IBM Sterling Connect:Direct Browser User Interface

User's Guide

Version 1.5

This edition applies to the 1.5 Version of IBM® Sterling Connect:Direct® Browser User Interface and to all subsequent releases and modifications until otherwise indicated in new editions.

Before using this information and the product it supports, read the information in *Notices*, on page 101.

Contents

Chapter 1

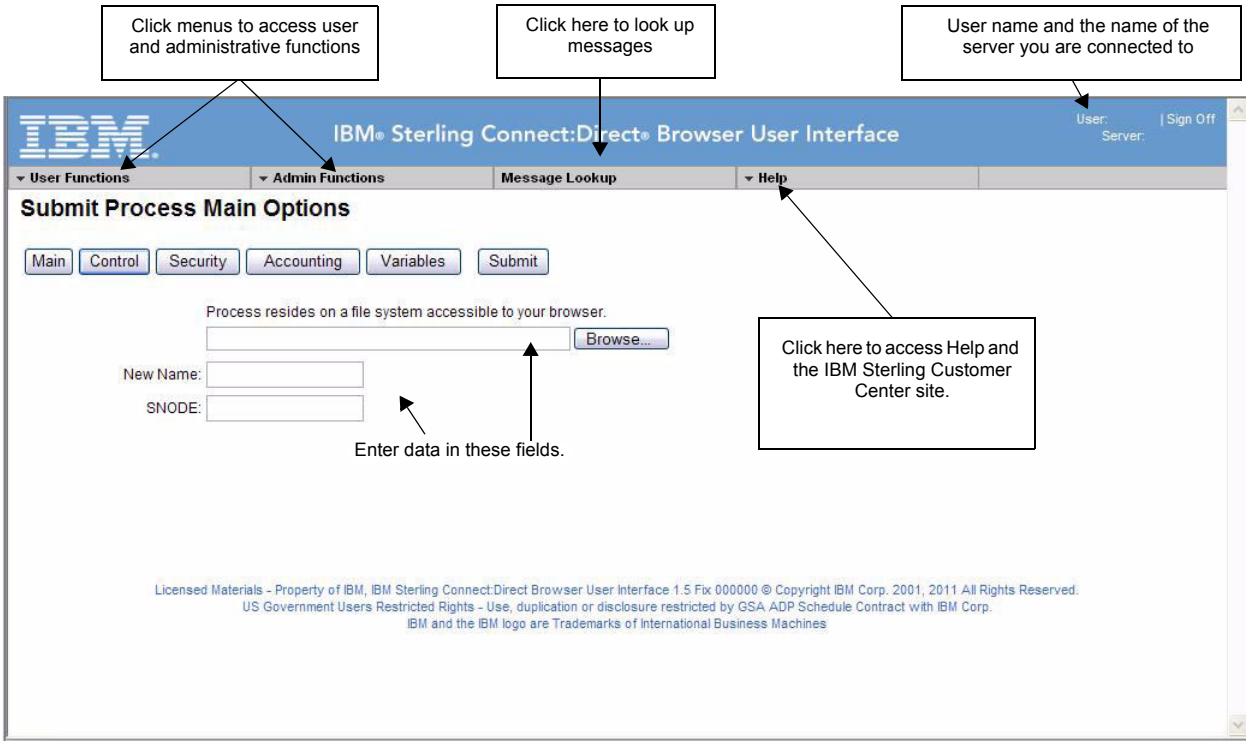
About Sterling Connect:Direct Browser User Interface

The IBM® Sterling Connect:Direct® Browser User Interface allows you to create, submit, and monitor Sterling Connect:Direct Processes from an Internet browser.

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

Sterling Connect:Direct Browser User Interface Functions

The Sterling Connect:Direct Browser User Interface uses standard browser functionality to create, submit, and monitor Processes and perform system administration. The following sample Submit Process page shows the layout of a typical Sterling Connect:Direct Browser User Interface page.



When you sign on to the Sterling Connect:Direct Browser User Interface, functions are available in the menus at the top of the screen. The functions available vary according to the following criteria:

- The Sterling Connect:Direct authority for the user ID that you signed on with. For example, if the user ID does not have authority to submit Processes, the **Submit Process** function is not displayed.
- The Sterling Connect:Direct platform and release you are signed on to. For example, IBM® Sterling Connect:Direct® for z/OS® administrators cannot update user proxies.
- Whether you are signed on. Most functions are not displayed until you sign on.

Clicking **User Functions** displays the following user functions. This table also shows the applicable platforms for each function

Function	Description	Sterling Connect:Direct for z/OS	Sterling Connect:Direct for Microsoft Windows	Sterling Connect:Direct for UNIX	Sterling Connect:Direct for HP NonStop
Submit Process	Submits a predefined Process. You can specify various processing options, such as start date and start time, processing priority, security and accounting information, and variables.	X	X	X	X
Copy File	Builds and submits a Process to transmit a file from one Sterling Connect:Direct node to another. You can then save the Process for future use.	X	X	X	X
Process Builder	A graphical interface that you use to build new Processes or modify existing ones.	X Release 4.4.00	X Release 4.2.00	X Release 3.6.00	X Release 3.4.00
Select Process	Shows summary and detail status for one or more Processes. You can also change, delete, or suspend a Process from this function.	X	X	X	X
Select Statistics	Shows summary and detail Process statistical information.	X	X	X	X
Process Control	Enables you to change Process parameters, suspend Processes, or delete Processes.	X	X	X	X

Clicking **Admin Functions** displays the following system administration functions. This table also shows the applicable platforms for each function.

Function	Description	Sterling Connect:Direct for z/OS	Sterling Connect:Direct for Microsoft Windows	Sterling Connect:Direct for UNIX	Sterling Connect:Direct for HP NonStop
Netmap	Displays network map (Netmap) information.	X Release 4.3.00 (with maintenance) or later	X	X Release 3.5.00 or later only	X
	Adds, changes, or deletes network map information.	X Release 4.3.00 (with maintenance) or later	X	X Release 3.5.00 or later only	X
	Adds, changes, or deletes communications modes.		X		X
	Adds, changes, or deletes communications path information.		X		X
Initparm	Displays initialization parameters.	X Release 4.3.00 (with maintenance) or later	X	X Release 3.5.00 or later only	X
	Updates initialization parameters.		X	X Release 3.5.00 or later only	
Native Command	Issues Sterling Connect:Direct commands.	X Release 4.3.00 (with maintenance) or later			X
User Auth	Displays, adds, changes, or deletes user authorities.	X Release 4.3.00 (with maintenance) or later	X	X Release 3.6.00 or later only	X
Proxy	Displays, adds, changes, or deletes user proxies.		X	X Release 3.6.00 or later only	X
Tracing	Displays and updates Sterling Connect:Direct tracing parameters.	X Release 4.3.00 (with maintenance) or later	X	X	

Function	Description	Sterling Connect:Direct for z/OS	Sterling Connect:Direct for Microsoft Windows	Sterling Connect:Direct for UNIX	Sterling Connect:Direct for HP NonStop
Trans. Table	Displays, adds, and changes a Sterling Connect:Direct translation table.		X		
Typekey	Defines file attributes for new files on Sterling Connect:Direct for HP NonStop systems. These attributes are used when you specify a particular typekey as part of a COPY statement in a Process.				X
Configuration	Configures the Sterling Connect:Direct Browser User Interface. Access to this function is restricted by user ID and password.	X	X	X	X

Clicking **Message Lookup** functions. This table also shows the applicable platforms for each function.

Function	Description	Sterling Connect:Direct for z/OS	Sterling Connect:Direct for Microsoft Windows	Sterling Connect:Direct for UNIX	Sterling Connect:Direct for HP NonStop
Select Message	Displays the short and long message text for a specified message ID.	X	X	X	X

Clicking **Help** displays the following system administration functions. This table also shows the applicable platforms for each function.

Function	Description	Sterling Connect:Direct for z/OS	Sterling Connect:Direct for Microsoft Windows	Sterling Connect:Direct for UNIX	Sterling Connect:Direct for HP NonStop
Help Topics	Displays Sterling Connect:Direct Browser User Interface Help.	X	X	X	X

International Language Support

Sterling Connect:Direct Browser User Interface is distributed with English language displays, messages, and Help. The *IBM Sterling Connect:Direct Browser User Interface Configuration Guide* describes how to add support for additional languages.

About Processes

A Sterling Connect:Direct Process is a series of statements that allows you to transfer files, run programs, and submit jobs or other Processes.

Processes contain parameters that control Process attributes such as Process name, Process execution start time, user notification, security, and accounting data. These Process parameters can be specified within the actual Process or you can specify them when you submit the Process. Any parameters you provide when you submit a Process override the parameters coded in the Process.

You can submit a Process to any Sterling Connect:Direct node. Typically, the primary node (PNODE) is where the Process resides. The secondary node (SNODE) is the other node that the Process connects to. The two nodes work together to execute the Process.

You can use a Sterling Connect:Direct Process to:

- Exchange text or binary files with other Sterling Connect:Direct nodes using the COPY statement.
- Start executables or send jobs to queues on a z/OS, OpenVMS, i5/OS, HP NonStop, Microsoft Windows, or UNIX server using the RUN JOB or RUN TASK statements coded within a Process.
- Execute Microsoft Windows or UNIX commands as if they were entered on the system console by using the RUN TASK statement coded within a Process.
- Submit a Process to another Sterling Connect:Direct node.

See the *IBM Sterling Connect:Direct Process Statements Guide* for Process examples.

User Security and the Sterling Connect:Direct Browser User Interface

The Sterling Connect:Direct Browser User Interface user signs on using a Sterling Connect:Direct ID and password. This ID and password is passed to the Sterling Connect:Direct server, which identifies what tasks the user is allowed to perform on the server.

For example, if Sterling Connect:Direct for z/OS security does not permit a user to perform a SELECT STATISTICS task in Sterling Connect:Direct for z/OS, that user cannot perform this task through the Sterling Connect:Direct Browser User Interface. The Sterling Connect:Direct security must be modified to give the user the necessary permissions.

For more information about Sterling Connect:Direct user security, see the documentation for the appropriate Sterling Connect:Direct platform.

There is an administrative user ID and password that you use to configure the Sterling Connect:Direct Browser User Interface. This user ID and password is part of the Sterling Connect:Direct Browser User Interface and are separate from any security associated with a Sterling Connect:Direct server.

Task Overview

The following table directs you to the information to perform the Sterling Connect:Direct Browser User Interface tasks documented in this guide:

Task	For More Information, See
Signing on to Sterling Connect:Direct Browser User Interface	Chapter 2, *Signing On and Off*
Building Sterling Connect:Direct Processes with the Process Builder feature	Chapter 3, *Building Sterling Connect:Direct Processes*
Building a Process to copy a file	Chapter 4, *Copying a File*
Submitting a Process	Chapter 5, *Submitting a Process*
Viewing Process information	Chapter 6, *Viewing Process Information*
Viewing Process statistics	Chapter 7, *Viewing Statistics*
Viewing Sterling Connect:Direct Message Text	Chapter 8, *Viewing Message Text*
Controlling Processes	Chapter 9, *Controlling Processes*

Chapter 2

Signing On and Off

To sign on to a Sterling Connect:Direct node using the Sterling Connect:Direct Browser User Interface:

1. Access the the URL Sterling Connect:Direct Browser User Interface. Aquire this URL from the system administrator.
2. Select the Sterling Connect:Direct node to sign on to from the Select Node box, or type the node name. If the node you are signing on to is not configured in the Sterling Connect:Direct Browser User Interface, leave this field blank.

   Note: The node must be configured on the Configure Node Properties page, and the Display Configured Nodes selection on the Configure System Properties page must be Yes, for a node to display the Select Node box. See *Changing a System Property File* on page 10 of the *IBM Sterling Connect:Direct Browser User Interface Configuration Guide* for more information.

3. Type the IP address or host name of the Sterling Connect:Direct system that you want to sign on to. If the node you are signing on to is configured in the Sterling Connect:Direct Browser User Interface, leave this field blank.
4. Type the port number of the Sterling Connect:Direct system that you want to sign on to. If the node you are signing on to is configured in the Sterling Connect:Direct Browser User Interface, leave this field blank.
5. Specify the protocol to use. Default specifies to use the value defined in the node. If there is no node definition, default specifies to use TCP/IP.
6. Type your user ID.
7. Type your password.

   Note: Your system administrator may configure your system so that only the user ID is required.

8. Click **Sign On**.

   You can open a new browser window if you want an additional Sterling Connect:Direct signon. Each browser window is limited to one signon.

   See the online Help or *Glossary* for field descriptions.

To sign off from the Sterling Connect:Direct Browser User Interface, click **Sign Off** in the upper right corner of the screen.

Chapter 3

Building Sterling Connect:Direct Processes

This chapter contains the following information:

- About Processes
- The Process Builder
- Building a New Process
- Sample Processes
- Using the IBM Sterling Connect:Direct Process Statements Guide to Create Processes

About Processes

A Sterling Connect:Direct Process is a series of statements that enable you to transfer files, run programs, and submit jobs or other Processes.

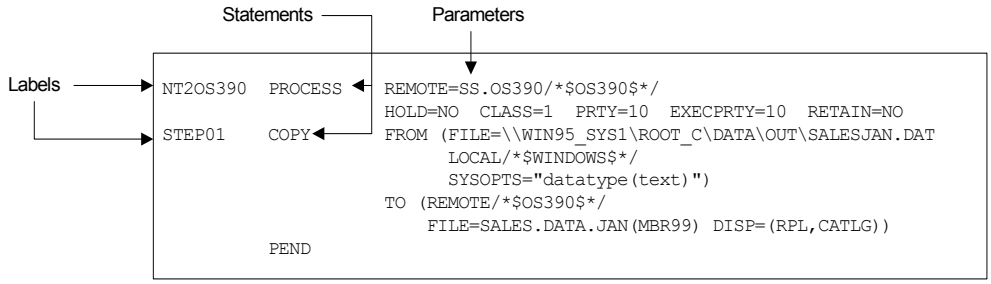
A Process contains some or all of the following types of statements.

Statement	Description
Process	The first statement in a Process. The Process statement defines general Process characteristics, including Process name, primary and secondary nodes, execution date and time, security parameters, accounting data, and symbolic variables. All Processes must have a Process statement.
Copy	A statement that transfers a file from one Sterling Connect:Direct node to another. Copy statement parameters include source and destination file names and attributes.
Run Job	A statement that submits a job to the host operating system. This job executes concurrently with the Process. Any Process statements following the Run Job statement execute without waiting for the Run Job results. The job can execute on either the local or remote node.

Statement	Description
Run Task	A statement that executes an external program or command. The program or command must complete before any further statements in the Process are executed. Run Task produces a return code as the exit code for the program it calls.
Submit	A statement within a Process that submits another Process. The Process can execute on either the PNODE or SNODE.
Conditional (If, Else, Endif, Goto)	A statement that controls Process execution by testing Process step return codes and directing the next step.
Comment	A statement that contains a descriptive comment.
Exit	A statement that indicates the end of a Process. The Exit statement is only used in Sterling Connect:Direct for UNIX and Sterling Connect:Direct for Microsoft Windows Processes. There are no parameters for the Exit statement.

Each statement uses parameters to control Process activities such as execution start time, user notification, security, or accounting data. These parameters can be specified within the Process or you can specify them when you submit the Process. The parameters for a statement vary according to platform.

The following is a text example of a Process that copies a file from a Sterling Connect:Direct for Microsoft Windows node to a Sterling Connect:Direct for z/OS node. This Process that uses the Process, Copy, and Pend statements. Note that the statements are preceded by an identifying label and followed by parameters.



You can submit a Process to any Sterling Connect:Direct node in your network. Typically, the primary node (PNODE) is where the Process resides. The secondary node (SNODE) is the other node that the Process connects to. The two nodes work together to execute the Process.

See the *IBM Sterling Connect:Direct Process Statements Guide* for Process syntax and examples.

The Process Builder

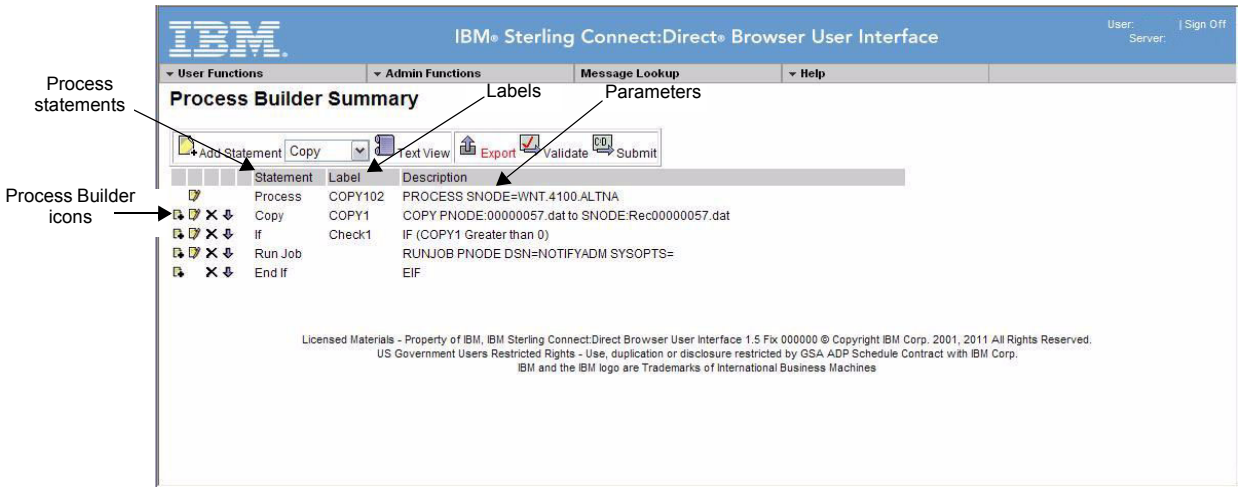
The Process Builder is a graphical interface that enables you to build, modify, and save Processes. The Process Builder handles Sterling Connect:Direct Process syntax rules automatically, such as inserting quotes in SYSOPTS statements. The Process Builder eliminates the typographical mistakes made when creating Processes with a text editor. You can also validate Process syntax and submit completed Processes from the Process Builder.

