Connect:Direct®
for Windows

Getting Started Guide

Version 4.4

Sterling Commerce
An IBM Company

Connect:Direct for Windows Getting Started Guide
Version 4.4

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Chapter 1

About Connect:Direct for Windows

Connect:Direct for Windows is an enterprise solution for secure, automated file delivery between business applications. Its session management and extended recover features help assure data delivery in support of 24 hours a day, 7 days a week business operations.

Connect:Direct for Windows links technologies, moves all types of information, and manages high-performance transfers by providing easy-to-use automation, checkpoint/restart, and error recovery. Connect:Direct offers choices in communications protocols, hardware platforms, and operating systems. It provides the flexibility to move information from mainframes to midrange systems to desktop and LAN-based workstations.

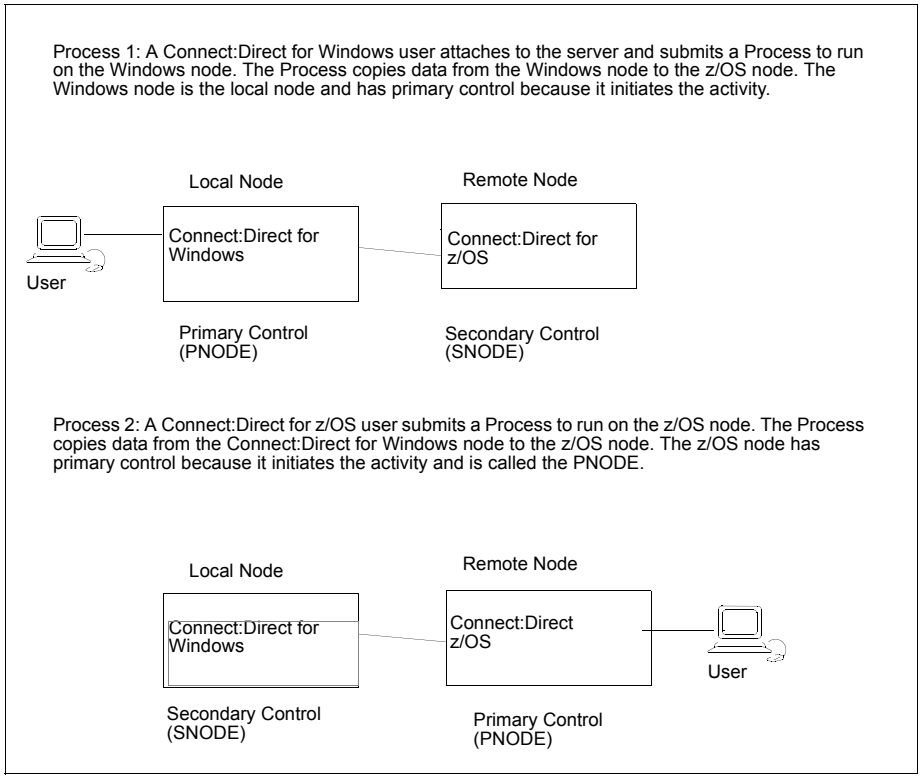
Using Nodes to Transfer Data

Each data transfer involves a local and a remote node. The active Connect:Direct server is the local node and the remote node is the partner node. The two servers (local and remote) function together to perform the work. Either Connect:Direct node initiates the work. You can submit Processes from a remote node to run on your local Connect:Direct node.

When Connect:Direct establishes a session between the local and a remote node, one is the initiator of the session and the other serves as the partner and has a secondary function. The node that initiates the session has primary control, regardless of the direction of information flow. Connect:Direct must be installed on both the local node and the remote node.

The following figure illustrates the distinction between primary control and local/remote nodes. Process monitors and statistics reports running on the local Windows node show both Processes as

they affect the local system. You are able to determine whether the local node is the initiating node or the receiving node.



Planning to Use Connect:Direct for Windows

Before you use Connect:Direct for Windows, plan how you will use it to perform your work. Complete the following tasks to use Connect:Direct for Windows:

- Configure Connect:Direct for Windows
- Define the work to perform
- Perform and manage the work that is performed

For most tasks, you have a choice on the tool to use to create the component. Connect:Direct Requester is one of the available tools. Its graphical interface makes it easy to configure Connect:Direct for Windows and create Connect:Direct Processes. Because you can use this tool to perform all functions necessary to use Connect:Direct for Windows, this document provides instructions on using Connect:Direct Requester to create and submit Connect:Direct Processes, view Process activity and output, and perform administrative tasks such as editing the network map, modifying initialization parameters, and defining user authorizations.

Configuring Connect:Direct for Windows

Before you begin using Connect:Direct for Windows, first configure your environment. To prepare to use Connect:Direct to submit Processes, perform the following tasks:

- Configure the Local Node—Configure a local definition for each server you install at the local site, define a user ID for each user who will access the local node, define user authorities for each user ID and if remote users need to access the local network, define remote user proxies. Use Connect:Direct Requester to configure the local node.

  When you copy data from a local domain to another domain on a network, the Domain user ID and password must be exactly the same on both domains and a trust between the two domains must exist.

- Configure the Network Map—The network map identifies the remote nodes that each local node can communicate with and the communications information needed to establish a connection. Use Connect:Direct Requester or the Configuration tool to configure the network map.

Defining the Work to Perform

After you determine what tasks to perform, you define Processes and work lists. A Process provides instructions, called *statements*, for transferring files, running programs, submitting Processes on the remote node, and altering the sequence of Process step execution. It also controls the execution of the Process. Use Connect:Direct Requester for Windows to define Processes.

You create Processes and store them in a file for repeated use. You can customize a Process when you submit it by temporarily changing its controlling parameters (such as the remote node) and by using symbolic substitution variables. You can submit Processes to any Connect:Direct node. The local node and a remote node work together to execute the Process.

If you want to define the work to perform but you are not ready to submit the work for execution, define a work list. A work list is a document containing a sequential list of Process submit requests. It can contain the four types of ad hoc Processes that you can submit to the Connect:Direct server: Send/Receive File, Submit Process, Run Task, or Run Job. Using work lists can save you time and effort by automating routine or repetitive submission tasks. You can build a work list to periodically submit related work as a single work flow. Your work list can serve as a library of related or unrelated Processes.

Performing the Work

Once you define the Processes necessary to perform the work, you are ready to begin transferring files. You make requests through a computer that accesses the Connect:Direct server across a communications network. Files that you want to transfer must reside on or be accessible to the server.

The following events occur when you begin the file transfer process:

- The commands you issue are passed to the appropriate API.
- The API verifies that they are syntactically correct and that they contain all the required information to execute the request. It then packages and ships the commands across the network to the server.

- Command processors on the server either execute the commands or pass them on to the main components of the server where the actual data transfer, statistics management, and other services take place.
- The Connect:Direct server packages the results of the command and routes them back across the network to the originating workstation. You can then use the management tools to display the results of the Process.

Use Browser User Interface, Connect:Direct Requester, or the Command Line Interface to control Processes.

Managing the Work

As Processes are submitted, the Transmission Control Queue (TCQ) holds information about Connect:Direct Processes that are currently executing or scheduled to execute in the future. The TCQ contains four logical queues: Execution, Wait, Timer, and Hold.

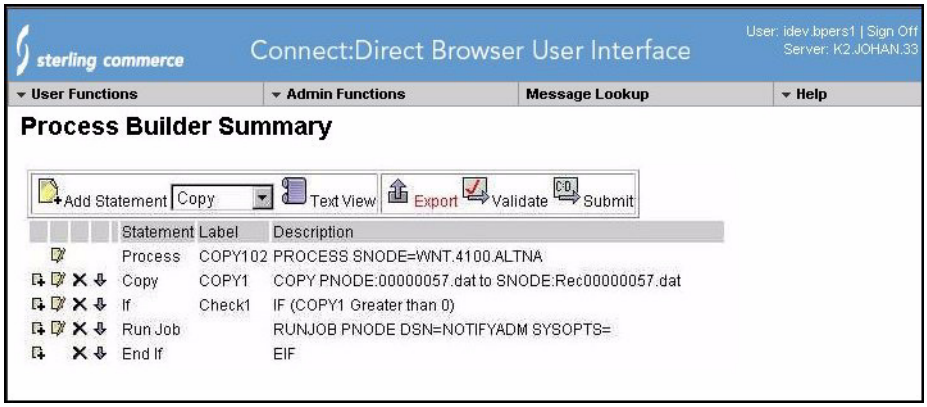
Connect:Direct places the Process in the appropriate queue based on Process control parameters that affect scheduling. Connect:Direct selects Processes in a priority-based manner for execution as sessions are available.

Connect:Direct for Windows provides tools to allow you to manage Processes. These tools include:

- Process Monitor—Use this tool to view Processes in the Transmission Control Queue (TCQ), release held Processes, change the status of a Process, and delete a Process.
- Process Notification Utility—Use this utility to change the notification method you defined when you installed Connect:Direct for Windows to notify users of Process execution.
- Windows Event Logging—Use this utility to log informational, warning, and error messages that are generated.
- Message Lookup—If you need to troubleshoot the meaning of an error message, use this utility to view more explanation about an error message.
- SNMP—If you want to use Microsoft Windows SNMP to capture messages, you must identify which messages you want to include and determine if messages are trapped or logged to the event log.
- CRC checking—If you want to enable CRC checking, a CRC is generated for the entire buffer, including the header. The SNODE calculates the CRC value and compares it to the CRC value in the TCP header. If the values do not match, the Process is terminated. When Secure+ Option is enabled during a session, CRC checking is disabled.
- CLI—The command line interface provides commands to access queues and manage Processes. These commands enable you to control Process execution, view Process status and results, and affect the Connect:Direct server. Issue these commands through or in a native command text format through the Applications Programming Interface (API).
- Connect:Direct Browser User Interface—Connect:Direct Browser User Interface allows you to build, submit, and monitor Connect:Direct Processes from an Internet browser, such as Microsoft Internet Explorer.

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

Connect:Direct Browser is distributed on CD-ROM with Connect:Direct for z/OS, Connect:Direct for Windows, Connect:Direct for UNIX, Connect:Direct for HP NonStop, and Sterling Control Center. It can also be downloaded from the Sterling Commerce Web site. Connect:Direct Browser is installed on a Web server and can be accessed by administrators and users through a URL. The following example shows the page used to graphically build a Process:



To learn more about Connect:Direct Browser, see the documentation on the Connect:Direct Browser CD-ROM or available online from the Sterling Commerce Documentation Library.

- Transmission Control Queue—Connect:Direct stores submitted Processes in the Transmission Control Queue (TCQ). The TCQ is divided into four logical queues: Execution, Wait, Timer, and Hold. Processes are run from the Execution queue. Connect:Direct places a Process in the appropriate queue based on Process statement parameters, such as the **hold**, **retain**, and **startt** parameters.

