



DialOut Client Software User's Guide

Part No. 09-0910-000
Published June 1996

Trademark and Copyright Information

NCSIport is copyrighted by Network Products Corporation. All software manufactured by Network Products Corporation is copyrighted according to national copyright laws and international copyright treaties. Unauthorized duplication is a violation of Federal and international copyright laws.

NCSI and Network Modem Program are registered trademarks of Network Products Corporation.

NMP2, ACS2, +INS, ACS2/SA, and XCS2 are trademarks of Network Products Corporation. The numeral 2 designation is commonly used by NPC in place of the 2 designation.

Windows is a trademark of Microsoft Corporation.

Microsoft is a registered trademark of Microsoft Corporation.

NetWare is a registered trademark of Novell, Inc.

All other product names are trademarks or registered trademarks of their respective owners.

Network Products Corporation
1440 West Colorado Boulevard, Pasadena California USA 91105
Voice: 818-441-6504
Facsimile: 818-441-6894
In the US: 1-800-NET-PRO5

BBS Number: 818-441-6933

CIS 75300,1105
Internet techsupport@networkproducts.com
sales@networkproducts.com
World Wide Web www.networkproducts.com

Contents

Installation Instructions.....	1
DOS Installation.....	1
Windows Installation	1
Loading NCSI with Windows.....	1
Quick Start Guide.....	3
Operation	5
Win 95 Installation.....	5
A Word about Third Party Applications	6
NCSI Compatible Communications Applications.....	8

The AccessBuilder has supported dialout over a Telnet connection since version 5.0. With Version 6.1 the AccessBuilder also supports dialout over IPX works with NPC (Network Products Corporation) dialout clients. NPC clients support both the NCSI interface and supports a port redirector for Windows and Win 95.

The AccessBuilder support for dialout is documented in the configuration guide. All the AccessBuilder parameters for dialout are configurable through the Transcend AccessBuilder Manager. At the end of this document is the list of AccessBuilder parameters relating to dialout.

There are three clients shipped with the AccessBuilder Server 6.1 for dialout. They individually support DOS, Win 3.1 or Win 95. There is no native support for WIN NT. The extract utility for the CD (cdsetup) supports either installing the clients directly from the CD or copying the client software on a floppy diskette, network drive or local drive. There is no copy restrictions on the dialout client.

Installation Instructions

DOS Installation

For installing from a floppy drive:

a:
install

The install program will ask you where you want to install the client software.

For installing from the local drive or network drive you must change directory to the directory that has install.exe.

```
cd c:\dialout  
install
```

If you are not in the directory the install program is in then you will get an error during installation.

Windows Installation

Run setup from windows. The setup program will ask if your on a Novell network or not. It will ask the target directory. The default is c:\ncsi.

Loading NCSI with Windows

The client workstation interface, NCSI (Network Communication Services Interface), needs to be loaded on every workstation that requires access to the communication server. NCSI does not need to be loaded on the communication server unless that server is

running NPC communication server software as a TSR in a non-dedicated mode AND that workstation also requires access to the communication server resident there.

There are three ways to load NCSI on a Windows workstation:

1. Load NCSI prior to starting Windows. Note that the network drivers MUST be started prior to loading NCSI. This may not be possible if you are using protected-mode drivers.

You can save on memory by loading NCSI high (but avoid memory optimization programs) and disabling the command interpreter with a `-C` and limiting the number of virtual circuits with `-Vn`, where `n` is the number of virtual circuits desired. Note that some applications use more than one virtual circuit. Note also that some applications use the command interpreter, but mask its use from the user.

2. Create a file called `WINSTART.BAT` in your `\WINDOWS` sub-directory and using standard ASCII text editor enter the line `NCSI -W`. NCSI detects the presence of the Windows kernel and needs the `-W` switch to instruct NCSI to load and unload properly under Windows. `WINSTART.BAT` is analogous to `AUTOEXEC.BAT` for DOS and loads devices in extended memory after the Windows kernel and protected-mode networking functions are already loaded.

