

# Sterling Commerce Product Documentation



## **Connect:Direct® for z/OS Version 4.7.00**

Release Notes

**Third Edition**

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# Contents

<b>Requirements</b>	<b>5</b>
Hardware and Software . . . . .	5
Customer Center Portal User Name and Password . . . . .	6
Additional Requirements . . . . .	7
POSIX Environment and System Libraries . . . . .	7
MBCS Transfers . . . . .	7
License Key File . . . . .	7
<b>What's New in This Release</b>	<b>7</b>
Features and Enhancements . . . . .	7
Improvements to Documentation . . . . .	10
<b>Obtaining Product Updates</b>	<b>11</b>
<b>Description of Support Requests Resolved for This Release</b>	<b>11</b>
<b>Special Considerations</b>	<b>11</b>
Connect:Direct for z/OS . . . . .	11
Connect:Direct Secure+ Option . . . . .	18
<b>Known Restrictions</b>	<b>18</b>
Connect:Direct . . . . .	18
Connect:Direct Secure+ Option . . . . .	20
File Agent . . . . .	20

**Installation Notes** **21**

---

**Upgrading to Connect:Direct Version 4.7** **21**

---

Connect:Direct . . . . .	21
Sharing DASD Between Version 1.7 and Pre-1.7 Versions of the z/OS Operating System . . . . .	22
Migrating an Existing Network Map . . . . .	23
Rebuilding the TCQ/TCX Files when Migrating from a Release Prior to 4.4 . . . . .	23
Connect:Direct Secure+ Option . . . . .	24
Removing References . . . . .	24
Encrypting the Connect:Direct Secure+ Option Parameters File with TDES . . . . .	24
File Agent . . . . .	25

**Installing Connect:Direct from the ESD Portal** **25**

---

Downloading Product Files . . . . .	25
Unpacking Application Files . . . . .	26
Installing the Application . . . . .	27

**Documentation Updates** **28**

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Connect:Direct for z/OS Installation Guide . . . . .	28
Chapter 2, Planning the Installation . . . . .	28
Chapter 3, Installing Connect:Direct for z/OS . . . . .	28
Appendix E, Implementing the Sysplex Requester Facility . . . . .	28
Connect:Direct for z/OS Installation Guide . . . . .	29
Chapter 3, Installing Connect:Direct for z/OS . . . . .	29
Appendix A Installation Worksheets . . . . .	29
Connect:Direct for z/OS Administration Guide . . . . .	29

**Connect:Direct Documentation** **29**

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# Connect:Direct for z/OS Version 4.7.00 Release Notes

The *Connect:Direct for z/OS Version 4.7.00 Release Notes* document supplements Connect:Direct version 4.7 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. Read the document in its entirety before installation.

The Connect:Direct for z/OS package consists of the distribution media, a license key, and product publications. Connect:Direct for z/OS is distributed as follows:

- ◆ File downloaded from the Sterling Commerce Electronic Software Distribution Portal  
See *Installing Connect:Direct from the ESD Portal* on page 25 for instructions.
- ◆ CD-ROM, DVD, or tape format when Sterling Commerce ships the physical distribution media

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## Requirements

Your use of Connect:Direct for z/OS version 4.7.00 has the following requirements:

### Hardware and Software

The hardware and software requirements for the Connect:Direct for z/OS version 4.7.00 release are listed in Chapter 2, *Planning the Installation*, of *Connect:Direct for z/OS Installation Guide*. You must have IBM z/OS version 1.7 or later. The Connect:Direct Secure+ Option component requires the same hardware and software as Connect:Direct and the additional software listed in the following table.

The File Agent component must be installed in the UNIX System Services component of z/OS and configured to communicate with the Connect:Direct server. Use a PC for terminal emulation when you are ready to create a configuration file when executing File Agent. File Agent uses mount points, which are HFS files requiring at least 20 cylinders of available space. See the following table for additional File Agent requirements.

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**Note:** Sterling Commerce does not provide assistance for versions of third-party products not supported by their vendors. To ensure optimal performance, you must be running the current version of all third-party software that interfaces with Connect:Direct.

In addition, all third-party software must be supported for IBM z/OS version 1.7 or later.

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Component or Functionality	Software
Connect:Direct Secure+ Option for z/OS	TCP/IP connection if you plan to use the SSL or TLS protocol for secure communications
	IBM SystemSSL toolkit
	IBM Language Environment
	License management key with SECURE-PLUS and SECURE-SSL enabled
File Agent version 1.0.07	Hummingbird Exceed® PC X server for WIN32, version 7.0 or later for terminal emulation
	Java 2 Platform, Standard Edition (J2SE). Download the J2SE from the IBM web site.

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## Customer Center Portal User Name and Password

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

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

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

## Additional Requirements

Connect:Direct for z/OS version 4.7.00 has the following additional requirements.

### POSIX Environment and System Libraries

The UNIX System Services (or POSIX) environment must be installed and set up prior to installing Connect:Direct. The POSIX requirement and the use of C/C++ and LE mean that the following data sets must be available to Connect:Direct through the STEPLIB or LINKLST:

- ◆ CEE.SCEERUN (IBM Language Environment)
- ◆ CBC.SCLBDLL (C/C++ Run-time)
- ◆ SYS1.SIEALNKE (System SSL Environment)

### MBCS Transfers

To perform MBCS transfers, you must verify that the Natural Language Resources component of Language Environment is installed on your operating system.

### License Key File

The license key file identifies the product features that are available on authorized CPUs. When you purchase Connect:Direct, a temporary key file is sent to you that enables operation of Connect:Direct for a limited time. You must replace the temporary key with a permanent key to continue running Connect:Direct. For instructions on applying the temporary and permanent key file, see *Connect:Direct for z/OS Installation Guide*.

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## What's New in This Release

For the latest information on updates to the product and documentation, see *Features and Enhancements* on page 7 and *Improvements to Documentation* on page 10.

### Features and Enhancements

Connect:Direct for z/OS version 4.7.00 and its related software have the following features and enhancements:

Product/Component	Feature or Enhancement
Connect:Direct	<p>Provides new network connectivity features, including:</p> <ul style="list-style-type: none"> <li>◆ Support of IPv6 protocol, allowing for a much larger address range than IPv4.</li> <li>◆ Listen on multiple IP addresses for incoming API and server connections.</li> <li>◆ Use of a specific IP address defined by the user in the network map for outbound connections.</li> <li>◆ Enable a DNS lookup to return a list of addresses in both IPv4 and IPv6. When performing a DNS lookup to resolve an address, the first address in the list of the appropriate address family is used.</li> </ul> <p>New initialization parameters support these enhancements:TCP.LISTEN and TCP.API.LISTEN. These parameters allow for specification of IPv4 and IPv6 addresses, and single and multiple port TCP/IP listening capability. The initialization parameters, TCP.ADDR, CDPLEX.TCPIP, and TCP.SRC.PORTS, are updated to allow for IPv6 address specification. The new CDPLEX.REDIRECT initialization parameter is used by the Connect:Direct/Plex Manager to determine the redirection address presented to the remote node. A new command, INQUIRE TCP, displays the status of each listen port. A new NETMAP parameter, SOURCEIP, defines the source IP address to bind during an outbound connection request.</p> <p><b>Note:</b> Certain initialization parameters cannot coexist in the global or local initialization parameter file. If you combine mutually exclusive parameters, initialization terminates with an error message indicating which parameters cannot coexist in the initialization parameter file. Decide which parameter to use, modify the file, and restart Connect:Direct.</p> <hr/> <p>Enhances the DMGSECUR macro to allow for RACF's use of protected security IDs with no password.</p> <hr/> <p>Enhances the ISPF Interface so that the temporary data set can now be allocated using multiple extents on multiple DASD volumes.</p> <hr/> <p>Enhances DBCS translation when data sets are copied to allow Connect:Direct to send a file before generating an error.</p> <hr/> <p>Provides automatic recall of archived data sets without requiring the use of an Allocation Exit.</p> <hr/> <p>Enhances the installation process through updated installation panels and field level Help.</p> <hr/> <p>Provides the ability to significantly improve BSAM data transfer rates by using a higher number of concurrent I/O operations. With this enhancement, you can control the trade-off between storage use and I/O performance by setting the MAXSTGIO initialization parameter and/or the NCP value in the COPY statement's DCB parameter to fit your environment and file transfer needs.</p>