The Process Builder feature is only available if you are signed on to one of the following systems:

- Sterling Connect:Direct for Microsoft Windows 4.2.00 or later
- Sterling Connect:Direct for HP NonStop 3.4.00 or later
- Sterling Connect:Direct for z/OS 4.4.00 (with latest maintenance) or later
- Sterling Connect:Direct for UNIX 3.6.00 or later

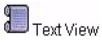
The following page is displayed when you select the Process Builder feature:

The following illustration shows a Process on the Process Builder Summary page:



Process Builder Summary Page Icons

The following table explains the icons on the Process Builder Summary pages:

Button	Description
	Displays the Process Builder Process Statement Main Options page to create a new Process.
	Imports the specified Process into the Process Builder.
	Displays a data entry page for the statement type specified in the list box.
	Switches from a graphical view of the Process to a text view.
	Saves the Process in text format in a specified location.
	Sends the Process to the Sterling Connect:Direct server for Process syntax validation.
	Submits the Process to a Sterling Connect:Direct server.
	Adds a new Process statement using the parameters from the current statement.
	Edits the statement.
	Deletes the statement.
	Moves the statement down in the Process.
	Indicates that the Process statement contains invalid syntax.

Building a New Process

The Process Builder feature of the Sterling Connect:Direct Browser User Interface enables you to build, save, and submit a Process using a graphical interface. You can also edit existing Processes with the Process Builder. If you want to create and save a Process that performs only a file copy, you can also use the Copy File feature (see Chapter 4, *Copying a File*).

Building a Process consist of the following tasks:

- Analyzing the business task you want to accomplish
- Creating a Process statement

- Adding statements for the tasks you want to accomplish
- Validating the Process
- Executing the Process

Analyzing the Business Task You Want to Accomplish

The first, and probably most important, step in creating a Process is to analyze the business task you want to accomplish. Most Sterling Connect:Direct Processes copy files from one location to another (although Processes can also call external programs or even other Processes). Among the factors you need to consider are:

- What files do you want to copy?
- Where do you want to copy the files from, and where to?
- What Sterling Connect:Direct platforms are involved in the transfer?
- Will the Process run at regularly scheduled dates and times?
- What security is required to access the Sterling Connect:Direct servers that will execute the Process?
- Should the files be compressed during transmission?
- Do you want to perform checkpoint/restart on the transmission, enabling the transmission to resume at a defined point in case of failure?
- Will the Process call an external program?
- Will the Process include branching that performs additional processing depending on Process results?

You may find it helpful to create a flow chart of the Process before using the Process Builder to create it.

Creating a Process Statement

Every Process begins with a Process statement that defines general Process information. In the Sterling Connect:Direct Browser User Interface, the Process statement consist of five pages of options that define various processing options, such as when and where the Process is submitted, if a user is notified when a task completes, who can run the Process, and symbolic variables to be substituted in the Process.

Process Statement Main Options

To complete the Process Builder Process Statement Main Options page:

1. From the **User Functions** menu, select **Process Builder** to display the Process Builder Summary page.
2. Click 

to display the Process Builder Process Statement Main Options page.

   Asterisks indicate required fields on this page.
3. Type a name for the Process.
4. Type the PNODE for the Process.

This field already contains the node that you are signed on to. You can change it to any defined node. You do not need to be signed onto the node to specify it.

5. Select the PNODE platform.
6. Type the SNODE for the Process.
7. Select the SNODE platform.
8. Select another Process Statement option, or click  to return to the Process Builder Summary page.

See the online Help or *Glossary* for field descriptions.

Process Statement Control Options

To complete the Process Builder Process Statement Control Options page:

1. Click **Control** to display the Process Builder Process Statement Control Options page.

   All fields on this page are optional.
2. Type the Start Date if you want to the process to execute on a particular day or date.
3. Type the Start Time if you want to the process to execute at a particular time.
4. Select the Hold Status.

Note: If you submit a Process with Hold set to Yes, it waits in a Hold queue, even if you specify a start time. Sterling Connect:Direct ignores the start time until the Hold is removed.

---

5. Select the Priority for the Process.
6. Select the Retain Option.

Note: If you send or receive a file with the Retain parameter set to Yes and Hold set to No or Call, Sterling Connect:Direct ignores the Hold parameter.

---

7. Select the class.
8. Type the user ID of the person to notify when the Process finishes. This feature is not available for Sterling Connect:Direct for HP NonStop.
9. Select another Process Statement option, or click  to return to the Process Builder Summary page.

See the online Help or *Glossary* for field descriptions.

Process Statement Security Options

Security options specify the user IDs and passwords that can access the PNODE and the SNODE.

To use the Process Builder Process Statement Security Options page:

1. Click **Security** to display the Process Builder Process Statement Security Options page.

   All fields on this page are optional.
2. Type the PNODE User ID.

3. Type the PNODE Password.
4. Type the SNODE User ID.
5. Type the SNODE password.
6. Select another Process Statement option, or click  to return to the Process Builder Summary page.

See the online Help or *Glossary* for field descriptions.

Process Statement Accounting Data

Accounting data is a free-form information that you define and use to track Process execution and data transfers. You can track data transfers by cost centers, department numbers, satellite locations, or any other type of code or identification that would benefit the management of data tracking.

To use the Process Builder Process Statement Accounting Data page:

1. Click **Accounting** to display the Process Builder Process Statement Accounting Data page.

   All fields on this page are optional.
2. Type a text string to use as accounting information for the PNODE. You can enter up to 256 characters.
3. Type a text string to use as accounting information for the SNODE. You can enter up to 256 characters.
4. Select another Process Statement option, or click  to return to the Process Builder Summary page.

See the online Help or *Glossary* for field descriptions.

Process Statement Symbolic Variables

You use the Symbolic Variables page to specify or override symbolic variables when submitting a Process. Sterling Connect:Direct substitutes the assigned value for the variable during Process execution.

To use the Process Builder Process Statement Symbolic Variables page:

1. Click **Variables** to display the Process Builder Process Statement Symbolic Variables page.

   All fields on this page are optional.
2. Type the variable names and values you have created.
3. Select another Process Statement option, or click  to return to the Process Builder Summary page.

Creating a Copy Statement

The Copy statement copies a file from one Sterling Connect:Direct node to another. The Copy Statement page contains several subpages that allow you to specify copy options. Copy options vary according to platform.

Copy Statement Main Options

To add a Copy statement to a Process:

1. From the Process Builder Summary page, select **Copy** and 

to display the Process Builder Copy Statement Main Options page.

   Asterisks indicate required fields on this page.
2. Type a label for the Copy step.
3. Select the Copy Direction.
4. Type the Source File name. If the file is on the PNODE, you can click  to browse to the file.

   Note: The browse feature is only available on Sterling Connect:Direct for z/OS 4.4, Sterling Connect:Direct for UNIX 3.6, Sterling Connect:Direct for Microsoft Windows 4.1, and Sterling Connect:Direct for HP NonStop 3.4 or later releases. Special characters (such as single quotes) in the directory name or file name are not supported for the browse feature.
5. Select the Source DISP.
6. Type the Destination File name. If the file is on the PNODE, you can click  to browse to the file.
7. Select the Destination DISP.
8. Select the Compression characteristics if you want to compress the file during transmission.
9. Select the Checkpoint/Restart characteristics if you want Sterling Connect:Direct to set checkpoints when it transmits the file.
10. Select another Copy Statement option, or click  to return to the Process Builder Summary page.

See the online Help or *Glossary* for field descriptions.

Copy Statement From Options

You use the Copy Statement From page to specify additional copy options for the platform that you are copying a file from. Based on the operating system that you are copying the file from, you are presented with options for one of the following Sterling Connect:Direct platforms:

- OpenVMS Copy From Options
- z/OS Copy From Options
- i5/OS Copy From Options
- HP NonStop Kernel Copy From Options
- VM Copy From Options

- ✦ VSE Copy From Options
- ✦ Microsoft Windows and UNIX Copy From Options

The Source File and Source Disposition fields contain the data you specified on the Process Builder Copy Statement Main Options page.

The following sections describe the Copy From options for each platform.

OpenVMS Copy From Options

To specify OpenVMS Copy From options:

1. Type the Source File Name. If the file is on the PNODE, you can click ... to browse to the file.

Note: The browse feature is only available on Sterling Connect:Direct for z/OS 4.4, Sterling Connect:Direct for UNIX 3.6, Sterling Connect:Direct for Microsoft Windows 4.1, and Sterling Connect:Direct for HP NonStop 3.4 or later releases. Special characters (such as single quotes) in the directory name or file name are not supported for the browse feature.

---

2. Select the disposition of the source file.
3. Type the System Operations (SYSOPTS).
4. Type any Data Exit information.
5. Type the selection criteria to select files to copy.
6. Do one of the following:
   - Click  to return to the Process Builder Summary page
   - Click Main to return to the Process Builder Copy Statement Main Options page.
   - Click Copy To to display the Process Builder Copy Statement To Options page.

See the online Help or *Glossary* for field descriptions.

z/OS Copy From Options

To specify z/OS Copy From options:

1. Type the Source File Name. If the file is on the PNODE, you can click ... to browse to the file.

Note: The browse feature is only available on Sterling Connect:Direct for z/OS 4.4, Sterling Connect:Direct for UNIX 3.6, Sterling Connect:Direct for Microsoft Windows 4.1, and Sterling Connect:Direct for HP NonStop 3.4 or later releases. Special characters (such as single quotes) in the directory name or file name are not supported for the browse feature.

---

2. Type the Data Control Block (DCB).

3. Select the disposition of the source file using the following three subfields:
   - Access
   - Normal Term
   - Abnormal Term
4. Type the Unit address.
5. Type the Volume number.
6. Type the Label.
7. Type the SYSOPTS.
8. Do one of the following:
   - Click  to return to the Process Builder Summary page
   - Click Main to return to the Process Builder Copy Statement Main Options page.
   - Click Copy To to display the Process Builder Copy Statement To Options page.

See the online Help or *Glossary* for field descriptions.

i5/OS Copy From Options

To specify i5/OS Copy From options:

1. Type the Source File Name. If the file is on the PNODE, you can click ... to browse to the file.

Note: The browse feature is only available on Sterling Connect:Direct for z/OS 4.4, Sterling Connect:Direct for UNIX 3.6, Sterling Connect:Direct for Microsoft Windows 4.1, and Sterling Connect:Direct for HP NonStop 3.4 or later releases. Special characters (such as single quotes) in the directory name or file name are not supported for the browse feature.

---

2. Type the SYSOPTS.
3. Select the disposition of the source file using the following three subfields:
   - Access
   - Normal Term
   - Abnormal Term
4. Do one of the following:
   - Click  to return to the Process Builder Summary page
   - Click Main to return to the Process Builder Copy Statement Main Options page.
   - Click Copy To to display the Process Builder Copy Statement To Options page.

See the online Help or *Glossary* for field descriptions.

HP NonStop Kernel Copy From Options

To specify HP NonStop Kernel Copy From options:

1. Type the Source File Name. If the file is on the PNODE, you can click ... to browse to the file.

Note: The browse feature is only available on Sterling Connect:Direct for z/OS 4.4, Sterling Connect:Direct for UNIX 3.6, Sterling Connect:Direct for Microsoft Windows 4.1, and Sterling Connect:Direct for HP NonStop 3.4 or later releases. Special characters (such as single quotes) in the directory name or file name are not supported for the browse feature.

---

2. Type the SYSOPTS.
3. Type the DCB information.
4. Select the disposition of the source file using the following two subfields:
   - Access
   - Normal Term
5. Do one of the following:
   - Click  to return to the Process Builder Summary page
   - Click Main to return to the Process Builder Copy Statement Main Options page.
   - Click Copy To to display the Process Builder Copy Statement To Options page.

See the online Help or *Glossary* for field descriptions.

VM Copy From Options

To specify VM Copy From options:

1. Type the Source File Name. If the file is on the PNODE, you can click ... to browse to the file.

Note: The browse feature is only available on Sterling Connect:Direct for z/OS 4.4, Sterling Connect:Direct for UNIX 3.6, Sterling Connect:Direct for Microsoft Windows 4.1, and Sterling Connect:Direct for HP NonStop 3.4 or later releases. Special characters (such as single quotes) in the directory name or file name are not supported for the browse feature.

---

2. Type the File Type.
3. Type the link information in the following four fields:
   - User ID
   - Password
   - Access Mode
   - CUU

4. Type the DCB information.
5. Type the Unit address.
6. Type the Volume number.
7. Type the Label.
8. Type the Typekey.
9. Select the source disposition.
10. Select if you want to use the date value from the file to be copied as the creation date for the new file.
11. Select if you want to replace destination files with the same name as the files being sent.
12. Specify any selection criteria for files to send.
13. Specify any exclusion criteria for files to send.
14. Do one of the following:
    - Click  to return to the Process Builder Summary page
    - Click Main to return to the Process Builder Copy Statement Main Options page.
    - Click Copy To to display the Process Builder Copy Statement To Options page.

See the online Help or *Glossary* for field descriptions.

VSE Copy From Options

To specify VSE Copy From options:

1. Type the Source File Name. If the file is on the PNODE, you can click ... to browse to the file.

Note: The browse feature is only available on Sterling Connect:Direct for z/OS 4.4, Sterling Connect:Direct for UNIX 3.6, Sterling Connect:Direct for Microsoft Windows 4.1, and Sterling Connect:Direct for HP NonStop 3.4 or later releases. Special characters (such as single quotes) in the directory name or file name are not supported for the browse feature.

---

2. Type the DCB information.
3. Type the SYSOPTS.
4. Select the disposition of the source file using the following two subfields:
    - Access
    - Normal Term
5. Type the Space value.
6. Type the Unit address.
7. Type the Volume number.
8. Type the Label.

9. Specify the VSAM catalog where the VSAM files reside.
10. Type the Typekey.
11. Type the number of I/O buffers.
12. Do one of the following:
    - Click  to return to the Process Builder Summary page
    - Click Main to return to the Process Builder Copy Statement Main Options page.
    - Click Copy To to display the Process Builder Copy Statement To Options page.

See the online Help or *Glossary* for field descriptions.

Microsoft Windows and UNIX Copy From Options

The Microsoft Windows and UNIX platforms use the same Copy From options. To specify these options:

1. Type the Source File Name. If the file is on the PNODE, you can click ... to browse to the file.
2. Select the Source Disposition.

Note: The browse feature is only available on Sterling Connect:Direct for z/OS 4.4, Sterling Connect:Direct for UNIX 3.6, Sterling Connect:Direct for Microsoft Windows 4.1, and Sterling Connect:Direct for HP NonStop 3.4 or later releases. Special characters (such as single quotes) in the directory name or file name are not supported for the browse feature.

---

3. Type the SYSOPTS.
4. Do one of the following:
    - Click  to return to the Process Builder Summary page
    - Click Main to return to the Process Builder Copy Statement Main Options page.
    - Click Copy To to display the Process Builder Copy Statement To Options page.

See the online Help or *Glossary* for field descriptions.

Copy Statement To Options

Use the Copy Statement To page to specify options for the platform that you are copying a file to. Depending on the operating system you are copying to, you are presented with options for one of the following Sterling Connect:Direct platforms:

- OpenVMS Copy To Options
- z/OS Copy From Options
- OS/400 Copy To Options
- HP NonStop Copy To Options
- VM Copy To Options
- VSE Copy To Options

✦ Microsoft Windows/UNIX/Unknown Copy To Options

The following sections describe the Copy To options for each platform.

OpenVMS Copy To Options

To specify OpenVMS Copy To options:

1. Type the Destination File Name. If the file is on the PNODE, you can click ... to browse to the file.

Note: The browse feature is only available on Sterling Connect:Direct for z/OS 4.4, Sterling Connect:Direct for UNIX 3.6, Sterling Connect:Direct for Microsoft Windows 4.1, and Sterling Connect:Direct for HP NonStop 3.4 or later releases. Special characters (such as single quotes) in the directory name or file name are not supported for the browse feature.

---

2. Select the disposition of the destination file.
3. Type the SYSOPTS.
4. Type the DCB information.
5. Type any Data Exit information for the copy.
6. Type the Typekey.
7. Do one of the following:
   - Click  to return to the Process Builder Summary page
   - Click Main to return to the Process Builder Copy Statement Main Options page.
   - Click Copy From to display the Process Builder Copy Statement From Options page.

See the online Help or *Glossary* for field descriptions.

z/OS Copy To Options

To specify z/OS Copy To options:

1. Type the Destination File Name. If the file is on the PNODE, you can click ... to browse to the file.

Note: The browse feature is only available on Sterling Connect:Direct for z/OS 4.4, Sterling Connect:Direct for UNIX 3.6, Sterling Connect:Direct for Microsoft Windows 4.1, and Sterling Connect:Direct for HP NonStop 3.4 or later releases. Special characters (such as single quotes) in the directory name or file name are not supported for the browse feature.

---

2. Type the Data Control Block (DCB).
3. Select the destination file disposition using the following three subfields:
   - Access
   - Normal Term
   - Abnormal Term

4. Type the Space value.
5. Type the Unit address.
6. Type the Volume number.
7. Type the Label.
8. Type the Typekey.
9. Type the SYSOPTS.
10. Do one of the following:
    - Click  to return to the Process Builder Summary page
    - Click Main to return to the Process Builder Copy Statement Main Options page.
    - Click Copy From to display the Process Builder Copy Statement From Options page.