When NCSI is loaded this way, NCSI services are only available to Windows applications and are unavailable to virtual DOS sessions started from within Windows. If only Windows applications are being used with NCSI within Windows this may be an acceptable way to load NCSI. If a DOS session started from within Windows requires NCSI services also, start another instance of NCSI within the virtual DOS session itself giving NCSI the `-W` and `-D` command-line switches. NCSI detects the presence of the Windows kernel and needs the `-W` switch to instruct NCSI to load. The `-D` command-line switch tells NCSI to use a dynamic socket so the newly loaded NCSI will not interfere with the already resident, but undetected NCSI loaded in `WINSTART.BAT`.

3. Load NCSI in a DOS session by supplying the `-W` command-line switch. NCSI will only be available to THIS virtual DOS machine. You will not be able to "see" NCSI from any DOS Window or from Windows itself. Be sure to release NCSI by using `NCSI-REL` and supplying it the `-W` command- line switch also before closing the DOS Window.

Another component for windows is `NCSIport`. `NCSIport` is a Windows application that redirects Windows comm calls to NCSI, allowing 16 bit Windows applications that are not modem-pool-aware to access the NCSI interface without need for modification by the

vendor. Thus even non-NCSI compatible Windows applications can use the AccessBuilder.

Many applications include native support for NCSI. Most commercial terminal emulation and remote control applications include this support. These packages DO NOT require NCSIport. If possible, it is better to use the NCSI-compatible version of an application with NCSI. Generally an application that supports NCSI in native mode provides a more robust and feature-rich environment than an application used with NCSI through NCSIport.

Development of this comm port redirector was driven by the demand for FAX via NCSI and the lack of network support in certain communication applications. NCSIport allows AccessBuilder access while maintaining the original functionality of the COMM.DRV supplied with Windows. It will support multiple sessions of either local serial ports, network ports, or both.

NCSIport does not replace the comm.drv, but handles only the ports that are specified by NCSI.INI as redirected to NCSI. If you do not have a NCSI.INI one will be created for you when you use NCSIport. The standard comm.drv handles any non-redirected ports.

Quick Start Guide

This Quick Start assumes a machine with two physical COM ports and a standard Windows installation.

1. In the [386Enh] section of SYSTEM.INI, add the lines

```
Com3AutoAssign=0  
Com4AutoAssign=0
```

if they are not there already. This will allow com3 and com4 to become available for redirection.

2. In the [ports] section of WIN.INI add the lines

```
COM3:=9600,n,8,1,p  
COM4:=9600,n,8,1,p
```

This will allow some applications, such as TERMINAL, to "see" comm ports 3 and 4.

3. Exit and restart Windows.

4. In Windows, double-click the NCSIPort icon. The current status of your ports will be displayed. Select Ports on the menu bar. Select the port you wish to be redirected to NCSI. A check mark will appear beside either the word Normal or NCSI, depending on whether or not the port is to be redirected or handled by the Windows comm.drv. Click on NCSI so the port is redirected, as desired. A list of available NCSI ports will appear. Select the port you wish to use for the redirected output.
5. In your communications application specify the redirected port, e.g. COM3, and it will now use the communication server instead of a physical COM3 port.
6. You may wish to set the Minimize option in the NCSIPort Startup menu and add NCSIPort to your STARTUP group. This will make the redirected port(s) available each time you start Windows without requiring manual startup.

Operation

NCSIport stores default connection information in NCSI.INI. It is not necessary to reselect the network port when using NCSIport. It will use the previous selection. Entries in NCSI.INI can be changed by making the changes through NCSIport or by editing NCSI.INI directly.

The NCSIport is designed for use with Windows programs that make standard COM calls using the Microsoft recommended methods. While we claim many applications should work fine with the driver, Network Products is not responsible for the compatibility of any communication applications and cannot guarantee correct operation.