Product/Component	Feature or Enhancement
	<p>Supports two additional DSNTYPES:</p> <ul style="list-style-type: none"> <li>◆ EXTPREF specifies that the extended attribute is preferred but not required. The data set is created regardless of whether the extended attribute can be obtained.</li> <li>◆ EXTREQ specifies that the extended attribute is required. If an extended format data set cannot be allocated, a data set is not created.</li> </ul>
	<p>Enhances Statistics Archival utilities to allow automatic rolling off of the oldest record when a full condition occurs.</p>
	<p>Provides a new variable,%DD2DSN, which simplifies batch environment processing by passing the DSN referenced in an allocated DD statement in the JCL to a Process being submitted.</p>
	<p>Supports the use of alternate communication path definitions for Process restart and retry.</p>
	<p>Provides visibility to all fields in the network map for the SNODE accessed when a SUBMIT exit is invoked before a Process is executed. For example, you can now see if the node you are communicating to has been classified as an internal or external node in the network map and whether the exit being called is a Stage 1 or Stage 2 exit.</p>
	<p>Provides enhanced IUI/API Statistics reports that show:</p> <ul style="list-style-type: none"> <li>◆ The name of an alternate node when the node name used to transfer or receive a file differs from the one specified by the Process.</li> <li>◆ The Type keyword used to retrieve data set defaults for allocating the destination file as specified in a COPY step.</li> </ul>
	<p>Enhances the Process Submit (PS) and Submit Within (SW) statistics records, and the Select Statistics report, to supply the data set name (DSN) and member name that is submitted. This includes Processes submitted through another Process, or through the API that is used by both the IUI and DMBATCH. The submit DSN is supplied for both Extended Submit Facility (ESF) and non-ESF submits.</p>
Connect:Direct Secure+ Option	<p>Gives business partners more flexibility using Secure+ Option by providing the ability to turn security on or off for individual sessions by using the new keyword, SECURE, in the PROCESS statement. To turn on security for a specific session, you specify which protocol, SSL, TLS, or STS, you wish to use. When secure sessions are the default, you can use the OFF value to turn security off for a particular session.</p> <p><b>Note:</b> To implement this flexibility, both partners must have OVERRIDE=Y specified in their Secure+ Parameter files in both the local and remote node records and the protocol used for security. For more information, see the <i>Connect:Direct Secure+ Option for z/OS Implementation Guide</i> and Connect:Direct Processes web site at <a href="http://www.sterlingcommerce.com/documentation/processes/processhome.html">http://www.sterlingcommerce.com/documentation/processes/processhome.html</a>.</p>

## Improvements to Documentation

Sterling Commerce welcomes your comments and suggestions for improvements to our product documentation. You can submit suggestions for improvements to [ConnectDoc@stercomm.com](mailto:ConnectDoc@stercomm.com). As part of our continuing effort to improve the user experience and satisfaction with our documentation, the documentation for Connect:Direct for z/OS version 4.7 has the following changes:

- ◆ A new chapter on improving performance has been added to the *Connect:Direct for z/OS Administration Guide*, which includes not only detailed information on the new BSAM I/O performance enhancement but also other tips to reduce CPU overhead and improve throughput.
- ◆ *Connect:Direct Secure+ Option for z/OS Implementation Guide* has the following changes:
  - ◆ Additional information on the COPY statement's SECURE parameter for the STS protocol and a new chapter dedicated to the SECURE parameter for the PROCESS statement introduced in Version 4.7 for all protocols.
  - ◆ Additional information on validating and testing connections by session and a new appendix, which provides an example of configuring secure communications between a Connect:Direct for z/OS node and a Connect:Direct for OpenVMS node.
- ◆ A new table has been added to the *Connect:Direct for z/OS User's Guide* which lists records that can be viewed through the Select Statistics Display command and those that can be viewed through Extended Options.
- ◆ To streamline the documentation set and make information more accessible, several books have been eliminated by the following changes:
  - ◆ Incorporating material from the *Connect:Direct for z/OS Sysplex Requester Facility Installation Guide* into the *Connect:Direct for z/OS Installation Guide* as an appendix
  - ◆ Incorporating material from the following four publications into one new book called *Connect:Direct for z/OS Facilities Guide*
    - *Connect:Direct for z/OS Activity Reporting System User's Guide*
    - *Connect:Direct Event Services Support User's Guide*
    - *Connect:Direct Spool Transfer User's Guide*
    - *Connect:Direct Console Operator's Guide*
- ◆ The Process Guide web site has the following changes:
  - ◆ A new section in *Understanding Connect:Direct Processes* which discusses intrinsic symbolic variables including the new %DD2DSN symbolic variable which passes a DSN from a DD statement in the JCL.
  - ◆ New subparameters added to the COPY and PROCESS statements.
  - ◆ Two additional DSNTYPES.
  - ◆ Adding several new example Processes both for new features and existing Process language functionality.

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

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

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## Obtaining Product Updates

Product updates and update summaries, including issues resolved for previous versions of Connect:Direct for z/OS, are available on the Customer Center Web site.

To obtain product updates:

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

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## Description of Support Requests Resolved for This Release

To review the list of Support Requests resolved for Connect:Direct for z/OS version 4.7.00 since the last cumulative fix release, refer to *Support Requests Resolved for Connect:Direct for z/OS Version 4.7.00*, which is available in PDF format from the Customer Center Support On Demand Documentation Library. For the history of issues resolved prior to this release, navigate to the Product Updates/Downloads site for your product and platform using the instructions in *Obtaining Product Updates* on page 11 and review the Maintenance documentation for the previous release.

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## Special Considerations

This section contains considerations in addition to the procedures contained in this document and the other Connect:Direct documents. Refer to the following notes before installing the product.

