

CD-Connect™ Version 1.6

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Corporation (CIC)
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Technical Support Information:

For the best response to technical issues, please FAX us at 303-442-2616 and provide a copy of your config.sys and autoexec.bat for the machine in question as well as a complete description of the problem.

CD-Connect Licensing:

CD-Connect is licensed in 5, 10, and 25 user increments. If you have the 10 user version, this means that 10 workstations may load CDUSER concurrently. These workstations may connect up to 5 different (or the same) CD-Servers. This means a total of 10 workstations may have a combined total of 50 connections at any one time. You may load as many copies of CDSERVER on CD-Servers as best fits your configuration, but each CD-Server requires a different directory.

CD-Connect components:

INSTALL.EXE:

Installation program to install CD-Connect. This file is not copied over to the installation directory.

CDSETUP.EXE:

This program will initialize data files for CDSERVER.EXE and CDUSER.EXE. CDSETUP will setup CD-Connect server names, resource names, and network addresses for segmented networks.

CDSERVER.EXE:

This is the CD-Server TSR. After checking for CDROM drives previously defined in CDSETUP, it will terminate and go resident waiting for CDUSER connections and requests. CDSERVER will load itself in conventional memory but may be loaded in high

memory using the MS-DOS 5.0 or greater lh or load high command. Please refer to the MS-DOS or DR-DOS manual.

CDUSER.EXE:

This is the client-side redirector TSR. When the specified local drive, CD-Server, and CD-Server resource are supplied to CDUSER, it will terminate and go resident, communicating with the remote CD-Server. CDUSER will first attempt to load itself in high memory, if available and there is enough room, then load in conventional memory.

RESOURCE.DAT:

This file is created the first time you run CDSETUP.EXE. CDSERVER requires this file to be in the same directory it is run from.

NETADDR.DAT:

This file is created the first time you run CDSETUP.EXE. Both CDUSER and CDSERVER require this file to be in the same directory they are run from.

CD-Connect requirements:

Novell Netware 2.X, 3.X, 4.X, Personal Netware, or Netware Lite

MS-DOS 3.3 or greater (or 100% compatible)

CDUSER requires 16K of conventional or high memory.

CDSERVER requires 18K conventional or high memory (with a memory manager), 64K of EMS memory, CD-ROM drive and drivers, MSCDEX.EXE version 2.0 or greater.

Notes for using CD-Connect with Novell Netware:

CD-Connect and the CONFIG.SYS LASTDRIVE= command: The Novell Netware shell, NETX.COM will assign the first network drive after the LASTDRIVE= command in your config.sys. If LASTDRIVE=E then your login drive will be F:. (This is the default if there is no LASTDRIVE command in the config.sys.) CDUSER.EXE and MSCDEX require a drive letter that is less than or equal to the LASTDRIVE= statement. Using the above example, and assuming drive C: as a local hard disk, CDUSER could use D:, and E: for the

redirected CDROM drives. If drives D: and E: are local drives or undesirable you may use Novell's VLMs and set your config.sys to LASTDRIVE= Z and use any drive letter from C: to Z:. For more information about Netware's VLMs, contact Novell.

CD-Connect and Netware's SPX: CD-Connect requires the SPX transport to be loaded for communication. CDUSER requires 1 SPX connection to operate and CDSERVER requires the number concurrent users for SPX connections. The default number of SPX connections is 15, however this default may be modified through Netware's NET.CFG file, generally located in the directory NETX.COM or VLM.EXE if loaded. If you receive the message 'SPX connection count is too low' message, increase the value in your NET.CFG file. (See Netware manuals for more information.) CDUSER and CDSERVER will also report a warning message if after loading there are no more SPX connections available. This is a non-fatal error informing you that any other applications that may use SPX will not run without the SPX connection count being increased.