  Connect:Direct runs Processes based on their priority and when the Process is placed in the Execution queue. Higher priority Processes are selected for execution ahead of Processes with a lower priority. You can access the queues and manage the Processes through Connect:Direct commands.

- File Agent—Connect:Direct File Agent is a feature of Connect:Direct which provides unattended file management. File Agent monitors *watched* directories to detect new files. When File Agent detects a new file, it either submits a default Process or evaluates the file using rules to override the default Process and to determine which Process to submit. You create rules to submit different Processes based on the following properties:

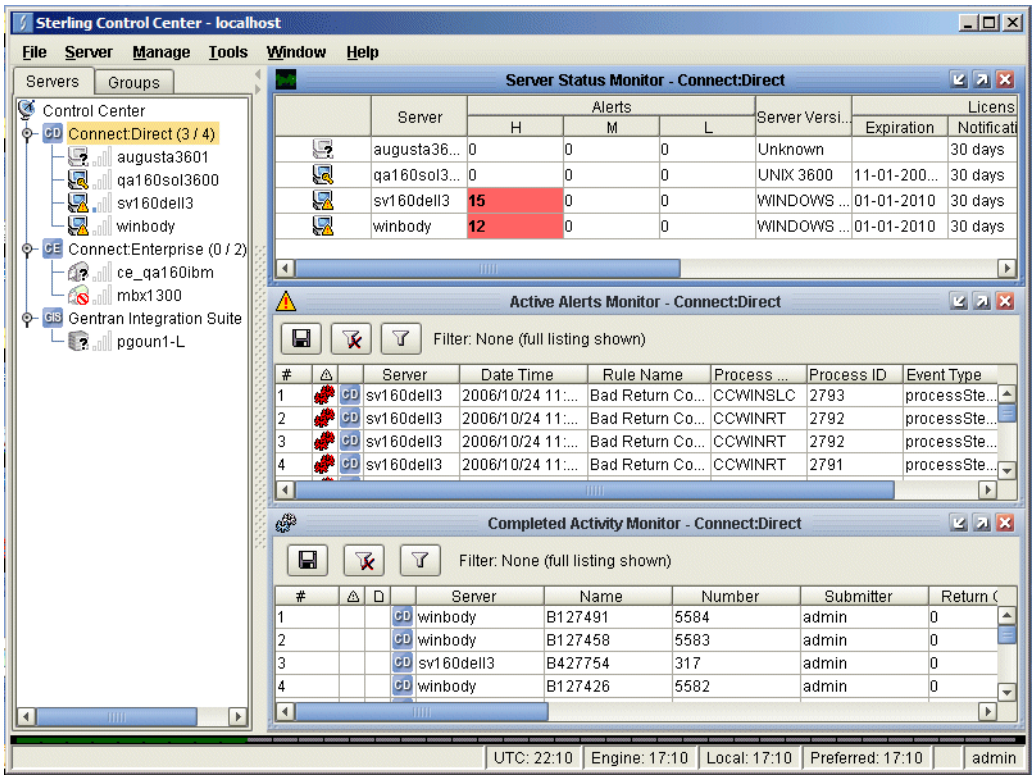
  - Specific or partial file names
  - File size
  - System events

  You create the Processes used by File Agent on Connect:Direct; you cannot create them using File Agent.

  To achieve optimum performance, configure File Agent to communicate with the Connect:Direct node where it is installed. File Agent can be installed on UNIX, Windows, and z/OS operating systems. For information to help you plan how to implement File Agent, see the *Managing Files with Connect:Direct File Agent* chapter in the *Connect:Direct for*

Windows Getting Started Guide. The Connect:Direct File Agent Help contains instructions for configuring File Agent.

- Sterling Control Center —Sterling Control Center is a centralized management system that provides operations personnel with continuous enterprise-wide business activity monitoring capabilities for Connect:Direct for z/OS, UNIX, Windows, HP NonStop, Select, and OS/400 (iSeries) servers, Connect:Enterprise for UNIX and z/OS servers, and Gentran Integration Suite (GIS) servers. Sterling Control Center enables you to:
  - Manage multiple servers
    - Group individual servers into server groups for a single view of system-wide activity
    - View status and statistics on active or completed processing
    - Suspend, release, and handle Connect:Direct Processes on z/OS, UNIX, Windows, Select, and HP NonStop platforms
    - Stop Connect:Direct servers on z/OS, Windows, HP NonStop, OS/400, and UNIX platforms.
  - Monitor service levels
    - View processing across Connect:Direct for z/OS, UNIX, Select, Windows, HP NonStop, and OS/400 (iSeries) servers, Connect:Enterprise for UNIX and z/OS servers, and GIS servers within your network, and retrieve information about active and completed processing



- Receive notification of data delivery events that occur or do not occur as scheduled
- Define rules based on processing criteria that can generate an alert, send an e-mail

notification, generate a Simple Network Management Protocol (SNMP) trap to an Enterprise Systems Manager (ESM), run a system command, or issue a Connect:Direct server command

- Monitor for alerts, such as a server failure or late-starting Process
- Create service level criteria (SLCs) that define processing schedules, monitor Processes, files within Processes, and file transfers for compliance with these schedules, and generate alerts when the schedules are not met

- Analyze key operational metrics through reports to document and analyze processing activity
- Create customized reports based on criteria you define
- Validate the authenticity of a user logging on to Sterling Control Center, using one or more of four authentication methods, including password validation, host name identification, Windows domain, and TCP/IP address
- Identify additional Connect:Direct servers that may need to be monitored based on communications with a currently monitored server using the Guided Node Discovery feature

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

- Ensuring that critical processing windows are met
- Reducing impact on downstream processing by verifying that expected processing occurs
- Providing proactive notification for at-risk business processes
- Consolidating information for throughput analysis, capacity planning, post-processing operational or security audits, and workload analysis
- Reducing the risk of errors associated with manual system administration, including eliminating individual server logon to view activity, and the need to separately configure each server for error and exception notifications

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

Restarting Processes

Several facilities are provided for Process recovery after a system malfunction. The purpose of Process recovery is to resume execution as quickly as possible and to minimize redundant data transmission after a system failure. The following Connect:Direct facilities are available to enable Process recovery:

- Process step restart—As a Process runs, the steps are recorded in the TCQ. If a Process is interrupted for any reason, the Process is held in the TCQ. When you release the Process to continue running, the Process automatically begins at the step where it halted.

- Automatic session retry—Two sets of connection retry parameters are defined in the remote node information record of the network map file: short-term and long-term. If you do not specify a value for these parameters in the remote node information record, default values are used from the local.node entry of the network map file. The short-term parameters allow immediate retry attempts. Long-term parameters are used after all short-term retries are attempted. Long-term attempts assume that the connection problem cannot be fixed quickly and retry attempts occur after a longer time period, thus saving the overhead of connection retry attempts.
- Checkpoint/restart—This feature is available with both the **copy** statement and the **run task** statement. To activate the checkpoint/restart feature in the **run task** statement, specify a **restart=yes** parameter in the initialization parameters file.

  Connect:Direct records the file positioning checkpoint information in the checkpoint/restart file at specified intervals during a **copy** operation. If a **copy** step is interrupted for any reason, it can be restarted at the last checkpoint position. You can code the **restart** parameter on the **run task** step or in the **runtask.parms** record in the initialization parameters file. If you add the **restart** parameter on the **run task** step, it overrides the initialization parameter. When you add **restart=yes**, Connect:Direct runs the program again. When you code **restart=no**, the Process skips the **run task** step when the Process is restarted. Both the PNODE and the SNODE must support checkpoint/restart.
- Intelligent session restart—When an error occurs on a node connection and multiple Processes are scheduled for the node, this feature permits a session retry on only the first Process submitted. The session retry is attempted on the first Process while all other Processes are placed in the Timer queue. After a session is established for the first Process, the other Processes are released so that they can be executed.

  If a connection is lost during Process execution, one Process is placed in the Timer queue in RE or retry status using the short and long-term connection retry wait intervals and retry counts. All other Processes that are executing on the node terminate and are placed in the Timer queue with RE status.

  If a Process is submitted to a Connect:Direct node for which a session cannot be established, the Process is placed on the Timer queue. Any session retry attempt that is already underway will continue. If all attempts have already been exhausted, then nothing else is done.

  If a connection to a remote Connect:Direct node is reestablished, the Process is restarted and establishes a connection with the remote node. The SMGR notifies the PMGR that a session has been established. Each Process in the TCQ Timer queue for this node is released, scheduled, and executed according to Process priority and session class.

  If a connection cannot be reestablished with the remote node, all Processes for the remote node are placed in the Hold queue in HE (hold due to error) status.
- Short-term and long-term retry parameter definitions—Enables a Process, which was unable to execute because a file that it called was unavailable, to be retried at a later time. If a file allocation error occurs when a Process is executing on either the local or the remote node, and the file allocation error is identified as a condition to retry, the Process is placed in the Timer queue. The Process is then retried using the short-term and long-term retry parameter definitions.

Connect:Direct for Windows Documentation

See *Connect:Direct for Windows Version 4.4.00 Release Notes* for a complete list of the product documentation.

About This Guide

Connect:Direct for Windows Getting Started Guide is for programmers and network operations staff who install, configure, and maintain the Connect:Direct for Windows version 4.4 product.

This guide assumes knowledge of the Windows operating system, including its applications, network, and environment. If you are not familiar with the Windows operating system, refer to the Windows library of manuals.

Task Overview

The following table directs you to the information required to perform the tasks documented in this guide:

Task	For More Information, See
Preparing to install Connect:Direct for Windows	Chapter 2, *Preparing for the Installation*
Installing Connect:Direct for Windows	Chapter 3, *Installing Connect:Direct for Windows*
Uninstalling Connect:Direct for Windows	Chapter 3, *Installing Connect:Direct for Windows*
Automating product installation	Chapter 4, *Automating Connect:Direct for Windows Installations*

Chapter 2

Preparing for the Installation

Before you install Connect:Direct for Windows, you must first ensure that all of the system hardware and software, including third-party software, are configured. Pre-installation tasks include the following:

- Ensure that the system meets product hardware and software requirements
- Define users for Windows
- Configure and test TCP/IP or SNA connectivity, if necessary
- Install and configure SQL Server for database support, if necessary
- Install and configure SNMP, if necessary
- If you plan to use NT Broadcast to send user notification messages, ensure that NT Broadcast is configured
- Complete the installation worksheets

Product Requirements

Connect:Direct for Windows requires certain hardware and software. Refer to the *Connect:Direct for Windows Release Notes* Version 4.4.00 for the product hardware and software requirements.