### Connect:Direct for z/OS

Review the following considerations before installing the product:

- ◆ Connect:Direct for z/OS version 4.7 is the last release to support the CDWAIT and CDPOST programs. To synchronize the operation of batch job streams and the execution of a Process, using the MAXDELAY keyword parameter in a SUBMIT command offers many advantages. For more information, see *The Batch Interface* chapter in the *Connect:Direct for z/OS User Guide*.
- ◆ The following initialization parameters are obsolete in Connect:Direct for z/OS version 4.7.00 and are ignored if they are in the initialization parameters file:
  - ◆ NETEX (and all parameters related to the NETEX protocol and that have NETEX in the parameter name)
  - ◆ LOG.PRINTER
  - ◆ CONNECT.WAIT

- ◆ PASSWORD.REPLY
- ◆ TCP=HPNS
- ◆ TCP=SNS
- ◆ TCP.SNS.SUBSYS
- ◆ The following initialization parameters are used in prior releases to define a single TCP/IP port for Connect:Direct to listen for and accept incoming connection requests:
  - TCP.ADDR
  - TCP.NAME
  - TCP.PORTNUM
  - TCP.API.PORTNUM
  - CDPLEX.TCPIP
  - CDPLEX.TCPNAME

Although these parameters are supported in Connect:Direct for z/OS version 4.7, they will become obsolete in a future release. If you use these old TCP initialization parameters, informational messages are issued to NDMLOG. These messages indicate which parameters to replace with new parameters, and Connect:Direct continues to initialize. To avoid these messages, migrate to the new TCP.LISTEN and TCP.API.LISTEN parameters as indicated in the message.

In addition, if you include any combination of TCP.LISTEN and TCP.API.LISTEN with the old parameters in the initialization parameters file, initialization fails. You receive an error message describing the combination of parameters that caused the error. Once you eliminate the incorrect combination of parameters, Connect:Direct initializes successfully.

In a Connect:Direct/Plex environment, if you specify ANYADDR or ANYADDR6 for the TCP.LISTEN local initialization parameter associated with a Connect:Direct Server but do not specify the CDPLEX.REDIRECT parameter, a default address is created as the Connect:Direct/Plex redirection address. For the IPv6 protocol, the default is generated by adding a ::FFFF: prefix to the IPv4 default. If you do not want this to be your default address, specify the value you do want using the CDPLEX.REDIRECT parameter.

If you are using the dynamic VIPA resources, you may need to specify the SOURCEIP parameter in the network map if the remote node is not able to perform network map checking. The SOURCEIP address will be used to bind the socket and will be used by the remote node to perform netmap checking.

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**Note:** By default, Connect:Direct binds to the address specified in the initialization parameter file as the source IP address. If multiple addresses are specified, the first IPv4 and first IPv6 address is used as the default. If the first address in the list is ANYADDR or ANYADDR6, the default is obtained from TCP/IP itself. If an address other than the default is required, you must define the SOURCEIP parameter in the network map.

---

The TCP.NAME and CDPLEX.TCPNAME local initialization parameters are no longer used by Connect:Direct. To direct a TCP/IP connection through a specific IP stack, you must use the SOURCEIP network map parameter.

- ◆ For the Connect:Direct/Plex Manager to be able to select a server to bind to the SOURCEIP address in a network map, specify one of the following:
  - ◆ For SOURCEIP, an address used by at least one of the servers to establish a listen task
  - ◆ For the PNODE PLEXCLASS keyword in a PROCESS statement, a server to which to direct the Process
- ◆ If no IPv6 addresses are defined in the network map, you can still use a network map generated using Connect:Direct for z/OS version 4.7 with previous releases. If you need to back out of a version 4.7 install and have defined IPv6 addresses in the network map, you can still use it with previous releases. However, beware that the IPv6 addresses in the netmap will be blanked out and ignored when used with previous releases making communication with IPv6 nodes impossible. If the network map includes IPv6 addresses and the SOURCEIP parameter, previous releases of Connect:Direct for z/OS will be able to use the netmap but will not be able to generate it appropriately unless you edit the data itself. Also, note that IPv6 addresses defined in ALT.ADDR addresses included in the ALT.COMM parameter will not be blanked out when a network map generated under Connect:Direct for z/OS version 4.7 is used with a previous release.
- ◆ To support the IPv6 protocol which allows for much larger IP addresses, the following panels were changed:

Panel ID	Title of Panel
DMI@INQ	Inquire CD Internal Status
DMI@SGDF	Signon Defaults
DMI@SIGN	Multi-Session Signon
DMI@WHO	WHO Panel
DMISGNON	Main Signon Panel
DMISUBMT	Submit Process (SB)
DMI#DSTP	Resolved TCP Name/Address panel
DMI#SP02	Select Process Detail Panel
DMI#SS01	Select Stats – Copy Step Detail
DMI#SN01	Swap/Display Panel
DMISLNET	Select NETMAP panel

---

**Note:** The layout of any batch report, including field offsets, produced by using one of these panels will change, as well.

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- ◆ UNIX System Service (BPX) calls are executed in the Connect:Direct IUI under the TSO or Batch User ID. BPX calls require that a user ID has an OMVS segment defined to it within the external security product, such as RACF, ACF2 or TOP SECRET. The BPX calls are used to resolve the TCP/IP name or address for reporting purpose in Select Statistics. If a user ID does

not have an OMVS segment defined to it, an SEC6 ABEND or Trace Resolver messages under the TSO or batch user can occur when requesting Select Statistics.

Information about adding an OMVS segment to a user ID using an external security product, either individually or as a group assignment, can be found in the manuals produced for the particular external security product you are using, such as IBM's RACF or CA's ACF2 or TOP SECRET.

- ◆ In releases prior to Version 4.7, when the DMGALRCL allocation exit attempted to recall a migrated or archived data set offline, the Process went into fail state and was taken out of the Execution queue and put into the Timer Retry (TI RE) queue. As Connect:Direct waited for the allocation and recall to be performed asynchronously, it would retry the Process based on the ALLOC.WAIT and ALLOC.RETRIES initialization parameters. If the Process exceeded the maximum time limit specified for retrying it (number of retries as specified by the ALLOC.RETRIES initialization parameter multiplied by the amount of time that Connect:Direct waits between retries as specified by the ALLOC.WAIT initialization parameter), the Process was put into the Hold queue requiring manual intervention.

In Version 4.7, when Connect:Direct executes a COPY Process without the DMGALRCL exit being present, it will use the ARCHRCAL macro synchronously, which means that the Process stays in the Execution queue not having to loop between the Execution, Timer, and Hold queues. The Process does not terminate while the recall operation is being performed but if the recall is unsuccessful, the COPY step produces a return code indicating the unsuccessful data set recall and instructs the user to correct the error and resubmit the Process.

Although it is not needed for data recall, the DMGALRCL exit will continue to be supported and invoked prior to any allocation activity if the ALLOCATION.EXIT=DMGALRCL initialization parameter is specified. However, this exit is no longer required to process migrated or archived data sets.

---

**Caution:** If the sample exit is not being used and a migration/recall product is not active, installed, or is temporarily down, the following messages are displayed:

```
ARC0050A DFSMSHSM IS NOT ACTIVE - START DFSMSHSM
ARC0051A JOB xxxxxxxx WAITING FOR DFSMSHSM TO RECALL DSN=dsname
*73 ARC0055A REPLY 'GO' OR 'CANCEL'
```

To proceed with the allocation, you must reply. Please refer to IBM documentation regarding the ARCxxxxA messages. If you reply CANCEL to the ARC0055A message, the Process completes with MSGID=SDE021CI. If 21C is in the ALLOC.CODES= list, the Process retries; otherwise, the Process terminates.

