Connect:Direct for Windows

Getting Started Guide

Version 4.5

Sterling Commerce
An IBM Company

Connect:Direct for Windows Getting Started Guide

First Edition

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Prepare for Installation

Prepare for Installation of Connect:Direct for Windows

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

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:

```
\\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.

Configure Windows User Privileges

Connect:Direct for Windows must be installed by a Windows Administrator. 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.

Customize a Connect:Direct Logon Account

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

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.

Note: 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.

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

5. Type the account name to use for logging onto Connect:Direct, or click Browse and double-click the user account to use for logging on.

6. Type the password in the Password box.

7. Confirm the password in the Confirm password box.

8. Click OK.

Configure 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.

Connect:Direct for Windows Installation Worksheet

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

Decision	Choices	Additional Information
What Connect:Direct software do you plan to install?	• Connect:Direct Requester • Connect:Direct Server • Connect:Direct Secure+ Option	
Choose the installation directory. (*X* represents the drive letter.)	• Accept the default installation directory - X:\Program Files\Sterling Commerce\Connect:Direct 4.5.00 • Change the installation directory • Install on a network drive • Place an icon on a desktop to perform the installation the first time the application is opened.	

Decision	Choices	Additional Information	
Name this Connect:Direct node - The default local node name is the name of the Windows computer.		**Note**	To change the local node name after the product is installed, you must reinstall Connect:Direct for Windows.
Identify the location of the license management file.		You will also need to identify the number of sessions you are licensed for.	
Identify the database software	• MySQL • Microsoft SQL Server—Windows Authentication • SQL Server with Mixed Mode Authentication	If security is implemented on Microsoft SQL Server—Windows Authentication, create a valid user ID and password and a CREATE TABLE privilege within the database. If Integrated security is implemented on SQL Server with Mixed Mode Authentication, ensure that the user group that the Connect:Direct installer belongs to has CREATE TABLE privilege within the Connect:Direct database.	
Identify TCP/IP communication information		Identify Node-to-Node IP Address, Node-to-Node Port, User Interface IP Address, User Interface Port	
Identify UDT communication information		Identify Node-to-Node IP Address, Node-to-Node Port, User Interface IP Address, User Interface Port	
Identify additional components	• APPC Connectivity - SNA. Identify LU Name, Net ID, Mode Name. • Process Notification. Specify NT Broadcast or SMTP. If SMTP, specify Host Address, Host Port (default is 25), and Sender. • Load an Existing Network Map. Identify the fully qualified pathname for the MAP.CFG. • Load Existing User Authorities. Identify the Fully qualified pathname for the USER.CFG.		

Install and Configure Database Software

During the Connect:Direct for Windows installation, you are prompted to choose MySQL or SQL Server as the database type. 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.

•   If you plan to use MySQL as the database, no preinstallation configuration is required.

- If you plan to use SQL Server as the database, 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. Use Control Panel to set the SQL Server to start automatically at Start > Settings > Control Panel > Administrative Tools > Services.

Automate 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 *About Silent Installations* for information about automating installations.

Configure 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 *SNA Configuration Worksheet* 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* 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.

SNA Configuration Worksheet

Use this worksheet to identify the parameters necessary to configure SNA. Make copies of this worksheet for each SNA configuration. See the *z/OS Network Map Example for VTAM* for SNA Server configuration examples.

Node	Information Needed	Additional Information
Local Node	Decide the following: • Connect:Direct Node Name • LU Alias Name Get the following information from your SNA administrator: • LU Name • Network Name • Mode Name • Control Point Name • Node ID	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.
Remote Node	Get the following information from your trading partner: • Connect:Direct Node Name • LU Alias Name Get the following information from your SNA administrator: • LU Name • Network Name • Control Point Name • Node ID • Network Address	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 that information from the SNA administrator of the remote system.

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

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                     )
```

XCA Token Ring: Switched Net Definitions

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

```
***************************************************
*                                      *
*                                      *
*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=00111111111111D  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
*
M1R01CDS VBUILD TYPE=CDRSC
          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
*
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'06020000000000000000300'             *
*                      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'06020000000000000000300'             *
*                      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'87
```

