

Sterling Commerce Product Documentation



Connect:Direct[®] for z/OS Version 5.0.00 Release Notes

First Edition

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Connect:Direct for z/OS Version 5.0.00 Release Notes

The *Connect:Direct for z/OS Version 5.0.00 Release Notes* document supplements Connect:Direct version 5.0 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 a file named CD.ZOS.V5000.BASE.exe from the Sterling Commerce Electronic Software Distribution Portal. This file is a self-extracting zip file that contains the complete set of installation files for the Connect:Direct for z/OS version 5.0.00 release, including the README.TXT file and the documentation files in PDF format. This file is approximately 27 MB.

Note: Internet Explorer may add a number in brackets to the name of the downloaded file, for example, CD[1].ZOS.V5000.BASE.exe. This does not have any effect on the file.

The self-extracting zip file contains the following files:

- CD.ZOS.V5000.BASE.README.TXT
- CD.ZOS.V5000.BASE.RELEASE
- CD50DocSet.Zip

The README.TXT file contains instructions on how to start installing Connect:Direct. Follow that procedure to unpack the application files on the z/OS platform and build your installation libraries. When you are ready to proceed, 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.

Requirements

Your use of Connect:Direct for z/OS version 5.0.00 has the following requirements:

Hardware and Software

The hardware and software requirements for the Connect:Direct for z/OS version 5.0.00 release are listed in Chapter 2, *Planning the Installation*, of *Connect:Direct for z/OS Installation Guide*. You must have IBM z/OS version 1.10 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. See the following table for additional File Agent requirements.

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 1.10 or later.

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 1.3 or later	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.

Customer Center Portal User Name and Password

The Customer Center portal offers you a single location to administer everything associated with your Sterling Commerce products and services. It provides quick access to online tools, on-demand applications, community forums, product information, industry news, support updates, and support case management. We've combined the current content experience of our customer-facing portals,

such as Innovation Gateway and Support on Demand, and extended it across all of our products and applications within Customer Center.

To log into the Customer Center, go to the [Customer Center web site](#). If you do not have a Support On Demand user name and password, click the **Join now** link and follow the instructions for new users. If you have a Support on Demand account, define a new password the first time you log on.

Additional Requirements

Connect:Direct for z/OS version 5.0.00 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. In addition to C/C++ and LE, XPLINK is now a requirement to support the File Accelerator and alters the data set list from previous releases.

- CEE.SCEERUN (IBM Language Environment)
- CEE.SCEERUN2 (XPLINK Requirement)
- CBC.SCLBDLL (C/C++ Run-time)
- SYS1.SIEALNKE (System SSL Environment)

If RACF program control is implemented, these data sets above and the Connect:Direct LINKLIB will need to be defined to the program class.

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 features available at a site. When you purchase Connect:Direct for z/OS, a temporary key file is sent to enable operation of Connect:Direct for z/OS for a limited time. You must replace the temporary key with a permanent one to continue running Connect:Direct. The temporary and permanent key files are supplied as text files named *nnnnn.txt*, where *nnnnn* is a number assigned by Sterling Commerce. Each key file is sent to you as an attachment to an e-mail. See the *Sterling MFT License Key Guide* for instructions to obtain the permanent license key file and install the license key.

What's New in This Release

For the latest information on updates to the product and documentation, see *Features and Enhancements* on page 8 and *Improvements to Documentation* on page 12.

Features and Enhancements

Connect:Direct for z/OS version 5.0.00 and its related software have the following features and enhancements.

Note: General documentation references for information on particular features are included in the table below. To do a more thorough search for information on a particular feature, follow the instructions for searching a collection of PDFs in a directory in *Connect:Direct Documentation* on page 27.