Win 95 Installation

NCSI.VXD is a Win95 driver that provides support for NCSI compatible DOS applications and existing 16bit Windows applications that support NCSI. It will also work with the current release of NCSIport (v4.0a) to provide redirection for non-NCSI 16 bit Windows applications. At the time of this beta there is no support for non-NCSI 32 bit Windows applications. In short, this VXD allows Win95 users to go on enjoying all of the functionality that was available previously under DOS, Windows, and Windows for Workgroups.

Attention ! Remove NCSI from your WINSTART.BAT or any other batch file, if you were loading it there.

Password Setup utility for Win95

There is a Password setup icon in Win95 for pre-loading user name and password. Its function is same as “ncsi.exe -l” of DOS driver. This is for those non-terminal applications like AOL and Compuserve to pass user name and password to AccessBuilder if DialOutAuthentication is set to yes.

Current Caveats

1. The RAS Dialup Adapter cannot be bound with IPX if you are running the IPX NCSI.VXD.
2. The Novell 32bit Client is currently not supported.

A Word about Third Party Applications

Most commercial applications support NCSI. Even though NPC has worked closely with applications designers over the years, programmers are free to implement NCSI support in a variety of ways.

Most applications that support NCSI put the NCSI-connection selector in the same spot as the COMn port selectors. For example, if a list is presented of available connection devices, it might look like this:

```
COM1
COM2
COM3
COM4
NCSI/NASI
INT14
```

The NCSI/NASI selection is the correct choice (NASI is the name of the software NPC licensed to Novell).

Generally after choosing NCSI or NCSI/NASI, a dialog box will appear asking you to configure the ports or services you want to connect to. The "ports" or "services" are the names given the AccessBuilder ports. If it has not been changed, the AccessBuilder ports are called AB_MODEM. You can check your port names by using the utility CLIST and typing CLIST /A in DOS while the server is running.

Some applications, like BTTY, make you type commands to connect to ports. In BTTY the command to connect to a port called PORT would simply be:

```
CONNECT AB_MODEM
```

ServerName [\admin\dialout \ipx\router]

Character string representing the name of the server, for example "R&D" or "Marketing". For dialout, this has to be a unique name throughout the network. It will also be used as the SAP name and NCSI server name. (Up to 10 characters. The default is 8 characters, ABxxxxxx* where xxxxxx is the least significant bytes of the MAC address.)

IPXEnabled [\admin\dialout]

Controls IPX protocol for dial out function. Periodically sends out SAP broadcasts of dialout service. (Yes: Enabled, No: Disabled*)

IdleTimeout [\admin\dialout]

Specifies the number of minutes a dial out session can be idle before it will be disconnected. (0 through 1440, 0:disabled, 5*)

KeepAliveTime [\admin\dialout]

Time, in minutes, in which the AccessBuilder must receive a keepalive packet from the client. If a keepalive packet is not received in this amount of time, the AccessBuilder disconnects the session.

(0 through 30, 0:disabled, 1*)

AuthenticationEnabled [\admin\dialout]

Sets the authentication on or off while using the dialout function.

(yes: enable*, no: disable)

DialOutEnabled [\port\s#_async#]

Enables or disables the dialout function for the port.

(yes: enable*, no: disable)

DialOutGeneralName [\port\s#_async#]

Group name for ports. A dial out client can connect to any port in the group. The maximum length is 8 bytes.(AB_MODEM* for async port.)

DialOutSpecificName [\port\s#_async#]

Specific name for each port. This name is unique throughout the entire network. The maximum length is 14 bytes. (ABxxxxxxSmPn* for AB4000 and ABxxxxxxPn* for AB2000, where xxxxxx is the least significant bytes of the MAC address, m is the slot number, and n is the port number.)

TelnetEnabled [\admin\dialout]

Controls the dialout function using the Telnet.