Requirements for Copying Files to and from Network Servers

When you are ready to begin creating Processes, be aware that Connect:Direct allows you to share information across computers. This means that all of the data does not have to be located on the Connect:Direct server. Observe the following requirements to enable copying files among network servers:

- Files to be copied must reside on a file server that is accessible by Connect:Direct for Windows.
- You must provide a valid user ID and password for the file server where the files reside. Use a local node ID when you submit a Process on the local node; use a remote node ID when you

submit a Process on a remote node.You can supply the information as part of the **Process** statement or the **submit** command or use the Login Connection Utility to provide this information.

- If a Process has multiple **copy** steps, the local node ID or remote node ID parameter must be appropriate for each file server from which, or to which you transfer a file. This method is necessary because the parameters apply to the Process as a whole and not to individual **copy** steps.
- Specify the Universal Naming Convention (UNC) form of the file name if the file is not on a drive directly connected to the same Windows server as Connect:Direct. If the file is on the Windows server where Connect:Direct is installed, you can specify the drive letter.

The UNC name format is as follows:

```
\\servername\share point name\filename
```

- The *servername* is the name of the Windows server where data resides.
- The *share point name* represents the name under which the remote Windows server shares the directory you want to access.
- The *filename* specifies the name of the file and any subdirectories, if necessary.

Configuring Windows User Privileges

Connect:Direct for Windows must be installed by a Windows Administrator (for example, sysadmin). However, the ongoing administration of Connect:Direct for Windows requires only that the administrator be a member of the Windows Users group and be defined in the Connect:Direct for Windows User Authorities with administrative privileges based on the admin template.

After Connect:Direct for Windows is installed, attach to Connect:Direct for Windows as sysadmin and add a user (or users) as a Connect:Direct for Windows administrator (for example, cdadmin) with the user right, “Log on locally.” Then, delete “sysadmin” from the Connect:Direct for Windows User Authorities.

Refer to the Microsoft Windows system documentation for instructions on setting up an administrator account. Refer to the *Connect:Direct for Windows System Guide* for information on configuring User Authorities.

Customizing a Connect:Direct Log On Account

Connect:Direct for Windows is installed under the Local System account.

Caution: Enabling the option **Allow service to interact with desktop** when running Connect:Direct under the local System account represents a security risk and may allow a user to gain access to services that interact with the desktop.

If you want to create a custom account for Connect:Direct, assign this account the following privileges:

- **Log on as service—**Set this privilege to allow a Windows service to run in the context of the specified user instead of running in the context of the local system account.
- **Replace a process level token—**Turn on this privilege to allow Connect:Direct for Windows to submit Processes on behalf of logged on users.
- **Be a member of the Local Administrator Group**—If you want to allow the node to update its entry in Active Directory, the account must also be a member of the Enterprise Admin group.
- **Secure+ directory**—Give the account full permissions to the Secure+ directory.

Note: These privileges are stored locally, even if the computer is a member of a domain. As a result, privileges cannot be set on the domain controller and granted to all computers on the domain.

Once you have created the account, you assign it as the account for Connect:Direct. To identify the custom log on account:

1. Select **Start > Settings > Control Panel > Administrative Tools > Services**.
2. Double-click the Connect:Direct server.
3. Click the **Log On** tab.
4. Select **This account** to identify the custom log on account.
5. Type the account name to use for logging on to Connect:Direct, or click **Browse** and double-click the user account to use for logging on.
6. Type the password on the **Password** box.
7. Confirm the password in the **Confirm password** box.
8. Click **OK**.

Configuring Connectivity

Before you install Connect:Direct for Windows, you must configure connectivity for the TCP/IP or SNA environment.

TCP/IP Connectivity

To enable TCP/IP connectivity, configure each computer with a valid IP address, IP subnet, and IP gateway. If the communications partner is on another subnet or network and a firewall is between the communications partner and the Windows computer, verify that the Access Control Lists (ACLs) are correctly configured. Contact your Firewall/Security Administrator for more information on configuring the ACLs for your firewall.

SNA Connectivity

If you plan to use SNA network communications connectivity with Connect:Direct for Windows, install and configure the SNA software before installing Connect:Direct for Windows. Use the worksheet, *SNA Configuration Worksheet* on page 41 to identify the parameters necessary to configure SNA.

In addition, create an active connection between the local and remote nodes. Connect:Direct for Windows requires the following information for the local and remote SNA networks in order to configure a peer- or host-based partner SNA connection:

- Network name
- Mode name (local system only)
- Control point name
- Node ID
- Network address (remote system only)
- LU name and LU alias name (these names may be the same value; Connect:Direct uses the LU alias name)

Note: Connect:Direct for Windows supports only independent LU6.2.

Refer to the *SNA Server/Host Configuration Worksheet* on page 42 when mapping SNA connection parameters between Connect:Direct for Windows and a host system.

Note: Consult the SNA product documentation or contact your SNA vendor for any questions about configuring the SNA communications software.

The Connect:Direct Workstation Online Connectivity tool is an SNA configuration tool available on the Connect Support Website at *http://www.sterlingcommerce.com* from the **Connect Support > Connect:Direct for Windows > Connectivity** section. This tool generates sample SNA configuration information to assist you in configuring your SNA software and configuring Connect:Direct for SNA connectivity. The Connect:Direct Workstation Online Connectivity tool only generates example independent LU6.2 Token Ring SNA configurations at this time. Refer to the *Connect:Direct for Windows Version Release Notes* for more information about accessing the Connect Support Website.

Installing and Configuring Database Software

The database is used to log Process statistics information, internal messages, and the Process control queue. Determine which software you plan to use as the database software and, if necessary, install the database software on the local computer, or a network drive or remote computer that is accessible from the locally installed Connect:Direct node.

MySQL is installed and configured automatically during the Connect:Direct for Windows installation. If you want to use SQL Server as the database for Connect:Direct for Windows, you

must provide/install SQL Server and follow the steps outlined in Chapter 3, *Installing Connect:Direct for Windows* to select it as the database type and provide information requested during the Connect:Direct for Windows installation. In addition, consider the following:

- If you plan to use MySQL as the database, no preinstallation configuration is required.
- If you plan to use Microsoft SQL Server as the database, set the SQL Server to start automatically in the Services option of the Control Panel.

Automating the Connect:Direct for Windows Installation

You can automate Connect:Direct for Windows installations using an initialization (INI) file. You can implement automated installations by specifying a path to the INI file from the command line of the Windows setup. See Chapter 4, *Automating Connect:Direct for Windows Installations*, for information about automating installations.

Completing the Connect:Direct Worksheets

To help you prepare for the installation, gather the information you need before you begin. Record the installation information in *Connect:Direct for Windows Installation Worksheet* on page 39. After you have completed the installation worksheet, use it as a guide to install Connect:Direct for Windows.

Complete the following worksheets:

- The *Connect:Direct for Windows Installation Worksheet* on page 39 to identify settings necessary for a basic installation.
- The *SNA Configuration Worksheet* on page 41, if you plan to configure SNA software.
- The *SNA Server/Host Configuration Worksheet* on page 42, if you plan to set up and configure an SNA connection between the host and the SNA server.

Chapter 3

Installing Connect:Direct for Windows

Once you complete the installation worksheets, you are ready to install Connect:Direct for Windows.

When you perform the installation, you can install all Connect:Direct for Windows components or you can install selected components. Choose from the following components:

- Connect:Direct for Windows server—Performs the functions issued from the user interface. If you want a dedicated server, install only this component. It also includes the Command Line Interface (CLI), a tool that allows you to issue commands to the server.
- Connect:Direct for Windows Requester—A graphical user interface that makes it easy to configure the Connect:Direct environment, create Processes, and submit commands to the server.
- Connect:Direct File Agent—A component that scans watched directories for the appearance of files. When a file is detected in a watched directory, Connect:Direct for Windows either submits a default Process to Connect:Direct or performs the actions specified by the rules for the file. For more information about using File Agent to manage files, see *Managing Files Using Connect:Direct File Agent* in the *Connect:Direct for Windows System Guide*.
- Connect:Direct Secure+ Option—A separately purchased option that allows you to implement security into a Connect:Direct operation. Secure+ must be installed on both nodes in order to activate the security software.
- Software Developer's Kit (SDK)—A separately purchased option that allows programmers to customize the functions of Connect:Direct for Windows.

After you install Connect:Direct for Windows, the TCP/IP information, database information, and notification method is defined in the initialization parameters. To change TCP/IP information, the notification type, or the Connect:Direct database, refer to the *Connect:Direct for Windows System Guide*.

Choosing an Installation Type

You choose the installation type to meet your needs. For example, if you want to install a standalone server, install only the Connect:Direct for Windows server software. If you want to use a computer as a server and a workstation, install both the server software and Connect:Direct Requester. If you

purchase Secure+ Option, use the custom installation to install both Connect:Direct for Windows and Secure+ Option.

Additionally, if you have a large network of computers where you need to install Connect:Direct for Windows, you can set up a silent installation. To configure a silent installation, install Connect:Direct for Windows on one computer. Then use the initialization parameters file that was created during the installation to create a silent installation. Send the modified INI file to each computer on which to perform the silent installation.

Icons are displayed by each component to illustrate the selected installation type. The following table shows the icons and installation types:

Icon	Description
	The component is installed to the local drive.
	Selected features of the component are installed.
	The component is not installed.
	Adds an icon to the desktop of the selected computer. The component is only installed when the user clicks the program icon to run the program.
	The component is installed on the network.

By default, Connect:Direct is installed in the following directory:

C:\Program Files\Sterling Commerce\Connect:Direct v4.4.00*component*

where *component* is the name of the component being installed. If you would like to install Connect:Direct for Windows in another location, select the Custom setup type during the installation and click **Change** in the setup panel. The remaining procedures use the default installation path.

Obtaining and Installing a Temporary or Permanent License Key File

The temporary and permanent license key file must be applied on the computer where Connect:Direct for Windows is installed.

To apply the temporary and permanent key file:

1. Copy the temporary license key file from the Sterling Commerce e-mail to the C:\Program Files\Sterling Commerce\Connect Direct v4.4.00\server directory.
2. Rename the temporary license key file to **license.key**.

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

3. To obtain a permanent license key, use the CD System ID Utility. To run the CD System ID Utility:
   a. Click **Start>Programs>Sterling Commerce Connect:Directv4.4>CD System ID Utility**. The **Connect:Direct System ID Utility** main window displays the CPU-ID and number of processors.
   b. To save the information, click **File>Save**.
   c. Type a name for the file and click **Save**.
   d. Click **File>Send email**.
   e. Type requested information in the e-mail template and click **Send**.

      You will receive the permanent license key file through e-mail in approximately 24 to 48 hours.
4. Make a copy of the original permanent license key file and keep it in a safe place.
5. To replace the temporary license key with the permanent license key file, repeat steps 1 and 2.

