

# Floppy Disk Drive Installation Guide

#### Copyright

Copyright © 1999, 2000 by Network Computing Devices, Inc. (NCD). The information contained in this document is subject to change without notice. Network Computing Devices, Inc. shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material. This document contains information which is protected by copyright. All rights are reserved. No part of this document may be photocopied, reproduced, or translated to another language without the prior written consent of Network Computing Devices, Inc.

Copyright © 1990, 1992, 1993, 1994, 1995, 1996 Tektronix, Inc. Wilsonville, Oregon.

Printed in the United States of America or the United Kingdom. All rights reserved. This document may not be copied in whole or in part, or otherwise reproduced except as specifically permitted under U.S. copyright law, without the prior written consent of Network Computing Devices, Inc., 350 North Bernardo Avenue, Mountain View, CA 94043 USA.

Portions of the network computer source code are copyrighted © 1989 by Sun Microsystems, Inc. Sun design patents pending in the U.S. and foreign countries. OPEN LOOK is a trademark of AT&T. Used by written permission of the owners.

Portions of this NCBridge software copyright © 1984-95 Adobe Systems Incorporated. All rights reserved.

Some fonts are copyrighted @ 1986, 1985 by Bigelow & Holmes. Lucida is a registered trademark of Bigelow & Holmes.

#### Trademarks

Network Computing Devices is a registered trademark of Network Computing Devices, Inc. WinDD and NCBridge are trademarks of Network Computing Devices, Inc.

Ethernet is a trademark of Xerox Corporation; UNIX is a registered trademark of AT&T; DEC, DECnet, DECwindows, ULTRIX, SCAMP, VMS, and VT are trademarks of Digital Equipment Corporation; SPARCstation is a registered trademark of SPARC International, licensed exclusively to Sun Microsystems, Inc.; Sun Microsystems, SunOS, NFS, Sun, Sun-3, Sun-4, and OpenWindows are trademarks of Sun Microsystems, Inc.; OSF, OSF/Motif, and Motif are trademarks of Open Software Foundation, Inc.; X and X Window System are trademarks of the Massachusetts Institute of Technology. Hewlett-Packard, HP, and vue are trademarks of the Hewlett-Packard company. IBM and SMIT are trademarks of International Business Machines. Silicon Graphics and IRIS are registered trademarks of OpenConnect is a registered trademark of OpenConnect Systems, Inc. Other trade names used in this document are trademarks or registered trademarks of the manufacturers or vendors of the associated products.

Microsoft, Windows NT and Windows95 are registered trademarks of Microsoft Corporation.

Adobe, Acrobat, Display PostScript, and ShowPS are trademarks of Adobe Systems Incorporated which may be registered in certain jurisdictions.

Use of a term in this book should not be regarded as affecting the validity of any trademark or service mark.

#### Certifications

UL 1950, CAN/CSA C22.2 No. 950, IEC 950, FCC Class A, EN55022 (class A), EN50082-1, EN60950, C-Tick, VCCI, MPR II (monitors only), CE, Energy Star Compliant (both monitor and logic unit).

#### Disclaimers

THE SOFTWARE PRODUCTS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, NCD FURTHER DISCLAIMS ALL WARRANTIES, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. THE ENTIRE RISK ARISING OUT OF THE USE OR PERFORMANCE OF THE SOFTWARE PRODUCTS AND DOCUMENTATION REMAINS WITH THE END USER.

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL NCD OR ITS SUPPLIERS BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, DIRECT, INDIRECT, SPECIAL, PUNITIVE, OR OTHER DAMAGES WHATSOEVER (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, OR OTHER PECUNIARY LOSS) ARISING OUT OF THE USE OF OR INABILITY TO USE THE SOFTWARE PRODUCTS OR DOCUMENTATION, EVEN IF NCD HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. BECAUSE SOME STATES/JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

#### Revisions

Revision history of this document:

Part Number	Revision Date	Description
9300948	July, 2000	NC200, NC400, and NC900 Network Computer Floppy Disk Drive Installation Guide, Rev. A.

#### **Contact Information**

Network Computing Devices, Inc. 301 Ravendale Drive Mountain View, CA 94043 USA

1-800-800-9599 (USA and Canada) 1-503-641-2200 http://www.ncd.com

# Safety Summary

## **Terms In This Document**

CAUTION statements identify conditions of practices that can result in damage to the equipment or other property.

## Introduction

These instructions describe how to connect your new floppy disk drive to your Network Computer (NC). Connection is made to the parallel port on the NC. When you are using the WinDD ICA client, this drive provides you with PC file storage and retrieval capability at your NC.