(Yes: Enabled, No: Disabled*)

LoginStatus [\path \port\s#async# \port\s#_br#\s#_br#_#]

Current login status on the port (unused, dialin*, dialout, router, disabled)

NCSI Compatible Communications Applications

Network Products Corporation has worked closely with a variety of communications application developers to provide a full range of applications. Using NPC's interface program, NCSI, and the NETWORK VERSION of a compatible application, a user on Advanced Netware, Vines, or NetBIOS Compatible network can use the AccessBuilder. A list of these applications is provided below. For more information on specific applications, please contact the manufacturer of the application.

TERMINAL EMULATION

AccuSoft

AccuTerm

8041 Foothill Blvd., Sunland, CA 91040 (818) 951-1891 fax (818) 951-3606

ADDS Viewpoint A2, Viewpoint Enhanced, Viewpoint 60

DEC VT52, VT220

PICK PC Color

Tektronix 4010/4014 Color

Wyse 50 & 60

Alpha Pacific Computer Systems

pcVision v3.1

1540 Marsh Street, Suite 202 San Luis Obispo, CA 93401 (805) 543-3282

Alpha Micro AM62 A

Data General Dasher 200

DEC VT320, VT340

Tektronix 4014

Wyse WY-50

Cambridge Computer Corporation

VX Connect

80 Mt. Stanford Road Mt Carmel, CT 06518 (203) 288-6004

ADDS Regent 20, Regent 25, Regent 40

Data General Dasher 100, Dasher 200, Dasher 210, Dasher 211, Dasher 214,
Dasher 215, Dasher 220, Dasher 400, Dasher 410, Dasher 411, Dasher 460,
Dasher 461

DEC VT52, VT100, VT220, VT340

Hazeltine 1500, 1520

Hewlett-Packard 700 Series, 2392A

Honeywell VIP 7200, VIP 7205, VIP7801, VIP7803, VIP7813

Lear-Siegler ADM-3A, ADM-5

Prime PST-100, PST-200, PST-250

Tele Video 910, 912, 920, 925, 950, 955
Wyse WY-50
Zentec 8000

Coefficient Systems

CoTerm
2039 Palmer Avenue, Suite 202 Larchmont, NY 10538 (800) 833-4220
DEC VT100, VT220, VT340
Tektronix 4010, 4012, 4014

Columbia University

Kermit
Kermit Distribution Center for Computing Activities 612 West 115th Street
New York, NY 10025 (212) 854-1919

CompuServe

Professional Connection CIM, Navigator for Windows, WinCIM
500 Arlington Centre Boulevard P.O. Box 20212 Columbus, OH 43220
(614) 457-8600

Control Data Services Inc.

VistaCom for Windows, VistaCom V, VistaCom VII
9315 Largo Drive West, Suite 250 Landover, MD 20785 (301) 808-4270
ADDS VP60
ADM 31
AJ 510
Data General 200
Data Point 8220
DEC VT52, VT100, VT102, VT220
PC 7171
PCI 100
Simware 3278
TAB 132, E32
Tektronix 401X, 4010, 4105, 4106, 4107, 4109, 4205, 4209
Televideo 925, 950, 970
Teletype TTY
VIP 7801
Wyse 50

Crosstalk/DCA

Crosstalk Mark IV, Crosstalk 16, Crosstalk for Windows
1000 Alderman Drive Alpharetta, GA 30202 (404) 442-4930
ANSI Color Graphics

ADDS Viewpoint 9
AT&T 510, 513
Data General Dasher 200
Datapoint 3601
DEC VT52, VT100, VT101, VT102, VT220, VT640
FTTERM
Hazeltine Espirit III
Hewlett Packard 2392A, 2394A, 2623A, 2624A
IBM 3101, 3278-2, 3278-3, 3278-4, 3278-5, 3279-2, 3279-3, 3279-52G,
3279-53G, 5290
Lear-Siegler ADM-3A
Teletype (TYT)
Tele Video 912, 925, 950
Tymnet 78
Wyse 50, 50+, 60