Product/Component	Feature or Enhancement
Connect:Direct	<p>Compression Control Feature (CCF) allows you to control the type of compression used between nodes, that is, standard versus extended, and how compression is used on a node, that is, whether the selected compression type is required, may be used, or is not allowed at all.</p> <ul style="list-style-type: none"> ◆ <i>Connect:Direct for z/OS Administration Guide</i>, Chapter 15, <i>Performance Tuning</i> <hr/> <p>Enables central management of Connect:Direct for z/OS initialization parameters from Sterling Control Center. Using Control Center, you can now modify the initialization parameters of a Connect:Direct stand-alone server or the global and local initialization parameters for a Connect:Direct/Plex.</p> <p>In addition, you can create backup copies of the global and local initialization parameter members to use in an emergency situation if Connect:Direct cannot successfully initialize after initparm updates have been applied. To use this new feature, you must specify the new global initialization parameter, INITPARM.BACKUP. To implement this feature in a Connect:Direct/Plex environment, you must specify the CDPLEX.INITPARM.BACKUP local initialization parameter for the Connect:Direct/Plex Manager and each Connect:Direct/Plex server.</p> <ul style="list-style-type: none"> ◆ <i>Connect:Direct for z/OS Administration Guide</i>, Chapter 3, <i>Implementing Security</i> and Appendices A and B, <i>Global and Local Initialization Parameters</i> ◆ <i>Sterling Control Center Configuration Management Guide</i> <hr/> <p>Enables the Connect:Direct administrator to define global signon defaults using the ISPF interface so that users do not have to individually alter their signon default values to increase their allocation. By implementing a global signon default, you can avoid insufficient space being allocated for the temporary data set upon signon as well as SB37 ABENDs.</p> <ul style="list-style-type: none"> ◆ <i>Connect:Direct for z/OS Administration Guide</i>, Chapter 2, <i>Basic System Administration</i> <hr/> <p>Provides a new global initialization parameter allowing you to specify the maximum time of session inactivity a TCP/IP connected IUI or API session waits before timing out and exiting. This allows the DTF to detect and recover lost sessions, which reduces the number of active connections.</p> <ul style="list-style-type: none"> ◆ <i>Connect:Direct for z/OS Administration Guide</i>, Appendix A, <i>Global Initialization Parameters</i> ◆ <i>Connect:Direct for z/OS User Guide</i>, Chapter 6, <i>Managing Sessions</i>

Product/Component	Feature or Enhancement
	<p>Provides a new global initialization parameter called Process Retention which allows you to save a completed PNODE process and retain it for a period of time. Retaining a Process allows you to troubleshoot problems with a completed Process as the DTF ran it, that is, with all symbolics having been substituted.</p> <ul style="list-style-type: none"> ◆ <i>Connect:Direct for z/OS Administration Guide, Appendix A, Global Initialization Parameters</i> ◆ <i>Connect:Direct for z/OS User Guide, Chapter 9, Process Queuing and Recovery</i>
	<p>Provides a simple way to migrate unmanaged FTP sessions within z/OS job streams to a managed Connect:Direct environment using the new Connect:Direct FTP+ for z/OS feature with minimal changes to the JCL.</p> <ul style="list-style-type: none"> ◆ <i>Connect:Direct for z/OS User Guide, Chapter 12, Utility Programs</i>
	<p>Increases the number of entries in the Quiesce/Trace node table (previous limit was 15) to include one entry for each adjacent node in your netmap. To initialize Quiesce and Trace settings for one or more nodes, you can use the global initialization parameters, NODE.TRACE.ON, NODE.TRACE.OFF, NODE QUIESCE.ON, and NODE QUIESCE.OFF, and include the * and ? wildcard characters to specify node names. When you run the INQUIRE DEBUG command, the enhanced output displays the Quiesce and Trace settings for all adjacent nodes.</p> <ul style="list-style-type: none"> ◆ <i>Connect:Direct for z/OS Administration Guide, Chapter 2, Basic System Administration and Chapter 16, Isolating Problems</i>
	<p>Provides a convenient method to modify Quiesce and Trace settings for the adjacent nodes in your netmap with the new MODIFY NODES screen. You can issue Quiesce and Trace commands or selectively modify Quiesce and Trace settings for individual nodes on this screen.</p> <ul style="list-style-type: none"> ◆ <i>Connect:Direct for z/OS Administration Guide, Chapter 2, Basic System Administration</i>
	<p>Enhances the MODIFY SESSION command with support for * and ? wildcard characters when specifying node names. This allows you to suspend or resume processing on a single node, multiple nodes, or all nodes.</p> <ul style="list-style-type: none"> ◆ <i>Connect:Direct for z/OS Administration Guide, Chapter 2, Basic System Administration</i>
	<p>Provides a convenient method to modify trace debug-bit settings with two new commands: MODIFY NODE.TRACE.BITSON and MODIFY NODE.TRACE.BITSOFF. These commands work on individual node debug settings the same way that MODIFY BITS.ON and MODIFY BITS.OFF commands work on the global debug setting. You can use the * and ? wildcard characters with these commands to specify individual nodes.</p> <ul style="list-style-type: none"> ◆ <i>Connect:Direct for z/OS Administration Guide, Chapter 16, Isolating Problems</i>