---

- ◆ Because of internal code changes in the base Connect:Direct product, which promote a more efficient process flow and increase the number of concurrent I/O sessions, review the following factors that affect BSAM sequential data set transfer rates:
  - ◆ MAXSTGIO initialization parameter which limits the maximum I/O buffer storage for BSAM sequential data set transfers. The larger the value, the more concurrent I/O operations Connect:Direct can process. The default has changed from 61,440 to 1 MB. An additional positional parameter has been added to allow you to limit the maximum I/O buffer storage used when you specify the Number of Channel Programs (NCP) in the DCB parameter of the COPY statement. If you specify an NCP value greater than 0, Connect:Direct limits that value using the second positional parameter. For more

information on how Connect:Direct processes sequential data sets using BSAM and how to take advantage of this enhancement, review the following documentation:

- *Performance Tuning* in the *Connect:Direct for z/OS Administration Guide* for general guidelines
- *Appendix A* in the *Administration Guide* for more specific information on the MAXSTGIO initialization parameter

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**Note:** If MAXSTGIO is currently defined in the initialization parameter file, you do not have to modify it to include the second positional parameter but you may have it set too low to take advantage of this new enhancement.

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- ◆ Region parameter on the DTF job or step card. Whether or not you adjust the MAXSTGIO initialization parameter, you may need to review what is specified for the region to ensure that you have adequate DTF storage for data transfers and to support the maximum number of concurrent Processes that can be run. For more information on virtual storage requirements, see *Planning the Installation* in *Connect:Direct for z/OS Installation Guide*.
- ◆ The DCB parameter in your COPY statements. You can specify the NCP value in the DCB parameter to fine-tune the maximum storage used or not specify it to let the system determine the NCP value. To review sample benchmark figures to see the results of changing the NCP value, see *Improving Performance* in the *Connect:Direct for z/OS Administration Guide*.
- ◆ The usage of striped extended-format data sets for files that have large amounts of data or in which the time is of essence. A striped extended-format data set is spread over multiple volumes allowing parallel data access. Connect:Direct can take advantage of this attribute and users could see 100% or more increase in I/O rate, depending on the number of stripes. In prior releases of Connect:Direct, striped data sets were transferred using an NCP=1. Starting with Version 4.7, that restriction has been eliminated.

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**Note:** If the receiving side is still limited to NCP=1, the transfer speed will not be improved, since it is limited to the speed at the worst bottleneck.

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With this release, Connect:Direct will no longer use the BUFNO parameter in the COPY statement to specify the number of BSAM buffers for reading data from or writing data to a data set. Although Connect:Direct will continue to accept a value of 0–255 for the BUFNO parameter, it will set the actual value to 0. Use the NCP parameter if you wish to specify the number of I/O buffers and the MAXSTGIO initialization parameter to limit it.

- ◆ Due to an issue with the security toolkit on the i5/OS hardware, an SSL/TLS cipher suite can be negotiated during the SSL/TLS handshake that is not defined in the cipher suite list. IBM PMR, 35692, has been opened to address the i5/OS toolkit issue. When the PTF becomes available for i5/OS, apply it to ensure cipher suite negotiation occurs as expected.
- ◆ To maximize the available storage below the 16-MB line, define sufficient storage above the 16-MB line, and maximize concurrent processing, define a region size of 0 MB for Connect:Direct.

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**Note:** Depending on your system-specific storage requirements, the MAXTHREADTASK and the MAXASSIZE parameters in SYS1.PARMLIB member BPXPRMxx may also have to be altered to ensure maximum storage and maximum concurrent processing within Connect:Direct.

---

- ◆ Do not specify ESTAE=NO unless directed by Connect:Direct Customer Support. If you specify ESTAE=NO and a subtask ABEND occurs, error recovery cannot be invoked, and one of the nodes may go into a WAIT state. For information about properly implementing the ESTAE initialization parameter, refer to Appendix A, *Global Initialization Parameters*, of the *Connect:Direct for z/OS Administration Guide*.
- ◆ Because the standby extended recovery job and the active Connect:Direct node use the same VTAM APPLID, TCP/IP address, and port, the standby extended recovery job must run in the same z/OS image as the active Connect:Direct node unless you use the Dynamic VIPA and Dynamic SNA information described in *Preparing TCP/IP Configuration* of Chapter 2, *Planning the Installation*, of the *Connect:Direct for z/OS Installation Guide* and in Chapter 8, *Configuring Extended Recovery*, of the *Connect:Direct for z/OS Administration Guide*.
- ◆ If you copy a file that is in IBM-proprietary compressed format to a new file that is not in IBM-proprietary compressed format, it is possible Connect:Direct will not allocate enough space for the new file.
- ◆ The Connect:Direct startup JCL has a user-definable DD statement (USRINFO) for displaying user-defined information from User Exits. If the USRINFO DD is allocated, then Connect:Direct opens it during product initialization and initializes it with the string SITA523I USRINFO INITIALIZED.
- ◆ All messages that begin with the prefix APSM will display in ESTAE output instead of SCESTAE as in earlier releases.
- ◆ The Batch Compression Utility (CDSACOMP) does not support data sets with a block size greater than 32,760 bytes which includes all LBI transfers.
- ◆ Because of the changes in the Transmission Control Queue (TCQ) to support Processes containing up to 1 MB, review all SUBMIT exits. Modify any SUBMIT exit that:
  - ◆ Alters the size of the TCQE (change TQRECLN)
  - ◆ Uses TQCSPRD (pointer to first, that is, current step)
  - ◆ Uses TSHFTCQE (forward pointer to next step)
  - ◆ Uses TSHBTCQE (backward pointer to previous step)
  - ◆ Adds or changes PACCT or SACCT information

The TQCSPRD, TSHFTCQE, and TSHBTCQE fields contain offsets relative to the start of the TCQE for Processes that do not exceed 64 KB. For larger Processes, these fields must be multiplied by 16 before being used as an offset. In the TCQE, a flag indicates whether or not this processing should take place (the flag byte is TQFLAGA and the bit equate is TQGT64K).

SUBMIT exits are no longer allowed to change the size of the TCQE (modify TQRECLN). The sample SUBMIT exit SUBXACCT previously showed how to add the PACCT and SACCT fields to the end of the TCQE and extended the length. Because this is no longer allowed, fields have been reserved for the PACCT and SACCT information to allow the



SUBMIT exit to add or modify accounting information as required. The sample SUBMIT exit SUBXACCT has been modified to show you how to manipulate this account information.

- ◆ When copying variable block format data sets greater than 32,760 bytes to a Connect:Direct for UNIX or Windows system, specify the DCB attribute, BLKSIZE, for the TO destination file to ensure that adequate buffer space is allocated. If you do not, one of the following messages is displayed:
  - ◆ LCPR001I - Rec len in Comm buffer bigger than IO buffer size (on a Connect:Direct for Windows system).
  - ◆ XCPR001I - Rec len in Comm buffer bigger than IO buffer size (on a Connect:Direct for UNIX system).
- ◆ Connect:Direct for z/OS version 4.7.00 does not support a LU1 printer dedicated to collecting Connect:Direct log data. Remove the LOG.PRINTER initialization parameter if it is still in the initialization parameters file.
- ◆ Use of IGGCSI00 to access files requires that Connect:Direct for z/OS have READ access to the master catalog.
- ◆ Only Version 2 Flows, which are used for the TCP/IP and SNA LU6.2 protocols, support the ability to checkpoint files larger than 4 GB. Version 1 Flows, which were used for VTAM SNA LU0, do not support this ability.
- ◆ To honor the permission setting for HFS files using the PERMISS keyword, you must set the UNIX System Services UMASK to 000 either by default or by using the runtime environment variable, \_EDC\_UMASK\_DFLT. To set the environment variable, define the \_EDC\_UMASK\_DFLT=000 variable in a RECFM=VB type file and allocate the ENVIRON DD in the Connect:Direct startup JCL.  
Example: //ENVIRON DD DISP=SHR,DSN=\$CD.ENVIRON(TZ)
- ◆ If you use the InterConnect Option feature to transfer data between Connect:Enterprise and Connect:Direct, you may receive the following warning message in the SYSPRINT report (known as the CONFIRM file in the Connect:Direct Process) if you have not updated your ICO Process member to allocate the report file:

CMA180W - OPEN FAILED FOR REPORTS FILE, ICO REPORTS WILL NOT BE GENERATED
---------------------------------------------------------------------------

A Connect:Enterprise fix introduced in August 2006 adds a new parameter which generates a report detailing the operation of the requested offline utility function including information about whether or not the utility ran successfully. In addition, new sample Process members have been added to the Process library which contain examples of how to pass the new parameters and allocate the report file. For information on Fix 35600, see the Readme file for the Cumulative Fix 1206 package for Connect:Enterprise Release 1.2.00 available on the Product Support web site. See *Obtaining Product Updates* on page 11 for instructions on how to navigate to this web site.