See the online Help or *Glossary* for field descriptions.

i5/OS Copy To Options

To specify i5/OS Copy To options:

1. Type the Destination File Name. If the file is on the PNODE, you can click ... to browse to the file.

Note: The browse feature is only available on Sterling Connect:Direct for z/OS 4.4, Sterling Connect:Direct for UNIX 3.6, Sterling Connect:Direct for Microsoft Windows 4.1, and Sterling Connect:Direct for HP NonStop 3.4 or later releases. Special characters (such as single quotes) in the directory name or file name are not supported for the browse feature.

---

2. Type the SYSOPTS.
3. Type the Unit address.
4. Select the disposition of the destination file.
5. Do one of the following:
    - Click  to return to the Process Builder Summary page
    - Click Main to return to the Process Builder Copy Statement Main Options page.
    - Click Copy From to display the Process Builder Copy Statement From Options page.

See the online Help or *Glossary* for field descriptions.

HP NonStop Copy To Options

To specify HP NonStop Copy To options:

1. Type the Destination File Name. If the file is on the PNODE, you can click ... to browse to the file.

Note: The browse feature is only available on Sterling Connect:Direct for z/OS 4.4, Sterling Connect:Direct for UNIX 3.6, Sterling Connect:Direct for Microsoft Windows 4.1, and Sterling Connect:Direct for HP NonStop 3.4 or later releases. Special characters (such as single quotes) in the directory name or file name are not supported for the browse feature.

2. Type the SYSOPTS.
3. Type the DCB information.
4. Select the disposition of the source file using the following two subfields:
   - Access
   - Normal Term
5. Type the Typekey.
6. Do one of the following:
   - Click  to return to the Process Builder Summary page
   - Click Main to return to the Process Builder Copy Statement Main Options page.
   - Click Copy From to display the Process Builder Copy Statement From Options page.

See the online Help or *Glossary* for field descriptions.

VM Copy To Options

To specify VM Copy To options:

1. Type the Destination File Name. If the file is on the PNODE, you can click ... to browse to the file.

Note: The browse feature is only available on Sterling Connect:Direct for z/OS 4.4, Sterling Connect:Direct for UNIX 3.6, Sterling Connect:Direct for Microsoft Windows 4.1, and Sterling Connect:Direct for HP NonStop 3.4 or later releases. Special characters (such as single quotes) in the directory name or file name are not supported for the browse feature.

2. Type the File Type.
3. Type the link information using the following four fields:
   - User ID
   - Password
   - Access Mode
   - CUU
4. Select the disposition of the destination file.

5. Select if you want to create an IBM RACF profile for the new file.
6. Type the DCB information.
7. Type the Unit address.
8. Type the Volume number.
9. Type the Label.
10. Type the Typekey.
11. Do one of the following:
    - Click  to return to the Process Builder Summary page
    - Click Main to return to the Process Builder Copy Statement Main Options page.
    - Click Copy From to display the Process Builder Copy Statement From Options page.

See the online Help or *Glossary* for field descriptions.

VSE Copy To Options

To specify VSE Copy To options:

1. Type the Destination File Name. If the file is on the PNODE, you can click ... to browse to the file.

Note: The browse feature is only available on Sterling Connect:Direct for z/OS 4.4, Sterling Connect:Direct for UNIX 3.6, Sterling Connect:Direct for Microsoft Windows 4.1, and Sterling Connect:Direct for HP NonStop 3.4 or later releases. Special characters (such as single quotes) in the directory name or file name are not supported for the browse feature.

---

2. Type the DCB information.
3. Type the SYSOPTS.
4. Select the disposition of the destination file using the following two subfields:
    - Access
    - Normal Term
5. Type the Space value.
6. Type the Unit address.
7. Type the Volume number.
8. Type the Label.
9. Specify the VSAM catalog where the VSAM files reside.
10. Type the Typekey.

11. Type the number of I/O buffers.
12. Do one of the following:
    - Click  to return to the Process Builder Summary page
    - Click Main to return to the Process Builder Copy Statement Main Options page.
    - Click Copy From to display the Process Builder Copy Statement From Options page.

See the online Help or *Glossary* for field descriptions.

Microsoft Windows/UNIX/Unknown Copy To Options

The Microsoft Windows and UNIX platforms use the same Copy To options. The Unknown platform selection also uses these options. To specify these options:

1. Type the Destination File Name. If the file is on the PNODE, you can click ... to browse to the file.

Note: The browse feature is only available on Sterling Connect:Direct for z/OS 4.4, Sterling Connect:Direct for UNIX 3.6, Sterling Connect:Direct for Microsoft Windows 4.1, and Sterling Connect:Direct for HP NonStop 3.4 or later releases. Special characters (such as single quotes) in the directory name or file name are not supported for the browse feature.

2. Select the Destination Disposition.
3. Type the SYSOPTS.
4. Do one of the following:
    - Click  to return to the Process Builder Summary page
    - Click Main to return to the Process Builder Copy Statement Main Options page.
    - Click Copy From to display the Process Builder Copy Statement From Options page.

See the online Help or *Glossary* for field descriptions.

Creating a Run Task Statement

The Run Task statement calls external programs to run on a Sterling Connect:Direct node. The Process waits until the external program completes before continuing. When the external program completes, the Run Task returns a completion code that indicates program success. This completion code can be used by subsequent Process conditional statements (see *Creating Conditional Statements* on page 36).

You can pass parameters to the external program as Run Task statement SYSOPTS.

The following are items to remember when writing programs called by Run Task statements:

- ✦ Do not specify programs in the Run Task statement that require user intervention.
- ✦ Do not use a completion code of 16 in the external program, or the Process will fail.

To create a Run Task statement:

1. From the Process Builder Summary page, select **Run Task** and  to display the Process Builder Run Task Statement page.
2. Type a label for the Run Task step.
3. Select whether the Run Task is submitted from the PNODE or on the SNODE.
4. Type the full path to the external program. If the program is on the PNODE, you can click  to browse to it.

Note: The browse feature is only available on Sterling Connect:Direct for z/OS 4.4, Sterling Connect:Direct for UNIX 3.6, Sterling Connect:Direct for Microsoft Windows 4.1, and Sterling Connect:Direct for HP NonStop 3.4 or later releases. Special characters (such as single quotes) in the directory name or file name are not supported for the browse feature.

5. Type the System Operations (SYSOPTS) or any optional parameters to pass to the program.

   Run Task parameters will vary by platform. See the *IBM Sterling Connect:Direct Process Statements Guide* for information about platform-specific parameters.
6. Click  to return to the Process Builder Summary page.

See the online Help or *Glossary* for field descriptions.

Creating a Run Job Statement

The Run Job statement executes external programs or commands to run on a Sterling Connect:Direct node. These programs run concurrently with the Process. Unlike the Run Task statement (see *Creating a Run Task Statement* on page 34), the Process does not wait for the program to finish.

When the Run Job statement completes, it returns a completion code. This completion code indicates the success of the Run Job statement, and not the success of the program or command.

You can pass parameters to the external program as Run Job statement SYSOPTS.

To create a Run Job statement:

1. From the Process Builder Summary page, select **Run Job** and  to access the Process Builder Run Job Statement page.
2. Type a label for the Run Job step.
3. Select whether the Run Job is submitted from the PNODE or on the SNODE.

Note: Sterling Connect:Direct for HP NonStop only supports Run Job on the SNODE.

4. Type the full path to the external program. If the program is on the PNODE, you can click ... to browse to it.

Note: The browse feature is only available on Sterling Connect:Direct for z/OS 4.4, Sterling Connect:Direct for UNIX 3.6, Sterling Connect:Direct for Microsoft Windows 4.1, and Sterling Connect:Direct for HP NonStop 3.4 or later releases. Special characters (such as single quotes) in the directory name or file name are not supported for the browse feature.

5. Type the System Operations (SYSOPTS) or any optional parameters to pass to the program.

   Run Job parameters will vary by platform. See the *IBM Sterling Connect:Direct Process Statements Guide* for information about platform-specific parameters.

6. Click to return to the Process Builder Summary page.

See the online Help or *Glossary* for field descriptions.

Creating Conditional Statements

Conditional statements are used to branch processing within a Process, based on the result of a previous Process step. For example, when a Process performs a file copy, a conditional statement can test if the copy was successful. If the copy was successful, the Process continues processing subsequent statements. If the copy was unsuccessful, the Process can call a user-defined program that sends an error to the console operator and stops processing.

Conditional statements test against the completion code of a previous step. (Completion codes are also known as return codes or condition codes.) If the step being tested is a Run Task or a Run Job that calls an external program, the completion code indicates if the Run Task or Run Job was successful. It does not indicate if the program called by the Run Task or Run Job was successful.

See the Help or *Glossary* for a list of completion codes.

The following table lists the conditional statements:

Statement	Description

If	Specifies that the Process execute a block of statements based on the completion code of a previous Process step.
	Each If statement must be closed with an Endif statement. For example:
	`step05 IF (step03 lt 4)`
	`step06 copy from (file=myfile2 local)`
	`to (file=yourfile2 remote)`
	`EIF`

Statement	Description

Else	Specifies a block of statements to execute when the if . . . then condition is not satisfied.
	For example:
	`step02 IF (step01 gt 4)`
	`goto step07`
	`else`
	`step03 runjob dsn=WINxx`
	`sysopts="pgm(testwin.exe)"`
	`EIF`

Endif	Specifies the end of an If Then statement.

Goto	Specifies that processing move to the block of statements indicated by the step label. For example:
	`step02 IF (step01 gt 4)`
	`goto step07`
	`else`
	`exit`
	`EIF`
	indicates that if Process step01 completes with a completion code greater than 4, the Process should execute the statements defined in step07.

Exit	Ends the Process and bypasses all remaining steps in the Process.

Conditional statements can be nested so that a Process can test for multiple results and react accordingly.

Creating a Simple Conditional Statement

This procedure shows how to create a simple conditional statement that tests if a copy was successful. If the copy was successful, the Process executes the next statement. If the copy was not successful, the Process executes a Run Task that calls another program.

1. Use the Process Builder to create a new Process (see *Creating a Process Statement* on page 21).
2. Create a Copy statement and label it STEP1 (see *Creating a Copy Statement* on page 23).
3. From the Process Builder Summary page, select **If** and 

to access the Process Builder If Statement page.
4. Type a label for the If step.
5. Select the label that you want to test against from the list box (STEP1 in this example).

   You can also type the name in the Label field, if you have not created the label yet.
6. Select **GT** (greater than) from the Operator field.
7. Select **4** from the Value field.
8. Click  to return to the Process Builder Summary page.

   The If statement is added to the Process. Note that Process Builder appends Then to the end of the statement.

9. From the Process Builder Summary page, select **Run Task** and  to access the Process Builder Run Task Statement page.
10. Create a Run Task statement that calls another program (*Creating a Run Task Statement* on page 34).
11. Click  to return to the Process Builder Summary page.
12. Select **Endif** and  .

    The conditional statement is completed. You can continue adding other statements as necessary to continue processing.

Creating a Multi-Conditional Statement

This procedure describes how to create a Sterling Connect:Direct for Microsoft Windows Process containing several conditional statements. The results of the conditional statements tests determine subsequent processing.

A multi-conditional statement requires more planning than a simple conditional statement because you must determine the branch paths before creating the Process. In the example in this procedure, the following activities should occur:

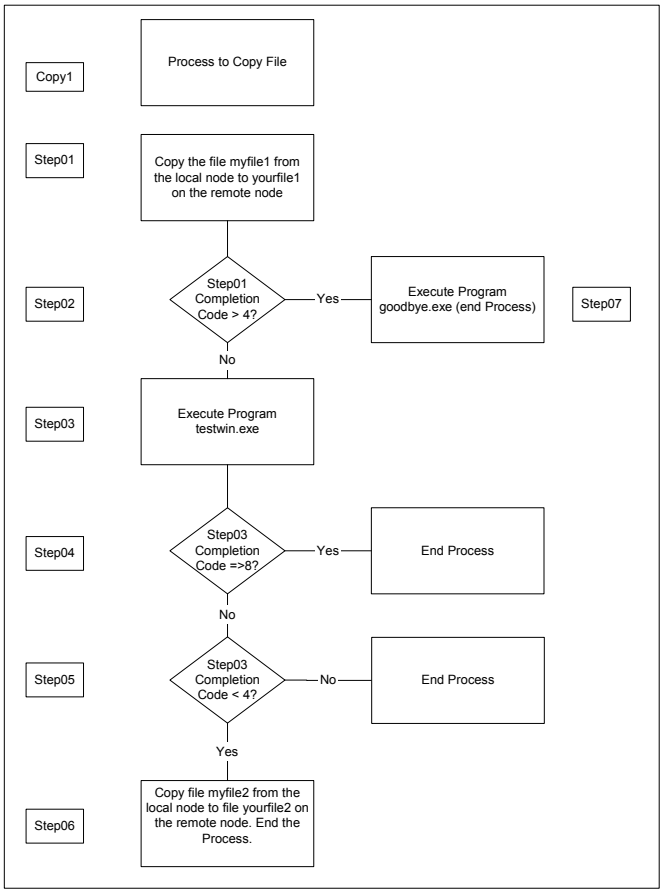
- Copy a file named myfile1 from the local node to a file named yourfile1 on the remote node.
- If the copy is successful, (completion code of 4 or less) execute an external program named testwin.exe.

  If the copy fails (completion code greater than 4) execute an external program called goodbye.exe
- If the completion code from the step calling the testwin.exe program indicates success (less than 4) copy a file named myfile2 from the local node to a file named yourfile2 on the remote node, and end the Process.

  If the completion code from the step calling the testwin.exe program indicates failure (completion code 8 or greater) end the Process.

Flow Chart of Sample Process

A flow chart of the Process would look like the following diagram:



Note that step labels are assigned to each activity. This is important because conditional statements use the step labels for branching instructions.

Creating a Multi-Conditional Process

To create this multi-conditional Process:

1. Use the Process Builder to create a new Process (see *Creating a Process Statement* on page 21).
2. Create a Copy statement to copy a file named myfile1 from the local node to a file named yourfile1 on the remote node, and label it **Step01** (see *Creating a Copy Statement* on page 23).
3. From the Process Builder Summary page, select **If** and 

to access the Process Builder If Statement page.
4. Type **Step02** for the If step label.
5. Select **Step01** from the list box, **GT** (greater than) from the **Operator** field, and **4** from the Value field.

   Step01 is the step you will test against.
6. Click  to return to the Process Builder Summary page.

The If statement is added to the Process.

7. Select **Goto** and  to access the Process Builder Goto Statement page.
8. Type **Step07** for the Target Label.
9. Click  to return to the Process Builder Summary page.

   The Goto statement is added to the Process.
10. Select **Else** and  to add an Else statement.
11. Select **Run Job** and  to access the Process Builder Run Job Statement page.
12. Type **Step03** as the Run Job statement.
13. Complete a Run job statement to call the testwin.exe program. (*Creating a Run Job Statement* on page 35).
14. Click  to return to the Process Builder Summary page.

    The Run Job statement is added to the Process.
15. Select **Endif** and  to add an Endif statement. This closes the first conditional test.
16. Select **If** and  to access the Process Builder If Statement page.
17. Type **Step04** for the If step label.
18. Select **Step03** from the list box, **GE** (greater than or equal to) from the **Operator** field, and **8** from the Value field.

    Step03 is the step you will test against.
19. Click  to return to the Process Builder Summary page.

    The If statement is added to the Process.
20. Select **Exit** and  .
21. Select **Endif** and  .
22. Select **If** and  to access the Process Builder If Statement page.
23. Type **Step05** for the If step label.
24. Select **Step03** from the list box, **LT** (less than) from the Operator field, and **4** from the Value field.

    Step03 is the step you will test against.
25. Click  to return to the Process Builder Summary page.

    The If statement is added to the Process.
26. Create a Copy statement to copy a file named myfile2 from the local node to a file named yourfile2 on the remote node, and label it **Step06** (see *Creating a Copy Statement* on page 23).
27. Click  to return to the Process Builder Summary page.

28. Select **Endif** and Add Statement.
29. Select **Exit** and Add Statement.
30. Select **Run Task** and Add Statement to access the Process Builder Run Task Statement page.
31. Assign the Run Task statement the label **Step07**.
32. Complete a Run Task statement to call the goodbye.exe program. (*Creating a Run Task Statement* on page 34).
33. Click to return to the Process Builder Summary page.
34. Select **Exit** and Add Statement.

Adding a Comment to a Process

To add a comment to a Process:

1. Select **Comment** and Add Statement to display the Process Builder Comment Statement page.
2. Type the comment text.
3. Click to return to the Process Builder Summary page.

   The Comment statement is added to the Process.

Creating a Submit Statement

The Submit statement submits another Process from within a Process. The submitted Process can execute on either the PNODE or SNODE.

To create a Submit statement:

1. From the Process Builder Summary page, select **Submit** and Add Statement to display the Process Builder Submit Statement page.
2. Type a label for the Submit step.
3. Select whether the Process is submitted from the PNODE or on the SNODE.
4. Type the full path and name of the Process. If the Process is on the PNODE, you can click ... to browse to it.

Note: The browse feature is only available on Sterling Connect:Direct for z/OS 4.4, Sterling Connect:Direct for UNIX 3.6, Sterling Connect:Direct for Microsoft Windows 4.1, and Sterling Connect:Direct for HP NonStop 3.4 or later releases. Special characters (such as single quotes) in the directory name or file name are not supported for the browse feature.

---

5. Type a new 1-8 character name for the submitted Process, if you want to rename it when it executes.
6. Click to return to the Process Builder Summary page.

See the online Help or *Glossary* for field descriptions.

Validating Process Syntax

To validate Process syntax, click  from the Process Builder Summary page.

The Process is sent to the Sterling Connect:Direct server for syntax validation. If the Process syntax is valid, the message *Validation completed successfully* is displayed.

If the Process syntax is not valid, an error message is displayed. Investigate and correct any errors before submitting the Process.