Starting the Installation

To begin the Connect:Direct for Windows installation:

1. Insert the Connect:Direct for Windows CD into the CD-ROM drive or double-click the setup.exe file extracted from the file downloaded from ESD Portal.
2. If the Autorun option is enabled for the CD-ROM drive, the Connect:Direct for Windows installation setup detects the type of Windows operating system installed on your computer and automatically starts the installation. If the Autorun option is disabled, perform the following steps:
   a. Click **Start** and then click **Run**.
   b. On the Run dialog box, click **Browse**.
   c. On the Browse dialog box, select the drive mapped to your CD-ROM drive from the **Look in:** field drop-down box.
   d. Double-click **Setup.exe**. The program returns to the **Run** dialog box.
   e. Click **OK**.
3. On the Welcome dialog, click **Next**.
4. Do one of the following:
   a. To install Connect:Direct Server and Requester, select **Typical** and click **Next**. Go to *Upgrading Installation* on page 26 to complete this installation.
   b. To install Connect:Direct for Windows and Secure+ Option, select **Custom** and click **Next**. Go to *Completing the Custom Installation* on page 24 to complete this installation.

Completing the Typical Installation

To complete the Connect:Direct for Windows typical installation:

1. Select one of the following from the **Configure Connect:Direct for Windows Server** dialog box:
   - **Default**—To use the default settings when installing the server and click **Next** to continue.
   - **Custom**—To manually enter the configuration settings and click **Next** to continue. Go to the procedure, *Completing the Custom Installation* on page 24.
   - **Upgrade**—To upgrade an existing installation and use the settings defined in the previous installation and click **Next** to continue. Go to step 16 on page 26.
2. The **License Management** dialog box is displayed.Click **Browse** and select the locate license file that is provided to you by Sterling Commerce. The license file is copied to the C:\Program Files\Sterling Commerce\Connect:Direct v4.4.00\server folder. Click **Next**.
3. The **Configure MySQL** dialog box is displayed. Configure MySQL to capture statistics, messages, and TCQ information by providing the port number and password. Click **Next**.
4. The **Ready to Install the Program** dialog box is displayed. Click **Install**. As message informs you that Connect:Direct for Windows is being installed.
5. The **Finish** dialog box has a check box for automatically starting the Connect:Direct Requester. If you do not want to start Connect:Direct Requester, deselect this option. Click **Finish**.

Completing the Custom Installation

To complete the Connect:Direct for Windows custom installation:

1. After selecting **Custom** and clicking Next, the Custom Setup dialog box is displayed. The Connect:Direct for Windows Server and Requester software will be installed automatically.
   - To install Secure+ Option, click the icon next to Secure+ and identify the type of installation to perform.
   - MySQL is the default database option. If you plan to use Microsoft SQL Server, you do not need to install MySQL. Click the icon next to MySQL and select the red X to make this feature unavailable.
2. The default installation path of Connect:Direct for Windows is C:\Program Files\Sterling Commerce\Connect Direct v.4.4.00\. If you want to change the installation path:
   a. In the **Custom setup** dialog box, highlight **Server** and click **Change**. A dialog box is displayed to allow you to choose a different installation location.
   b. After you choose the destination location, click **OK**.
3. After selecting which components to install, click **Next**. If you have chosen to install Secure+ Option, important information about configuring Secure+ Option is displayed. Read the message and click **Next** to continue.

4. The **Configure Connect:Direct for Windows Server** dialog box is displayed. Select one of the following:
   a. **Default**—To use the default settings when installing the server, and click **Next**. Go to *Upgrading Installation* on page 26.
   b. **Custom**—To manually enter the configuration settings, and click **Next**.
   c. **Upgrade**—To upgrade an existing installation and use the settings defined in the previous installation and click **Next** to continue.
5. If you selected the **Custom** installation option, the **Enter Local Node Name** dialog box is displayed showing the name of the local node, which is defined at the computer where you are installing Connect:Direct for Windows. If you want to use a different local node name, type the alternate node name in the field provided and click **Next**.
6. The **License Management** dialog box is displayed. Click Browse and select the license file which is provided to you by Sterling Commerce. The license file is copied to the C:\Program Files\Sterling Commerce\Connect Direct v4.4.00\server folder. Click **Next**.
7. You are prompted to configure either MySQL or Microsoft SQL Server to capture statistics, messages, and TCQ information, depending on whether you deselected MySQL as the default database.
   - MySQL—Type the port number and the password and click **Next**.
   - Microsoft SQL Server—Select a SQL Server from the list or click **Browse** to locate one. Specify how to connect using one of the following and then click **Next**:
     - Windows authentication
     - Server authentication using the specified **User ID** and **Password**
8. On the **Service Account Information** dialog box, the privileges of the Local system account are displayed. You have the option of specifying a different service account for security reasons. To specify a different account, type:
   - **Service Account** name
   - **Service Password**
   - Verify the password
9. To configure TCP/IP as the connection method, type or select the following information:
   - Node-to-Node IP Address
   - Node-to-Node Port
   - User Interface IP Address
   - User Interface Port

   Click **Next**.
10. If you installed SNA, the **Enter SNA Information** dialog box is displayed. To configure SNA support:
    a. Select **Configure SNA**.
    b. Type the local LU name in the **Local LU Name** field.
    c. Type the network name or ID in the **Network Name (NET ID)** field.

d. Type the mode name in the **APPC Mode Name** field.

e. Click **Next**.

11. The **Register with Active Directory** dialog box is displayed. If you want to use Active Directory, select **Register Client Connection Settings** and click **Next**.
12. The **SNMP and Event Logging** dialog box is displayed. To configure SNMP support:
    a. To enable the SNMP extension agent, select **Enable Connect:Direct SNMP Extension Agent**.
    b. To enable event logging, select **Enable SNMP Event Logging.**
    c. Click **Next**.
13. The **Notifications** dialog box is displayed. To configure notification support:
    a. To enable Windows broadcasting, select **NT Network Broadcast**.
    b. To enable SMTP, select **SMTP**.
    c. Click **Next**.
14. The **Imported Configurations Files** dialog box is displayed. To use a network map or user authorities that you defined for previous versions of Connect:Direct, click **Browse** and select the network map to import or the user authority configuration file to import. Click **Next**.
15. The **Ready to Install the Program** dialog box is displayed. Click **Install**. A message informs you that Connect:Direct for Windows is being installed.
16. If you installed Connect:Direct Requester, the **Finish** dialog box has a check box that automatically starts Connect:Direct Requester. If you do not want to start Connect:Direct Requester, deselect this option. Click **Finish**.

Upgrading Installation

If you selected the option to Upgrade from a previously installed version of Connect:Direct:

1. Select a node to upgrade in the **Installed Nodes** drop down box. Click **Next** to continue.
2. An Information box is displayed stating, “MS-Access database is no longer supported. The Access database will be migrated to MySQL Server.” Click **OK** to continue.
3. The **Configure MySQL Server** dialog box is displayed. Configure MySQL to capture statistics, messages, and TCQ information by providing the port number and password. Click **Next**.
4. The Upgrade Connect:Direct Options dialog box is displayed. If you want to keep the previous version of Connect:Direct installed, select the option to keep the previous version. Click **Next**.
5. The Ready to Install the Program dialog box is displayed. Click **Install**. A message informs you that Connect:Direct for Windows is being installed.
6. The **Finish** dialog box has a check box for automatically starting the Connect:Direct Requester. If you do not want to start Connect:Direct Requester, deselect this option. Click **Finish**.

Modifying, Repairing, and Installing Connect:Direct for Windows Components

After you install Connect:Direct for Windows, you can change the features you installed including repairing a component that has become corrupted, removing an installed component, or installing an additional component. After you install Connect:Direct the first time, future installation attempts identify this as a second installation.

To add, remove, or repair a Connect:Direct component:

1. Take one of the following actions, depending on how you obtained Connect:Direct for Windows:
   - Insert the Connect:Direct for Windows CD into the CD-ROM drive.
   - Navigate to the setup.exe file in the ESD installation file.
2. If the Autorun option is enabled for the CD-ROM drive, the Connect:Direct for Windows installation setup detects the type of Windows operating system installed on your computer and automatically initiates. If the Autorun option is disabled on your Windows computer, perform the following steps:
   a. Click **Start** and then click **Run**.
   b. On the **Run** dialog box, click **Browse**.
   c. On the **Browse** dialog box, select the drive mapped to your CD-ROM drive from the **Look in:** field drop-down box.
   d. Double-click **Setup.exe**. The program returns to the Run dialog box.
   e. Click **OK**.
3. On the **Welcome** dialog, click **Next** to continue the installation.
4. To install additional Connect:Direct for Windows components:
   a. Select **Modify** to install an additional Connect:Direct feature and click **Next**.
   b. Click **Next** to continue the modification process.
   c. Select the components to modify and click **Next**.
   d. Click **Install**.
   e. Click **Finish** to complete the modification.
5. To repair an installed Connect:Direct for Windows component:
   a. Select **Repair.**
   b. Click **Next**.
   c. Select the components to modify and click **Next**.
   d. Click **Install**.
   e. Click **Finish** to complete the repair.
6. To remove an installed Connect:Direct for Windows component:
   a. Select **Remove** to uninstall a Connect:Direct component.
   b. Select the components to modify and click **Next**.

c. Click **Next**.

d. Click **Remove**.

e. Click **Finish** after the components have been removed.

Installing Connect:Direct File Agent

When you install Connect:Direct File Agent, Java Runtime Environment (JRE) is automatically installed. To install File Agent:

1. Insert the Connect:Direct for Windows CD into the CD-ROM drive or locate the files you extracted from ESD Portal, and double-click the FileAgentInstall.exe.
2. From the **Introduction** dialog box, click **Next**.
3. If you want to install File Agent in a selected location, click **Choose** and identify the location for the File Agent installation.
4. Click **Next**, then click **Install**.
5. When the installation is complete, click **Done**.

Uninstalling Connect:Direct for Windows

The Connect:Direct for Windows Uninstall program completely removes the application, its components, Connect:Direct Requester and Connect:Direct for Windows server, program folder, and program items.

To uninstall the Connect:Direct Server program and all of the server utilities:

1. Click **Start/Programs/Settings/Control Panel/Add-Remove Programs.**
2. Highlight **Connect:Direct for Windows** and click **Remove**.
3. Click **Yes** to confirm the removal of this program.
4. Click **Finish** to complete the uninstallation.
5. Click **OK** to close the **Add/Remove Programs Properties** dialog box.

Adding Initialization Parameters to Support Firewall Navigation

If you communicate with a trading partner using a firewall, set two initialization parameters to support it. You assign a specific TCP/IP source port number or a range of port numbers with a particular TCP/IP address or addresses for outgoing Connect:Direct sessions. Setting these

parameters allows controlled access to a Connect:Direct server if it is behind a packet-filtering firewall without compromising security.