- ◆ When a COPY statement has both the DSNTYPE and LIKE parameters specified for the TO data set, the DSNTYPE should override the LIKE data set's DSNTYPE attribute. However, if you specify DSNTYPE=EXTREQ or EXTPREF, the resulting data set is always non-extended, even if the LIKE data set is extended. To avoid this problem, apply IBM APAR OA21866.

## Connect:Direct Secure+ Option

Review the following considerations before installing the product:

- ◆ Connect:Direct administrators need access to UNIX system services in order to update SSL and TLS parameters.
- ◆ Connect:Direct needs UNIX read/write permissions to the key database. Use the UNIX CHMOD command to change permissions, if necessary.
- ◆ A default certificate must exist for the SSL or TLS protocol to successfully communicate with a trading partner. Use the IBM GSKKYPAN utility to set a trading partner certificate as the default. For information about creating and managing certificates, refer to the IBM documentation. To locate documentation, go the IBM web site and perform a search on GSKSSL10.

---

## Known Restrictions

Connect:Direct for z/OS version 4.7 and its related software have the following restrictions related to the use of third-party hardware or software with Connect:Direct.

### Connect:Direct

Connect:Direct for z/OS version 4.7.00 has the following restrictions:

- ◆ Checkpointing is ignored when transferring HFS files.
- ◆ **Using scheduling or automated operations packages can result in attempts to process incomplete or empty files**  
Scheduling packages, such as CA-7, ZEKE, or CONTROL-M and certain automated operations packages, such as CONTROL-O, are often set to start jobs upon a file's closure and an SMF record being cut or based upon specific messages appearing on the system console. When using Connect:Direct for z/OS, this method of starting jobs can result in attempts to process incomplete or empty files. This situation can occur when an active transfer is interrupted and must be restarted. The receiving file will be closed, but upon Process restart it will be written to by Connect:Direct for z/OS.  
  
The recommended way to prevent erroneous processing by such packages is to set up Processes with conditional logic to verify that the copy successfully completes, and then use the scheduling or automation package's provided program (U7SVC, ZEKENDM, CTM@IF10) in a Connect:Direct RUN TASK.
- ◆ **Sending Partitioned Data Set (PDS) Members to and from VM**  
You must use the DM RTPOMV or DM RTVMPO file conversion program to transfer a PDS to a CMS MACLIB. These programs do not support PDSE data sets and cannot be used to convert PDSEs.
- ◆ **Restarting a Checkpointed Process using Different Versions of Connect:Direct**  
You cannot restart a Process that has been checkpointed using Connect:Direct for z/OS Version 4.6 or later with an earlier release of Connect:Direct (Version 4.5 or earlier). The reverse is true as well, that is, you cannot restart a Process that has been checkpointed using Connect:Direct for z/OS Version 4.5 or earlier, and then restart it with a later version of

Connect:Direct. Because of changes to support the LARGE format sequential data sets in IBM z/OS version 1.6 or later, Connect:Direct for z/OS versions before 4.6 produce restart positioning information in the CKPT record that is different and incompatible with that produced in version 4.6 or later.

Do not attempt to restart a checkpointed Process in a different version of Connect:Direct. Delete the checkpointed Process and resubmit it using the appropriate version of Connect:Direct for z/OS.

◆ **IBM z/OS Version 1.7 Does Not Support ISAM Data**

Connect:Direct no longer supports ISAM data sets since IBM discontinued support for ISAM with z/OS Version 1.7, the minimum z/OS release for this release of Connect:Direct for z/OS. If you attempt to copy either from or to an ISAM data set, the data transfer fails with an SVSG021I message. Correct the Process and resubmit it not specifying DSORG=IS.

◆ **Session Management of Adjacent Nodes**

Use the SESS.SNODE.MAX network map parameter only with the TCP/IP and LU6.2 protocols.

◆ **CA TCPAccess Version 4.1**

Using TCPAccess version 4.1 without maintenance causes transfers initiated by the z/OS node to fail. You must apply TCPAccess maintenance level 9706 to correct this problem. In addition, you must use Open Edition Sockets to enable Connect:Direct to interface with TCPAccess.

◆ **IBM C Program Containing MAIN() or Enclave**

You cannot execute any IBM C program that contains a MAIN() section or enclave as a Run Task or Exit. FTP is an example of this type of program.

◆ **LU6.2 Does not Support Redirection of Processes in Connect:Direct/Plex Environment**

The LU6.2 connection protocol does not support the feature, which allows the Connect:Direct Manager to redirect work to one of its servers. The remote node must address the server on which you want to run an LU6.2 Process. To do this, specify the node name and VTAM address of the Connect:Direct Server on which the Process is to run in the remote server's network map. Use the same CDPLEX.SERVER.NODE and CDPLEX.VTAM specified for the local initialization parameters for the Connect:Direct Server you are trying to address.

◆ **LU0 Does not Support LBI Files**

Connect:Direct cannot transfer LBI files using LU0 connections.

◆ **LBI Block Size Limitations by Record Format and Device Type**

With Connect:Direct for z/OS version 4.7, all LBI BLKSIZEs are supported for all RECFM values. However, when connected to a previous version of Connect:Direct for z/OS, its BLKSIZE limits are still in effect. The following table shows the maximum block sizes for those record formats for which Connect:Direct for z/OS version 4.6 does not support the LBI maximum block size length of 262,144 bytes:

RECFM	BLKSIZE DASD	BLKSIZE TAPEIO=BSAM to tape
F	32760	65535
V	32760	65535
VS/VBS	32760	65535
U	32760	65535

---

**Note:** Using TAPEIO=EXCP, Connect:Direct cannot write an LBI format tape and cannot read an LBI format tape with a block size greater than 65535. Consider using TAPEIO=BSAM.

---

- ◆ **Copying between Connect:Direct for z/OS and Connect:Direct Windows or UNIX**  
When a copy operation is performed between Connect:Direct for z/OS version 4.7 and Connect:Direct Windows version 4.2 or later or Connect:Direct for UNIX version 3.6.01 or later and all of the following conditions are in effect, the Connect:Direct Process can terminate with an SVTO0011 error:

- ◆ Connect:Direct for z/OS is sending the file.
- ◆ SSL/TLS is enabled for the remote Windows node.
- ◆ The SSL/TLS cipher is SSL\_RSA\_WITH\_NULL\_MD5.
- ◆ Negotiated Comm buffer size is 64K.