INSTALLATION

Step 1 - Pre-installation

You must first install your CD-ROM drive(s) on the CD-Server according to your drive manufacturer's instructions. CD-Connect's CDSERVER requires access to the CD-ROM drive(s) via MSCDEX version 2.0 or greater. CDUSER does not use MSCDEX. A typical configuration for a CD-ROM drive before installation of CD-Connect might look like the following: (Using Adaptec's AHA 1542B SCSI adapter and a NEC-74)

```
CONFIG.SYS:
DEVICE=C:\DOS\HIMEM.SYS- Himem driver
DEVICE=C:\DOS\EMM386.SYS - EMM or EMS driver
DEVICE=C:\ASW410\ASPI4DOS.SYS      - Adapter
driver
DEVICE=C:\ASW410\ASWCDNEC.SYS      /D:ASPICD0
                                      CDROM driver
FILES=40
BUFFERS=40
LASTDRIVE=F
```

```
AUTOEXEC.BAT:  
PROMPT $P$G  
PATH=C:\DOS;C:\WINDOWS  
C:\DOS\MSCDEX /D:ASPICD0 /L:D /M:12
```

At this point you should be able to access the CD-ROM drive(s) locally on the CD-Server.

Step 2 - Running INSTALL.EXE

Insert the CD-Connect disk in floppy drive A: or B: and type: A:\INSTALL or B:\INSTALL

Enter in the destination path to install CD-Connect files. The best place to install CD-Connect is on the file server in a directory that is accessible to all users that will be using it. Once CD-Connect has completed the file copying, it will automatically load CDSETUP.EXE. It is recommended you follow along with the next steps when configuring and loading CD-Connect programs. You will need to have certain rights to add a directory, please refer to your Novell Netware manual.

Step 3 - Running CDSETUP.EXE

Select 'Set Resource Names' from the main menu.

a) Enter in the name of this CD-Server. (Example: 'CDSERV1')

b) Enter in the maximum number of total open files that will be available to remote users. The minimum is 20 and the maximum is 225. CDSERVER will use this number to allow remote users to open X number of files concurrently and the remaining files will be available to the foreground application on the CD-Server. If this number is 40 then your config.sys should read FILES=60, which would allocate 40 open files to remote users and 20 open files to the foreground application on the CD-Server.

c) Fill in the resource name, drive letter, and description for each CD-ROM drive available. Pressing the F9 key will search for all CD-ROM drives and fill in a default for these fields. (Example: 'CD1' 'F')

d) Press F10 to save the changes.

e) If the maximum number of files specified is greater than your FILES= statement plus 20 in the config.sys, CDSETUP will prompt you to update your config.sys FILES= statement.

Select 'Edit Network Address' from the main menu:

a) Fill in the hexadecimal numbers that represent different network segments on your network. If you are unsure what numbers to use, consult your network administrator. Pressing F9 will attempt to search for all known network segments for you. Netware Lite and Personal network users should use the default value of 1.

b) Press F10 to save the changes.

Step 4 - Running CDSERVER.EXE:

Type 'CDSERVER' on the CD-Server. CDSERVER will report the drive(s) it is making available to remote users and load resident.

Step 5 - Running CDUSER.EXE:

Run CDUSER on the remote workstation with the following command line parameters:

```
/s:ServerName          (Name of CD-Server to attach to, from step 3a)
/m:ResourceName       (Name of the resource to attach to, from step 3b)
/l:DriveLetter        (Local drive letter to assign to remote CD-ROM)
```

Using the examples in the previous steps you would type:

```
CDUSER /s:CDSERV1 /m:CD1 /l:F
```

This would assign drive F: as the remote CD-ROM drive on CD-Server 'CDSERV1' and 'CD1' as the drive you want to access. The drive letter you choose need not be the same as the drive selected under step 3b. The drive letter you choose must be less than the LASTDRIVE= parameter in the config.sys.

If you receive the message 'Unable to locate CD-Server 'ServerName'', re-run CDSETUP and confirm that your network addresses are setup correctly and that CDSERVER is running.

You may also supply the command line information using these DOS environment variables:

```
SET CDSRV=ServerName
SET CDNAM=ResourceName
SET CDDRV=DriveLetter
```

You may connect to additional remote CD-ROM drives by running CDUSER again and specifying different parameters.