Crystal Point Software
PCTerm v3.2G, OUTSIDE View for Windows v2.1
22122 20th Avenue South East Suite 148 Bothell, WA 98021 (206) 487-3656
ADDS Regent 60, Viewpoint
Alpha Micro AM62 A
ANSI 3.64
Cifer T205
Data General Dasher 200, Dasher 410, Dasher 411, Dasher 460, Dasher 6053
Datapoint 8220
Dasher 460, 6053
DEC VT52, VT100, VT220, VT320, VT640
Hazeltine Esprit III, 1500
Hewlett-Packard 2622A, 239
Honeywell VIP 7200, VIP 7205, VIP 7801
IBM 3101-10, 3101-20
Microdata Prism IV
NCR 7901, 796-401
Qantel VT3
TAB 132/15
Tandem 6530
Teletype (TTY)
Televideo 950
Wyse 50
Zenith Z19

Datastorm Technologies, Inc.
Procomm Plus Network Version, Procomm Plus for Windows

3212 Lemone Industrial Boulevard Columbia, MO 65205 (314) 443-3282
ADDS 60, 90
ANSI BBS, X3-64
AT&T 605, 4410
Data General Dasher 100, Dasher 200, Dasher 210
DEC VT52, VT100, VT102, VT220, VT320
Esprit 3
Heath/Zenith 19
IBM 950, 3101, 3161, 3270, PC
Lear Siegler ADM3A-5, ADM31
Tele Video 900 Series, 910, 912, 920, 922, 925, 950, 955
Teletype TTY
Videotex
Wyse WY-50, WY-75, WY-100

Diversified Computer Systems (DCS)
EM4010, EM320, EM4105
3775 Iris Avenue, Suite 1B Boulder, CO 80301 (303) 447-9251
DEC VT52, VT100, VT102, VT220, VT320, VT640
Tektronix 4010, 4014, 4105

Flying Point Software
@Con/PC
20 Collingswood Sag Harbor, NY 11963 (516) 725-3622
Data General Dasher 200, Dasher 210, Dasher 211, Dasher 215, Dasher 400,
Dasher 410, Dasher 411
IBM ANSI
Teletype (TTY)

Friendly Software Sweden AB
Kompanion
Qvidingsgatan 5C
S-416 51 Goteborg, Sweden 46-031-19-78-30, fax 46-031-21-25-62
ANSI
CEPT
DEC VT100
PRESTEL

FTG Data Systems
EMU-TEK Five Plus, EMU-TEK 4200 Plus
P.O. Box 615
8381 Katella Ave., Suite #J Stanton, CA 90680 (714) 995-3900
DEC VT100

Tektronix 4010, 4012, 4014, 4105, 4107, 4109, 4205, 4207, 4208, 4209

Future Soft

Dynacomm, Dynacomm for Windows

1001 South Dairy Ashford, Suite 101 Houston, TX 77077 (713) 496-9400

ADDS Viewpoint /60

AT&T 605/705

CompuServe Vidtex

Data General D47

DEC VT52, VT100, VT120, VT220

Hewlett-Packard 700 Series, 94

MINTEL

IBM 3101

Tele Video 925, 950

Grafpoint, Inc.

TNET

1485 Saratoga Avenue San Jose, CA 95129 (408) 446-1919

DEC VT100, VT102, VT220

Tektronix 4010, 4012, 4014, 4105, 4107, 4115, 4125, 4207, 4208, 4211

Hayes Microcomputer Products, Inc.

Smartcom Exec v2.1, Smartcom for Windows v2.1

5835 Peachtree Corners East Norcross, GA 30092 (404) 840-9200

DEC VT52, VT100, VT102

IBM ANSI

Teletype (TTY)

HI-Q International

Mission Control

3 Lake Isle Way Ormond Beach, FL 32174 (904) 672-4668

KEA Systems LTD.