To prevent this situation, take one of the following actions:

- ◆ Select a different SSL/TLS cipher.
- ◆ Reduce the Windows Comm buffer size to 16K.
- ◆ Have Connect:Direct Windows initiate the Process.

## Connect:Direct Secure+ Option

Connect:Direct Secure+ Option has the following restriction:

- ◆ Secure connections cannot be established using the following protocols:
  - ◆ LU0
  - ◆ PNODE=SNODE

Nonsecure connections operate normally using these protocols.

## File Agent

The File Agent component of Connect:Direct has the following known restrictions:

- ◆ File Agent can detect when VSAM files are created, but not when they are updated.
- ◆ When watching for a VSAM file, File Agent triggers a Process three times because it detects the creation of the cluster, data, and index portions of the VSAM dataset. To prevent the Process from being triggered unnecessarily when the VSAM cluster, data, and index components are created, append .DATA to the data set name. To see an example involving a VSAM data file, see the *Managing Files with Connect:Direct File Agent* chapter in the *Connect:Direct for z/OS Administration Guide*.
- ◆ File Agent ignores PDSE data sets in a watch directory.
- ◆ Do not use the Search tab on the Connect:Direct configuration GUI Help when running the GUI as a z/OS batch job. Using the Search tab on z/OS systems can terminate the configuration GUI session.

- ◆ To avoid a parsing error when a substitution for a variable would include an open or closing parenthesis, enclose the variable in double quotes.  
For example, if `%FA_FILE_FOUND.` is to be passed as the Process Argument &DSN, specify the variable as:  
`&DSN="%FA_FILE_FOUND."`
- ◆ Some Hummingbird Exceed releases earlier than 9.0 are incompatible with the Help facilities and do not allow you to close the Help windows.

---

## Installation Notes

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

- ◆ Review the *Connect:Direct for z/OS Installation Guide*, and complete the worksheets prior to installing Connect:Direct for z/OS and its related software.
- ◆ Review your security configuration to ensure compatibility with Connect:Direct. Refer to the *Connect:Direct for z/OS Installation Guide* for security options.
- ◆ Verify that you have the current updates for Connect:Direct. Access current update information, including instructions for applying updates containing product fixes and enhancements, from the Customer Center Web site at <https://cn.sterlingcommerce.com> See *Obtaining Product Updates* on page 11 for instructions.
- ◆ For installation instructions for the Sterling External Authentication Server, application refer to the *Sterling External Authentication Server Version 2.0.00 Release Notes*.

---

## Upgrading to Connect:Direct Version 4.7

Review the upgrading considerations for Connect:Direct and its related software before you begin the procedure.

### Connect:Direct

Review the following items before upgrading your existing Connect:Direct system:

- ◆ You must re-assemble and re-link all user exits.
- ◆ Reassemble and link-edit your security module that uses the DMGSECUR macro to ensure that all enhancements are implemented. To put the new exit into effect, stop and restart Connect:Direct.
- ◆ After Connect:Direct files have been migrated to version 4.7, using these files with a previous release of Connect:Direct results in the inability to view user comment fields in the network map. If you update the network map using an older version of Connect:Direct, any information stored in the comment fields may be lost.
- ◆ To ensure above-the-line storage, calculate the difference between the maximum storage values used for BSAM data transfers (as specified by the MAXSTGIO initialization parameter) and change the JOBSTEP region accordingly. For additional information, see *Improving Performance* in the *Connect:Direct for z/OS Administration Guide*.

- ◆ Performing an upgrade is similar to performing an initial installation. For an upgrade, you can choose to retain some or all of the data files that were created by the initial installation or as a result of the last upgrade.

To retain existing Connect:Direct files when you migrate to version 4.7, use the information in the following table. These files will be required if you need to fall back to the version from which you are upgrading.

Data Set	Migration Considerations
NETMAP file	If you are migrating a network map from Connect:Direct OS/390 Version 4.3 or earlier, unload, delete, reallocate, and reload the network map. For more information, see <i>Migrating an Existing Network Map</i> on page 23.
AUTH, CKPT, and TYPE files	<p>Use IDCAMS REPRO to migrate the data from the old files to the new files.</p> <p>For the AUTH file, use this DCB information: DCB=(DSORG=PS,RECFM=VB,LRECL=2052,BLKSIZE=24624)</p> <p>For the TYPE file, use this DCB information: DCB=(DSORG=PS,RECFM=VB,LRECL=1934,BLKSIZE=29010)</p>
STATS files	Use IDCAMS REPRO to migrate the data from the old ESDS statistics file to the new ESDS statistics file with this DCB information: DCB=(DSORG=PS,RECFM=VB,LRECL=1604, BLKSIZE=28332). Then use the DMSTBKEY JCL member in \$CD.JCL to build the new KSDS from each new ESDS.
MSG file	Because new messages have been added to the MSG file, you must use the version 4.7.00 message file. Any user-defined messages can be loaded using the MSGLOAD JCL in the \$CD.JCL installation data set.
Connect:Direct initialization parameters file	<p>After migrating data from a previous release, specify the Connect:Direct initialization parameters TCQ=WARM and STAT.INIT=WARM and attempt the initialization.</p> <p><b>Note:</b> Make sure that all obsolete initialization parameters have been removed before you start up Connect:Direct. See the list of initialization parameters that are obsolete in Connect:Direct for z/OS version 4.7 in <i>Special Considerations</i> on page 11.</p>

## Sharing DASD Between Version 1.7 and Pre-1.7 Versions of the z/OS Operating System

Connect:Direct supports creating large format data sets on version 1.7 of the z/OS operating system; however, versions of the IBM z/OS operating system earlier than version 1.7 do not support large format data sets. Therefore, if you run Connect:Direct in an environment in which you share DASD with pre-1.7 versions of z/OS, you must take the following action to prevent the possibility of lost data when large format data set files are transferred between pre-version 1.7 systems and version 1.7 systems:

- ◆ Apply IBM large data set coexistence APARS, OA08515 and OA08517, to any pre-1.7 z/OS operating systems on which you are running Connect:Direct.

Applying the APARS produces an S213 or S737 ABEND when Connect:Direct attempts to open a large format data set on a pre-1.7 version of z/OS. The ABEND enables you to take corrective action to prevent the loss of data.

---

**Caution:** If you fail to apply the APARS, you risk losing data, and you will not be notified of the loss.

---

## Migrating an Existing Network Map

To use an existing network map when you migrate to Connect:Direct version 4.7.00, follow this general procedure:

1. Run the JNETUNLD job stream to unload the network map file of your current release by having your UNLOAD DD statement point to your upgrade release CNTL library.
2. Make changes to the initialization parameters, if necessary. Edit your network map source, if necessary, then run JNETDEF to redefine your network map, and JNETLOAD to reload it. For more information on generating and loading the network map, see *Installing Connect:Direct for z/OS* in *Connect:Direct for z/OS Installation Guide*.
3. If you change the name of your network map, make the following changes:
  - a. Update your NETDSN initialization parameter, DMBATCH JCL, and ISPF main menu panel (usually ISR@PRIM).
  - b. Change the network map name in the MCS.SIGNON initialization parameter.