Saving a Process

To save a Process:

1. From the Process Builder Summary page, click  .

   The Process Save page is displayed.

2. Click the file name **Link** to display the Save As window.

Note: On some Web servers, clicking the file name **Link** displays the Process instead of the Save As window. If this happens, click the browser's **Back** button to return to the Process Save page. Then right-click the file name **Link** and select **Save Target As**.

---

3. From the Save As window, select a location to save the Process file, rename the file if desired, and click **Save**.

Submitting a Process

To submit a Process syntax, click  from the Process Builder Summary page.

The Process is submitted to the Sterling Connect:Direct server.

Viewing a Process in Text Format

To view a Process in text format:

1. From the Process Builder Summary page, click  .

   The Process is displayed in text format. This view is read-only. You cannot make changes in this view.

Note: Sterling Connect:Direct Browser User Interface adds a /*BEGIN_REQUESTER_COMMENTS comment block to the beginning of the Process. This block contains operating system and PNODE/SNODE information. This comment block maintains compatibility with Processes built with the Sterling Connect:Direct Requester.

---

2. Click  to return to the Process Builder Summary page.

Editing a Process

To edit an existing Process:

1. From the Process Builder Summary page, click Browse... to navigate to and select the Process.
2. Click Import.

   The Process statements are displayed.
3. Click one of the following icons next to a Process statement to edit that statement:

Icon	Description
	Adds a new Process statement using the parameters from the current statement.
	Edits the statement.
	Deletes the statement.
	Moves the statement down in the Process.

4. When finished, click Export to save the file.

Sample Processes

This section describes how to build the following sample Processes:

- Copying a File from Sterling Connect:Direct for UNIX to Sterling Connect:Direct for Microsoft Windows
- Copying a File from Sterling Connect:Direct for Microsoft Windows to Sterling Connect:Direct for UNIX and Running a Program on Sterling Connect:Direct for Microsoft Windows
- Calling an External Program from a Sterling Connect:Direct for z/OS Process
- Calling an External Program from a Sterling Connect:Direct for Microsoft Windows Process
- Using a Conditional in a Sterling Connect:Direct for z/OS to Sterling Connect:Direct HP NonStop Copy Process

Copying a File from Sterling Connect:Direct for UNIX to Sterling Connect:Direct for Microsoft Windows

This example creates a Process to copy a file name from a Sterling Connect:Direct for UNIX node to a Sterling Connect:Direct for Microsoft Windows node. The parameters in this example are:

- UNIX node name–UNT.3500.PROD1
- Microsoft Windows node name–WNT.4100.ALTNA
- Source file–/usr/datat/out/invoi01.dat

This example also uses a SYSOPTS statement that converts the data to binary format on the Sterling Connect:Direct for Microsoft Windows node.

1. Use the Process Builder to create a new Process (see *Creating a Process Statement* on page 21) with the following values:

Field	Value
Process Name	UX2NT
PNODE	UNT.3500.PROD1
PNODE Platform	UNIX
SNODE	WNT.4100.ALTNA
SNODE Platform	Windows
Hold	No
Retain	No

2. Add a Copy statement (see *Creating a Copy Statement* on page 23) with the following values:

Field	Value
Step Label	copy1
Direction	Send
Source File	/usr/datat/out/invoi01.dat
Source Disposition	SHR
Destination File	c:\users\data\in\invoi01.dat
Copy To SYSOPTS	datatype(binary)

3. Validate and save the Process.

Copying a File from Sterling Connect:Direct for Microsoft Windows to Sterling Connect:Direct for UNIX and Running a Program on Sterling Connect:Direct for Microsoft Windows

This Process copies a binary file from a Sterling Connect:Direct for Microsoft Windows node to a Sterling Connect:Direct for UNIX node. If the copy is successful, the Sterling Connect:Direct for Microsoft Windows node performs a Run Task statement to delete the source file on the Sterling Connect:Direct for Microsoft Windows node. (The SYSOPTS **cmd(del &file1)** parameter deletes the source file.)

The Copy and Run Task statements use symbolic variables. The Sterling Connect:Direct for Microsoft Windows desktop parameter is set to **No** because no user input is required for the delete command.

1. Use the Process Builder to create a new Process (see *Creating a Process Statement* on page 21) with the following values:

Field	Value
Process Name	proc1
PNODE	CD.UNIX
PNODE Platform	UNIX
SNODE	CD.NT
SNODE Platform	Windows
Variables	&file1=”d:\data\out\reprts01.dat” &file2=”/data/in/reprts01.dat”

2. Add a Copy statement (see *Creating a Copy Statement* on page 23) with the following values:

Field	Value
Step Label	copy1
Direction	Receiver
Source File	&file1
Destination File	&file2
Copy From SYSOPTS	datatype(binary)

3. Add an If statement (see *Creating Conditional Statements* on page 36) with the following values:

Field	Value
Label	copy1
Operator	Equal to
Value	0

4. Add a Run Task statement (see *Creating a Run Task Statement* on page 34) with the following values:

Field	Value
Step Label	run1
Submit Node	SNODE
SYSOPTS	cmd(del &file1)desktop(no)

5. Add an End if statement.
6. Validate and save the Process.

Calling an External Program from a Sterling Connect:Direct for z/OS Process

This Process calls an external program named MYTASK on an SNODE and passes the program a list of three parameter addresses.

1. Use the Process Builder to create a new Process (see *Creating a Process Statement* on page 21) with the following values:

Field	Value
Process Name	proc1
PNODE	CD.390.101
PNODE Platform	OS390
SNODE	CD.390.02
SNODE Platform	OS390

2. Add a Run Task statement (see *Creating a Run Task Statement* on page 34) with the following values:

Field	Value
Step Label	STEP1
Submit Node	SNODE
Program Name	MYTASK
SYSOPTS	(PARM=(CL44'DATA.BASE.P1', F'0010', XL8'FFA8'))

3. Validate and save the Process.

Calling an External Program from a Sterling Connect:Direct for Microsoft Windows Process

This Process calls an external program named testwin.exe and waits for it to finish. It passes the external program parameters through the SYSOPTS statement.

1. Use the Process Builder to create a new Process (see *Creating a Process Statement* on page 21) with the following values:

Field	Value
Process Name	CallProg
PNODE	CD.WIN.ALPHA
PNODE Platform	Windows
SNODE	CD.WIN.BETA
SNODE Platform	Windows

2. Add a Run Task statement (see *Creating a Run Task Statement* on page 34) with the following values:

Field	Value
Step Label	RTSTEP
Submit Node	SNODE
Program Name	WINNT
SYSOPTS	pgm(C:\winnt35\system32\testwin.exe)

3. Validate and save the Process.

Using a Conditional in a Sterling Connect:Direct for z/OS to Sterling Connect:Direct for HP NonStop Copy Process

This Process copies a file from a Sterling Connect:Direct for z/OS node to a Sterling Connect:Direct for HP NonStop node. If the copy is successful, the Process then executes an external program named NEXTPROG on the HP node and passes parameters to it as SYSOPTS. If the copy is not successful, the Process terminates.

1. Use the Process Builder to create a new Process (see *Creating a Process Statement* on page 21) with the following values:

Field	Value
Process Name	PROC1
PNODE	CD.390
PNODE Platform	OS390
SNODE	CD.TAN
SNODE Platform	HP NonStop
SNODE User ID	117.202
SNODE Password	PSWRD

2. Add a Copy statement (see *Creating a Copy Statement* on page 23) with the following values:

Field	Value
Step Label	STEP01
Direction	Send
Source File	JSMITH.GENPROC.LIB(COPY)
Source Disposition	SHR
Destination File	$B.ROGER.ACCTJAN
Destination Disposition	RPL

3. Add an If statement (see *Creating Conditional Statements* on page 36) with the following values:

Field	Value
Step Label	STEP02
Label	STEP01

Field	Value
Operator	Greater Than
Value	0

4. Add an Exit statement.
5. Add an EndIF statement.
6. Add a Run Task statement (see *Creating a Run Task Statement* on page 34) with the following values:

Field	Value
Step Label	STEP03
Submit Node	SNODE
Program Name	NEXTPROG
SYSOPTS	(/IN $USER.BGK.T1, TERM $ZTNP1.#PTH001H/)

7. Validate and save the Process.

Using the *IBM Sterling Connect:Direct Process Statements Guide* to Create Processes

The *IBM Sterling Connect:Direct Process Statements Guide* contains many sample Processes. You can use this manual as a guide to create Processes with the Process Builder. Find the sample Process you want to use as a template in the *IBM Sterling Connect:Direct Process Statements Guide*, then use the Process Builder to create the Process labels and statements, substituting your own values for the parameters. *About Processes* on page 17 shows the layout of a Process.

The *IBM Sterling Connect:Direct Process Statements Guide* is provided on the Sterling Connect:Direct Browser User Interface installation CD-ROM.

Chapter 4

Copying a File

You use the Copy File page to create a Process that copies a data file from one Sterling Connect:Direct node to another. The Copy File page contains several subpages that allow you to specify copy options. After creating the Copy File Process, you can save it for future use.

Because the copy options vary according to platform, you must specify the remote platform.

This feature enables you to build only Copy Processes. If you want to build a Process that performs additional Sterling Connect:Direct tasks, such as Run Task or Run Job, use the Process Builder feature (see *Building Sterling Connect:Direct Processes* on page 17).

You do not have to complete all of the options to copy a file. After you submit a Copy File Process, a message is displayed if the submit was successful. See Appendix A, *Messages* for a description of messages.

Copying a File—Main Options

To copy a file:

1. From the **User Functions** menu, select **Copy File** to access the **Copy File Main** menu.
2. Select the Copy Direction.
3. Select the Sterling Connect:Direct platform of the SNODE.
4. Type the SNODE.
5. Type the Process Name.
6. Type the Source File. If the file is on the PNODE, you can click ... to browse to it.
7. Type the Source DISP.
8. Type the Destination File. If the file is on the PNODE, you can click ... to browse to it.
9. Type the Destination DISP.
10. Select the Compression characteristics.
11. Select the Checkpoint/Restart characteristics.
12. Click one of the options buttons at the top of the page to specify more information.

See the online Help or *Glossary* for field descriptions.

Copying a File—Control Options

You use the Copy File Control Options page to specify additional options when copying a file.

To use the Copy File Control Options page:

1. Type the Start Date.
2. Type the Start Time.
3. Select the Hold status.

> **Note:** If you submit a Copy File with Hold set to Yes, it is placed on the Hold queue even if you specify a start time. Sterling Connect:Direct ignores the start time until the Hold is removed.

4. Select the Priority.
5. Select the Retain option.

> **Note:** If you set the Retain parameter to Yes and set Hold to No or Call, Sterling Connect:Direct ignores the Hold parameter.

6. Select the Class.
7. Type the user ID of the person to notify when the copy finishes. This feature is not available for Sterling Connect:Direct for HP NonStop.
8. If you want to submit the Copy now, click **Submit**.

If you want to specify more information, click one of the options buttons at the top of the page.

See the online Help or *Glossary* for field descriptions.

Copying a File—Security Options

You use the Copy File Security Options page to specify security options when copying a file. Sterling Connect:Direct encrypts the Process before sending it.

To use the Copy File Security Options page:

1. Type the PNODE User ID.
2. Type the PNODE Password.
3. Type the SNODE User ID.
4. Type the SNODE Password.
5. If you want to submit the Copy now, click **Submit**.
6. If you want to specify more information, click one of the options buttons at the top of the page.

See the online Help or *Glossary* for field descriptions.

Copying a File—Accounting Data Options

You use the Copy File Accounting Data page to specify accounting data.

To use the Copy File Accounting Data page:

1. Type a text string to use as accounting information for the PNODE. You can enter up to 256 characters.
2. Type a text string to use as accounting information for the SNODE. You can enter up to 256 characters.
3. If you want to submit the Copy now, click **Submit**.
4. If you want to specify more information, click one of the options buttons at the top of the page.

Copying a File—Copy From Options

You use the Copy From page to specify options for the platform that you are copying from. Based on your operating system, you are presented with options for one of the following Sterling Connect:Direct platforms:

- OpenVMS Copy From Options
- z/OS Copy From Options
- i5/OS Copy From Options
- HP NonStop Copy From Options
- VM Copy From Options
- VSE Copy From Options
- Microsoft Windows and UNIX Copy From Options

The following sections describe the Copy From options for each platform.

OpenVMS Copy From Options

To specify OpenVMS Copy From options:

1. Type the Source File Name. If the file is on the PNODE, you can click  to browse to it.
2. Select the disposition of the source file.
3. Type the System Operations (SYSOPTS).
4. Type any Data Exit information.
5. Type the selection criteria to select files to copy.
6. Click **Copy To** to specify options for the platform that you are copying the file to.

See the online Help or *Glossary* for field descriptions.

z/OS Copy From Options

To specify z/OS Copy From options:

1. Type the Source File Name. If the file is on the PNODE, you can click ... to browse to it.
2. Type the Data Control Block (DCB).
3. Select the disposition of the source file using the following three subfields:
   - Access
   - Normal Term
   - Abnormal Term
4. Type the Unit address.
5. Type the Volume number.
6. Type the Label.
7. Type the SYSOPTS.
8. Click **Copy To** to specify options for the platform that you are copying the file to.

See the online Help or *Glossary* for field descriptions.

i5/OS Copy From Options

To specify i5/OS Copy From options:

1. Type the Source File Name. If the file is on the PNODE, you can click ... to browse to it.
2. Type the SYSOPTS.
3. Select the disposition of the source file using the following three subfields:
   - Access
   - Normal Term
   - Abnormal Term
4. Click **Copy To** to specify options for the platform that you are copying the file to.

See the online Help or *Glossary* for field descriptions.

HP NonStop Copy From Options

To specify HP NonStop Copy From options:

1. Type the Source File Name. If the file is on the PNODE, you can click ... to browse to it.
2. Type the SYSOPTS.
3. Type the DCB information.
4. Select the disposition of the source file using the following two subfields:
   - Access
   - Normal Term

5. Click **Copy To** to specify options for the platform that you are copying the file to.

See the online Help or *Glossary* for field descriptions.

VM Copy From Options

To specify VM Copy From options:

1. Type the Source File Name. If the file is on the PNODE, you can click ... to browse to it.
2. Type the File Type.
3. Type the link information in the following four fields:
   - User ID
   - Password
   - Access Mode
   - CUU
4. Type the DCB information.
5. Type the Unit address.
6. Type the Volume number.
7. Type the Label.
8. Type the Typekey.
9. Select the source disposition.
10. Select if you want to use the date value from the file be be copied as the creation date for the new file.
11. Select if you want to replace destination files with the same name as the files being sent.
12. Specify any selection criteria for files to send.
13. Specify any exclusion criteria for files to send.
14. Click **Copy To** to specify options for the platform that you are copying the file to.

See the online Help or *Glossary* for field descriptions.

VSE Copy From Options

To specify VSE Copy From options:

1. Type the Source File Name. If the file is on the PNODE, you can click ... to browse to it.
2. Type the DCB information.
3. Type the SYSOPTS.
4. Select the disposition of the source file using the following two subfields:
   - Access
   - Normal Term

5. Type the Space value.
6. Type the Unit address.
7. Type the Volume number.
8. Type the Label.
9. Specify the VSAM catalog where the VSAM files reside.
10. Type the Typekey.
11. Type the number of I/O buffers.
12. Click **Copy To** to specify options for the platform that you are copying the file to.

See the online Help or *Glossary* for field descriptions.

Microsoft Windows and UNIX Copy From Options

The Microsoft Windows and UNIX platforms use the same Copy From options. To specify these options:

1. Type the Source File Name. If the file is on the PNODE, you can click ... to browse to it.
2. Select the Source Disposition.
3. Type the SYSOPTS.
4. Click **Copy To** to specify options for the platform that you are copying the file to.

See the online Help or *Glossary* for field descriptions.

Copying a File—Copy To Options

Use the Copy To page to specify options for the platform that you are copying to. Depending on the operating system you are copying to, you are presented with options for one of the following Sterling Connect:Direct platforms:

- OpenVMS Copy To Options
- z/OS Copy To Options
- i5/OS Copy To Options
- HP NonStop Copy To Options
- VM Copy To Options
- VSE Copy To Options
- Microsoft Windows/UNIX/Unknown Copy To Options

The following sections describe the Copy To options for each platform.

OpenVMS Copy To Options

To specify OpenVMS Copy To options:

1. Type the Destination File Name. If the file is on the PNODE, you can click ... to browse to it.
2. Select the disposition of the destination file.
3. Type the SYSOPTS.
4. Type the DCB information.
5. Type any Data Exit information for the copy.
6. Type the Typekey.
7. Click **Submit** to submit the copy Process.

See the online Help or *Glossary* for field descriptions.

z/OS Copy To Options

To specify z/OS Copy To options:

1. Type the Destination File Name. If the file is on the PNODE, you can click ... to browse to it.
2. Type the Data Control Block (DCB).
3. Select the destination file disposition using the following three subfields:
   - Access
   - Normal Term
   - Abnormal Term
4. Type the Space value.
5. Type the Unit address.
6. Type the Volume number.
7. Type the Label.
8. Type the Typekey.
9. Type the SYSOPTS.
10. Click **Submit** to submit the copy Process.

See the online Help or *Glossary* for field descriptions.

i5/OS Copy To Options

To specify i5/OS Copy To options:

1. Type the Destination File Name. If the file is on the PNODE, you can click ... to browse to it.
2. Type the SYSOPTS.
3. Type the Unit address.

4. Select the disposition of the destination file.
5. Click **Submit** to submit the copy Process.

See the online Help or *Glossary* for field descriptions.

HP NonStop Copy To Options

To specify HP NonStop Copy To options:

1. Type the Destination File Name. If the file is on the PNODE, you can click to browse to it.
2. Type the SYSOPTS.
3. Type the DCB information.
4. Select the disposition of the source file using the following two subfields:
   - Access
   - Normal Term
5. Type the Typekey.
6. Click **Submit** to submit the copy Process.