To implement the firewall navigation:

1. Coordinate IP addresses and associated port assignments with your firewall administrator.
2. Add the following parameter to the Local Node Characteristics section of the initialization parameters file:
3. tcp.src.ports=(*valid IP address/optional subnet mask* | *valid IP address pattern*, *associated port number* | *associated range of port numbers* | *associated port number, associated range of port numbers*)
4. Apply the new initialization parameter.
5. A second parameter called tcp.src.ports.list.iterations is automatically added to the Local Node Characteristics section during installation and has a default value of 1.

   Refer to the following table for a description and valid values for these parameters:

Parameter Name	Parameter Definition	Valid Values
tcp.src.ports	Specifies an IP address or multiple addresses and the ports permitted for the address when going through a packet-filtering firewall.	Valid IP address with an optional mask for the upper boundary of the IP address range and the associated outgoing port number or range of port numbers for the specified IP address, for example: (199.2.4.*, 1000), (fd00:0:0:2015:*::*, 2000-3000), (199.2.4.0/255.255.255.0, 4000-5000),(fd00:0:0:2015::0/48, 6000, 7000) For more information on IP addresses, masks, and ports, see the *Specifying IP Addresses, Host Names, and Ports* appendix in the *Connect:Direct for Windows System Guide*. A wildcard character (*) is supported to define an IP address pattern. If the wildcard character is used, the optional mask is not valid.
tcp.src.ports.list.iterations	Specifies the number of times that Connect:Direct scans the list of available ports defined in tcp.src.ports to attempt a connection before going into a retry state. This parameter is automatically added to the initialization parameter and is assigned a value of 1. If desired, change this value.	A numeric value from 1–255. The default value is 1.

6. Coordinate the specified port numbers with the firewall administrators.

Firewall Configuration Example

The following sample illustrates a configuration of the firewall navigation initialization parameter. An explanation of the configuration follows the example. Although the tcp.src.port parameter is shown as a multi-line parameter in the following example, Connect:Direct for Windows only supports single-line parameters.

```
tcp.src.ports=(199.2.4.*, 5000-5050),
  (199.2.4.7, 1376),
  (200.200.0.0/255.255.0.0, 2000-2100, 3000-3100),
  (138.16.17.*, 2000-2050, 3000-3050, 4001, 4005)
```

In this example, if Connect:Direct initiates a session with a remote node at the IP address 199.2.4.7, it will use only port 1376. A session 199.2.4.6 (or any other address beginning with 199.2.4) will use any port in the range 5000 to 5050.

A session to 200.200.4.10 uses a port from within the two ranges specified (2000 to 2100 or 3000 to 3100.) Additionally, because of the subnet mask specification, a session to any IP address beginning with 200.200 will choose a port from within the two ranges specified.

The port for a session to any address beginning with 138.16.17 is selected from one of the two ranges (2000 to 2050 or 3000 to 3050) or the two individual ports specified (4001 or 4005).

Chapter 4

Automating Connect:Direct for Windows Installations

You can automate Connect:Direct for Windows installation and configuration for distribution throughout your enterprise by performing silent installations. Silent installations require no user responses during the installation routine. Configuration information is supplied by the initialization file that you define. Before you perform a silent installation, install Connect:Direct for Windows on a master node and configure a network map and user authorizations.

Preparing for a Silent Installation

The Microsoft Installer Properties are the foundation of a silent installation. Properties can be set on the command line or by creating custom transforms. A transform is a collection of changes applied to an installation. Transforms alter the installation database and can be used to customize a base installation package. Applying a transform to a base installation package adds or replaces data in the installation database.

Silent Installation Options

You can perform a default silent installation that installs Connect:Direct server and Connect:Direct Requester, or you can use transforms to modify the settings of an installation package. The transforms included with this product enable, disable, and remove a feature from the Connect Direct for Windows.msi package. To change the silent installation setting, use a transform to enable or disable the desired feature.

The following transform files are provided on the CD-ROM in the /advanced folder to allow you to perform silent installations:

- SecurePlusRemoved.mst—The MSI transform that removes the prompt for the Secure+ CD when performing an Administrative installation.
- RequesterDisable.mst—The MSI transform that disables Requester for Windows during a silent installation.

- SecurePlusEnable.mst—The MSI transform that allows you perform a silent installation of Secure+ Option.
- ServerDisable.mst—The MSI transform that disables Connect:Direct for Windows server during a silent installation.

Requirements for Silent Installation

Use the following list as a guide to the silent installation requirements for each node:

- To perform the default installation (server and Connect:Direct Requester), the node must have a license key.
- To install only Connect:Direct Requester or SDK, no license key is required.
- If the node uses special services, for example, Active Directory, SNMP, or SNA, a custom INI file is required. If no custom INI file is present, the default installation is performed.

The remainder of this chapter provides a high-level description of the following major tasks required to perform a silent installation:

- Designate a node where the Connect:Direct server is installed as the master node.
- Define site-specific initialization parameters for each server where Connect:Direct will be installed.
- Configure the network map and user authorizations on the master node.
- Perform an administrative silent installation.

Customizing Connect:Direct for Windows Initialization and Configuration Information

The Connect:Direct server supports an INI file, which can specify the value of installation properties. If you plan to use the INI file to manage a silent installation, change the parameters of the INI file provided with Connect:Direct for Windows to specify site-specific information.

The Connect:Direct for Windows server initialization file (CD_SRVR.INI) is located on the CD-ROM in the /advanced folder. The Connect:Direct Requester and SDK installations do not use initialization files. To set the installation directory for an installation, specify the INSTALLDIR property in the command line.

Customizing Initialization Information in the INI File

To define site-specific parameter values in an INI file for each node where you install Connect:Direct for Windows using the silent installation:

1. Open the CD_SRVR.INI file using any text editor, such as Windows Notepad.
2. Define the site-specific initialization parameters for a node and save the file.
3. Repeat steps 1–2 for each server where Connect:Direct will be installed.

Refer to the following table for available parameters and values defined in the CD_SRVR.INI file:

Parameter Name	Parameter Definition	Values
CD_SETUP_TYPE	The installation type: Default, Custom, or Upgrade.	Default | Custom | Upgrade
CD_NODENAME	Specifies the local node name, from 1–16 characters, consisting of numbers, letters, @, #, $, -, underscore (_), and period (.) with no spaces or apostrophes.	If this field is blank, the parameter defaults to the first 16 characters of the computer where the server is being installed.
CD_UPGRADE_NODE	The version of software and node to upgrade.	Version of software to update and the name of the node in the format Vx.xx.xx\nodename where x.x.xx is the version number
CD_UPGRADE_KEEPSCR_FLAG	Identifies if the current Connect:Direct will be version uninstalled before upgrading to the new version.	1=enabled This variable applies only if CD_SETUP_TYPE=UPGRADE
CD_LICENSE_FILE	The path name to the license file (license management key.)	*X*:\Program Files\Sterling Commerce\Connect Direct \v4.4.00 | Any valid Windows directory
CD_HOST_IP	The IP address of the host server.	Any valid IP address.
CD_HOST_PORT	Specifies the port number that the Connect:Direct Windows, or user-written API programs will connect to establish client sessions with this Connect:Direct server for outgoing communications.	A numeric value in the format *nnnn*, where *nnnn* is a positive integer with a value from 0–65535. The default is **1364**.
CD_API_IP	The host IP address. Any valid TCP/IP address may be specified.	Valid TCP/IP address. If blank, the IP address is obtained from the destination computer's IP address in the TCP/IP stack.
CD_API_PORT	Specifies the port number that the Connect:Direct for Windows or user-written API programs will connect to establish client sessions with this Connect:Direct server. You must specify the port when it differs from the default.	A numeric value in the format *nnnn*, where *nnnn* is a positive integer with a value from 0–65535. The default is **1363**.
CD_SNA_FLAG	Identifies if SNA connectivity is supported.	1=enabled
CD_SNA_LUNAME	The local LU name to use during SNA communications or the name of the computer, if no LU name is specified.	Valid 1–8 character LU name or computer name up to 8 characters.

Parameter Name	Parameter Definition	Values
CD_SNA_NETID	The SNA network ID.	A valid 1–8 character network ID
CD_SNA_MODE	The SNA mode name.	NDM624K | a valid 1–8 character mode name
CD_SNMP_FLAG	Enables SNMP.	1=enabled
CD_EVENTLOG_FLAG	Enables SNMP Event log.	1=enabled
CD_ACTIVEDIR_FLAG	Registers the client IP address to active directory.	1=enabled
CD_NOTIFY_TYPE	Defines the notification type to use.	NT Broadcast | SMTP
CD_NOTIFY_SMTP_HOST	If CD_NOTIFY_TYPE = SMTP, this field identifies the IP address of the SMTP host.	Host address in the format *nnn.nnn.nnn.nnn* (IPv4) or *nnnn:nnnn:nnnn:nnnn:nnnn:nnnn:nnnn:nnn*n (IPv6)
CD_NOTIFY_SMTP_PORT	If CD_NOTIFY_TYPE = SMTP, this field identifies the port used by the SMTP host.	A numeric value in the format of *nnnn*, where *nnnn* is a positive integer with a value from 0–65535. The default value is **25**.
CD_NOTIFY_SMTP_SENDER	If CD_NOTIFY_TYPE = SMTP, this field identifies the e-mail address to identify the sender of the message	Valid e-mail address
CD_NOTIFY_SMTP_AUTHENTICATE	If CD_NOTIFY_TYPE = SMTP, this field enables authentication. If this value is not set, the user ID and password fields are ignored.	Enabled=1
CD_NOTIFY_SMTP_USERID	If CD_NOTIFY_TYPE = SMTP, this field identifies the user ID to use to authenticate the server.	A valid user ID.
CD_NOTIFY_SMTP_PWD	If CD_NOTIFY_TYPE = SMTP, this field identifies the user password to use to authenticate the server.	A valid user password.
CD_USERAUTH_FILE	The path name and file name to the user authority file.	*X*:\Program Files\Sterling Commerce\Connect Direct \v4.4.00\ MyUserAuthSettings.cfg | Any valid Windows directory and user authority file name
CD_NETMAP_FILE	The path name and file name of the network map file.	*X*:\Program Files\Sterling Commerce\Connect Direct \v4.4.00\mynetmap.map | Any valid Windows directory and network map file name

Parameter Name	Parameter Definition	Values
CD_DATABASE_TYPE	The type of database to use.	MYSQL| MSSQLSS (SQL Server - Windows Authentication)| MSSQLIS (SQL Server - Mixed Mode)
CD_SQL_SERVER	The name of a valid SQL Server. **Note:** This variable is required only if CD_DATATBASE_TYPE is MSSQLSS or MSSQLIS. Two types of SQL Server validation are used: SQL Server with Windows Authentication or SQL Server - Mixed Mode Authentication. Integrated security with Windows authentication requires the server name and mixed mode security requires the server name, user name and password.	Valid SQL Server Name
CD_SQL USERID	The SQL Server system administrator's user ID.	Valid SQL Server System administrator user ID
CD_SQL_PWD	The SQL Server system administrator's password. **Note:** This variable is required only if the CD_DATATBASE_TYPE is MSSQLSS.	Valid 1–30 character SQL Server System administrator password

Customizing Connect:Direct for Windows Configuration Information

After you install Connect:Direct for Windows on a master node, you can customize configuration information for distribution within your enterprise by using Connect:Direct Requester to configure the network map and user authorizations on the master node. You can then extract those files using the Configuration Utility. Refer to *Chapter 3, Defining and Managing the Connect:Direct Network,* in the *Connect:Direct for Windows System Guide* for more information about using the Configuration Utility.