## Rebuilding the TCQ/TCX Files when Migrating from a Release Prior to 4.4

In versions of Connect:Direct prior to 4.4, completed Processes in the TCQ are deleted logically rather than physically. Therefore, if you try to rebuild the TCQ for migration to Connect:Direct version 4.7 by running the CDTCQFIX utility only in Rebuild TCX mode, you may encounter the following problems:

- ◆ Completed Processes remaining in the TCQ may be restarted when the DTF is initialized.
- ◆ The report generated by the CDTCQFIX utility may list completed Processes that you do not expect to be present in the TCQ.
- ◆ The free TCQ space may be mapped incorrectly as a result of the presence of completed ghost Processes.

To avoid these problems during migration to a post-4.4 version of Connect:Direct, use the following table to determine how to apply the CDTCQFIX utility to rebuild the TCQ/TCX. For more information on running the CDTCQFIX utility and the reports it generates, see the chapter on managing the TCQ in *Connect:Direct for z/OS Administration Guide*.

If You Are	Use This Method to Run the CDTCQFIX Utility
<ul style="list-style-type: none"> <li>◆ Upgrading from a release prior to 4.4 and Processes in the TCQ must be retained</li> </ul>	<ol style="list-style-type: none"> <li>1 Modify the TCQFIX2 sample JCL in \$CD.SAMPLIB for your site and run the CDTCQFIX utility in Use TCX mode. Use TCX mode specifies to use the existing TCX and TCQ to create a temporary TCQ. This step removes all of the completed Processes that remain in the TCQ to prevent them from being restarted when the DTF is initialized.</li> </ol>
<ul style="list-style-type: none"> <li>◆ Upgrading from a version prior to 4.4 and no Processes in the TCQ must be retained</li> </ul>	<ol style="list-style-type: none"> <li>2 Modify the TCQFIX1 sample JCL in \$CD.SAMPLIB for your site and run the CDTCQFIX utility in Rebuild TCX mode against the temporary TCQ created in step 1. Rebuild TCX mode creates the new TCQ and TCX files for use by the upgraded version of Connect:Direct. This step corrects the mapping of free TCQ space in the TCX.</li> </ol>
<ul style="list-style-type: none"> <li>◆ Upgrading from a version prior to 4.4 and no Processes in the TCQ must be retained</li> </ul>	<ul style="list-style-type: none"> <li>◆ Set the global initialization parameter TCQ=COLD and perform a cold start of Connect:Direct. This option reinitializes the TCQ and clears it of all Processes.</li> </ul>

## Connect:Direct Secure+ Option

Review the following items before upgrading your existing Connect:Direct Secure+ Option application.

### Removing References

If you are upgrading from an existing version of the Connect:Direct application, remove references to Connect:Direct Secure+ Option in the ISPLLIB, ISPPLIB, and STEPLIB libraries.

### Encrypting the Connect:Direct Secure+ Option Parameters File with TDES

Parameter files created prior to Connect:Direct for z/OS version 4.5.00 were created using IDEAL encryption. If these files are used in later releases, you will receive a SITA905W warning message during startup, indicating that the parameter is not encrypted with the TDES algorithm.

---

**Caution:** Before you begin this procedure, make copies of the Secure+ Option parameters file and the access file to enable you to back out of this change if necessary.

---

To encrypt a Secure+ Option parameters file with the TDES algorithm:

1. Open the Secure+ Admin Tool.
2. To display the Secure+ Admin Tool File Selection panel, select **File** and type **2**.



3. To display the parameters files configured for your system, type the parameters file prefix or partial prefix followed by an asterisk (\*), select **Browse**, and press **Enter**.
4. To open the file, type **S** beside the file and press **Enter**.
5. From the File menu, select **Save as** and press **Enter**.
6. On the Save As information panel, select the text string **Make Pass Phrase** and press **Enter**.
7. Type the required passphrase and press **Enter**.
8. To submit the Save as-generated JCL, select option 3- **Submit** and press **Enter**.

---

**Note:** After a Secure+ Option parameters file has been re-keyed using the TDES algorithm, it cannot be migrated back to an earlier release without applying maintenance for that release. Connect:Direct version 4.4 requires compatibility fix R035146 while Connect:Direct version 4.3 requires R035147. You can obtain the compatibility fixes from the Sterling Commerce Customer Support web site.

---

## File Agent

To take advantage of the new command line in the latest version of File Agent, you must modify the Java command line parameters after you install the latest version. See *Managing Files with Connect:Direct File Agent* in *Connect:Direct for z/OS Administration Guide* for details on how File Agent works and sample configuration scenarios.

If you are upgrading from an existing version of File Agent, follow this general procedure.

---

**Note:** Files recorded in the checkpoint file are treated as if the command line parameters had been active when the files were first discovered. You should not have to delete the checkpoint file.

---

1. Install File Agent into an empty directory.
2. Copy the .ser files from the old to the new File Agent installation directory.
3. Rename the old installation directory to an archive name.
4. Rename the new installation directory to the primary name.

## Installing Connect:Direct from the ESD Portal

These instructions contain procedures for downloading and installing the Connect:Direct version 4.7.00 release. The file you download from the Electronic Software Distribution (ESD) Portal is named ESD file. This file is a self-extracting zip file that contains the complete set of installation files for the Connect:Direct for z/OS version 4.7.00 GA release, including the README.TXT file and the documentation files in PDF format. This file is approximately 27 MB.

## Downloading Product Files

This procedure assumes that you are downloading the ESD file to a PC or workstation and then uploading it to your z/OS system.

To download the ESD file file:

1. Click the link to the Download Area in the e-mail from Sterling Commerce.
2. In the **Security Alert** dialog box, click **Yes**.
3. On the Login page, type the following information included in the e-mail:
  - ◆ Sterling order number
  - ◆ Company name
  - ◆ Customer ID
4. Click **Login**. The Download Area is displayed.
5. Find Connect:Direct for z/OS version 4.7.00 and click **Download**.
6. In the **File Download** dialog box, click **Save**.
7. When the **Save As** dialog box opens, specify the location to save the file, or save the ESD file file to your desktop.

---

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

---

8. Double-click the file that you downloaded to extract the files.
9. Upload the CD.ZOS.V4700.BASE.RELEASE file to your z/OS system.

---

**Note:** To prevent corruption of the CD.ZOS.V4700.BASE.RELEASE file, you must upload it in **binary** mode.

---

10. Review the CD.ZOS.V4700.BASE.README.TXT file for information about pre-allocating the z/OS file.

Before you begin the installation, download and review the Connect:Direct documentation. See *Connect:Direct Documentation* on page 29 for details.

## Unpacking Application Files

To unpack the application files on the z/OS platform:

1. Use the following JCL as a model for creating the JCL to decompress and receive the Connect:Direct for z/OS installation file.