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)
```

z/OS Network Map Example for VTAM

The following sample illustrates the use of the VTAM parameters (identified by the alphabetic characters inside brackets) in a 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 alphabetic characters in brackets) 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(OS/390) NetName(NetName[f])
PartnerName(PartnerName[o]) TPName(NNV2DTF) Mode(mode[c]) CommPath(commpathname)
```

Access 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                               \
   /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"                      \
```

```
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                                     \
  /MAXRECVRU: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                                   \
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                                         \
```

Access 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.

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 alphabetic 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 Mapped Between SNA and VTAM	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)

Get Support for Sterling Products

Sterling Commerce provides intuitive technical products and superior Help and documentation to enable you to work independently. However, if you have a technical question regarding a Sterling Commerce product, use the Sterling Commerce Customer Support Web site.

The Sterling Commerce Customer Support Web site at www.sterlingcommerce.com is the doorway to Web support, information, and tools. This Web site contains informative links, including a solutions database, an issue tracking system, fix information, documentation, workshop information, contact information, sunset and retirement schedules, and ordering information. See the *Customer Support Reference Guide* for specific information on getting support for Sterling Commerce products.

Connect:Direct for Windows Documentation

The Connect:Direct for Windows library consists of the following manuals:

- *Getting Started with Connect:Direct Windows* is a guide to installing Connect:Direct Windows. This book includes pre-installation and installation information and tasks.
- *Connect:Direct Windows System Guide* is a guide to setting up and using Connect:Direct Windows. This book also describes administrative concepts for Connect:Direct Windows.
- *Connect:Direct Windows Release Notes* includes product updates and compatibilities, last-minute changes, instructions for downloading the product from the ESD Portal, known restrictions, enhancements, and installation notes.
- *Connect:Direct Windows Maintenance Updates* contains the latest product maintenance.

The following manuals supplement the Connect:Direct Windows documentation:

- *Connect:Direct Process Concepts and Examples Guide* provides an overview of Connect:Direct, describes the general structure and syntax rules for the Process language, and includes numerous examples.
- *Connect:Direct Process Statements Guide* describes the Process statements for various platforms including Connect:Direct.
- *Connect:Direct Compatibility and Connectivity Chart* provides definitions for the supported Connect:Direct platforms and the mapping of definitions that must match between two communicating platforms.
- *Connect:Direct for Windows Secure+ Option Implementation Guide* provides installation and configuration information for Secure+ Option.
- *Connect:Direct SDK Programmer's Guide* provides system programmers and system developers with the information needed to extend the capabilities of the Connect:Direct environment.

Install Connect:Direct for Windows

Install Connect:Direct for Windows: Overview

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.

- 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) is 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*.

Connect:Direct for Windows Installation Icons

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 at 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 icons and installation types are described below:

	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 Connect:Direct program group 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.

Connect:Direct is installed in the directory called X:\Program Files\Sterling Commerce\Connect Direct v4.5.00\component.

- **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.

Obtain and Install 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.

1. Copy the temporary license key file from the Sterling Commerce e-mail to the C:\Program Files \Sterling Commerce\Connect Direct 4.5.00\server directory.

2. Rename the temporary license key file to license.key.

    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:
    - Click Start > Programs > Sterling Commerce Connect:Direct v4.5.00 > CD System ID Utility. The Connect:Direct System ID Utility main window displays the CPU-ID and number of processors.
    - To save the information, click File > Save.
    - Type a name for the file and click Save.
    - Click File > Send email.
    - 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.

Start the Installation

To begin the Connect:Direct for Windows installation:

1.   Insert the Connect:Direct for Windows CD into the CD drive or double-click the setup.exe file extracted from the file downloaded from the ESD Portal.