Product/Component	Feature or Enhancement
	<p>Provides support for Connect:Direct/Plex customers who require different CDPLEX.REDIRECT addresses for their Connect:Direct/Plex Servers based on how the remote Connect:Direct server contacts the Connect:Direct/Plex Manager. To use this new feature, you must specify the new Manager local initialization parameter, CDPLEX.REDIRECT.EXCEPTION.</p> <ul style="list-style-type: none"> ◆ <i>Connect:Direct for z/OS Administration Guide, Chapter 7, Configuring a Connect:Direct/Plex Environment</i>
	<p>Provides ability to use the RACF FACILITY class to define user authorization profiles within Connect:Direct to control user access without resorting to dummy datasets.</p> <ul style="list-style-type: none"> ◆ <i>Connect:Direct for z/OS Administration Guide, Chapter 3, Implementing Security</i>
	<p>Allows the use of DSN=NULLFILE as an output file (the COPY TO dataset) to satisfy any purpose, for example:</p> <ul style="list-style-type: none"> ◆ To verify connections and security options when communicating with another system ◆ To obtain timing of a connection for transfer of a specific amount (<i>n</i>MB) of data ◆ To use instead of an I/O EXIT that is going to just discard data
	<p>Provide more information to better monitor Connect:Direct systems by adding the following items:</p> <ul style="list-style-type: none"> ◆ Operator user ID to the SMU1911 message for netmap changes ◆ Checkpoint interval, security protocol, and Secure+ usage added to summary stats for a Process ◆ Submitter Jobname, and Job ID to certain statistical record types ◆ Additional Connect:Direct sense codes to give more information about connection errors involving the netmap (for more information, see <i>Connect:Direct for z/OS User Guide, Chapter 4, The Interactive User Interface</i>)
	<p>Provide ability to control tracing of the Security Stage 2 Exit through commands or initialization parameters without having to restart Connect:Direct by using a new keyword, TRACE=DEBUG in the DMGSECUR macro.</p> <ul style="list-style-type: none"> ◆ <i>Connect:Direct for z/OS Administration Guide, Chapter 3, Implementing Security and Chapter 16, Isolating Problems</i>
	<p>Improves high availability and error recovery by providing Connect:Direct a mechanism to avoid certain ABENDs due to a lack of storage.</p>
	<p>Enables the use of mixed case file names and parameters so that strings using symbolics can be built.</p>
	<p>Makes detailed statistics easier to read by consistently using the abbreviation, Process Num, and improving the alignment of columns.</p>
	<p>Enhances security by supporting the use of special characters included in passwords if enclosed in apostrophes resulting in stronger passwords.</p>