See the online Help or *Glossary* for field descriptions.

VM Copy To Options

To specify VM Copy To options:

1. Type the Destination File Name. If the file is on the PNODE, you can click to browse to it.
2. Type the File Type.
3. Type the link information using the following four fields:
   - User ID
   - Password
   - Access Mode
   - CUU
4. Select the disposition of the destination file.
5. Select if you want to create an IBM RACF profile for the new file.
6. Type the DCB information.
7. Type the Unit address.
8. Type the Volume number.
9. Type the Label.
10. Type the Typekey.
11. Click **Submit** to submit the copy Process.

See the online Help or *Glossary* for field descriptions.

VSE Copy To Options

To specify VSE Copy To options:

1. Type the Destination File Name. If the file is on the PNODE, you can click ... to browse to it.
2. Type the DCB information.
3. Type the SYSOPTS.
4. Select the disposition of the destination file using the following two subfields:
   - Access
   - Normal Term
5. Type the Space value.
6. Type the Unit address.
7. Type the Volume number.
8. Type the Label.
9. Specify the VSAM catalog where the VSAM files reside.
10. Type the Typekey.
11. Type the number of I/O buffers.
12. Click **Submit** to submit the copy Process.

See the online Help or *Glossary* for field descriptions.

Microsoft Windows/UNIX/Unknown Copy To Options

The Microsoft Windows and UNIX platforms use the same Copy To options. The Unknown platform selection also uses these options. To specify these options:

1. Type the Destination File Name. If the file is on the PNODE, you can click ... to browse to it.
2. Select the Destination Disposition.
3. Type the SYSOPTS.
4. Click **Submit** to submit the copy Process.

See the online Help or *Glossary* for field descriptions.

Saving a Copy File Process

The following procedures describe how to save a Copy File Process to your browser's file system. The exact procedure depends on your browser type.

To save a Copy File Process using your browser:

1. Click **Save**.

The Save Copy File Process window is displayed.

2. Click the highlighted link.

   If you did not name the Process, the link is browser.cdp. If you named the Process, the link is *process-name*.cdp.

   A file download window is displayed.

Note: Some Web servers do not display the file download window. If the file dialog window is not displayed, right-click on the link and select **Save Target as**. Go to step 5.

---

3. Select **Save this file to disk**.
4. Click **OK**.

   A Save As window is displayed.

5. Change the file name if desired.
6. Select a location to store the Process.
7. Click **Save**.

Chapter 5

Submitting a Process

You use the Submit Process page to submit an existing Process. The Submit Process page contains several subpages that allow you to specify various options for the Process. These options override any existing parameters in the Process.

You do not have to complete all of the options to submit a Process; you can submit the Process as soon as you complete the first page. The Sterling Connect:Direct Browser User Interface encrypts the Process before sending it.

Note: The Process syntax is checked by the Sterling Connect:Direct platform after you submit the Process. The Sterling Connect:Direct Browser User Interface does not check Process syntax.

Submitting a Process—Main Options

To submit an existing Process:

1. From the **User Functions** menu, select **Submit Process** to access the Submit Process Main Options page.
2. If the Process resides on a Sterling Connect:Direct server system, type the member name of the Process library (z/OS only).

   If the Process resides on the browser's file system, click **Browse** to navigate to and select the Process.

   Note: If the Process is located elsewhere other than the Sterling Connect:Direct server, the maximum size of the Process is 8 KB.
3. If desired, type a new name for the Process.
4. If desired, type the SNODE.
5. If you want to submit the Process now, click **Submit**.
6. If you want to specify more information, click one of the options buttons at the top of the page.

See the online Help or *Glossary* for field descriptions.

Submitting a Process—Control Options

You use the Submit Process Control Options page to specify additional options when submitting a Process.

To use the Submit Process Control Options page:

1. Type the Start Date.
2. Type the Start Time.
3. Select the Hold Status.

> **Note:** If you submit a Process with Hold set to Yes, it is placed in the Hold queue even if you specify a start time. Sterling Connect:Direct ignores the start time until the Hold is removed.

4. Select the Priority for the Process.
5. Select the Retain Option.

> **Note:** If you send or receive a file with the Retain parameter set to Yes and Hold set to No or Call, Sterling Connect:Direct ignores the Hold parameter.

6. Select the class.
7. Type the user ID of the person to notify when the Process finishes. This feature is not available for Sterling Connect:Direct HP NonStop.
8. If you want to submit the Process now, click **Submit**.

If you want to specify more information, click one of the options buttons at the top of the page.

See the online Help or *Glossary* for field descriptions.

Submitting a Process—Security Options

You use the Submit Process Security Options page to specify security options when submitting a Process.

To use the Submit Process Security Options page:

1. Type the PNODE User ID.
2. Type the PNODE Password.
3. Type the SNODE User ID.
4. Type the SNODE password.
5. If you want to submit the Process now, click **Submit**.
6. If you want to specify more information, click one of the options buttons at the top of the page.

See the online Help or *Glossary* for field descriptions.

Submitting a Process—Accounting Data

You use the Submit Process Accounting Data page to specify accounting data when submitting a Process.

To use the Submit Process Accounting Data page:

1. Type a text string to use as accounting information for the PNODE. You can enter up to 256 characters.
2. Type a text string to use as accounting information for the SNODE. You can enter up to 256 characters.
3. If you want to submit the Process now, click **Submit**.
4. If you want to specify more information, click one of the options buttons at the top of the page.

Submitting a Process—Symbolic Variables

You use the Submit Process Symbolic Variables page to specify or override symbolic variables when submitting a Process. You must assign values to all symbolic parameters in the Process before you submit the Process. Sterling Connect:Direct substitutes the assigned value for the variable during Process execution.

See the *IBM Sterling Connect:Direct Process Statements Guide* for your platform for symbolic substitution rules.

To use the Submit Process Symbolic Variables page:

1. Type the variable names and values you have created.
2. If you want to submit the Process now, click **Submit**.
3. If you want to specify more information, click one of the options buttons at the top of the page.

Chapter 6

Viewing Process Information

You use the Select Process page to view Process information as Processes progress through Sterling Connect:Direct. You can choose the Processes to display based on selection criteria such as Process name and number, SNODE, queue, status, or submitter node and user ID.

After you make your selections and click **Select Process**, summary Process information is displayed. You can then select to display detailed information about a particular Process. You can also select to change, delete, or suspend a Process.

View Process Information

To view Process details:

1. From the **User Functions** menu, select **Select Process**. The Select Process Request page is displayed.
2. Type the selection criteria in one or more of the following fields:
   - Process name
   - Process number
   - SNODE
   - Queue
   - Status (not used for HP NonStop)
   - Submitter node and user ID

   You do not have to enter all the parameters on this page. Separate multiple entries in a field with commas.
3. Click **Select Process** to display the Process Results page.

See the online Help or *Glossary* for field descriptions.

Select Process Results

The following information is displayed on the Select Process Results page.

Field	Description
Name	Specifies the Process name.
Num	Specifies the Process number.
Step Name	Specifies the name of the step within the Process.
Status	Specifies the Process status. Not used for HP NonStop. The statuses are: ◆ Execution (EX)–The Process is executing. ◆ Pending Execution (PE)–The Process is selected for execution and startup is in progress. ◆ Waiting Connection (WC)–The Process is ready for execution, but all available connections to the SNODE are in use. ◆ Waiting Start Time (WS)–The Process is waiting in the Timer queue because it was submitted with a start time or date that has not expired. When the start time is reached, the Process is placed into the Wait queue for scheduling. ◆ Held Suspension (HS)–The operator issued a delete Process request with Hold set to Yes. ◆ Timer Retry (RE)–A Process error occurred and the Process was moved to the Timer queue in RE status with short-term and long-term wait times beginning. ◆ Held for Call (HC)–The Process was submitted with the Hold option set to Call. A session started from either node moves the Process to the Wait queue in WC status. The Process is placed in the Execution queue when it is selected for execution. ◆ Held Due to Error (HE)–A session error or other abnormal condition occurred. ◆ Held Initially (HI)–The Process was submitted with the Hold option set to Yes. ◆ Held By Operator (HO)–A change Process request with Hold set to Yes was issued. ◆ Held By Retain (HR)–The Process was submitted with retain after execution set to Yes or Initial.

Field	Description
Queue	Specifies the queue containing the Process. The queues are: ◆ All–All Processes in the TCQ. ◆ Execution–Processes currently being executed. ◆ Hold–Processes that are either held by the user or operator or held due to execution errors. ◆ Timer–Processes that are scheduled to be executed later, or Processes in time retry due to session errors. ◆ Wait–Processes that are eligible for execution and are awaiting selection. The following additional queues are available for HP NonStop: ◆ Bad–An error occurred during initialization of Process execution. This error can occur because of a security error or some other unrecoverable error. ◆ Call–The Process executes after a connection is established with the other node. You cannot specify a start date or time. ◆ Initial–A copy of the Process executes when you start the server. ◆ Hold–The Process remains the Hold queue until you release it. ◆ PExc–The Process is pending execution. ◆ Retain–A copy of the Process is retained after execution. You can later release a copy of this Process for execution. ◆ Rettimer–The Process executes periodically, either daily or weekly. A copy of the Process is released for execution at the end of the period specified. ◆ Retry–Process retries after a certain interval if the error that occurred is recoverable. ◆ Suspend–The SUSPEND PROCESS command suspends the Process. You can later release the Process for execution.
Submitter Node	Specifies the node from which the Process was submitted.
Submitter	Specifies the user ID that submitted the Process.
PNODE	Specifies the primary node used for the Process.
SNODE	Specifies the secondary node used for the Process.
Message ID	Specifies the current message ID for the Process. Click the ID to display the full message text.
Byte Count	Specifies the number of bytes transferred so far during the current Process step (if the Process is executing).

Click one of the following icons to perform an action on a record.

Icon	Description
	Click to update the display as the Process runs. If the Process ended, summary results are displayed.
	Click to change Process information. See *Change Process Parameters* on page 85 for more information.
	Click to delete the Process. See *Delete a Process* on page 88 for more information.
	Click to suspend the Process. See *Suspend a Process* on page 88 for more information.
	Click to display detail information about a Process.

Process Detail Results

The following table lists, in alphabetic field name order, the information that can be displayed on the Process Details page. Depending on the Process, not all fields may be displayed.

Click the navigational symbols to move through the records, to return to the Select Process Results page, to refresh the display, or to change, delete, or suspend this Process.

Field	Description
Byte Count	Specifies the number of bytes transferred so far during the current Process step (if the Process is executing).
Condition Code (also known as completion code or CC)	Specifies the return code values associated with step termination. Valid completion codes are: ◆ 0–Successful execution of the Process. ◆ 4–A warning error was encountered. The statement probably finished normally, but you should verify the execution results. ◆ 8–An error occurred during Process execution. ◆ 16–A severe error occurred during Process execution. ◆ Any–All values.
Checkpoint	Indicates if Checkpoint is activated for this Process.
Class	Determines the node-to-node session on which a Process can be executed.

Field	Description
DestDisp1	Specifies what to do with the destination file after a copy is complete. The destination DISP values are: ◆ NEW–Creates a new file on the destination node. ◆ RPL–Creates a new file on the destination node or, if the file already exists, replaces the named file on the destination node. ◆ MOD–Appends data to the end of an existing file for which you have exclusive rights.
DestDisp2	Specifies the disposition of the destination file after a successful Process step termination that results in a zero completion code.
DestDisp3	Specifies the disposition of the destination file after an abnormal Process step termination that results in a non-zero completion code.
Destination File	Specifies the destination file used in the Process.
EncAlg Name	Specifies the name of the encryption algorithm.
Exec Priority	The priority under which the operating system thread that executes Sterling Connect:Direct runs. Applies to Microsoft Windows only.
Extended Compression	Specifies the extended compression option.
Feedback	Specifies the feedback code for the module. The value depends on the module that creates it.
From Node	Specifies the node that sent the file. ◆ S–SNODE ◆ P–PNODE
Function	Specifies the function being performed.
Hold	Specifies the Hold status of a Process. The Hold statuses are: ◆ No–The Process is not placed in the Hold queue. It is executed as soon as resources are available. ◆ Yes–The Process is held in the Hold queue in Held Initially (HI) status until it is explicitly released. ◆ Call–The Process is held until the SNODE, as specified in the Process SNODE parameter, connects to the PNODE. The Process is then released for execution. The Process is also released when another Process on the PNODE connects to the SNODE.
Local Node	Specifies the node that processed the file. ◆ S–SNODE ◆ P–PNODE
Log Date/Time	Specifies the date and time that the statistics record was written to the statistics log.

Field	Description
Message ID	Specifies the current message ID for the Process. Click the ID to display the full message text.
PNODE	Specifies the primary node.
Priority	Specifies the priority assigned to the Process. The lower the number the higher the priority.
Proc Name	Specifies the Process name.
Proc Number	Specifies the Process number.
Queue	Specifies the queue containing the Process. The queues are: ◆ All–All Processes in the TCQ. ◆ Execution–Processes currently being executed. ◆ Hold–Processes that are either held by the user or operator or held due to execution errors. ◆ Timer–Processes that are scheduled to be executed later, or Processes in time retry due to session errors. ◆ Wait–Processes that are eligible for execution and are awaiting selection. The following additional queues are available for Sterling Connect:Direct HP NonStop: ◆ Bad–An error occurred during initialization of Process execution. This error can occur because of a security error or some other unrecoverable error. ◆ Call–The Process executes after a connection is established with the other node. You cannot specify a start date or time. ◆ Initial–A copy of the Process executes when you start the server. ◆ Hold–The Process remains the Hold queue until you release it. ◆ PExc–The Process is pending execution. ◆ Retain–A copy of the Process is retained after execution. You can later release a copy of this Process for execution. ◆ Rettimer–The Process executes periodically, either daily or weekly. A copy of the Process is released for execution at the end of the period specified. ◆ Retry–Process retries after a certain interval if the error that occurred is recoverable. ◆ Suspend–The SUSPEND PROCESS command suspends the Process. You can later release the Process for execution.
Record Count	Specifies the number of records in the file that was sent.
Restart	Indicates if Restart is activated for this Process.

Field	Description
Retain	Indicates whether Sterling Connect:Direct retains a copy of a Process after it is executed. The Retain options are: ◆ Initial–Specifies to retain the Process in the Hold queue for execution every time that Sterling Connect:Direct initializes. ◆ No–Specifies not to retain the Process after it is executed. ◆ Yes–Specifies to retain the Process in the Hold queue after it is executed. You can release the Process for execution later or delete it.
Scheduled Date/Time	Specifies the date and time that a Process is scheduled to be executed.
Secure+ Enabled	Indicates that Sterling Connect:Direct Secure Plus is activated for the Process.
Signature	Indicates that digital signature is activated.
SNODE	Specifies the secondary node used for the Process.
Source Disp1	Specifies access to the source file during a copy operation. The source DISP values are: ◆ SHR–The file can be opened for read-only access while it is being copied. ◆ OLD–The file cannot be opened during the transfer.
Source Disp2	Specifies the disposition of the source file after a successful Process step termination that results in a zero completion code.
Source Disp3	Specifies the disposition of the source file after an abnormal Process step termination that results in a non-zero completion code.
Source File	Specifies the source file used in the Process.
Standard Compression	Specifies the standard compression option.

Field	Description
Status	Specifies the Process status. The statuses are: ◆ Execution (EX)–The Process is executing. ◆ Pending Execution (PE)–The Process is selected for execution and startup is in progress. ◆ Waiting Connection (WC)–The Process is ready to execute, but all available connections to the SNODE are in use. ◆ Waiting Start Time (WS)–The Process is waiting in the Timer queue because it was submitted with a start time or date that has not expired. When the start time is reached, the Process is placed into the Wait queue for scheduling for execution. ◆ Held Suspension (HS)–The operator issued a delete Process request with Hold set to Yes. ◆ Timer Retry (RE)–A Process error occurred and the Process was moved to the Timer queue in RE status with short-term and long-term wait times beginning. ◆ Held for Call (HC)–The Process was submitted with the Hold parameter set to Call. A session started from either node moves the Process to the Wait queue in WC status. The Process is placed in the Execution queue when it is selected for execution. ◆ Held Due to Error (HE)–A session error or other abnormal condition occurred. ◆ Held Initially (HI)–The Process was submitted with the Hold option set to Yes. ◆ Held By Operator (HO)–A change Process request with Hold set to Yes was issued. ◆ Held By Retain (HR)–The Process was submitted with retain after execution set to Yes or Initial. Not used for HP NonStop.
Step Name	Specifies the current Process step.
Submit Node	Specifies the node from which the Process was submitted.
Submitter	Specifies the user ID that submitted the Process.
XMIT Bytes	Specifies the number of bytes transmitted.
XMITRUs Buffers	Specifies the number of network buffers transmitted.

Viewing Sterling B2B Integrator Process Information

If a Sterling Connect:Direct Process was submitted to an IBM® Sterling B2B Integrator system, and the Sterling Connect:Direct Browser User Interface links to the Sterling B2B Integrator system were properly configured, you can view Sterling B2B Integrator tracking information through the Select Process function.

To view Sterling B2B Integrator Process Information from the Select Statistics function:

1. Click **Select Process** to display the Select Process Request page.
2. Type the selection criteria and click **Select Process** to display the Select Process Request page.

   Processes submitted to the GIS system display a hyperlink under the **Name** field.
3. Click the hyperlink under the **Name** field to display the GIS Process Information in a new window.
4. Follow the procedure in *Viewing Sterling B2B Integrator Process Information* on page 81 to view the information.

Chapter 7

Viewing Statistics

Sterling Connect:Direct maintains statistics on all Sterling Connect:Direct activity, including completion records for each step of a Process. You use the Select Statistics page to view Process statistics. You can retrieve statistics based on various criteria, such as Process name, start and stop date, start and stop time, and so on.