2.   If the Autorun option is enabled for the CD 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, do the following:
   • Click Start, then click Run.
   • On the Run dialog box, click Browse.
   • On the Browse dialog box, select the drive mapped to your CD drive from the Look in: field drop-down box.
   • Double-click Setup.exe. The program returns to the Run dialog box.
   • Click OK.

3.   On the Welcome dialog, click Next.

4.   On the License Agreement page, read the agreement and indicate acceptance by clicking "I accept the terms of the license agreement." Click Next.

      Note: If you click "I do not accept...," you must terminate the installation.

5.   Do one of the following:
   · To install Connect:Direct server and Requester, select Typical. Click Next.
   · To install Connect:Direct for Windows and Secure+ Option, select Custom. This is the preferred installation method. Click Next.

Complete the Typical Installation

This procedure assumes you have started the installation and have selected Typical as the type of installation you want to perform.

To complete the Connect:Direct for Windows typical installation:

1.   Select Default from the Configure Connect:Direct for Windows Server dialog box.

2.   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 v4.5.00\server folder. Click Next.

3.   Configure MySQL to capture statistics, messages, and TCQ information by providing the port number and password. Click Next.

4.   Click Install.

5.   Click OK to continue the installation.

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.

Complete a Custom Installation

This procedure assumes that you have started the installation and have selected Custom as the type of installation you want to perform.

To complete a custom installation of Connect:Direct for Windows:

1.   After you select Custom and click Next, the Custom Setup dialog box is displayed. The Connect:Direct for Windows Server and Requester software will be installed automatically.

   •   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.

   •   To install Secure+ Option, click the icon next to Secure+ and identify the type of installation to perform.

   •   To install an SNMP extension agent, click the icon next to SNMP Extension Agent to remove the red X.

2.   The default installation path of Connect:Direct for Windows is C:\Program Files\Sterling Commerce\Connect Direct v4.5.00. If you want to change the installation path:

   •   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.

   •   After you choose the destination location, click OK.

3.   After selecting which components to install, click Next.

4.   The Configure Connect:Direct for Windows Server dialog box is displayed. Select Custom.

5.   The Enter Local Node Name dialog box is displayed showing the name of the local node, which is defined as the hostname of 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 v4.5.00\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 to connect using Windows authentication or Microsoft SQL Server using the specified User ID and Password.

8. On the Service Account Information dialog box, you can specify an optional user account to run the Connect:Direct service. To specify an account, click "Enter an optional service logon account," enter the following information, and follow by clicking Next.

- Service Account name
- Service Password
- Verify the password

Note: In setting up the logon account, give the account these privileges:

- Act as part of the operating system
- Log on as a service
- Log on locally
- Replace a process-level token
- Full permissions over the installation directory, typically "Program Files \Sterling Commerce\Connect Direct v4.5.00"
- Make the user a member of the local Administrators Group

9. To configure TCP/IP as the connection method, type or select the following information and click Next.

- Node-to-Node IP Address
- Node-to-Node Port
- User Interface IP Address
- User Interface Port

10. If you installed SNA, the Enter SNA Information dialog box is displayed. To configure SNA support:

- Select Configure SNA.
- Type the local LU name in the Local LU Name field.
- Type the network name or ID in the Network Name (NET ID) field.
- Type the mode name in the APPC Mode Name field.
- 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:

- To enable the SNMP extension agent, select Enable Connect:Direct SNMP Extension Agent.
- To enable event logging, select Enable SNMP Event Logging.
- Click Next.

13. The Notifications dialog box is displayed. To configure notification support:

- To enable Windows broadcasting, select NT Network Broadcast.
- To enable SMTP, select SMTP.
- 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.

Upgrade Installation

This procedure assumes that you have started the installation and have selected Upgrade as the type of installation you want to perform.

Do the following:

1.   Select a node to upgrade in the Installed Nodes drop-down list. Click Next to continue.

2.   If you are upgrading from Connect:Direct for Windows 4.2.00 or earlier, 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.   If you are upgrading from Connect:Direct for Windows 4.4.00 or later, the Configure MySQL Server dialog box is displayed. Configure MySQL by providing the port number and password. Click Next.

4.   Within the Upgrade Connect:Direct Options panel, you can choose to keep the previous version by checking the option "Keep <version - nodename>." Optionally, you can choose to upgrade the previous version to the current one by leaving the box unchecked. Click Next.