To apply the customized configuration files during a silent installation, set parameters values in the CD_SRVR.INI file:

- To apply a customized network map file, set CD_NETMAP_FILE to the fully qualified path to a customized network map configuration file.
- To apply a customized user authorization file, set CD_USERAUTH_FILE to the fully qualified path to a customized User Authorization configuration file.

Running a Silent Installation

After you modify the initialization files and, if necessary, send them to the remote nodes, instruct the remote location to use the administrative installation or the Microsoft Systems Management

Server to perform a silent installation. Both methods use the Msiexec program to interpret packages and installs products. Msiexec also sets an error level that corresponds to the Microsoft Win32 error codes.

Performing an Administrative Installation

To permit nodes to perform an administrative installation, create a folder on the network for each server running a silent installation and include in that folder the items required for the installation, for example, the site-specific INI file, license key, and transforms. Use the administrative installation to place an installation image on a network drive. For a complete list of advanced installation options, refer to the Readme.html file in the \advanced directory.

To attach to the network and install Connect:Direct for Windows features from the network location:

1. Click **Start** and then click **Run**. The **Run** dialog box is displayed.
2. In the **Open** field of the **Run** dialog box, type command similar to following example:

```
MsiExec /A "Connect Direct for Windows.msi"
```

This command installs all Connect:Direct for Windows components including Connect:Direct Requester and Secure+ Option.

Note: The MsiExec command installs Connect:Direct for Windows in the default directory C:\Program Files\Sterling Commerce\Connect Direct Windows v[current version]. If you want to install Connect:Direct for Windows in a different directory, use the INSTALLDIR option on the command line. Enclose the pathname in quotes and terminate the path with a backslash, such as INSTALLDIR=”D:\myfiles\CDWIN\”.

3. To perform an Administrative installation of Connect:Direct for Windows only, without Secure+, type the following command:

```
MsiExec /A "Connect Direct for Windows.msi"
TRANSFORMS=Advanced\SecurePlusRemoved.mst
```

Note: Computers in a Windows 2003 or XP Domain that use Active Directory can also automate installations using the software installation extension of the Group Policy Snap-In.

The Windows installer uses an /M command line parameter to generate MIF files. In the following example, the CDNT.mif file is created to report success or failure:

```
x:\MsiExec /I “CONNECT Direct for Windows.msi” /M C:\Windows\CDNT.mif
```

Performing an Unattended Uninstallation

Connect:Direct for Windows also provides for an unattended uninstallation. In the following example, the /x command parameter removes the package, Connect Direct for Windows.msi. The /Q switch runs the uninstall in silent mode.

```
MsiExec /x "Connect Direct for Windows.msi" /Q
```

Appendix A

Worksheets

Use the worksheets in this appendix to gather and record information needed for the installation.

Connect:Direct for Windows Installation Worksheet

Complete this worksheet before you install Connect:Direct for Windows.

1. What Connect:Direct software do you plan to install?

   - ❑ Connect:Direct Requester
   - ❑ Connect:Direct Server
   - ❑ Connect:Direct Secure+ Option

2. Choose the installation directory.

   X represents the drive letter mapped to your Windows directory.

   - ❑ Accept the default installation directory - C:\Program Files\Sterling Commerce\Connect:Direct v4.4.00
   - ❑ Change the installation directory

     New installation directory: _____

   - ❑ Install on a network drive
   - ❑ Place an icon on a desktop to perform the installation the first time the application is opened.

3. Name this Connect:Direct node - The default local node name is the name of the Windows computer.

   Local node name: _____

   Note: To change the local node name after the product is installed, you must re-install Connect:Direct for Windows.

4. Identify the location of the license management file.

   License file location: _____

   Maximum number of sessions: _____

5. Identify the database software:

   - ❑ MySQL
   - ❑ Microsoft SQL Server—Windows Authentication

     If SQL security is implemented, create a valid user ID and password and a CREATE TABLE privilege within the database.

     SQL Server Name: _____

     User ID: _____ Password: _____
   - ❑ SQL Server with Mixed Mode Authentication

     If Integrated security is implemented, ensure that the user group that the Connect:Direct installer belongs to has CREATE TABLE privilege within the Connect:Direct database.

     SQL Server Name: _____
6. Identify TCP/IP communication information.

   Node-to-Node IP Address: _____

   Node-to-Node Port: _____

   User Interface IP Address: _____

   User Interface Port: _____
7. Identify additional components, as necessary:

   - ❑ APPC Connectivity - SNA

     LU Name: _____

     Net ID: _____

     Mode Name _____
   - ❑ Process Notification
     - ❑ NT Broadcast
     - ❑ SMTP

     SMTP Settings:

     Host Address: _____

     Host port: _____ (25 is the default value.)

     Sender: _____
   - ❑ Load an Existing Network Map

     Fully-qualified pathname for the MAP.CFG: _____
   - ❑ Load Existing User Authorities

     Fully-qualified pathname for the USER.CFG: _____

SNA Configuration Worksheet

Use this worksheet to identify the parameters necessary to configure SNA. Make copies of this worksheet for each SNA configuration. See Appendix B, (fix cross reference) for SNA Server configuration examples.

Local Node SNA Information

Connect:Direct Node Name:_____

LU Alias Name: _____

The LU Alias name is a user-defined name that references the LU name defined in the local SNA network. This value can be the same as the actual LU name.

You can get the following information from your local SNA administrator.

LU Name: _____ Network Name: _____

Mode Name: _____ Control Point Name: _____

Node ID: _____

Remote Node SNA Information

Connect:Direct Node Name:_____

LU Alias Name: _____

The LU Alias name is a user-defined name that references the LU name defined in the remote SNA network. This value can be the same as the actual LU name. Obtain the following information from the SNA administrator of the remote system.

LU Name: _____ Network Name: _____

Control Point Name:_____ Node ID: _____

Network Address: _____

SNA Server/Host Configuration Worksheet

Complete this worksheet before you set up and configure an SNA connection between the host and the SNA server.

For each parameter listed, record the parameter value mapped between SNA and VTAM. Use the alpha identifier in the first column to understand how the parameters are implemented in the network map in the example following this table.

	Windows/SNA	Parameter Value	Host/VTAM
[a]	Local Connect:Direct node name	= =	LOCAL.NODE
[b]	Remote Connect:Direct node name	= =	ADJACENT.NODE
[c]	Mode	= =	LOGMODE
[d]	Session Limits	= =	VTAM APPLID DSESSLIM
[e]	Max RU	= =	LOGMODE RU Size
[f]	Server Netname	= =	VTAMNETID (owner of PU)
[g]	Server CPNAME	= =	VTAM PU Name
[h]	Connection CPNAME	= =	VTAM SSCPNNAME
[i]	Connection Netname	= =	VTAM NETID (owner of PU)
[j]	Connection LOCALBLOCKNO	= =	VTAM PU DBLK
[k]	Connection LOCALNODENO	= =	VTAM PU IDNUM
[l]	Connection REMOTENETADDR	= =	Remote Network Address
[m]	Local LU Name (APPCLU)	= =	VTAM LU Name (must be independent)
[n]	APPCLU Netname	= =	VTAM NETID (owner of PU)
[o]	Remote Partner LU (APPCRLU)	= =	VTAM APPLID
[p]	APPRCLU Netname	= =	VTAM NETID (owner of APPLID)

z/OS Network Map Example

The following sample illustrates the use of the VTAM parameters (identified by the alpha characters) in an z/OS network map:

```
LOCALNODE=                          ADJACENT.NODE=(

     (node name[b],                       (node name[a],
     communications name[o],,             communications name[m],,
     superuser password)                  LU62)
     TCQ=(tcxdsn, tcqdsn))                PARSESS=(max[d], default)
                                          ENVIRONMENT=NT
                                          LOGMODE=logmode entry name[c])
```

Refer to the platform-specific Connect:Direct Installation and Administration guides for network map information on other host platforms.

Windows Network Map Example

The following sample illustrates the use of the SNA parameters (identified by alpha characters) in a Windows network map:

```
CREATE_SNA_MODE Name(mode [c])
MAXRUsize (MaxRU [e]) MaxPacingSize(7) MaxNetSessLimit(8)

CREATE_SNA_COMMPATH Name(commpathname)
Transport(transport-type) Adapter(0) Address(000000000000)
NetId(netid[f]) PUName() LUName(LUName [m])
ProfileName() LULocAddr(0) Mode(mode[c]) LUSessLimit(8)

CREATE_REMOTENODE Name(remotenodename [b])
LRetry(10) LRetryTime(180) Sretry(10) SretryTime(10) SessPnodeMax(32)
SessSnodeMax(32) DefaultClass(1) RemoteOSEnv(z/OS) NetName(NetName[f])
PartnerName(PartnerName[o]) TPName(NNV2DTF) Mode(mode[c])
CommPath(commpathname)
```

Appendix B

VTAM 4.1 Example Definitions

This chapter provides sample SNA configuration and VTAM 4.1 definitions. It also provides instructions on accessing SNA configuration listings.

Sample SNA Configuration

This section illustrates a sample SNA configuration used to connect to Connect:Direct for z/OS.

You provide the following SNA resource definitions during the Microsoft SNA configuration. These values are derived from VTAM definitions supporting connections between Connect:Direct for z/OS and Connect:Direct for Windows. Contact the VTAM administrator for the values you need to specify during SNA configuration.

Windows	Parameter Value	z/OS
Remote LU Name	= M1CDXY2B	=APPLID
Local LU Name	= M1R01LUA	=LU NAME
Network Name	= CSDNET	=NETID
Mode Name	= NDM624K	=MODEENT
Remote Control Point Name	= CSDSA01	=SSCPNAME
Local Control Point Name	= M1RPU01	=PU NAME
Local Connect:Direct Node Name	= SS.DUB.USER1	=ADJACENT.NODE
Remote Connect:Direct Node Name	= CDNT0001	=LOCAL.NODE
Local Node ID	= 0716200D	=XID
Remote Network Address	= 4000 7000 6200	=MAC Address

VTAM 4.1 Sample Definitions

The following section contains definitions for use in configuring your SNA software. The relevant resource name entries are in bold.