With NCBridge 3.2 (or higher), there is a new local floppy manager client that allows the user to transfer files between a UNIX host and the local floppy disk. Operation of this client is described later in this document.

Before you begin installation, check the contents of the kit to be sure that you have everything and check to be sure you have a Parallel Port installed in your NC. Then turn to the installation procedures that begin on page 2.

## **Kit Contents**

The Floppy Drive kit includes the following:

- One Floppy Drive
- One AC Power Adapter
- One AC Power Cord
- One Interconnect cable
- These installation instructions



## **System Requirements**

To connect the floppy drive to your NC, you must have a Parallel Port installed. If you do not have a Parallel Port installed, contact your NCD distributor or sales representative. In addition, your NC must be operating with NCBridge Software Version 3.2 or later.

## **Connecting the Drive**

- 1. Connect the drive to the NC's parallel port. Refer to the drawing in Figure 1. Look at the plugs on the interconnect cable. The plug that has pins connects to the NC; the plug that has holes connects to the floppy drive.
- 2. Connect the power supply to the floppy drive as shown.

Now you are ready to make the connection to the network described on page 4.

Connecting the Drive



Figure 1. Connecting the Floppy Drive to the NC



# Connecting the Drive to the Network with Windows NT Terminal Server

This section describes how to connect the floppy drive to the network via an ICA connection using a Windows NT 4.0 Terminal Server Edition host.

Before you can use the floppy drive you must connect the drive to the network, which means that you give the drive a designator and a path on the network. You only need to make this connection one time. The network connection will remain in effect each time you log on until you specifically disconnect the drive from the network.

Remember that you have exclusive access to the floppy drive connected to your NC. Other users cannot read from or write to the floppy drive connected to your NC, and you cannot read from or write to floppy drives connected to other NCs.

The following is a description for mapping the local floppy disk to a Windows NT Terminal Server using MetaFrame software.

- 1. Click on the Start button and select Programs⇒Windows Explorer.
- 2. Use either the Map Network Drive icon (Figure 2) if View⇒Toolbar is on or Tools⇒Map Network Drive Menu (Figure 3) if the icons are not used.

🔍 Ex	plorin	g - C:\				Map I	Network Driv	ve Icon	
<u>F</u> ile	<u>E</u> dit	⊻iew	<u>T</u> ools	<u>H</u> elp					
🗐 Sy	stem (C:	)			-	£	*	X 🖻 🛍	5
All Fo	lders						Contents	of 'C:\'	

Figure 2. Map Network Drive Icon

System (C:)	Èind	•	X 🖻
All Folders	Map Network Drive		of 'C:\'
👌 Desktop	Disconnect Network Drive		
i⊇ 💭 My Computer i∃ 🖃 3½ Floppy (A	<u>G</u> o to		5
🕀 🖅 🗐 System (C:)	📄 dtst	emp	

Figure 3. Network Drive Menu

Connecting the Drive to the Network with Windows NT Terminal Server

- 3. To disconnect a network drive, click on the *Disconnect* network drive icon or select *Tools*⇒**Disconnect Network Drive**... In the dialog box that appears, select the drive to be disconnected and click **OK**.
- 4. Select a drive designation in the Drive field (see Figure 4). The letter that appears in the block is the next available unused drive designation. You can use this letter or select a different one by pulling down on the button in the block or at the end of the block.

Map Network	k Drive		X
<u>D</u> rive:	0:	•	OK
<u>P</u> ath:		•	Cancel
<u>C</u> onnect As:			<u>H</u> elp
	Reconnect at Logon		Se <u>a</u> rch
Shared Directories:		🗖 <u>E</u> xpa	and by Default
😪 Client N	etwork		
E, Clie	nt	ICA-tep#71	
🔁 \\Client\A\$		Floppy	
🚰 InterDrive NT			
Microso	ft Windows Network		

Figure 4. Connect Network Drive Dialog Box

- 5. Enter \\Client\A\$ in the Path field. To do this: select the A drive in the Shared Directories (double-click on *Client Network*, then on *Client*, then click on *A*:), or pull down on the button at the end of the Path field and select \\Client\A\$.
- 6. Click on the **OK** button to make the connection.

The drive, which appears as a drive icon in the *Windows Explorer* window, is ready for use. You can use the *Windows Explorer* to move files to or from the floppy drive just as you would any other drive.



# Formatting a Disk

The current version of Windows NT Server 4.0 is not designed to format network-connected floppy disks. This means that you cannot format a disk locally in the disk drive connected to your NC using the disk formatting operations (**Copy Disk**, **Label Disk**, and **Format Disk**) in the *File* menu of the Windows Program Manager. Local disk-formatting capability is, however, a feature of the WinDD ICA client.