5.   The Ready to Install the Program panel is displayed. Click Install. A message informs you that Connect:Direct for Windows is being installed.

6.   The Finish dialog panel 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.

Add Connect:Direct for Windows Components

Before performing this procedure, first you must have installed Connect:Direct for Windows.

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, do the following:

1.   Start the Connect:Direct for Windows installation.

2.   On the Welcome dialog, click Next to continue.

3.   To install additional Connect:Direct for Windows components, do the following:
    • Select Modify to install an additional Connect:Direct component and click Next.

       • Select the component to add, choose "This feature will be installed on local hard drive," and click Next.

       • Click Install.

       • Click Finish to complete the modification.

Repair Connect:Direct for Windows Components

Before performing this procedure, first you must have installed Connect:Direct for Windows.

To repair Connect:Direct for Windows components:

1. Start the Connect:Direct for Windows installation.

2. On the Welcome dialog, click Next.

3. Select Repair and click Next

4. Click Install to repair the installation.

5. Click Finish to complete the modification.

Remove Connect:Direct for Windows Components

Before performing this procedure, first you must have installed Connect:Direct for Windows.

To remove a Connect:Direct for Windows installed component:

1. Start the Connect:Direct for Windows installation.

2. On the Welcome dialog, click Next.

3. Select Modify to remove a Connect:Direct component and click Next.

4. Select the component to remove, choose "This feature will not be available," and click Next.

5. Click Install.

6. Click Finish to complete the modification.

Install Requester Only

For cluster installations, computers other than the one on which Connect:Direct is installed may require that the Requester be installed.

This procedure is for installing Requester only.

To install Connect:Direct Requester:

1. Insert the Connect:Direct Requester CD into the CD drive or double-click the setup.exe file extracted from the file downloaded from the ESD Portal.

2.   If the Autorun option is enabled for the CD drive, the installation setup detects the type of
      Windows operating system installed on your computer and automatically starts the installation.
      If the Autorun option is disabled, do the following:

      • Click Start, then click Run.

      • On the Run dialog, click Browse.

      • On the Browse dialog, select the drive mapped to your CD drive from the Look in: field drop-
        down box.

      • Double-click Setup.exe. The program returns to the Run dialog box.

      • Click OK.

3.   On the Welcome dialog, click Next.

4.   On the License Agreement page, read the agreement and indicate acceptance by clicking "I accept
      the terms of the license agreement." Then click Next.

      Note: If you click "I do not accept...," you must terminate the installation.

5.   On the Setup Type dialog, select Typical and click Next.

6.   Click Install.

Install 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 drive, or locate the files you extracted
      from the ESD Portal, and double-click the FileAgentInstall.exe file.

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.

Uninstall Connect:Direct for Windows

Before performing this procedure, first you must have installed Connect:Direct for Windows.

The Connect:Direct for Windows Uninstall program removes the application, its components,
Connect:Direct Requester, and Connect:Direct for Windows server, program items, and most server
and Registry settings.

To uninstall the Connect:Direct Server program and all of the server utilities, perform the following
steps:

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.

Add 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 add firewall support initialization parameters:

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:

   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)

3. Apply the new initialization parameter.

4. 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	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.*, 1024), (fd00:0:0:2015:*::*, 2000-3000), (199.2.4.0/255.255.255.0, 4000-5000),(fd00:0:0:2015::0/48, 6000, 7000) A wildcard character (*) is supported to define an IP address pattern. If the wildcard character is used, the optional mask is not valid.

Parameter Name	Parameter Definition	Valid Values
tcp.src.ports.list.iterations	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.

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

Firewall Configuration Example

The following example illustrates a configuration of the firewall navigation initialization parameter. An explanation follows the example. Although the tcp.src.port parameter is shown as a multi-line parameter, 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 the 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).

Automate Installation

About Silent 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.

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.

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.

Customize Initialization Information for a Silent Installation

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 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.