XCA Token Ring: Switched Net Definitions

The following sample represents the Switched Net PU definitions for an XCA attached Windows SNA server.

```
*************************************************
*                                               *
*XCA TR    DEFINITION                          *
*                                               *
*                                               *
*CHANGE LOG                                     *
*                                               *
*************************************************
M1R01PU  VBUILD TYPE=SWNET,                                    X
      MAXGRP=1,              MAXIMUM NUMBER OF UNIQUE GRPNM    X
      MAXNO=1               MAXIMUM NUMBER OF UNIQUE DIALNO
*
***
M1RPU01  PU    ADDR=01,                                        X
               PUTYPE=2,                                       X
               ISTATUS=ACTIVE,                                 X
               DBLK=071,                                       X
               IDNUM=6200D,                                    X
               PASSLIM=8,                                      X
               DLOGMOD=NDM624K,                                X
               MODETAB=DALLMTAB,                               X
               SSCPFM=USSSCS,                                  X
               USSTAB=LSUSSTAB,                                X
               PACING=7,                                       X
               VPACING=7,                                      X
               DISCNT=(NO),                                    X
               MAXDATA=521,                                    X
               MAXPATH=2,                                      X
               MAXOUT=8
*
M1RPTH0D PATH  GRPNM=M1XG516D,                                 X
             DIALNO=0011111111111D  DUMMY

*M1ROLUA LU LOCADDR=0, DLOGMODE=NDM6241C

*3270
*
M1R01LU2 LU  LOCADDR=2,DLOGMOD=D4A3290
M1R01LU3 LU  LOCADDR=3,DLOGMOD=D4A3290
*
*LU 6.2 ILU
*
```

XCA Token Ring: Independent LU Definition

The following sample illustrates the Independent LU definitions included as Cross Domain Resources:

```
*****************************************************************
*         VTAM 3.4 CDRSC DEFINITIONS FOR INDEPENDENT LU'S       *
*               6.2 ILU DEFINITION - XCA TR       ACCESS        *
*                                                               *
*CHANGE LOG:                                                    *
*                                                               *
*****************************************************************
M1R01CDS VBUILD TYPE=CDRSC
*
M1R01LUA CDRSC ISTATUS=ACTIVE,                                  X
           ALSLIST=M1RPU01,       ADJ LINK STATION              X
           MODETAB=DALLMTAB,      LOGON MODE TABLE              X
           DLOGMOD=NDM624K,       LOGON MODE TABLE ENTRY        X
           RESSCB=5               SESSION CONTROL BLOCKS
*
M1R01LUB CDRSC ISTATUS=ACTIVE,                                  X
           ALSLIST=M1RPU01,       ADJ LINK STATION              X
           MODETAB=DALLMTAB,      LOGON MODE TABLE              X
           DLOGMOD=NDM624K,       LOGON MODE TABLE ENTRY        X
           RESSCB=5               SESSION CONTROL BLOCKS
*
M1R01LUC CDRSC ISTATUS=ACTIVE,                                  X
           ALSLIST=M1RPU01,       ADJ LINK STATION              X
           MODETAB=DALLMTAB,      LOGON MODE TABLE              X
           DLOGMOD=NDM622K,       LOGON MODE TABLE ENTRY        X
           RESSCB=5               SESSION CONTROL BLOCKS
*
M1R01LUD CDRSC ISTATUS=ACTIVE,                                  X
           ALSLIST=M1RPU01,       ADJ LINK STATION              X
           MODETAB=DALLMTAB,      LOGON MODE TABLE              X
           DLOGMOD=NDM621K,       LOGON MODE TABLE ENTRY        X
           RESSCB=5               SESSION CONTROL BLOCKS
*
```

XCA Token Ring: Major Node Definition

The following sample illustrates the major node definitions for an XCA device:

```
*********************************************************************
*                                                                   *
* XCA MAJOR NODE                                                    *
*                                                                   *
* CHANGE LOG:                                                       *
*********************************************************************
M1XCA516 VBUILD TYPE=XCA        XCA MAJOR NODE
*
M1XP5161 PORT  MEDIUM=RING,     TOKEN-RING                       X
               SAPADDR=4,       SERVICE ACCESS POINT ADDRESS     X
               ADAPNO=0,        ADAPTER NUMBER                   X
               CUADDR=516       CHANNEL UNIT ADDRESS
*
M1XG516D GROUP DIAL=YES,        SWITCHED PERIPHERAL NODE         X
               CALL=IN,         DIAL IN AS PER MCDATA            X
               ISTATUS=ACTIVE   ACTIVATED AT GEN
*
M1XL516D LINE  ANSWER=ON        PU CAN DIAL IN
*
M1X516PD PU
*
***
```

Sample Connect:Direct APPLDEF

The following sample illustrates the application definitions for Connect:Direct for z/OS:

```
ZZAPPGLP VBUILD TYPE=APPL
*********************************************************************
*         C:D z/OS TEST LU 6.2 ILU APPL DEFINITION            *
*                                                                   *
*********************************************************************
*
M1CDXY2B APPL ACBNAME=M1CDXY2B,    VTAM APPLID                   X
            APPC=YES,           LU 6.2 CAPABLE                   X
            AUTH=(ACQ,VPACE),   VTAM AUTHORITY FOR THIS APP      X
            AUTOSES=10,         # OF AUTO CONT WINNER ACTIVATES  X
            DDRAINL=ALLOW,      DRAIN ALLOWED FOR CNOS 0         X
            DLOGMOD=NDMLM1K,    DEFAULT MODE TABLE ENTRY         X
            DMINWNL=10,         MIN CONT WINNER FOR LOCAL LU     X
            DMINWNR=10,         MIN CONT WINNER FOR REMOTE LU    X
            DRESPL=ALLOW,       APPL WILL DO SESSION DEACTIVATES X
            DSESLIM=20,         MAX # OF ALLOWED SESS FOR MODE   X
            EAS=509,            APPROX # OF CONCURRENT SESSIONS  X
            MODETAB=DALLMTAB,   MODE TABLE NAME                  X
            VPACING=7           DEFAULT RECEIVE PACING VALUE
*
```

Sample Connect:Direct MODEENTS (Mode Definitions)

The following sample illustrates the mode definition entries for an independent LU:

```
*****************************************************************
*                                                               *
*                     LU 6.2 WITH 4K RU'S                       *
*                                                               *
*****************************************************************
NDM624K  MODEENT LOGMODE=NDM624K,                              *
               TYPE=1,                                         *
               COS=NDMCOS1,                                    *
               FMPROF=X'13',                                   *
               TSPROF=X'07',                                   *
               PRIPROT=X'B0',                                  *
               SECPROT=X'B0',                                  *
               PSNDPAC=X'04',                                  *
               SRCVPAC=X'04',                                  *
               SSNDPAC=X'04',                                  *
               COMPROT=X'D0B1',                                *
               RUSIZES=X'8989',                                *
               PSERVIC=X'060200000000000000000300'             *
*                        0 1 2 3 4 5 6 7 8 9 1011
*****************************************************************
*                                                               *
*                     LU 6.2 WITH 2K RU'S                       *
*                                                               *
*****************************************************************
NDM622K  MODEENT LOGMODE=NDM622K,                              *
               TYPE=1,                                         *
               COS=NDMCOS1,                                    *
               FMPROF=X'13',                                   *
               TSPROF=X'07',                                   *
               PRIPROT=X'B0',                                  *
               PSNDPAC=X'04',                                  *
               SRCVPAC=X'04',                                  *
               SSNDPAC=X'04',                                  *
               SECPROT=X'B0',                                  *
               COMPROT=X'D0B1',                                *
               RUSIZES=X'8888',                                *
               PSERVIC=X'060200000000000000000300'             *
*                        0 1 2 3 4 5 6 7 8 9 1011
*****************************************************************
*                                                               *
*                     LU 6.2 WITH 1K RU'S                       *
*                                                               *
*****************************************************************
NDM621K  MODEENT LOGMODE=NDM621K,                              *
               TYPE=1,                                         *
               COS=NDMCOS1,                                    *
               FMPROF=X'13',                                   *
               TSPROF=X'07',                                   *
               PRIPROT=X'B0',                                  *
               PSNDPAC=X'04',                                  *
               SRCVPAC=X'04',                                  *
               SSNDPAC=X'04',                                  *
               SECPROT=X'B0',                                  *
               COMPROT=X'D0B1',                                *
               RUSIZES=X'8787',                                *
               PSERVIC=X'060200000000000000000300'             *
*                        0 1 2 3 4 5 6 7 8 9 1011
```

Sample VTAM Start Options (ATCSTRxx)

The following sample represents the VTAM Start Option entries for NETID and SSCPNAME.

```
*****************************************************************
*                                                               *
*                  z/OS VTAM START DEFINITION                 *
*                                                               *
*****************************************************************
HOSTSA=01,                                                     X
NODETYPE=NN,                                                   X
CONNTYPE=LEN,                                                  X
CPCP=YES,                                                      X
GWSSCP=YES,                                                    X
NETID=CSDNET,                                                  X
SSCPID=15015,                                                  X
SSCPNAME=CSDSA01,                                              X
LISTBKUP=DEFAULTS,                                             X
TNSTAT,NOCNSL,TIME=60,                                         X
PPOLOG=YES,                                                    X
XNETALS=YES,                                                   X
NCPBUFSZ=2048,                                                 X
HOTIOTRM=50,                                                   X
IOPURGE=5M,                                                    X
MSGLEVEL=V4R1,                                                 X
MAINTLVL=9311,                                                 X
IOBUF=(750,320,50,,30,100,3000),                               X
CRPLBUF=(500,,0,,25,1),                                        X
LFBUF=(300,,0,,32,1),                                          X
LPBUF=(80,,0,,12,1),                                           X
SFBUF=(40,,0,,34,1),                                           X
SPBUF=(32,,0,,32,1),                                           X
BSBUF=(600,,0,,25,50),                                         X
XDBUF=(55,,0,,5,1)
```

Sample Connect:Direct for z/OS Network Map Entries

The following sample illustrates Connect:Direct for z/OS network map entries for Windows SNA software running Connect:Direct for Windows:

```
*****************************************************************
*                                                               *
*                  Connect:Direct NETWORK MAP                   *
*                                                               *
*****************************************************************
*                                                               *
*****************************************************************
* LOCAL NODE                                                    *
*****************************************************************
LOCAL.NODE    =  ((SS.DUB.USER1 M1CDXX2B,, SUPERUSR)          -
           TCQ=  (USER1.R210.TCX                              -
                  USER1.R210.TCQ)                 )
*
ADJACENT.NODE = (PARSESS = (10  2)                            -
                (CDNT0001, M1R01LUA, LU62)                  -
                ENVIRONMENT=NT                              -
                LOGMODE=NDM624K                        )
```

Accessing SNA Server Configuration Listing

Use the following Windows SNA Server command to display the configuration and redirect the information to a file:

```
snacfg /print>filename
```