To format a disk, click the **Disk** button at the bottom of the WinDD login window (Figure 5) or select **Disk** from the *Options* menu in the WinDD menu bar (Figure 6). In either case the Disk Formatting Menu appears (Figure 7). Fill in the volume label block and set the Capacity and Quick Format parameters as appropriate, then press the **Start** button.

>>> CAUTION: The Copy Disk, Label Disk, and Format Disk selections in the Disk menu of the Windows File Manager are for use with the application server's A: drive. They have no effect on a disk in your local floppy drive and may destroy data on any disk in the servers A: drive.

Formatting a Disk

Options Help	
Application Server	Load
TS_LAB12	No Load License
IS_LAB19	0
TURBTSE	No Load License
WCP_TS	No Load License
Word97	Application
Application Server:	
WinDD Message Console	
Configure Disk Cano	Exit WinDD

Figure 5. WinDD ICA Client Log On Window

	w
Options	Help
Log On Configure	
Disk Exit	Program Manager - NV ile <u>O</u> ptions <u>W</u> indow <u>H</u> elp

Figure 6. WinDD ICA Client Options Menu



-	WinDD
Options Help	
	Disk
Label	
Volume Label:	Apply
Format	
Capacity:	1.44 MB
Volume Label:	
Format:	Full
	Start
Eject	Cancel

Figure 7. Disk Formatting Menu

Local Floppy Manager (LFM) Client for UNIX Hosts

## Local Floppy Manager (LFM) Client for UNIX Hosts

The LFM client provides a Graphical User Interface (GUI) for copying files between the local floppy drive attached to the NC via the parallel interface and a UNIX host server. The GUI features a point and click operation. The LFM client is available with NCBridge version 3.2 or higher.

The LFM client is compatible with both the current NC product and earlier NCs and X terminals. The compatible platforms are XP117C, XP119C, XP119M, XP200, XP350, XP400, NC200, NC400 and NC900 series products.

To start the LFM on an NC, ensure that the floppy drive is connected to the parallel port of the NC and powered up. Then, for the NC900, type this command at the command-line prompt:

xpsh -display <*ipaddr*>:0 lfm.900

Example: xpsh -display 134.6.5.12:0 lfm.900

To start the LFM client on a NC200/400 unit, type the following:

xpsh -display <ipaddr>:0 lfm.500

Example: xpsh -display 134.6.7.14:0 lfm.500

Once the client is properly executed, the console of the NC should indicate that the files "lfm.xxx" and "fdDrv.xxx" have been loaded, where "xxx" is one of the extensions listed below:

Model	Extension
ХР	(*.350)
NC200/NC400	(*.500)
NC900	(*.900)

The client screen should appear, as shown in Figure 8.



File				
Net: Login Path /tmp_	solar:dalen mnt/home/dalen/*	A: Volum Path \*	e NTSSD_0126	
12288 512 4096 4096 4096 4096 4096 118161 387013 294443 99306 4400 18944 3406 9216 142026 81113 1272 2352 0 20 20 2522	 dt .hotjava .netscape .netscape-old .snapshot 0709945.pdf 200645.zip 300645.zip 300645.zip 412-16.txt 419-23.txt 419-23.txt 426-30.txt 426	160 4400	MAILCAP 419–23.TXT	
File copied				Abort

#### Figure 8. Local Floppy Manager Client

#### Troubleshooting

# Troubleshooting

Use this troubleshooting guide if you encounter problems installing or using the floppy disk drive.

lf	Then
You cannot read files on a disk in the drive.	Check that the interconnect cable is installed correctly and completely attached to the floppy drive and the X terminal.
The WinDD ICA client window "hangs" when you attempt to connect network drive.	This typically happens when the local print spooler or net to port access is enabled. You (or your system administrator) can disable them by doing the following:
	<ol> <li>2. Modify the <i>xp.cnf</i> file to disable the net to port access or the local print spooler. Then restart the NC.</li> </ol>
The floppy drive will not format a disk.	Be sure that you use only the "Format" button at the bottom of the WinDD ICA client log on window or select "Format" from the Options menu in the WinDD menu bar when attempting to format a disk.
	Do not use the <b>Copy Disk</b> , <b>Label Disk</b> , or <b>Format Disk</b> selections in the Disk menu of the Windows File Manager. These are for use with the application server's A: drive; they have no effect on a disk in your floppy and may destroy data on any disk in the servers A: drive.



Network Computing Devices, Inc. 301 Ravendale Drive Mountain View, CA 94043-5207