After you make your selections and click **Select Statistics**, summary statistics are displayed. You can then select to display detailed statistics about a particular Process.

View Process Statistics

Perform the following procedure to view Process statistics. You do not need to enter data in all of the fields on this page; you only need to supply enough data to specify the selection criteria.

1. From the **User Functions** menu, select **Select Statistics**. The Select Statistics Request page is displayed.
2. Type the selection criteria in one or more of the following fields:
   - Process name
   - Process number
   - Completion code
   - Record categories (not used for HP NonStop)
   - Record IDs
   - SNODE
   - Start date
   - Start time
   - Stop date
   - Stop time

- Submitter node and user ID
- Source file name (not used for HP NonStop)
- Destination file name (not used for HP NonStop)

You do not have to enter all the parameters on this page. Separate multiple entries in a field with commas. (Multiple entries are not available for HP NonStop).

3. Click **Select Statistics** to display the Process statistics.

   The following table explains the fields on this page:

Field	Description
Process Names	Specifies the name of the Process. Separate multiple Process names with commas.
Process Numbers	Specifies the system-assigned Process number. Separate multiple Process numbers with commas.
Completion Code operand and Completion Code	Specifies the completion code operator and return code values associated with step termination. Select a Completion Code operand from the drop-down box. The completion code operands are **Equal to**, **Greater or Equal to**, **Greater than**, **Less or equal to**, **Less than**, and **Not Equal to**. Valid completion codes are: ◆ Any–All values. ◆ 0–Successful execution of the Process. ◆ 4–A warning error was encountered. The statement probably finished normally, but you should verify the execution results. ◆ 8–An error occurred during Process execution. ◆ 16–A severe error occurred during Process execution.
Record Categories	Specifies whether the record is related to an event or to a Process. The values are: ◆ CAEV–The record is related to a Sterling Connect:Direct event, such as a Sterling Connect:Direct shutdown. ◆ CAPR–The record is related to a Sterling Connect:Direct Process. Not used for HP NonStop.
Record IDs	Specifies the type of statistics record generated. See Appendix B, *Sterling Connect:Direct Statistic Record IDs* for a list of Record IDs.
SNODE	Specifies the secondary Sterling Connect:Direct node.
Start Date	View Processes starting on this date.
Start Time	View Processes starting on this time.
Stop Date	View Processes ending on this date.
Stop Time	View Processes ending at this time.

Field	Description
Submitter (Node, user ID)	Specifies the node and user ID that submitted the Process.
Source file name	Specifies the source file name. Not used for HP NonStop.
Destination file name	Specifies the destination file name. Not used for HP NonStop.

Select Statistics Results

The following information is displayed on the Select Statistics Results page. Click to display detail statistics.

Field	Description
Log Date/Time	Specifies the date and time that the statistics record was written to the log file.
Type	Specifies whether the record is related to an event or to a Process. The values are: ◆ CAEV–The record is related to a Sterling Connect:Direct Process.
Rec ID	Specifies the type of statistics record generated. See Appendix B, *Sterling Connect:Direct Statistic Record IDs* for a list of statistic record IDs.
CC (also known as condition code or completion code)	Specifies the return code values associated with step termination. Valid codes are: ◆ 0–Successful execution of the Process. ◆ 4–A warning level error was encountered. The statement probably finished normally, but you should verify the execution results. ◆ 8–An error occurred during Process execution. ◆ 16–A severe error occurred during Process execution. ◆ Any–All values.
FDBK	Specifies the feedback code for the module. The value depends on the module that creates it.
MSGID	Specifies the current message ID for the Process. Click the ID to display the full message text.
PName	Specifies the Process name.
Pnum	Specifies the Process number assigned by Sterling Connect:Direct when the Process was submitted.
Step Name	Specifies the name of the step within the Process.

Select Statistics Details

The following table lists in alphabetic order the information that can be displayed on the Select Statistics Details page. The exact information displayed depends on the statistics record contents.

Field	Description
Bytes Read	Specifies the number of bytes read from the source file.
Bytes Received	Specifies the number of bytes received by the destination file.
Bytes Sent	Specifies the number of bytes sent to the destination file.
Bytes Written	Specifies the number of bytes written to the destination file.
Checkpoint	Indicates if checkpointing is activated for this Process.
Class	Determines the node-to-node session on which a Process can be executed.
Condition Code (or CC)	Specifies the return code values for the step termination. Valid codes are: ◆ 0–Successful Process execution. ◆ 4–A warning error was encountered. The statement probably completed normally, but you should verify the execution results. ◆ 8–An error occurred during Process execution. ◆ 16–A severe error occurred during Process execution. ◆ Any–All values.
Control Block Enc Alg	Specifies the algorithm used to encrypt Sterling Connect:Direct control blocks used for strong authentication. This is the first algorithm ID in the PNODE list that is also in the SNODE list.
Cur Signature Verified	Specifies if the current encryption key was used for verifying the digital signature.
Dest Disposition 1	Specifies what to do with the destination file after a copy is complete. The destination DISP values are: ◆ NEW–Creates a new file on the destination node. ◆ RPL–Creates a new file on the destination node or, if the file already exists, replaces the named file on the destination node. ◆ MOD–Appends data to the end of an existing file for which you have exclusive rights.
Dest Disposition 2	Specifies the disposition of the destination file after a successful Process step termination that results in a zero completion code.
Dest Disposition 3	Specifies the disposition of the destination file after an abnormal Process step termination that results in a non-zero completion code.
Destination File	Specifies the name of the destination file.

Field	Description
Exec Priority	Specifies the priority under which the operating system thread that executes Sterling Connect:Direct runs. Applies to Microsoft Windows only.
Extended Compression	Specifies the extended compression option.
Feedback	Specifies the feedback code for the module. The value depends on the module that creates it.
From Node	Specifies the node that sent the file. ◆ S–SNODE ◆ P–PNODE
Function	Specifies the function being performed.
Hold	Specifies the Hold status of a Process. See page 69 for a list of Hold statuses.
Link Fail	Indicated whether a link failure occurred during transmission.
Local Condition Code	Specifies the condition code produced by the local node.
Local Message ID	Specifies the message ID produced by the local node.
Local Node	Specifies the node that processed the file. ◆ S–SNODE ◆ P–PNODE
Log Date/Time	Specifies the date and time that the statistics record was written to the statistics log.
Member Name	The name of the member copied.
Merge EA	Specifies the merged data encryption algorithm resulting from the merger of the PNODE and SNODE encryption algorithms.
Merge Signature	Specifies the merged results from the digital signature settings for the PNODE and SNODE. If digital signature are enabled for either the PNODE or the SNODE, then digital signatures are used for the session. If digital signatures are not enabled for both the PNODE and SNODE, digital signatures are not used.
Message ID	Specifies the current message for the Process. Click the message ID to display the full message text.
Other Condition Code	Specifies the condition code produced by the other (remote) node.
Other Message ID	Specifies the message ID produced by the other (remote) node.
PNODE	Specifies the primary node.
PNODE Accounting Info	Specifies user-entered PNODE accounting information.

Field	Description
PNODE Enc Alg List	Specifies the data encryption algorithm used on the PNODE.
PNODE Enc Data	Specifies the PNODE encryption data.
PNODE Signature	Specifies if digital signatures are enabled for the PNODE.
Prev Signature Verified	Specifies if the previous encryption key was used for verifying the digital signature.
Priority	Specifies the priority assigned to the Process. The lower the number the higher the priority.
Proc Name	Specifies the Process name.
Proc Number	Specifies the Process number.
Queue	Specifies the queue containing the Process. See page 67 for a list of queues.
Record Category	Specifies whether the record is related to an event or a Process. The values are ◆ CAEV–The record is related to a Sterling Connect:Direct event, such as a Sterling Connect:Direct shutdown. ◆ CAPR–The record is related to a Sterling Connect:Direct Process.
Record ID	Specifies the record type indicator. See Appendix B, *Sterling Connect:Direct Statistic Record IDs*.
Records Read	Specifies the number of records read from the source file.
Records Written	Specifies the number of records written to the destination file.
Restart	Indicates whether the Process was restarted.
Retain	Indicates whether Sterling Connect:Direct retains a copy of a Process after it is executed. See page 71 for a list of Retain options.
RUs Received	Specifies the number of buffers received by the destination file.
RUs Sent	Specifies the number of buffers sent to the destination file.
RUs Size	Specifies the size of buffers received by the destination file.
Scheduled Date/Time	Specifies the date and time that a Process is scheduled to be executed.
Secure+ Enabled	Indicates that Sterling Connect:Direct Secure Plus is activated for the Process.
SNODE	Specifies the name of the secondary node.
SNODE Accounting Info	Specifies user-entered SNODE accounting information.
SNODE Enc Alg List	Specifies the data encryption algorithm used on the SNODE.
SNODE Enc Data	Specifies the SNODE encryption data.

Field	Description
SNODE Signature	Specifies if digital signatures are enabled for the SNODE.
Source Disposition 1	Specifies access to the source file during a copy operation. The source disposition values are: ◆ SHR–The file can be opened for read-only access while it is being copied. ◆ OLD–The file cannot be opened during the transfer.
Source Disposition 2	Specifies the disposition of the source file after following a successful Process step termination that results in a zero completion code.
Source Disposition 3	Specifies the disposition of the source file after following an abnormal Process step termination that results in a non-zero completion code.
Source File	Specifies the name and location of the source file.
Standard Compression	Specifies the standard compression option.
Status	Specifies the Process status. See page 72 for a list of status codes.
Step Name	Specifies the Process step.
Submit Date/Time	Specifies the date and time that the Process was submitted.
SYSOPTS	Specifies the platform-specific system operations. These parameters specify the data type, translation tables, inherited rights, attributes, and trustees.
Translation	Specifies if the data was translated.

Viewing Sterling B2B Integrator Process Information

If a Sterling Connect:Direct Process was submitted to a Sterling B2B Integrator system, and the Sterling Connect:Direct Browser User Interface links to the Sterling B2B Integrator system were properly configured, you can view Sterling B2B Integrator tracking information through the Select Statistics function.

To view Sterling B2B Integrator Process Information from the Select Statistics function:

1. Click **Select Statistics** to display the Select Statistics Request page.
2. Type the selection criteria and click **Select Statistics** to display the Select Statistics Results page.

   Processes submitted to the Sterling B2B Integrator system display a hyperlink under the **Rec ID** field.
3. Click the hyperlink to display the Sterling B2B Integrator Process Information.
4. Close the page after viewing the information.

Chapter 8

Viewing Message Text

The Select Message function allows you to view the short and long message text for a selected message ID.

To view the message text:

1. Click **Message Lookup**.
2. Type the message ID and click **Select Message**. The message text is displayed.

Click the browser's **Back** button to specify another message ID, or select another function.

Chapter 9

Controlling Processes

The Process Control function allows you to:

- Change Process Parameters
- Delete a Process
- Suspend a Process

Change Process Parameters

To change the parameters for one of more existing Processes that have not executed yet:

1. From the **User Functions** menu, select **Process Control** and **Change Process**.
   The Change Process page is displayed.
2. Specify the Processes you want to change.
   You can select the Processes to change by:
   - Node name
   - Process name
   - Process number
   - SNODE (not used for z/OS or HP NonStop)
   - Submitter node and user ID

   Separate multiple entries in a field with a comma or a space.
3. Type the parameters you want to change.
4. Click **Submit**.

   The following table describes the parameters that you can change.

Parameters

Parameter	Description
Class	Specifies the preferred session class for the Process. The Process can execute in the class specified or any higher class. Values range from one to the maximum number of PNODE sessions defined in the network map definition. This value overrides any defaults.
Debug	Sterling Connect:Direct for z/OS only. Specifies the 8-position trace setting for this Process. This allows you to specify a trace for only this Process.
Destination Node	Specifies the node that this Process communicates with.
Plexclass	Specifies the class that directs the Process to only certain servers in a Sterling Connect:Direct/Plex environment. This parameter does not apply to a Sterling Connect:Direct/Stand-alone server. The format is PNODE class, SNODE class. Each class is 1-8 characters long.
Hold	Specifies the Hold status of a Process. ◆ No–The Process is not placed in the Hold queue. It executes as soon as resources are available. ◆ Yes–The Process is held in the Hold queue in a Held Initially (HI) status until it is explicitly released. ◆ Call–The Process is held until the SNODE, as specified in the Process SNODE parameter, connects to the PNODE. The Process is then released for execution. The Process is also released when another Process on the PNODE connects to the SNODE.
Priority	Specifies the priority of a Process in the Transmission Control queue. Sterling Connect:Direct uses the Priority parameter for Process selection. Values range from 1–15. The lower the number the higher the priority. A Process with higher priority is selected for execution before a Process with a lower priority. This parameter does not affect the priority during transmission.
Release	Releases the Process for execution from its current queue. Not used for HP NonStop.

Parameter	Description
Retain	Specifies whether Sterling Connect:Direct retains a copy of a Process after it executes. If you specify Retain with a start time, the Process is released for execution at the specified time. Each time a retained Process is released, Sterling Connect:Direct creates a copy with a new Process number. The copy is executed, and the original Process remains in the queue. The Retain options are: ◆ Initial–Specifies to retain the Process in the Hold queue for execution every time that Sterling Connect:Direct initializes. Do not specify a start time if you choose this option. ◆ No–Specifies not to retain the Process after it executes. ◆ Yes–Specifies to retain the Process in the Hold queue after it executes. You can release the Process for execution later or delete it. When you specify a start date and start time, set **Retain** to **Yes** to continually execute the Process at the scheduled time.
Restart	Specifies the conditions for restarting an interrupted Process. Use this parameter to restart a data transmission at the last checkpoint before the interruption or at a previous checkpoint position. Not used for HP NonStop. ◆ NO specifies to restart the COPY step at the beginning of the transmission. ◆ FIRST=volume sequence number specifies to restart the COPY step at the beginning of the volume designated by the volume sequence number. ◆ FIRST=SER=volume serial number specifies to restart the COPY step at the beginning of the volume serial given. ◆ LAST=volume sequence number specifies to restart the COPY step at the end of the volume designated by the volume sequence number. ◆ LAST specifies to restart the COPY step at the last block on the volume if the output is disk or at the last checkpoint on the volume if the output is tape. ◆ LAST=SER=volume serial number specifies to restart the COPY step at the end of the volume serial given. ◆ VOLCNT=n specifies to change the volume count on the interrupted COPY step to the specified value. Use this parameter to increase the number of output volumes if the COPY step was interrupted because the volume count was too small.
Start Time	Specifies the time to execute the Process.

Delete a Process

To delete one or more Processes that have not executed yet:

Note: You cannot delete an executing Process. However, you can suspend an executing Process, then delete it.

1. From the **User Functions** menu, select **Process Control** and **Delete Process**.

   The Delete Process page is displayed.
2. Specify the Processes you want to delete.

   You can select the Processes to delete by:

   - Process name
   - Process number
   - SNODE (not used for z/OS or HP NonStop)
   - Submitter node and user ID

   Separate multiple entries in a field with a comma or a space.
3. Click **Submit**.

Suspend a Process

To suspend one or more executing Processes:

1. From the **User Functions** menu, select **Process Control** and **Suspend Process**.

   The Suspend Process page is displayed.
2. Specify the Processes you want to suspend.

   You can select the Processes to suspend by:

   - Process name
   - Process number
   - SNODE (not used for z/OS or HP NonStop)
   - Submitter node and user ID

   Separate multiple entries in a field with a comma or a space.
3. Click **Submit**.

Appendix A

Messages

The Sterling Connect:Direct Browser User Interface displays the following messages when you successfully complete a function or when a function is unsuccessful.

Message	Description	Action
Cannot connect to the Sterling Connect:Direct server.	The Sterling Connect:Direct server is not monitoring the specified port, or the server network is down.	Verify that the Sterling Connect:Direct server is running.
Cannot find node file.	You left the Node Name field blank, and the default node file is not in the server directory.	Ask the system administrator to verify that the node file associated with your user ID exists in the server directory.
Cannot open Node property file.	Either the node property file does not exist or it cannot be read.	Ask the system administrator to verify that the node property file exists and that it is readable.
Change Process successful.	The Change Process command completed successfully.	None.
Change Process failed.	The Change Process failed.	Review the Change Process parameters and submit the Change Process command again.
Sterling Connect:Direct server port number is invalid.	Either you entered an invalid port number during signon, or the node property file has an invalid port number.	Sign on again with a valid port number. If you still get this message, ask the system administrator to verify that the node property file has a valid port number.
Copy File failed.	The Copy File command failed.	Use Select Process to determine why the copy failed. Make the appropriate corrections and submit the Copy again.
Default node does not exist.	You left the Node Name field blank, and no default node name was set up in the system property file and user property file.	Either type the node name when you sign on, or ask the system administrator to set up a default node name.
Delete Process successful.	The Delete Process command completed successfully.	None.
Delete Process failed.	The Delete Process command failed.	Review the Delete Process parameters and submit the Delete Process command again.
Direct node port number is invalid. Please try again.	You tried to sign on with an invalid port number.	Either type a valid port number when you sign on, or ask the system administrator to associate user ID in the user property file with a valid node and port number.
Error: Connection Exception! Please try again.	You tried to logon with a valid user ID, but with an invalid IP address or port number.	Either type a valid address/port number when you sign on, or ask the system administrator to associate a node with your user ID in the user property file.