Product/Component	Feature or Enhancement
Secure+ Option	<p>Increases the length for a double-quoted SYSOPTS string in a RUN TASK statement enabling numerous substitutions to be passed bypassing the 254-byte limit for individual SYMBOL statements.</p>
Secure+ Option	<p>Enables remote administration of Secure+ Option from Sterling Control Center. Using Control Center, you can now perform the following functions when implementing the SSL or TLS protocol:</p> <ul style="list-style-type: none"> ◆ Display the list of nodes populated from the parameters file ◆ Create and update a remote node ◆ Update the local node ◆ Add and update certificates ◆ Create an alias node ◆ Select cipher suites ◆ Delete a remote node <p>For more information, see <i>Connect:Direct for z/OS Administration Guide</i>, Chapter 2, <i>Basic System Administration</i> and the <i>Sterling Control Center Configuration Management Guide</i>.</p>
	<p>Provides the ability to enforce that a client API be on a secure connection before allowing remote administration of Secure+ Option.</p>
	<p>Enables daily checking of all certificates. Provides automatic warnings for expired certificates and certificates that will expire within xxx days. In addition, a new administrator command allows you to display certificate expiration warnings on demand.</p> <ul style="list-style-type: none"> ◆ <i>Connect:Direct for z/OS Administration Guide</i>, Chapter 2, <i>Basic System Administration</i>
	<p>Enables the Secure+ Admin tool to dynamically update the local node record without having to stop and restart Connect:Direct</p> <ul style="list-style-type: none"> ◆ <i>Connect:Direct Secure+ Option for z/OS Implementation Guide</i>, Chapter 13, <i>Maintaining Secure+ Option</i>
	<p>Provides the ability to specify one or more cipher suites defined in Secure+ when executing a Process. When establishing a session between two business partners using Secure+ Option, a new second position parameter in the SECURE= Process keyword allows you override the cipher suites defined in the Secure+ parameter files.</p> <ul style="list-style-type: none"> ◆ <i>Connect:Direct Secure+ Option for z/OS Implementation Guide</i>, Chapter 12 <i>Override Settings in Connect:Direct Processes</i> and Connect:Direct Processes web site

Product/Component	Feature or Enhancement
	<p>Provides the ability to encrypt only the control block information in Function Management Headers (FMHs), such as a user ID, password, and filename, for all files being sent to a particular trading partner or for one particular file. By restricting encryption to the control block information rather than both the preliminary FMH information exchanged during the handshake to set up the session and the actual files being transferred, CPU utilization will decrease dramatically.</p> <ul style="list-style-type: none"> ◆ <i>Connect:Direct Secure+ Option for z/OS Implementation Guide</i>, Chapter 1, <i>About Connect:Direct Secure+ Option</i> and Chapter 12, <i>Override Settings in Connect:Direct Processes</i>
	<p>Strengthens password encryption for passwords at rest in the Connect:Direct TCQ and AUTH files.</p> <ul style="list-style-type: none"> ◆ <i>Connect:Direct Secure+ Option for z/OS Implementation Guide</i>, Chapter 1, <i>About Connect:Direct Secure+ Option</i> and Chapter 7, <i>Additional Configuration Options</i>
	<p>Improves usability of the Secure+ Admin Tool by providing a clearer presentation of SSL and TLS parameters on a combined panel arranged so that all common information is together and separate from the information related to just a single protocol.</p>
File Agent	<p>The latest release of this component of Connect:Direct includes the following functionality:</p> <ul style="list-style-type: none"> ◆ Enhances the management of rules processing by adding the ability to re-order Submit Process rules and System Event rules. ◆ Provides the option to refresh changes to the configuration without having to restart File Agent. ◆ Enhances the monitoring of File Agent by sending SNMP traps to Sterling Control Center and other SNMP monitoring software. ◆ Provides the option to save the File Agent configuration details and rules to a text file. ◆ Provides the option to monitor only the specified watch directories or the watch directories and subdirectories. <p>For more information, see <i>Connect:Direct for z/OS File Agent Configuration Guide</i> and Help.</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. 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 5.0 has the following changes:

- Licensing information for all Sterling MFT products and platforms has been centralized in the new *Sterling MFT License Guide*