KEAterm 420, KEAterm 420 Plus, KEAterm 340, ZSTEM 320

3738 North Fraser Way, Unit 101 Burnaby, B.C., V5J 5G1 (604) 431-0727

DEC VT52, VT100, VT220, VT320, VT340, VT420

Tektronix 4010/4014

M/H Group

VsCom, VsCom for Windows

300 West Adams Street, Suite 840 Chicago, IL 60606 (312) 443-1222

DEC VT100

Retrographic VT640

Wang VS 2100, VS 2110A

Microcom Software Division

Relay Gold

Still River Corporate Center 55 Federal Road Danbury, CT 06810

(203) 798-3800

DEC VT52, VT100, VT220, VT240

IBM 3101, 3101-10, 3101-20, 3270, 3278-2, 3278-3, 3278-4, 3278-5, 3279-2,
3279-3, 3279-52G, 3279-53G, ANSI

Teletype (TTY)

Tymnet 78

Videotex Minitel, Prestel-40, Prestel-80, Viatel

MiniSoft, Inc.

MiniSoft 92, MiniSoft 92 for Windows

13617 State Highway 9 Snohomish, WA 98290 (800) 682-0200

DEC VT2250

Hewlett-Packard 700 Series, 2392A, 2622A, 2826A

Mustang Software, Inc.

QmodemPro

P.O. Box 2264 Bakersfield, CA 93303

TTY

ANSI

DEC VT52, VT100, VT102, VT220, VT320

IBM 3101

Heath

Televideo TVI925

Wyse 50

Debug ASCII, Hex

Avatar

RIPscrip

Persoft

SmarTerm

465 Science Drive Madison, WI 53711 (608) 273-6000

Data General Dasher 100, Dasher 200, Dasher 210, Dasher 211, Dasher 215,
Dasher 400, Dasher 410

DEC VT52, VT100, VT102, VT125, VT220, VT240, VT241, VT320

Hewlett-Packard 2392A

Tektronix 4010, 4012, 4014

Teletype (TTY)

Polygon Inc.
PolyStar, PolyCom
1015 Corporate Square Drive, Suite 100 St. Louis, MO 63132 (314) 432-4142
DEC VT52, VT102, VT220, VT240, VT241, VT320, VT340
Hewlett-Packard 2392A
Tektronix 4010, 4014
Teletype (TTY)

Rhintek Inc.
EMU/470
8835 Columbia 100 Parkway Columbia, MD 21045 (301) 730-2575
Data General Dasher 214, Dasher 215, Dasher 220, Dasher 411, Dasher 461,
Dasher 470, W 640

Simware, Inc.
Simpc
20 Colonnade Road Nepen, Ontario K2E 7M6, Canada (613) 727-1779
DEC VT100
IBM 3270
Teletype (TTY)

Softklone
Mirror III LAN v2.5, Mirror for Windows v1.1
327 Office Plaza Drive, Suite 100 Tallahassee, FL 32301 (904) 878-8564
ADDS Viewpoint, Viewpoint 9, Viewpoint 41, Viewpoint A2M
ANSI
Data General Dasher 210
DEC VT52, VT100, VT101, VT102, VT220
Honeywell VIP 7200
IBM 3101, Block Mode, ANSI
Lear-Siegler ADM-3A
Regis
TeleVideo 912, 920, 925
Texas Instruments 940
Tymnet 78
VIP 7305
Wang VS 2110A
Wyse WY-50
Zenith 2-29

Softtronics
Softterm PC
5085 List Drive Colorado Springs, CO 80919 (719) 593-9540