The following sample illustrates the Microsoft SNA server configuration listing for a configured Windows server using the values listed in the VTAM Sample Definitions:

```
MODE #INTER /ADD                                \
  /SESSIONLIM:8                                 \
  /CONWIN:4                                     \
  /CONLOSE:0                                    \
  /AUTOACT:0                                    \
  /AUTOPARTNER:No                               \
  /HIGHPRIORITY:Yes                             \
  /PACESENDCNT:7                                \
  /PACERECVCNT:7                                \
  /MAXSENDRU:1024                               \
  /MAXRECVRU:1024                               \
  /MAXSENDRU:1024                               \
  /MAXSENDRU:1024                               \
  /COMMENT:"Interactive"                        \

MODE #INTERSC /ADD                              \
  /SESSIONLIM:8                                 \
  /CONWIN:4                                     \
  /CONLOSE:0                                    \
  /AUTOACT:0                                    \
  /AUTOPARTNER:No                               \
  /HIGHPRIORITY:Yes                             \
  /PACESENDCNT:7                                \
  /PACERECVCNT:7                                \
  /MAXSENDRU:1024                               \
  /MAXRECVRU:1024                               \
  /MAXSENDRU:1024                               \
  /MAXSENDRU:1024                               \
  /COMMENT:"Interactive"                        \

MODE #BATCH /ADD                                \
  /SESSIONLIM:8                                 \
  /CONWIN:4                                     \
  /CONLOSE:0                                    \
  /AUTOACT:0                                    \
  /AUTOPARTNER:No                               \
  /HIGHPRIORITY:No                              \
  /PACESENDCNT:3                                \
  /PACERECVCNT:3                                \
  /MAXSENDRU:1024                               \
  /MAXRECVRU:1024                               \
  /MAXSENDRU:1024                               \
  /MAXSENDRU:1024                               \
  /COMMENT:"Batch"                                      \

MODE #BATCHSC /ADD                              \
  /SESSIONLIM:8                                 \
  /CONWIN:4                                     \
  /CONLOSE:0                                    \
  /AUTOACT:0                                    \
  /AUTOPARTNER:No                               \
  /HIGHPRIORITY:No                              \
  /PACESENDCNT:3                                \
  /PACERECVCNT:3                                \
  /MAXSENDRU:1024                               \
  /MAXRECVRU:1024                               \
  /MAXSENDRU:1024                               \
  /MAXSENDRU:1024                               \
  /COMMENT:"Batch"                                      \

MODE BLANK /ADD                                 \
  /SESSIONLIM:8                                 \
  /CONWIN:4                                     \
  /CONLOSE:0                                    \
  /AUTOACT:0                                    \
  /AUTOPARTNER:No                               \
  /HIGHPRIORITY:No                              \
  /PACESENDCNT:3                                \
  /PACERECVCNT:3                                \
  /MAXSENDRU:1024                               \
  /MAXRECVRU:1024                               \
  /MAXSENDRU:1024                               \
  /MAXSENDRU:1024                               \
  /COMMENT:"8 Blank chars"                      \
```

Continued

```
MODE QPCSUPP /ADD                                \
  /SESSIONLIM:64                                 \
  /CONWIN:32                                     \
  /CONLOSE:0                                     \
  /AUTOACT:0                                     \
  /AUTOPARTNER:Yes                               \
  /HIGHPRIORITY:Yes                              \
  /PACESENDCNT:7                                 \
  /PACERECVCNT:7                                 \
  /MAXSENDRU:1024                                \
  /MAXRECVRU:1024                                \
  /MAXSENDRU:1024                                \
  /MAXSENDRU:1024                                \
  /COMMENT:"5250 Mode"                                 \

MODE NDM624K /ADD                                \
  /SESSIONLIM:20                                 \
  /CONWIN:10                                     \
  /CONLOSE:10                                    \
  /AUTOACT:0                                     \
  /AUTOPARTNER:No                                \
  /HIGHPRIORITY:No                               \
  /PACESENDCNT:7                                 \
  /PACERECVCNT:7                                 \
  /MAXSENDRU:4096                                \
  /MAXRECVRU:4096                                \
  /MAXSENDRU:4096                                \
  /MAXSENDRU:4096                                \
  /COMMENT:" "                                   \

SERVER CSD-PUBS /ADD                             \
  /CPNAME:M1RPU01                                \
  /NETNAME:CSDNET                                \
  /COMMENT:""                                    \

LINK SNADLC1 /ADD                                \
  /SERVER:CSD-PUBS                               \
  /LINKTYPE:Token                                \

CONNECTION TOKEN1 /ADD                           \
  /SERVER:CSD-PUBS                               \
  /COMMENT:"802.2 Connection"                    \
  /ACTIVATION:OnServerStartup                    \
  /CALLDIRECTION:Both                            \
  /LOCALBLOCKNO:071                              \
  /LOCALNODENO:6200D                             \
  /CPNAME:CSDSA01                                \
  /NETNAME:CSDNET                                \
  /REMOTEBLOCKNO:                                \
  /REMOTENODENO:                                 \
  /LINKSERVICE:SNADLC1                           \
  /REMOTEEND:Host                                \
  /CONNTYPE:802.2                                \
  /XIDTYPE:Format3                               \
  /REMOTENETADDR:400070006200                    \
  /REMOTESAPADDR:4                                     \

/MAXBTULEN:1929                                  \
  /RECEIVEACKTHRESH:2                            \
  /NAKSENDLIMIT:8                                \
  /RETRYLIMIT:10                                 \
  /XIDRETRIES:3                                  \
  /T1TIMEOUT:Default                             \
  /T2TIMEOUT:Default                             \
  /TITIMEOUT:Default                                   \
  /ACTIVATEDELAY:Default                         \
  /ACTIVATERETRYLIMIT:None                             \

APPCRLU M1CDXY2B /ADD                            \
  /CONNECTION:TOKEN1                             \
  /NETNAME:CSDNET                                \
  /LUNAME:M1CDXY2B                               \
  /COMMENT:""                                    \
  /UNINTERPNAME:M1CDXY2B                         \
  /AUTOPARTNER:No                                \
  /PARALLELSESS:Yes                              \
```

Continued

```
APPCLLU M1R01LUA /ADD                          \
  /SERVER:CSD-NTSNA1                           \
  /LUNUMBER:0                                  \
  /NETNAME:CSDNET                              \
  /LUNAME:M1R01LUA                             \
  /COMMENT:""                                  \
  /AUTOPARTNER:No                              \
  /DEFAULTPOOL:No                              \
  /TPTIMEOUT:60                                \

APPCLLU M1R01LUA                               \
  /ADDPARTNER:M1CDXY2B,NDM624K,TOKEN1          \

APPCLLU M1R01LUB /ADD                          \
  /SERVER:CSD-NTSNA1                           \
  /LUNUMBER:0                                  \
  /NETNAME:CSDNET                              \
  /LUNAME:M1R01LUB                             \
  /COMMENT:""                                  \
  /AUTOPARTNER:No                              \
  /DEFAULTPOOL:No                              \
  /TPTIMEOUT:60                                \

APPCLLU M1R01LUB                               \
  /ADDPARTNER:M1CDXX2B,NDM624K,TOKEN1          \

USER USER1 /ADD                                \
  /DOMAIN:CSD-NTSNA1                           \
  /COMMENT:""                                  \

USER USER1                                     \
  /INSERT:M1R01LU2                             \

USER USER1                                     \
  /INSERT:M1R01LU3                             \

DIAGNOSTIC                                     \
  /AUDITLEVEL:10                                     \
```

Accessing Communications Server Configuration Listing

The SNA configuration listing for IBM Communications Server is stored in a file with an extension of **acg**. The name for this file is defined when you install the Communications Server.

Glossary

A

Adjacent Node

An entry in the network map that defines a Connect:Direct node with which the local Connect:Direct node can communicate. The adjacent node is also referred to as a remote node.

Advanced Program-To-Program Communication (APPC)

The general facility characterizing the LU6.2 architecture and its various implementations in products.

Application Program Interface (API)

A Connect:Direct component that accepts commands and places them in an executable format.

C

Checkpoint Restart

Feature that eliminates the need to re-transmit an entire file in the event of a transmission failure. If a copy procedure is interrupted, Connect:Direct restarts that copy at the last checkpoint.

Commands

Initiate and monitor activity within the Connect:Direct system.

Configuration Registry

A database of configuration information central to Windows operation. The Registry is the storage location for configuration settings for Windows applications. The Registry centralizes all Windows settings and provides security and control over system, security, and user account settings.

D

Domain Name Service (DNS)

A distributed database that provides a hierarchical naming system for identifying Internet hosts.

L

Local Node Record

The base record in a parameters file that defines the Connect:Direct server. It includes the most commonly used settings at a site and is the central node through which all communication is filtered. Depending upon how each remote node record is configured, trading partner node records can use settings that are defined in the local node record.

Logical Unit (LU) 6.2

A type of logical unit that supports general communication between programs in a distributed processing environment. LU6.2 is characterized by (a) a peer relationship between session partners, (b) efficient utilization of a session for multiple transactions, (c) comprehensive end-to-end error processing, and (d) a generic application program interface (API) consisting of structured verbs that are mapped into a product implementation.

N

Network Map (Netmap)

The file that identifies all valid Connect:Direct nodes in a network including a local node record and a remote node record for each trading partner. The network map also defines the rules or protocols used by each node when communicating with the local Connect:Direct node.

Node

Any site in a network from which information distribution can be initiated.

New Technology File System (NTFS)

A system that uses fixed disks to organize data. NTFS treats files as objects with user and system defined attributes.

P

Primary Node (PNODE)

The node that submits the Connect:Direct Process to the secondary node (SNODE). In every communication, you must have a PNODE and an SNODE.

Process

A series of statements that initiate Connect:Direct activity, such as copying files and running jobs.

Process Statements

Instructions for transferring files, running operating system jobs, executing programs, or submitting other Connect:Direct Processes. They are used to build a Connect:Direct Process.

R

Registry

See Configuration Registry.

Remote Node

An entry in the network map that defines a Connect:Direct node with which the local Connect:Direct node can communicate. The remote node is also referred to as an adjacent node.

Retry Interval

The interval at which retries are performed as a part of the checkpoint-restart feature.

S

Secondary Node (SNODE)

The Connect:Direct node that interacts with the primary node (PNODE) during Connect:Direct Process execution and is the noncontrolling node. Every Process has one secondary node and one primary node.

Statistics File

Holds Connect:Direct statistics records that document the history of a Process.

Statistics Facility

Records Connect:Direct activities.

Systems Network Architecture (SNA)

The description of the logical structure, formats, protocols, and operational sequences for transmitting information units through, and controlling the configuration and operation of, networks.

T

Transmission Control Queue (TCQ)

Holds information about Connect:Direct Processes that are currently executing or scheduled to execute in the future.

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