- Conceptual information about the Connect:Direct line of products has been updated and centralized in the new *Connect:Direct Overview*
- The Process Guide web site has the following changes:
 - ◆ The functionality of the SECURE parameter of the PROCESS statement has been expanded to allow you to specify one or more ciphers to use for encryption instead of the default cipher suites, and to encrypt only the control block information contained in Function Management Headers (FMHs), such as a user ID, password, and filename, instead of the files being transferred if performance is a factor. (Both sides of the PROCESS must be Connect:Direct for z/OS nodes.)
 - ◆ The functionality of the SECURE parameter of the COPY statement has been expanded in TLS and SSL environments to allow you to encrypt only the control block information contained in Function Management Headers (FMHs), such as a user ID, password, and filename, instead of the files being transferred if performance is a factor. (Both sides involved in the file transfer must be Connect:Direct for z/OS nodes.)
 - ◆ The following examples have been provided to illustrate some of the new functionality:
 - Specifying a List of Ciphers in a Particular Process
 - Encrypting Only Control Block Information—Not Data Being Sent

To see what's new on the Process web site, go to [Latest Updates](#).

Obtaining Product Updates

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

To obtain product updates:

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

Special Considerations

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

Connect:Direct for z/OS

Review the following considerations before installing the product:

- The following initialization parameters were 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

In Version 5.0, these parameters are not supported and must be removed and replaced with the TCP.LISTEN and TCP.API.LISTEN initialization parameters. Connect:Direct will not start if any of the above parameters are in the initialization parameter file.

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.

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.

- The following initialization parameters are obsolete in Connect:Direct for z/OS Version 5.0 and must be removed from the initialization parameter file:

ABNLIGNR	ALLOC.OPTIONS	ALLOC.STORAGE
APCTHRSH	API.SYSTEMS	APPLID
BUFND	BUFSIZE	CD.KEY
CD.NODE	CDPLEX.TCPIP	CDPLEX.TCPNAME
CONNECT.WAIT	DUMP	EXT.COMPRESS.DEFAULT

LINES	LOG	LOG.PRINTER
LU1.ASYNC	LU1.NETMAP.CHECK	LU1.SCRIPT.DSN
LU2.WAIT	MAXRESTAR	MAXWAIT
MP	NDM.KEY	NDM.NODE
NETEX.MAX.OFFERS	NETEX.MAXRU	NETEX.NRBTIME
NETEX.OFFERTIME	NETEX.OLD.PREFERRED	NETEX.SSNM
NETEX.VER	NETEX.WINDOW	OS390.TASKING
PASSWORD	PASSWORD.REPLY	PC.ENABLE.CHECK
POA.APPL	POSIX	PRTYINT
RESIDENT.MOD	SECURITY.TYPE	STIMEOUT
STORAGE.PER.TASK	TAPE.DETACH	TAPE.RETPD
TCP.ADDR	TCP.API.PORTNUM	TCP.BUFSIZE
TCP.NAME	TCP.PORTNUM	TCP.SNS.SUBSYS
TCQDSN	TCXDSN	TPAM
XETEX	XETEX.MAX.OFFERS	XETEX.MAXRU
XETEX.NRBTIME	XETEX.OFFERTIME	XETEX.SSNM
XETEX.VER	XETEX.WINDOW	XLU1.ASYNC
XLU1.SCRIPT.DSN		

- If you plan to enable the Process Retention feature, increase the TCQ space before activating it. A Process is retained in the PR queue until manually deleted, space is required, or has reached the MAX.AGE values you define. Increasing TCQ space reduces the likelihood that a Process in the PR Queue will be automatically deleted when space is required. For more information on enlarging the TCQ, see the *Connect:Direct for z/OS Installation Guide*, Chapter 2, *Planning the Installation*.
- To prevent Connect:Direct for z/OS prior to Version 5.0 from starting with Processes in the PR queue, a toleration PTF has been created. When the DMINITPQ program detects an unsupported feature in use, it issues a SITA189E message, sets RC=16, and terminates Connect:Direct immediately.
- The FIPS and ESTAE initialization parameters are obsolete in Connect:Direct for z/OS version 5.0.00 and are ignored if they are in the initialization parameters file.
- The TAPEIO initialization parameter will become obsolete in a future release. If you have this parameter set to EXCP, see *Upgrading to Connect:Direct Version 5.0* on page 25.
- Prior to Connect:Direct for z/OS Version 5.0, if the Connect:Direct Workload Manager could not assign a server, which supports a specific PLEXCLASS, to execute a particular Process, the Process was placed in the status, WA WX (waiting for server). When the Connect:Direct/Plex server is the PNODE, this continues to be the case. You must manually alter either the PLEXCLASS or protocol, or ensure that the server is active. In Version 5.0, when the Connect:Direct/Plex server is the SNODE, no manual intervention is necessary. The