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

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.

CD_SRVR.INI Parameter Values

Parameter Name	Parameter Definition	Values
CD_SETUP_TYPE	The installation type: Default, Custom, or Upgrade.	Default	Custom	Upgrade
CD_SQL_AUTHENTICATION	SQL authentication.	
CD_MYSQL_PORT	Port for MySQL database.	
CD_MYSQL_PWD	Password for MySQL database access.	
CD_NodeName	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 eight 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_NODE_CHECK		
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 \x.x.xx	Any valid Windows directory
CD_HOST_IP	The IP address of the host server.	Any valid IP address.
CD_HOST_PORT	The port number that Connect:Direct for Windows, or user-written API programs, will use 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 no larger than four digits. The default is 1364.

Parameter Name	Parameter Definition	Values
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	The port number that Connect:Direct for Windows or user-written API programs will use 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 no larger than four digits. The default is 1363.
CD_SNA_FLAG	Indicates whether 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.
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 xxx.xxx.xxx
CD_NOTIFY_SMTP_PORT	If CD_NOTIFY_TYPE = SMTP, this field identifies the port used by the SMTP host.	Port number up to four characters. 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.	1=enabled
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 \x.x.xx \MyUserAuthSettings.cfg	Any valid Windows directory and user authority file name

Parameter Name	Parameter Definition	Values
CD_NETMAP_FILE	The path name and file name of the network map file.	X:\Program Files\Sterling Commerce \Connect Direct \x.x.xx \mynetmap.map	Any valid Windows directory and network map file name
CD_NETMAP_CHECK		
CD_SVC_ACCOUNT	Connect:Direct service user account.	
CD_SVC_ACCOUNT_PWD	Connect:Direct service user account password.	
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

Customize 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. For more information about using the Configuration Utility, refer to "Defining and Managing the Connect:Direct Network" in Help or in the *Connect:Direct for Windows System Guide*.

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

• 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.

Run a Silent Installation

Setup.exe installs the Microsoft Installer, Visual C++ Runtime Libraries and other prerequisites on a system when they do not already exist. To complete the installation, Setup.exe reboots the system if required and resumes the installation after the computer has restarted.

Setup.exe can accept a limited number of command-line parameters. By using these parameters, you can pass parameters through Setup.exe to the included .msi file (MsiExec). To pass arguments to the .msi file, use the /v option. Once you specify this option, you can list any of the supported parameters that can be passed to Msiexec.exe.

If you don't want the Setup.exe to display a progress bar when it launches, use the /s command-line parameter. For example, if you enter Setup.exe /s, Setup.exe launches, but the user interface is not displayed. If you want the .msi setup to run silently as well, you'll need to pass the /qn command-line parameter through Setup.exe using the /v parameter—for example: Setup.exe /s /v/qn

Follow these special formatting rules when passing a parameter in this way. First, place a backslash (\) character before a quotation mark that resides within existing quotes. For example, the command line above contains the following: /v"C:\My Files\SecurePlusEnable.mst\". Because the path contains spaces, you must use quotes. However, since quotes are required around the complete argument, if you don't use the backslash before internal quotes, the command-line statement fails.

Do not put a space between the command-line option (/v) and the arguments you are passing. This rule is also illustrated in the above example.

Finally, if you are passing multiple parameters using the /v option, separate them with a space. For example, the following command enables Secure+ Option and specifies the license file:

Setup.exe /s /v"C:\My Files\SecurePlusEnable.mst\" CD_LICENSE_FILE=\"C:\My Files\license.key \""

To attach to the network and install Connect:Direct for Windows features from the network location in a silent installation:

1. Click Start > Run. The Run dialog box is displayed.

2. In the Open field of the Run dialog box, type a command similar to following example: Setup.exe / s /v/qn

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

    Note: Setup.exe 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 Setup.exe /v"INSTALLDIR=\"D: \Program Files\Sterling Commerce\Connect Direct v4.5.00\"" .

3. Computers in a Windows 2000 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: setup.exe /s /v/qn /M C: \Windows\CDNT.mif

Perform an Unattended Uninstallation

Connect:Direct for Windows provides for an unattended uninstallation. In the following example, the /x command parameter removes the package.

Setup.exe /x

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zlib.h -- interface of the 'zlib' general purpose compression library version 1.2.3, July 18th, 2005

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