenVMS Installation and Administration Guide* and substitute the following command to start the installation utility:

```
$ @SYS$UPDATE:VMSINSTAL ndmsrv035
```

4. Follow the remaining instructions in Chapter 3 to complete the installation.

5. Follow the instructions in Chapter 4 of *IBM Sterling Connect:Direct for OpenVMS Installation and Administration Guide* to configure Sterling Connect:Direct OpenVMS.

Documentation Updates

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

IBM Sterling Connect:Direct for OpenVMS Installation and Administration Guide, Chapter 4, Configuring Sterling Connect:Direct for OpenVMS

Add the following logicals (initialization parameters) to the table in *Defining Sterling Connect:Direct for OpenVMS Initialization Parameters*:

Initialization Parameter	Default	Description
NDM$$NOLOG_ RECALL_PRIOR_ VERSION_ACTION	OFF	This logical, when OFF (not present in the INITPARMS.DAT file), suppresses the logging of all stat records except STEP_END and PROCESS_END records. When ON (present in the INITPARMS.DAT file), logs all statistics records, except for those individually suppressed by using one or more of the following NDM$$NOLOG logicals.
NDM$$NOLOG_SM_ ACTIVATIONS	none	If present, suppresses logging of session manager startup and shutdown stat records.
NDM$$NOLOG_SM_ SESSIONS	none	If present, suppresses logging of session start records.
NDM$$NOLOG_SM_ STEP_START	none	If present, suppresses logging of step start records.
NDM$$NOLOG_SM_ PROCESS_START	none	If present, suppresses logging of process start records.
NDM$$NOLOG_ MEMBER_COPY	none	If present, suppresses logging of PDS member copy complete records.
CRC=ON | OFF	OFF	Indicates whether Cyclic Redundancy Checking (CRC) is enabled for this node. The default for the initialization parameter and is ON. The default in the Process statement is OFF.
CRCOVERRIDE=YES | NO	YES	Determines if PROCESS statement can override the global CRC parameter: • YES—Can override global CRC parameter. This is the default. • NO—Cannot override global CRC parameter.

Notices

This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing

IBM Corporation

North Castle Drive

Armonk, NY 10504-1785

U.S.A.

For license inquiries regarding double-byte character set (DBCS) information, contact the IBM Intellectual

Property Department in your country or send inquiries, in writing, to:

Intellectual Property Licensing

Legal and Intellectual Property Law

IBM Japan Ltd.

1623-14, Shimotsuruma, Yamato-shi

Kanagawa 242-8502 Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law: INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT,

MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation

J46A/G4

555 Bailey Avenue

San Jose, CA_95141-1003

U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

This information is for planning purposes only. The information herein is subject to change before the products described become available. This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are ficticious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs. The sample programs are provided "AS IS", without warranty of any kind. IBM shall not be liable for any damages arising out of your use of the sample programs.

Each copy or any portion of these sample programs or any derivative work, must include a copyright notice as follows:

© IBM 2011. Portions of this code are derived from IBM Corp. Sample Programs. © Copyright IBM Corp. 2011.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

Trademarks

IBM, the IBM logo, and ibm.com are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at www.ibm.com/legal/copytrade.shtml.

Adobe, the Adobe logo, PostScript, and the PostScript logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States, and/or other countries.

IT Infrastructure Library is a registered trademark of the Central Computer and Telecommunications Agency which is now part of the Office of Government Commerce.

Intel, Intel logo, Intel Inside, Intel Inside logo, Intel Centrino, Intel Centrino logo, Celeron, Intel Xeon, Intel SpeedStep, Itanium, and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.