Additional Information:

CDSERVER.EXE Command line options:

```
/U (Unload CDSERVER from memory)
/V (Get current version)
/? (Get command line help)
```

CDUSER.EXE Command line options:

```
/U (Unload CDUSER from memory and delete all
    connections)
/R (Remove a drive connection, must be used with
the /L parameter)
/L:DriveLetter (Specifies a local drive letter to
redirect)
/S::ServerName (Specifies a CD-Server to connect to)
/M:ResourceName (Specifies a CD-Server resource to
attach to)
/C (Load in conventional memory only)
/H (Load in high memory only)
/D (Display all resources)
/O (Overwrite an existing local drive)
/T:Seconds (Change search timeout)
/? (Command line help)
```

Error Messages from CDUSER and CDSERVER:

The following are errorcodes that are displayed and returned to DOS for both CDUSER and CDSERVER.

Error 1: **You must be running DOS Version 3.3 or later.**

CDUSER and CDSERVER require MS-DOS 3.3 or greater.

Error 2: **Unable to find startup directory.**

An unusual DOS error occurred, probably due to an incompatible version of DOS.

Error 3: **Unable to find a free vector, please unload one or more TSRs.**

There are too many TSRs loaded, unload one or more TSRs.

Error 4: **IPX is not installed.**

IPX must be loaded. Run IPX.COM or IPXODI.COM

Error 5: **SPX is not installed.**

SPX must be loaded. Run IPX.COM or IPXODI.COM. If these files are loaded, make sure they do not have the A command line parameter.

Error 6: **Unable to open network address file, please run setup.**

You must run CDSETUP to initialize the network address file NETADDR.DAT. If you have run CDSETUP, make sure this file resides in the same directory that CDUSER or CDSERVER is loaded from.

Error 7: **Unable to open socket.**

CDSERVER or CDUSER was unable to open a socket for communications. Edit the Netware file NET.CFG and add or increase the 'ipx sockets = ' parameter. If this does not solve the problem, unload any other networking TSRs (aside from the Novell startup TSRs) and try it running again.

Error 8: **Not enough memory to execute.**

There is insufficient memory to run the application. Unload one or more TSRs to free up some memory.

Error 9: **This Operating System is not supported.**

This computer is not running a supported operating system such as the OS/2 compatibility box.

Error 10: **Unable to open temporary file.**

The application was unable to open a temporary file for writing. Try setting the TMP= environment variable to a local drive.

Error 11: Invalid number of startup parameters.

The application was run without the necessary command line parameters. Please review the documentation for the program you are trying to run.

Error 12: Unable to unload due to hooked interrupts. TSRs must be unloaded in reverse order.

The TSR you are trying to unload cannot because TSRs must be unloaded in reverse order. Unload the TSRs that were loaded after the CD-Connect application.

Error 13: Unable to free memory.

The TSR was unable to free the memory it is using. This is probably due to some memory corruption.

Error 14: SPX connection error.

There was an error code returned when trying to establish an SPX connection. Make sure both the node and the CD-Server have enough SPX connections defined in the NET.CFG file.

Error 15: SPX connection timeout.

The remote computer did not respond to an SPX request. This could be due to very heavy network traffic, a bad cable, or bad adapter.

Error 16: TSR must be installed before you can unload it.

You have attempted to unload the TSR before it was installed.

Error 17: User aborted search... Exiting.

You hit the ESC key while the program was doing a network search.

Error 18: Maximum local connection limit has been reached.

The maximum local connection limit of five was reached. Unload the TSR and reload with the new parameters.

Error 19: Available SPX connection count is too low.

There are not enough SPX connections available for continued execution. Edit the Netware file NET.CFG

and add or increase the parameter SPX connections =.

Error 20: Unable to load TSR high.

There was not enough high memory for the TSR to load high and the command line parameter /H was specified. At this time, this only applies to CDUSER.EXE.

Error 21: Error on file read.

One of the data files has become corrupt. Restore from backup both .DAT files or delete the .DAT files and re-run CDSETUP.

Error Messages from CDUSER:

Error 100: Unable to install redirector.

Another TSR or device driver will not allow CDUSER to install. Try to unload other redirection TSRs.