Process is placed in TI RE status (timer retry) and Connect:Direct will automatically retry to execute the Process.

- If Connect:Direct FTP+ for z/OS is used to communicate with a version of Connect:Direct for z/OS prior to Version 5.0, the CDFTP.TEMPFILE specification in the netmap must be an HFS file unless appropriate maintenance has been applied to that previous level of Connect:Direct for z/OS.
- Prior to Connect:Direct for z/OS version 5.0, the Stage 2 security exit (DMGSECUR) required reassembly, linking, and recycling of Connect:Direct to start and stop security tracing. With Version 5.0, the DMGSECUR keyword, TEST=, is being retired and replaced with the TRACE keyword. After you specify TRACE=DEBUG to turn on tracing for the security trace in the DTF, you can set trace control by using a DEBUG setting and/or the SECURITY DD statement. TRACE=NO does not allow tracing, regardless of DEBUG settings. For more information, see *Connect:Direct for z/OS Administration Guide*, Chapter 3, *Implementing Security*.
- Prior to Connect:Direct for z/OS version 4.7.01, Intelligent Session Retry put tasks into the HO HC queue pending a connection to the specified SNODE. This automatic processing was the equivalent of manually specifying HOLD=CALL in the SUBMIT or CHANGE PROCESS command. In Version 4.7.01 and later, Connect:Direct puts the tasks into HO RH (held for retry) when it is awaiting a connection as part of the Intelligent Session Retry logic. When you manually specify HOLD=CALL in the SUBMIT or CHANGE PROCESS command, Connect:Direct continues to put the Process in HC status in the Hold Queue.
- 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.

- 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 and later with previous releases that do not support IPv6. If you need to back out of a version 4.7 or later install and have defined IPv6 addresses in the network map, you can still use it with previous releases that do not support IPv6. However, beware that the IPv6 addresses in the netmap will be blanked out and ignored when used with previous releases that do not support IPv6 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 or later is used with a previous release that does not support IPv6.

- 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.

- 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

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.

- ◆ 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 for which time is of the 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 5.0, that restriction has been eliminated.

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.

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.

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.

- 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, such as PDSE, 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. Such COPYs may experience allocation failures (Sx37 type ABENDs), which will require SPACE to be manually coded in the Process.
- 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 5.0.00 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 13 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.
- For DMBATCH, specify a region size of 0 megabytes (REGION=0M), especially if you specify MAXDELAY. If you specify a different region size, the DMBATCH job can ABEND with an 878 code.

Special Considerations for Using UDT

If you plan to use UDT for file transfers on high-speed networks with latency, refer to the following table which summarizes performance differences between TCP and UDT:

Bandwidth	Latency	Results
45 Mbps	All latencies	TCP is equal to UDT

Bandwidth	Latency	Results
155 Mbps	Less than 20 ms	TCP outperforms UDT
	Greater than 20 ms	UDT outperforms TCP
1 Gbps	Less than 10 ms	TCP outperforms UDT
	Greater than 10 ms	UDT outperforms TCP

Note: UDT requires a new APKey file with the UDT keyword specified. If you do not update the license key file, the initialization will fail and you will see the message, SITA359I Asset Protection failure, UDT is not supported.

For more information on UDT, see *Configuring Firewall Navigation* and *Using the UDT Protocol* in the *Connect:Direct for z/OS Administration Guide*.