Message	Description	Action
Error: Logon failed! User ID or password may be invalid.	Invalid user ID/password combination.	Either type a valid user ID and password when you sign on, or ask the system administrator to set up a default user ID in the system property file.
Error: No Cookies Support	You tried to log on to Sterling Connect:Direct through the Sterling Connect:Direct Browser User Interface, and cookies are disabled on your browser.	Enable cookies on your browser, then log on to the Sterling Connect:Direct Browser User Interface again.
Invalid message ID.	You requested message text for a message ID that does not exist.	Verify the message ID and try again.
Local file is not attached. Return code: 735	You tried to submit a Process with a Process file name that does not exist in the browser's file system.	Supply an existing Process file name and resubmit.
Node, Address & Port must be specified.	You tried to add a node property record without the required information.	Enter the node, address, and port information and click **Add**.
No Node hostname/IP address is defined. Please try again!	You tried to sign on with a user ID without supplying a valid node name or IP address.	Either type a valid node name and IP address when you sign on, or ask the system administrator to associate a node with your user ID in the user property file.
No password is defined. Please try again.	Missing password.	Enter the user ID and password and click **Signon**.
No Process matches your criteria.	No Processes match the selection criteria you supplied.	If you think you should have found Processes, verify the selection criteria and try again.
No statistic matches your criteria.	No statistic records match the selection criteria you supplied.	If you think you should have found statistics records, verify the selection criteria and try again.
No user ID is defined. Please try again.	You did not type anything in the User ID field, and a default user does not exist.	Either type a user ID when you sign on, or ask the system administrator to set up a default user ID in the system property file.
Only a node with a Node property file defined can be accessed.	Either you entered a node name that does not match an entry in the node property file, or you left the node name field blank and the node name was not set up in the node property file.	Ask the system administrator to verify the node property file setup.
Only users with a User property file defined can access the Sterling Connect:Direct server.	Your user ID was not set up in the user property file.	Ask the system administrator to set up a user ID for you in the user property file.

Message	Description	Action
Sign off request successful.	The sign off was successful.	None.
Sign on is successful.	The sign on was successful.	None.
Submit Process failed, state is *waiting|hold|timer.*	The Submit Process failed, and the Process was moved to the indicated queue.	Use Select Process to determine why the Process failed. Make the appropriate corrections and submit the Process again.
Submit Process is successful.	The Submit Process was successful.	None.
Suspend Process completed.	The Suspend Process finished successfully.	None.
Suspend Process failed.	The Suspend Process failed.	Review the Suspend Process parameters and submit the Suspend Process again.
The submit of the Process succeeded.	A Copy File Process was successfully submitted.	None.
USER *name* login incorrect.	Either the user ID or the password is incorrect.	Try again with the correct user ID and password.
You are not currently signed on as the administrator. Note: You are signed off automatically when nonconfiguration functions are performed.	You used the Back button to access the Configuration utility from a nonconfiguration page. When you exit the Configuration utility, you are automatically signed off from it and must sign on again to use it.	Sign on again to the Configuration utility with a valid administrator ID and password.
You are not signed on. Please sign on first.	You have not signed on yet.	Sign on.
You must enter a Process.	You did not supply a Process name on a Submit Process.	Supply a valid Process name and resubmit.
You must enter either a node name, or enter IP, port.	Your signon is missing information.	Supply the missing information.
Your user ID or password is incorrect.	You supplied either an incorrect administrator ID or password when trying to sign on to the configuration feature.	Try again with the correct administrator ID and password.

Appendix B

Sterling Connect:Direct Statistic Record IDs

The following tables list Sterling Connect:Direct statistics record IDs and meaning by platform:

- Sterling Connect:Direct for UNIX Statistics Record IDs
- Sterling Connect:Direct for Microsoft Windows Statistics Record IDs
- Sterling Connect:Direct for z/OS Statistics Record IDs
- Sterling Connect:Direct for HP NonStop Statistics Record IDs

Sterling Connect:Direct for UNIX Statistics Record IDs

ID	Description
APSM	Asset Protection failure generated
CHGP	The CHANGE PROCESS command issued
CRHT	Copyright statement
CSPA	Secure Plus failure generated
CSTP	Child Process stopped
CTRC	Copy termination record
CTRM	Child Process terminated
CUKN	Child Process unknown status
CXIT	Child Process exited
DELP	The DELETE PROCESS command issued
FLSP	The FLUSH PROCESS command issued
FMRV	Error occurred in function management information receive operation

ID	Description
FMSD	Error occurred in function management information send operation
GPRC	Error occurred while getting Process
IFED	The IF statement ended
LIEX	License expired
LWEX	License will expire within 14 days
NINF	Sterling Connect:Direct Information generated at startup
NMOP	Network map file opened
NUIC	Initialization complete
NUIS	Initialization started
NUTC	Termination completed
NUTS	Termination started
PERR	Process error
PFLS	Process flushed
PRED	Processes ended
PSAV	Process saved
PSTR	Process started
RJED	The RUN JOB ended
RNCF	Remote node connection failed
RTED	The RUN TASK ended
SBED	The SUBMIT ended
SELP	The SELECT PROCESS command issued
SELS	The SELECT STATISTICS command issued
SEND	Session ended
SERR	System error
SHUD	Shutdown occurred
SIGC	Signal caught
SSTR	Save Process
STOP	The STOP command issued
SUBP	The SUBMIT command issued
TRAC	The TRACE command issued

ID	Description
UNKN	Unknown command issued
XMSG	Message sent to user exit
XSTA	User exit program started

Sterling Connect:Direct for Microsoft Windows Statistics Record IDs

ID	Description
CHGP	Change Process command issued
COAC	Communication activated
CRHT	Sterling Connect:Direct Copyright
CSTP	Child process stopped
CTRC	Copy control record written
CTRM	Child process terminated
CUKN	Child process unknown status
CXIT	Child process exited
DELP	Delete Process command issued
FLSP	Flush Process command issued
FMRV	Formatted Header (FMH) received
FMSD	Formatted Header (FMH) sent
GPRC	Get Process issued
IFED	If statement ended
LIEX	License has expired
LIOK	Listen okay
LWEX	License will expire in 14 days
NAUH	Node Authorization check issued
NMOP	Network map file opened
NUIC	Sterling Connect:Direct Initialization complete

ID	Description
NUIS	Sterling Connect:Direct start initialization
NUTC	Sterling Connect:Direct termination complete
NUTS	Sterling Connect:Direct termination started
PERR	Process error was detected
PFLS	Process was flushed
PRED	Process has ended
PSAV	Process was saved
PSED	Process step was detected
PSTR	Process has started
RJED	Run Job command completed
RNCF	Remote Sterling Connect:Direct server call failed
RTED	Run Task command completed
SBED	Submit complete
SELP	Select Process command issued
SELS	Select Statistics command issued
SEND	Session end issued
SERR	System error
SHUD	Sterling Connect:Direct shutdown
SIGC	Signal caught
SSTR	Session start issued
STOP	Stop Sterling Connect:Direct command issued
SUBP	Submit command issued
TRAC	Trace command issued
UNKN	Unknown command issued
USEC	User Security check issued
xxxx	Record types identified by the first four characters of the message ID

Sterling Connect:Direct for z/OS Statistics Record IDs

ID	Description
CE	Copy I/O Start
CH	Change Process
CI	Copy Step Start
CS	Statistics Command
CT	Copy Termination
DP	Delete Process
DS	Digital Signature
DT	Select Task
DU	Delete User
EI	Event Services Start Command
EL	Event Services Lost Session
ET	Event Services Stop Command
EV	Event Services Command
FI	Long File Name Record
FP	Flush Process
FS	Suspend Process
FT	Flush Task
GO	Process Modal - GOTO, ELSE, or EXIT Statement
IA	Inquire Statistics
ID	Inquire STATDIR
IF	Process Modal - IF Statement
IP	Inquire Initparms
IU	Insert User
IX	Inquire Sterling Connect:Direct Browser User Interface/Plex
JI	Run Job Start
MC	PDS Member Copy
NL	Process modal - EIF or PEND statement

ID	Description
PE	Sterling Connect:Direct Browser User Interface/Plex Error Record
PI	Process Start
PS	Process Submit
PT	Process Termination
PX	Sterling Connect:Direct Browser User Interface/Plex Activity (Leave or Join Sterling Connect:Direct Browser User Interface/Plex)
QE	Queue Change to EXEC queue
QH	Queue Change to HOLD queue
QT	Queue Change to TIMER queue
QW	Queue Change to WAIT queue
RJ	Run Job
RT	Run Task
S2	Statistics Logging Statistics
SC	Statistics Control Record
SD	Start Sterling Connect:Direct Browser User Interface
SF	Statistics Format
SI	Signon
SL	Select Sterling Connect:Direct Secure Plus Profile
SN	Select Netmap
SO	Signoff
SP	Select Process
SS	Select Statistics
ST	Stop Sterling Connect:Direct Browser User Interface
SU	Select User
SW	Submit within a Process
TI	Run Task Start
TP	Throughput Record Statistics
TS	Suspend Task
UC	Update Sterling Connect:Direct Secure Plus Profile
UM	Update Netmap
UU	Update User

ID	Description
WO	Write-to-Operator (WTO)
XO	Trace On/Off

Sterling Connect:Direct for HP NonStop Statistics Record IDs

Keyword	Description
SUBMIT	Submit process
SESSSTART	Session start
SESSEND	Session end
PROCSTART	Process start
PROCEND	Process end
STEPSTART	Step start
STEPEND	Step end
MSG	Information or error message
CMD	User commands
LM	License management information

Notices

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

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

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

IBM Director of Licensing

IBM Corporation

North Castle Drive

Armonk, NY 10504-1785

U.S.A.

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

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

Intellectual Property Licensing

Legal and Intellectual Property Law

IBM Japan Ltd.

1623-14, Shimotsuruma, Yamato-shi

Kanagawa 242-8502 Japan

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

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

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

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

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

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

IBM Corporation

J46A/G4

555 Bailey Avenue

San Jose, CA__95141-1003

U.S.A.

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

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

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

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

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

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

COPYRIGHT LICENSE:

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

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

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

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

Trademarks

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

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

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

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

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

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

ITIL is a registered trademark, and a registered community trademark of the Office of Government Commerce, and is registered in the U.S. Patent and Trademark Office.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Java and all Java-based trademarks and logos are trademarks or registered trademarks of Oracle and/or its affiliates.

Cell Broadband Engine is a trademark of Sony Computer Entertainment, Inc. in the United States, other countries, or both and is used under license therefrom.

Linear Tape-Open, LTO, the LTO Logo, Ultrium and the Ultrium Logo are trademarks of HP, IBM Corp. and Quantum in the U.S. and other countries.

Connect Control Center®, Connect:Direct®, Connect:Enterprise, Gentran®, Gentran:Basic®, Gentran:Control®, Gentran:Director®, Gentran:Plus®, Gentran:Realtime®, Gentran:Server®, Gentran:Viewpoint®, Sterling Commerce™, Sterling Information Broker®, and Sterling Integrator® are trademarks or registered trademarks of Sterling Commerce, Inc., an IBM Company.

Other company, product, and service names may be trademarks or service marks of others.

Glossary

Term	Definition
Abnormal termination	Specifies the disposition of the file after an abnormal Process step termination results in a non-zero completion code. This subparameter applies to non-VSAM files. The values are: KEEP–The file is kept after the Process step terminates abnormally. DELETE–The file is deleted after the Process step terminates abnormally. CATLG–The file is kept after the Process step terminates abnormally and an entry is placed in the system catalog (z/OS only).
Access	Specifies the status of a file before a Process is executed. The values are: NEW–Creates a new file on the destination node. RPL–Creates a new file on the destination node or, if the file already exists, replaces the named file of the destination node. MOD–Appends data to the end of an existing file for which you have exclusive rights (not used by VSE) SHR–The file exists and the Process does not have exclusive control of the file. OLD–The file exists, and the Process has exclusive control of the file.
Address	A node property that specifies either the fully qualified domain name or IP address (nnn.nnn.nnn.nnn format). This property is required. You can enter up to 64 characters for the domain name; however, only 20 characters are displayed. You can scroll through the field to see the complete name.
Allow only Defined Nodes	A system property that specifies whether the Sterling Connect:Direct Browser User Interface can only access the nodes defined in a node property file or can access any Sterling Connect:Direct node. The values are: Y–Specifies that the Sterling Connect:Direct Browser User Interface can only access nodes defined in the node property files. If you specify Y, you must create at least one node property file. N–Specifies that the Sterling Connect:Direct Browser User Interface can access any Sterling Connect:Direct node. N is the default value.
Allow only Defined Users	A system property that specifies whether only users defined in a user property file can access the Sterling Connect:Direct Browser User Interface, or if any Sterling Connect:Direct user can access the Sterling Connect:Direct Browser User Interface. Y–Specifies that only users defined in user property files can access the Sterling Connect:Direct Browser User Interface. N–Specifies that any Sterling Connect:Direct user can access the Sterling Connect:Direct Browser User Interface. N is the default value.

Term	Definition
BUFND	Specifies the number of I/O buffers VSAM uses for transmitting data between virtual and auxiliary storage. A buffer is the size of a control interval in the data component. Valid values range from 1–510. Increasing this number generally improves the I/O performance on the file but requires more memory.
Buffer Size	Specifies the buffer size for transmitting data to and from a remote Sterling Connect:Direct node. This is a numeric value from 256–32,768. The default is 4096. This field overrides the initialization parameter value.
Checkpoint Restart	Specifies if checkpointing is used. This allows restart of interrupted transmissions at the last valid checkpoint, reducing the time to retransmit a file. The options are: Default–Uses the value specified in the Checkpoint Interval initialization parameter. Check At Every–Performs checkpoints at the specified number of kilobytes or megabytes. Sequential files, VSAM files, or partitioned data sets (PDS) can be checkpointed. Checkpointing of PDS-to-PDS transmissions occurs on each each member. Sequential-to-PDS and PDS-to-sequential transmissions cannot be checkpointed.
Completion Code	Specifies the completion code operator and return code values associated with step termination. Also referred to as the condition code. The completion code operands are **Equal to**, **Greater or Equal to**, **Greater than**, **Less or equal to**, **Less than**, and **Not Equal to**. Valid completion codes are: • Any–All values. • 0–Successful execution of the Process. • 4–A warning error was encountered. The statement probably finished normally, but you should verify the execution results. • 8–An error occurred during Process execution. • 16–A severe error occurred during Process execution.
Compression	Specifies if the file data should be compressed, reducing the amount of data transmitted as the file is copied. The file is then automatically decompressed at its destination. The options are: None–The data is not compressed Primary Char–Compresses text data or single-character repetitive data. Repetitive occurrences (ranging from 2–63) of the primary compression character are compressed to one byte. Repetitive occurrences (ranging from 3–63) of any other character are compressed to two bytes. If you select the Primary Char option, you must specify either the primary compression character or its hexidexcimal equivalent. The default value for the primary compression character is a blank (X'40'). Extended–Extended searches for repetitive strings of characters in data and compresses them to codes that are transmitted and converted back to the original string during decompression. If you select Extended compression, you must specify the following: • Comp Level–The compression level. Level 1 is the fastest compression, but it offers the lowest amount of compression. Selecting a higher value produces more compression, but is slower. • Window–The size of the compression window or history buffer. Specifying a higher window size increases the degree of compression and uses more virtual memory (above the line); for example, window size 8 uses 1 KB of memory, whereas size 15 uses 128 KB of memory. • Memory–Identifies how much virtual memory (above the line) is allocated to compression. Level 1 requires the least memory (1K), but it reduces the amount of compression. Level 9 provides the fastest compression, but it uses the most memory (256K). Compression is CPU-intensive, and its effectiveness is data dependent. It should only be used if its benefits are known.

Term	Definition
Condition Code	See Completion Code.
Class	Specifies the preferred session class for the Process. The Process can execute in the class specified or any higher class. Values range from one to the maximum number of PNODE sessions defined in the network map definition. This value overrides any defaults.
Comment Statement	A statement within a Process that contains a descriptive comment.
Conditional Statement	A statement within a Process that controls its execution by testing Process step return codes and directing the next step. Conditional statements are If, Then, Else, EIF, Goto, and Exit.
Copy Statement	A statement within a Process that performs a data transfer. Copy statement parameters include source and destination file names and attributes.
DATAEXIT	Specifies the name of the user-written program called to examine or modify the COPY data.
DCB	Data Control Block. Specifies the attributes used to allocate source and destination files.
Debug	A system property that indicates whether debug tracing for Sterling Connect:Direct Browser User Interface operation is written to the trace data set. This property does not control Process execution debug tracing. The values are: Off–No debug tracing is performed. Minimal–Basic debug tracing is performed. Maximal–Extended debug tracing is performed.
Default Current Directory	Specifies the default directory to browse for a file.
Description	A node or user property that specifies descriptive information about the property file.
Destination DISP	Specifies what to do with the destination file after a copy is complete. The destination DISP values can be: NEW–Creates a new file on the destination node. RPL–Creates a new file on the destination node or, if the file already exists, replaces the named file on the destination node. MOD–Appends data to the end of an existing file for which you have exclusive rights. OLD–The file exists, and the Process has exclusive control of the file. SHR–The file exists and the Process does not have exclusive control of the file. The exact DISP values displayed depend on the platform.
Destination file	Specifies the name of the destination file that you are copying to. The name should include the full path to the file. The name can be 1–256 characters long (1–8 characters for HP NonStop Kernel).
Direction	Specifies the copy file direction. Selecting **Send** sends the file to the SNODE. Selecting **Receive** indicates the file is received from the SNODE.
Display Nodes	Specifies if nodes defined to the Sterling Connect:Direct Browser User Interface are displayed in a list box on the Signon page.
Default Connect:Direct Node	A system and user property that specifies the name of the Sterling Connect:Direct node to connect with, if the node is not specified in a request. This value must be the same as the name of one of the node property files. There is no default value.