Error 101: You must supply a CD resource name with /m:

CDUSER requires the /M:Resource name to connect to a CD-Server. See CDUSER Command line options for more information.

Error 102: You must supply a CD Server name with /s:

CDUSER requires the /S:Server name to connect to a CD-Server. See CDUSER Command line options for more information.

Error 103: You must supply a drive letter with /l:

CDUSER requires the /L:Drive letter to connect to a CD-Server. See CDUSER Command line options for more information.

Error 104: CDUSER is already loaded for drive [DriveLetter]

CDUSER is already loaded for this drive. Unload CDUSER or specify another drive letter.

Error 105: Maximum number of redirectors already installed.

The maximum total number of redirectors limit has been reached. Unload CDUSER from another workstation or upgrade to the next highest user version.

Error 106: Unable to locate CD-Server [ServerName]
CDUSER was unable to locate the server specified. Make sure the name specified is correct (run CDUSER -d to find out). If you still cannot see the server, verify that the network addresses are correct (through CDSETUP). Otherwise, try running CDUSER /T:5 to increase the search timeout.

Error 107: Drive [DriveLetter] is greater than LASTDRIVE LastDriveLetter]
The drive letter specified is greater than the LASTDRIVE parameter in the config.sys. Increase the LASTDRIVE parameter, decrease the drive letter passed to CDUSER, or use Netware VLMs.

Error 108: Drive [DriveLetter] is already assigned
Another application (such as Netware) is using this drive. Choose another drive or run CDUSER with the /O option.

Error 109: There are no available drives; change LASTDRIVE= in your CONFIG.SYS
Increase the LASTDRIVE= parameter in your config.sys. For example, it is common to put Z in as the last drive.

Error 110: Could not find CDUSER installed for drive [DriveLetter]
Not used at this time.

Error 111: Could not find any CD-Servers.
No CD-Servers could be found. See error 106.

Error 112: You cannot load CDUSER.EXE when CDSERVER.EXE is loaded.
You are attempting to load CDUSER then CDSERVER is loaded. Simply access the local version of the CD-ROM drive(s).

Error Messages from CDSERVER:

Error 200: Unable to locate EMM driver.
CDSERVER requires EMS memory to run. Add an extended memory manager to your config.sys file such as EMM386.SYS or EMM386.EXE.

- Error 201: EMM version must be 3.0 or greater.**
The EMM driver you are using is out of date. Load the newest version.
- Error 202: CDSERVER requires 4 EMS Pages (64K).**
There is not enough EMS memory to load CDSERVER. Decrease the amount of EMS memory other TSRs are using such as disk caches.
- Error 203: No available CD-ROM drives.**
CDSERVER could not detect any CD-ROM drive(s). Make sure MSCDEX is loaded and communication with the CD-ROM drives(s) is open.
- Error 204: Server with the same name already loaded on network.**
You are attempting to load another workstation CD-Server with the same name as another CD-Server. Copy CDSETUP and CDSERVER to a different directory, run CDSETUP and configure this workstation with a different CD-Server name.
- Error 205: You cannot load CDSERVER.EXE when CDUSER.EXE is loaded.**
CDSERVER and CDUSER cannot co-exist at this time.
- Error 206: CDSERVER is already loaded.**
You have attempted to load CDSERVER twice. CDSERVER can only be loaded once.
- Error 207: Unable to open network resource file, please run CDSETUP.EXE**
CDSERVER needs the file RESOURCE.DAT. Make sure this file is in the directory the CDSERVER.EXE was run from.
- Error 208: lease re-run CDSETUP.EXE or adjust the FILES**
parameter in your CONFIG.SYS to:
FILES = [Number]
The number of files in your config.sys is too low or the number specified in CDSETUP is too high.
- Error 209: A servername was not defined in the resource.dat file.**

Please run CDSETUP.EXE and define a servername.

No server name was specified in CDSETUP. Please re-run CDSETUP and enter a name.

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CD-Connect™

CD-ROM Access Software for Novell
Networks

***“Don’t stand in line while trying to get
online”***

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