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 GSKKYMAN utility (or RACF if using key rings) 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 5.0 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 5.0.00 has the following restrictions:

- UDT requires three threads for each executing Process which may impact your storage and concurrent processing capabilities. If the number of available threads becomes critically low, you may need to increase the MAXTHREADS limit per PROCESS in the OMVS environment for Connect:Direct.
- 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.
- **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.
- **Session Management of Adjacent Nodes**
 Use the SESS.SNODE.MAX network map parameter only with the TCP/IP and LU6.2 protocols.
- **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.

Another stipulation related to the LU6.2 protocol involves a situation where one of the Connect:Direct servers in a Connect:Direct/Plex environment is communicating with a stand-alone Connect:Direct DTF. In this case, all LU62 processes for this specific node must be directed to the same server and you can use a PLEXCLASS to accomplish this.
- **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 5.0, 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 5.0 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 or Connect:Direct UNIX initiate the Process.

Connect:Direct Secure+ Option

Connect:Direct Secure+ Option has the following restrictions:

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

Nonsecure connections operate normally using these protocols.

- You can only use the Quick Start option the first time you create and populate the Secure+ parameter file from the network map, and if your Connect:Direct TCP/IP netmap entries use standard IPV4 addresses.

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."
```

Note: Variable values enclosed in quotes must not be concatenated with other values. Any attempt to do this will cause a submit failure or subsequent Process failure.

- 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](#). See *Obtaining Product Updates* on page 13 for instructions.
- For installation instructions for the Sterling External Authentication Server application, refer to the latest *Sterling External Authentication Server Release Notes*.

Upgrading to Connect:Direct Version 5.0

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 after you complete the installation procedure.
- After installation, reassemble and link-edit your security module that uses the DMGSECUR macro to ensure that all enhancements are implemented. For more information, see *Connect:Direct for z/OS Administration Guide*, Chapter 3, *Implementing Security*.
- After Connect:Direct files have been migrated to version 5.0, 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.
- For archive JCL and Processes that use STAT archive files or STAT ESDS, update the LRECL to 2048. Also, you should update all archive jobs and procedures, which must change the logical record length. You can update the LRECLs in advance and use the LRECL updates with any existing release.
- 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*.
- If you have the TAPEIO initialization parameter set to EXCP and there are tape processes in the restart condition, ensure that those processes complete before upgrading (this includes partner nodes that may have checkpoint information for this node). Once you upgrade, EXCP will no longer be used for data I/O, and all tape I/O and repositioning will be performed using the high-speed documented and supported BSAM method.
- 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 5.0, 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	Unload, delete, reallocate, and reload the network map. For more information, see <i>Migrating an Existing Network Map</i> on page 26.

Data Set	Migration Considerations
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	<p>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=2048, BLKSIZE=28332). Then use the DMSTBKEY JCL member in \$CD.JCL to build the new KSDS from each new ESDS.</p>
MSG file	<p>Because new messages have been added to the MSG file, you must use the version 5.0.00 message file. Any user-defined messages can be loaded using the MSGLOAD JCL in the \$CD.JCL installation data set.</p>
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>Note: 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 5.0 on page 14.</p>

Migrating an Existing Network Map

To use an existing network map when you migrate to Connect:Direct version 5.0.00, 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.

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.

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 new 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 and .ckpt 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.

Documentation Updates

Connect:Direct for z/OS version 5.0 documentation requires no last-minute updates.

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](#). 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 the [Adobe web site](#). 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*
- *Connect:Direct Processes Language Reference Guide*
- *Connect:Direct Overview*
- *Sterling MFT License Key Guide*

Documentation for the following supplemental products is available on additional distribution media and from the Managed File Transfer (MFT) Connect:Direct Documentation Library in Customer Center:

- 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](#).

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 in the MFT Connect:Direct Documentation Library. After you log in to the Customer Center web site and navigate to the MFT Documentation Library, use the left-hand navigation menu to access the file.