Term	Definition
Default Connect:Direct User ID	A system or user property that specifies the Sterling Connect:Direct user ID or the user property file name to use if one is not specified in a request. There is no default value.
Exclusion Criteria	Specifies criteria for excluding specific CMS files from a copy operation. The format is: generic | member | (startrange/stoprange)| list generic–Specifies a generic file name. member–Specifies an individual file name. startrange–Specifies the first name in an alphanumeric range of files. stoprange–Specifies the last name in an alphanumeric range of files.
File Type	Specifies the VM file type.
Hold Status	Specifies the Hold status of a Process. The Hold statuses are: • No–The Process is not placed in the Hold queue. It is executed as soon as resources are available. • Yes–The Process is held in the Hold queue in Held Initially (HI) status until it is explicitly released. • Call–The Process is held until the SNODE, as specified in the Process SNODE parameter, connects to the PNODE. The Process is then released for execution. The Process is also released when another Process on the PNODE connects to the SNODE.
Host Name	Specifies the 1–256 character host name for the node.
IP Address	Specifies the IP address of the Sterling Connect:Direct system you want to sign on to. It is in the format nnn.nnn.nnn.nnn, for example 127.0.0.1. You do not have to supply an IP address if a node property file is defined for you.
Label	Specifies the label information for the tape.
Link	Specifies the disk where the CMS file is located. This parameter allows access to the CMS file. The Link information consists of: User ID–The owner ID for the CMS minidisk where the file is located. The valid length ranges from 1–8 characters. Password–The password for the CMS minidisk where the file is located. The maximum length is 256 characters. The default password is ALL. Access mode–the link access mode. The Copy From access modes are: • W (primary read/write access) • M (primary multiple access) • R (primary read-only access) • RR (primary and secondary read-only access) • WR (primary read/write access; alternate read-only access) • MR (primary multiple access; alternate read-only access) • MW (primary multiple access; alternate read/write only access) **Warning**: MW access to CMS format disks can be destructive. If you use MW access, no other VM user or Sterling Connect:Direct Process should have MW, M, or W access to the minidisk. If multiple users or Processes simultaneously write to the disk, the CMS directory on the disk can be destroyed. CUU–The virtual address of the disk where the CMS file is located. Any four-digit number is valid.

Term	Definition
Logging	A system property that controls whether Sterling Connect:Direct Browser User Interface activity is logged to the trace data set. This property does not affect Process logging. The values are: Off–No logging is performed. Minimal–Basic logging at key processing points is performed. Maximal–Detailed logging is performed.
Maximum API Connections	Specifies the Sterling Connect:Direct for UNIX api.max.connects local.node parameter that defines the maximum number of concurrent API connections permitted for the local node. The default is 16.
Maximum Logon Attempts	Specifies the maximum number of signon attempts the user is allowed per hour. The range is 0–99. The default is 60. Zero (0) indicates no maximum number.
Maximum Records	A system property that specifies the maximum number of records that a Sterling Connect:Direct node can return in response to a command. If the number of records exceeds this value, the command continues, but all records returned after the maximum number are will be discarded. The default is an unlimited number of records.
Maximum RU Size	Specifies the maximum RU size for sessions in this group. The default is 4096.
Maximum Sessions	Specifies the maximum number of sessions allowed in this mode group. The default is 8. Specify 1 if you use dependent LUs as the communications path because dependent LUs can only support a single session.
Mode	Specifies the 1–48 character communications mode name.
New Name	Specifies the new name of the Process. The default is the label on the Process statement.
Netmap Check	Specifies the Sterling Connect:Direct for UNIX netmap.check local.node parameter that determines if security checks are made to verify that a remote node name is in the netmap.cfg file.
Node	Specifies a 1–16 character name for the Sterling Connect:Direct node, as defined in the network map. Use of this field for login to the Sterling Connect:Direct Browser User Interface is optional; if the node is defined in your user property file, you do not have to supply a node during login.
Normal termination	Specifies the disposition of a file following a normal Process step termination that results in a zero completion code. The values are: KEEP–The file is kept after the Process step finishes. DELETE–The file is deleted after the Process step terminates normally. CATLG–The file is kept after the Process step terminates abnormally and an entry is placed in the system catalog (z/OS only).
Notify	Specifies the user ID to receive Process completion messages. The user ID is notified through a Microsoft Exchange E-mail, a Microsoft Windows dialog box, or a TSO notify.
Old Date	Specifies to use the creation or last modified date and the time of the file being transmitted to set the creation date and time of the file received. If you do not specify to use the old date, the current date and time are used for the creation date and time of the received file. Use this for sequential file transfers between two IBM® Sterling Connect:Direct® for VM/ESA systems, and transfers between a set of CMS files on Sterling Connect:Direct for VM/ESA to a PDS on an IBM® Sterling Connect:Direct® for z/OS® system.

Term	Definition
Operator	Specifies the type of comparison to be performed in an If statement. Operators are: • **EQ** specifies equals. • **GE** specifies must be greater than or equal to • **GT** specifies must be greater than • **LE** specifies must be less than or equal • **LT** specifies must be less • **NE** specifies does not equal
Pacing Send Count	Specifies the number of send operations to perform before waiting for a pacing response from a remote node. This is a numeric value from 0–63. The default is 0, which indicates no pacing. This field overrides the initialization parameter value.
Pacing Send Delay	Specifies the amount of time Sterling Connect:Direct waits before sending each outbound data buffer to the remote node. This is a 24-hour time value formatted as hh:mm:ss. The default value of 0 indicates that Sterling Connect:Direct sends each data buffer as soon as possible. The maximum value is 23:59:59. This field overrides the initialization parameters value.
Pacing Size	Specifies the largest permissible receive pacing window size for sessions in this mode group. Sterling Connect:Direct sends this number of data buffers before waiting for an acknowledgment from the remote node. The range is 0–63; 0 specifies no pacing. The default is 7.
Parallel Sessions	Specifies the Sterling Connect:Direct for UNIX local.node sess.total parameter that defines the maximum number of concurrent connections between all nodes and the local node. The default is 255.
Passticket Data	Specifies the values required for a Stage 2 security exit to rewrite a RACF PassTicket password. The format is *APPL prof name, secured signon key*, where: • *APPL prof name* is the value specified when the profile is defined for the PTICDATA class. • *Secured signon key* is the value associated with the PTICDATA class and the name specified in the APPL Prof name.
Password	A user node property that specifies the password corresponding to the User ID property value. If no value is specified, the system assumes either that there is no password associated with the user ID, or that a password is specified during logon. If you create a password you cannot later reset it to a null password. Instead, you must delete the user profile, then recreate the profile without a password.
Pend Statement	A statement within a Process that indicates the end of a Process. The Pend statement is only used in Sterling Connect:Direct for UNIX and Sterling Connect:Direct for Microsoft Windows Processes. There are no parameters for the Pend statement.
Port	Specifies the 1–5-digit port number of the Sterling Connect:Direct system you want to sign on to. You do not have to supply a port number if a node property file is defined.
Port property	A node property that specifies the 1–5-digit port number of this Sterling Connect:Direct node. The default listening port is 1363 for API requests.
PNODE	Specifies the Sterling Connect:Direct network node where the Process resides (the primary node).
PNODE Password	Specifies the user password on the PNODE. This field is case-sensitive.
PNODE User ID	Specifies the user ID used as a security ID on the PNODE. This ID must be the name of an existing user account. This field is case-sensitive.

Term	Definition
Priority	Specifies the priority of a Process in the Transmission Control queue. Sterling Connect:Direct uses the Priority parameter for Process selection. Values range from 1–15. The lower the number, the higher the priority. A Process with higher priority is selected for execution before a Process with a lower priority. This parameter does not affect the priority during transmission.
Process file name	Specifies the name of the file that contains the Process.
Process Name	Specifies the 1–8 character name of the Process.
Process Number	Specifies the system-assigned number of the Process. The range is 1–99999.
Process Statement	The first statement in a Process. The Process statement defines general Process characteristics, including Process name, primary and secondary nodes, execution date and time, security parameters, accounting data, and symbolic variables.
Protect	Specifies whether an IBM RACF profile is created for a new file.
Protocol	Specifies the type of protocol for a communications mode or path, either TCP/IP or APPC.
Proxy Attempt	Specifies the Sterling Connect:Direct for UNIX local.node proxy.attempt parameter that defines if remote users can specify a dummy user ID in the SNODE ID. The default is no, where neither the local system nor the remote system requires a user ID from the other side.
Queue	Specifies which queue to select Processes from. The queues are: • All–All Processes in the TCQ. • Exec–Processes currently be executed. • Hold–Processes that are either held by the user or operator or held due to execution errors. • Timer–Processes that are scheduled for execution later, or Processes in time retry due to session errors. • Wait–Processes that are eligible for execution and are awaiting selection. The following additional queues are available for HP NonStop: • Bad–An error occurred during initialization of Process execution. This error can occur because of a security error or some other unrecoverable error. • Call–The Process executes after a connection is established with the other node. You cannot specify a start date or time. • Initial–A copy of the Process executes when you start the server. • Hold–The Process remains the Hold queue until you release it. • PExc–The Process is pending execution. • Retain–A copy of the Process is retained after execution. You can later release a copy of this Process for execution. • Rettimer–The Process executes periodically, either daily or weekly. A copy of the Process is released for execution at the end of the period specified. • Retry–Process retries after a certain interval if the error that occurred is recoverable. • Suspend–The SUSPEND PROCESS command suspends the Process. You can later release the Process for execution.
Record Categories	Specifies whether the record is related to an event or to a Process. The values are: • CAEV–The record is related to a Sterling Connect:Direct event, such as a Sterling Connect:Direct shutdown. • CAPR–The record is related to a Sterling Connect:Direct Process.

Term	Definition
Record ID	Specifies the type of statistics record generated. See the *Select Statistics Results* Help topic for a list of Records IDs
Remote C:D Platform	Specifies the type of Sterling Connect:Direct system on the SNODE.
Replace	Specifies that the files sent replace destination files with the same name.
Retain	Indicates whether Sterling Connect:Direct retains a copy of a Process after it is executed. If you specify Retain with a start time, the Process is released for execution at the specified time. Each time a retained Process is released, Sterling Connect:Direct creates a copy with a new Process number. The copy is executed, and the original Process remains in the queue. The Retain options are: • Initial–Specifies to retain the Process in the Hold queue for execution every time that Sterling Connect:Direct initializes. Do not specify a start time if you choose this option. • No–Specifies to not retain the Process after it is executed. • Yes–Specifies to retain the Process in the Hold queue after it is executed. You can release the Process for execution later or delete it. When you specify a start date and start time, set **Retain** to **Yes** to continually execute the Process at the scheduled time.
Run Job Statement	A statement within a Process that submits a job to the host operating system. This job executes concurrently with the Process. Any Process statements following the Run Job statement execute without waiting for the Run Job results. The job can execute on either the local or remote node.
Run Task Statement	A statement within a Process that executes an external program or command. The program or command must complete before any further statements in the Process are executed. Run Task produces a return code as the exit code for the program it calls. Do not call programs with the Run Task statement that require user intervention to complete. Do not use a return code 16 in any programs called by the Run Task statement, or the Run Task will fail.
Security ID	Specifies the 1–64 character security ID used by a security subsystem such as RACF subsystem.
Security Password	Specifies the 1–64 character security password required by a security subsystem such as RACF subsystem.
Select	Specifies selection criteria for copying OpenVMS PDS members. The SELECT parameters are: name–Specifies an individual member name. *–Specifies a global generic indicating that all members of the file are to be included.

Term	Definition
Selection Criteria	Specifies selection criteria for copying a set of CMS files. The format is: member | generic|(*) | (member,[newname], [NR|R])|generic,,[NR|R] (startrange/stoprange,, [NR|R])| list The values are: member–Specifies an individual file name. generic–Specifies a generic file name. (*)–Specifies a global generic. A global generic indicates that all files in the set of files are to be included. newname–Specifies a new name for a file. The newname parameter must be null if a generic name or range is used in the first subparameter position. NR–Specifies that a file does not replace an existing file of the same name at the receiving set of files. NR overrides the REPLACE option. When used with newname, NR applies to the newname and not to the original file name. When used with a generic name or with a range, NR applies to all files selected for that criterion. R–Specifies that a file replaces an existing file of the same name at the receiving set of files. When used with newname, R applies to the newname and not to the original file name. When used with a generic name or with a range, R applies to all files selected for that criterion. When using a generic and specifying NR or R, ensure that the second positional parameter (newname) is null. startrange–Specifies the first name in an alphanumeric range of files. stoprange–Specifies the last name in an alphanumeric range of files.
Servlet Information	A system property that specifies the servlet information. The default is the Sterling Connect:Direct Browser User Interface.
Session Time-out in Seconds	A system property that specifies the number of seconds before a session terminates when no requests are processed. The default is 1800 seconds.
SNODE	Specifies the secondary node to be used in this Process. The secondary node name is a 1–16 alphanumeric character name that is defined in the network map. The name can be expressed in alphanumerics or nationals (@#$) with embedded periods.
SNODE New Password	Specifies a new password for the SNODE. The user password is changed to the new value on the SNODE if the user ID and old password are correct and the SNODE supports this optional parameter. Sterling Connect:Direct does not support spaces in the password. This field is case-sensitive.
SNODE Password	Specifies the user password on the SNODE. This field is case-sensitive.
SNODE User ID	Specifies the user ID used as a security ID on the SNODE. This field is case-sensitive.
Source DISP	Specifies access to the source file during a copy operation. The values can be: SHR–The file can be opened for read-only access while it is being copied. OLD–The file cannot be opened during the transfer. The exact DISP values displayed depend on the platform.
Source File	Specifies the fully qualified name of the source file being copied. The name can be 1–256 characters long (1–8 characters for HP NonStop Kernel).
Space	Specifies the amount of DASD storage to be allocated for new files on the destination node. Specify Space for all new non-VSAM files unless you specify a Typekey file that includes Space parameters.

Term	Definition
Start Date	Specifies the day and date to execute the Process.
Start Time	Specifies the time to execute the Process.
Status	Selects Processes for viewing according to status. Not used for HP NonStop. The statuses are: • Execution (EX)–The Process is being executed. • Pending Execution (PE)–The Process is selected for execution and startup is in progress. • Waiting Connection (WC)–The Process is ready to execute, but all available connections to the SNODE are in use. • Waiting Start Time (WS)–The Process is waiting in the Timer queue because it was submitted with a start time or date that has not expired. • Held Suspension (HS)–The operator issued a delete Process request with Hold set to Yes. • Timer Retry (RE)–The Process is in the Timer queue in RE (retry) status with short-term and long-term wait times. • Held for Call (HC)–The Process was submitted with the Hold option set to Call. • Held Due to Error (HE)–A session error or other abnormal condition occurred, and the Process is being held as a result. • Held Initially (HI)–The Process was submitted with the Hold option set to Yes. • Held By Operator (HO)–The Process is held because a Change Process request with Hold set to Yes was issued. • Held By Retain (HR)–The Process was submitted with retain after execution set to Yes or Initial.
Step Label	A 1–8 character user-defined string that identifies a Sterling Connect:Direct statement. The first character must be alphabetic. Step labels are also used by Goto statements to identify branching destinations in a Process.
Stop Date	View Processes ending on this date.
Stop Time	View Processes ending at this time.
Submit Statement	A statement within a Process that submits another Process. The Process can execute on either the local or remote node.
Submitter	Specifies the node name and user ID of the user that submitted the Process. Separate the node name and user ID with a comma; for example, atlanta, user1. To specify multiple submitters, enclose each node name/user ID combination in parentheses and separate with commas; for example, (atlanta, user1), (atlanta, user2), (atlanta, user3).
Symbolic Variables	Symbolic variables are text strings in a Process which are replaced with predefined values went the Process is executed. This allows you to easily change Processes when these values changes. For example, you van define a variable &filename and declare the value to be file1.txt. Whenever the Process encounters the &filename variable, it substitutes file1.txt. If you want to use a different value, just change the &filename definition to the new file name, and the Process will use that instead.
SYSOPTS	Specifies the platform-specific system operations. These parameters specify the data type, translation tables, inherited rights, attributes, and trustees. Separate multiple UNIX SYSOPTS with colons. Separate multiple Microsoft Windows, z/OS, OS/400, OpenVMS, VM, or VSE SYSOPTS with a space. Separate multiple HP Non-Stop SYSOPTS with a comma. Refer to the *Sterling Connect:Direct Process Statements Guide* for specific SYSOPTS values.
TCP Address	Specifies the Sterling Connect:Direct for UNIX local.node tcp.api parameter that is used to monitor connection requests from the CLI or API using TCP/IP. You can specify either the host name of the Sterling Connect:Direct host computer or the IP address of the Sterling Connect:Direct host computer.

Term	Definition
TCP API Bufsize	Specifies the Sterling Connect:Direct for UNIX local.node tcp.api.bufsize parameter that defines the buffer size for transmitting data to and from a Sterling Connect:Direct CLI/API. The default is 4096 bytes.
TCP Max Time to Wait	Specifies the Sterling Connect:Direct for UNIX local.node tcp.max.time.to.wait parameter that defines the maximum number of seconds that the local node waits for a message from the remote node when using TCP/IP. When the time expires, the Process moves to the timer queue and Sterling Connect:Direct attempts to reestablish a session with the remote node. When set to 0, the wait time is unlimited, unless limited by the operating system. The default value is 0.
TCP Port	Specifies the Sterling Connect:Direct port name or number used in TCP/IP communications.
Typekey	Specifies the name of the file that contains the default file attributes used to allocate the destination file. Specify a Typekey only when you request defaults.
Unit	Specifies the unit address, device type, or user-assigned group name where the file resides or will reside. For the OS/400 platform, specifies the unit identifier of the auxiliary storage unit where the storage space for the file and file members is allocated.
Value	Specifies the completion code used for comparison in an If statement. Typically, a completion code less than 4 indicates that the Process completed successfully, completion code of 4 indicates a warning, and a completion code greater than 4 indicates the Process ended with errors.
VOL	Specifies the volume serial numbers containing the file and optional processing associated with the file.
VSAMCAT	Specifies the name of the VSAM catalog where the VSAM file resides.

Index

A

B

C

D

E

F

G

H

I

L

M

N

O

P

Q

R

S

T

U

V

X