The TRSMMAIN compress/decompress utility used in the JCL is provided by IBM. This utility is available for download from the IBM Support web site at:

<ftp://ftp.software.ibm.com/s390/mvs/tools/packlib/>.

```

//jobname JOB (acct), 'name'
//*
//DELETES EXEC PGM=IEFBR14
//PDS DD DISP=(MOD,DELETE), DSN=your.hlq.INSTALL,
// UNIT=SYSDA, SPACE=(TRK, (1,1,1))
//UNPACK DD DISP=(MOD,DELETE), DSN=your.hlq.UNPACK,
// UNIT=SYSDA, SPACE=(TRK, 1)
//*
//UNPACK EXEC PGM=TRSMAN, PARM=UNPACK, COND=(0,NE)
//INFILE DD DISP=SHR, DSN=file.loaded.to.OS.390
//OUTFILE DD DISP=(NEW,CATLG), DSN=your.hlq.UNPACK,
// UNIT=SYSDA, SPACE=(TRK, (850,150), RLSE)
//STEPLIB DD DISP=SHR, DSN=library.containing.trsmain
//SYSPRINT DD SYSOUT=
//*
//RECEIVE EXEC PGM=IKJEFT01, COND=(0,NE)
//INPUT DD DISP=(OLD,DELETE), DSN=your.hlq.UNPACK
//SYSTSIN DD
RECEIVE INFILE(INPUT) NONAMES
DSNAME('your.hlq.INSTALL') RELEASE
//SYSTSPRT DD SYSOUT=

```

The preceding JCL example has three steps, with each step separated by an asterisk (\*). The first step verifies that PDS DD and UNPACK DD do not already exist. The second step downloads the compressed file and decompresses it. The third step receives the file into the installation directory. The resulting PDS contains the members described in the following table:

Folder	Description
\$INSTALL	Contains the sample JCL to RECEIVE the unloaded members and rebuild the libraries used for installation.
\$Readme	Contains this file in .txt format.
FILE01	Contains unloaded library TXLIB.
FILE02	Contains unloaded library LKLIB.
FILE03	Contains unloaded library DATA.
FILE04	Contains unloaded library CICS.LKLIB.

2. Modify \$INSTALL to specify your file names and site requirements.
3. Run \$INSTALL to build the installation libraries.

## Installing the Application

Use the following procedure to install Connect:Direct for z/OS:

1. Review *Connect:Direct for z/OS Version 4.7.00 Release Notes* for last-minute product information and installation requirements.
2. Go to the *Generate the Install JCL through ISPF/PDF* step in Chapter 3 of *Connect:Direct for z/OS Installation Guide* and follow the directions to complete the installation.

---

## Documentation Updates

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

### Connect:Direct for z/OS Installation Guide

To ensure a successful unload of the TXLIB data set, increase the number of PDS directory blocks allocated for it in the CDUNLD JCL from 300 to 500.

To reflect this change, review the following updates, which apply to the *Connect:Direct for z/OS Installation Guide*.

#### Chapter 2, Planning the Installation

On page 20, under the DIR BLKS column, replace 300 with 500 for the TXLIB data set in the table in *Distribution Libraries Space Requirement*.

On page 31, the first note in the Virtual Storage Requirements section should read:

---

**Note:** Connect:Direct for z/OS may make use of Above the Bar storage. The in-storage trace table defaults to 2 MB of Above the Bar storage, and is controlled by the TRACE.BUFFER initialization parameter.

---

#### Chapter 3, Installing Connect:Direct for z/OS

On page 40, in the example showing how to code the CDUNLD JCL in Step 2, replace 300 with 500 for the TXLIB data set as shown below:

```
//TXLIB    EXEC CDUNLD, TAPE=$TAPE, TVOL=$TVOL, DISK=$DISK, DVOL=$DVOL,
//          DSNM=TXLIB, FILE=2, FMID=N40700A, SPACE=30, DIR=500,
//          FM=FB, LR=80, BLK=CYL, BLKSIZ=0,
//          SYSHLQ=$CD
```

#### Appendix E, Implementing the Sysplex Requester Facility

On page 156, change the CDRUNLD job by replacing 300 with 500 for the TXLIB data set as shown below:

```
//TXLIB    EXEC CDUNLD, TAPE=$TAPE, TVOL=$TVOL, DISK=$DISK, DVOL=$DVOL,
//          DSNM=TXLIB, FILE=2, FMID=N40700A, SPACE=30, DIR=500,
//          FM=FB, LR=80, BLK=CYL, BLKSIZ=0,
//          SYSHLQ=$CD
```

Also on page 156, the page number for the section, *Description of Distribution Files*, should be page 20 instead of page 17.

## Connect:Direct for z/OS Installation Guide

To avoid a potential installation problem, specify the VOLUME parameter for the VSAM DEFINE CLUSTER.

To reflect this, review the following updates, which apply to the *Connect:Direct for z/OS Installation Guide*.

### Chapter 3, Installing Connect:Direct for z/OS

Insert the following note in Step 1 on page 43:

---

**Note:** Enter the VOLUME parameter for the VSAM DEFINE CLUSTER in the Permanent DASD Volume Serial No. field. If you do not, you must edit the VSAMDEF member in the \$CD.CNTL data set to specify the VOLUME in the DEFINE CLUSTER.

---

### Appendix A Installation Worksheets

On page 100, the Permanent DASD Volume Serial No. field should be shown as required and be in bold. Replace the description for that field with the following description:

The VOLUME parameter for the VSAM DEFINE CLUSTER, which is generated during installation. If not specified, you must edit the VSAMDEF member in the \$CD.CNTL data set to specify the VOLUME in the DEFINE CLUSTER.

## Connect:Direct for z/OS Administration Guide

Because the MULTI.COPY.STAT.RCD and TCQ.THRESHOLD initialization parameters are modifiable through the MODIFY INITPARMS command, apply the following changes:

- ◆ On page 41 in Chapter 2, *Basic System Administration*, add the MULTI.COPY.STAT.RCD and TCQ.THRESHOLD parameters to the list of the initialization parameters that you can update while Connect:Direct is running.
- ◆ On page 393 and page 421 in Appendix A, *Global Initialization Parameters*, change NO to YES in the *Modifiable through MODIFY INITPARMS command*: NO information at the end of the descriptions for the MULTI.COPY.STAT.RCD and TCQ.THRESHOLD initialization parameters.

---

## Connect:Direct Documentation

The Connect:Direct documentation is available on the product media or the documentation CD-ROM. You can view or download documentation from the Customer Center Web site at <https://cn.sterlingcommerce.com>. You need a Support Customer Center user name and password. See *Customer Center Portal User Name and Password* on page 6 for instructions on obtaining your user name and password.

Access to PDF files requires the latest version of Adobe Reader, which you can download at [www.adobe.com](http://www.adobe.com). You can search for a specific word or phrase in the text of an open Adobe PDF

document or a set of PDF documents in a specified location. See the Adobe Reader Help for instructions on using the Search feature. The search lists all instances of the specified string.

The Connect:Direct documentation consists of:

- ◆ *Connect:Direct for z/OS Administration Guide*
- ◆ *Connect:Direct for z/OS User's Guide*
- ◆ *Connect:Direct for z/OS Installation Guide*
- ◆ *Connect:Direct for z/OS Quick Reference*
- ◆ *Connect:Direct for z/OS CICS Administration and User's Guide*
- ◆ *Connect:Direct for z/OS Facilities Guide*
- ◆ *Connect:Direct Secure+ Option for z/OS Implementation Guide*
- ◆ *Sterling External Authentication Server Help*
- ◆ *Understanding Connect:Direct Processes*
- ◆ *Connect:Direct Compatibility and Connectivity Chart*
- ◆ *Connect:Direct for z/OS File Agent Configuration Guide and Help*

Documentation for the following supplemental products is available on additional distribution media and from the Documentation Library on the Customer Center Support On Demand Web site:

- ◆ Connect:Direct Browser User Interface
- ◆ Sterling Certificate Wizard
- ◆ Sterling External Authentication Server

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 Customer Center Support On Demand Documentation Library. After you log in to the Customer Center Support On Demand web site, use the following links on the left-hand navigation bar to access the file: **Product Support > Connect > Connect Documentation > Connect:Direct**.

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