ADDS Regent 20, Regent 25, Regent 40, Regent 60, Viewpoint, Viewpoint 9,
Viewpoint 41, Viewpoint A2M, Viewpoint /60, Viewpoint /78
AT&T 610
Data General Dasher 200, Dasher 410, Dasher 411, Dasher 460,
Dasher 6053, 132 Column Mode
Datamedia DT 80
Datapoint 3601, 8220
DEC VT52, VT100, VT102, VT220, VT240
Hazeltine Espirit 6310, 1400, 1410, 1420, 1421, 1500, 1520, 2000
Hewlett-Packard 2392A, 2622A
Homer
Honeywell VIP 7205, VIP 7801, VIP 7803, VIP 7813
IBM 3101-10, 3101-20, 3162, ANSI
Kimtron KT-7
Lear-Siegler ADM-2, ADM-3A, ADM-5, ADM-11
Megadata SIR 1000
Microdata Prism II
NCR 796-401
Perkin-Elmer 1251
Prime PST-100, PST-200
Soroc IQ 120
Tandberg TDV 2200
Tandem 6530
Tandy TRS-80
Tektronix 4010, 4014
Teletype (TTY)
TeleVideo 910, 912, 921, 925, 950, 955
Texas Instruments 931
Tymnet 78
Wang VS 2110, VS 2110A
Wyse WY-50, WY-60

Software Ventures

Microphone Pro for Windows
2907 Claremont Avenue, Berkely, CA 94705 (510) 644-3232,
fax (510) 848-0885
DEC VT52, VT100, VT102
ANSI X3.64 (with color)
PC ANSI
Teletype TTY

Synex Systems Corporation
PK Harmony

1188 West Georgia Street, Suite 800 Vancouver, V6E 4A2, Canada
(604) 688-8271 - (800) 663-8663
ADDS Regent 20, Regent 25, Regent 40, Regent 60, Viewpoint 9
DEC VT52, VT100, VT101, VT102
Enhanced Viewpoint
IBM ANSI
Microdata Prism IV
Wyse WY-50

Transend Corporation
PC COMPLETE 4.1
884 Portola Road Portola Valley, CA 94028 (415) 851-3402
DEC VT52, VT100
Teletype (TTY)

Ungermann-Bass (U-B)
Contact
3900 Freedom Circle Santa Clara, CA 95052 (408) 496-0111
DEC VT52, VT100, VT220
IBM 3101

U.S. Robotics
Blast!
5615 Corporate Boulevard, Baton Rouge, LA 70808 (800) 24-BLAST
fax (504) 923-0888
ADM 3A
Ampex D80
Data General 200, 410, 411, 461
DEC VT52, VT100, VT220, VT320
IBM 3101
PC ANSI Color Graphics
Teletype TTY
TV 920
Wyse 50, 60

Walker Richer & Qinn (WRQ)
Reflection Series, Reflection 1 for Windows, Reflection 2 for Windows,
Reflection 4 for Windows
2815 East Lake Avenue East Seattle, WA 98102 (206) 217-7500
DEC VT52, VT100, VT101, VT102, VT125, VT220, VT240, VT241, VT320, VT340
Hewlett-Packard 700 Series, 2392A, 2394A, 2622A, 2623A, 2626A, 2637A
IBM 3270
Tektronix Tek4010, 4014

Teletype (TTY)

REMOTE CONTROL

Microcom, Inc.

Carbon Copy for Windows v2.0

500 River Ridge Drive Norwood, MA 02062 (617) 551-1000

fax (617) 551-1021

Ocean Isle Software

Reach-Out

49 Royal Palm Boulevard Vero Beach, FL 32960 (407) 770-4777

Symantec/DMA

pcANYWHERE IV LAN, pcANYWHERE LAN

10201 Torre Avenue Cupertino, CA 95014 (800) 441-7234

ADDS Viewpoint

Data General Dasher 200

DEC VT52, VT100

Hazeltine 1500

IBM 3101

Lear-Siegler ADM-3A

Tele Video 955

Triton Technologies, Inc.

Co/Session LAN

200 Middlesex Turnpike Iselin, NJ 08830 (908) 855-9440 -

(800) 322-9440

Teletype (TTY)

SPECIAL PURPOSE

Commerce Clearing House

CCH Access for Windows

4025 West Peterson Ave. Chicago, IL 60646 (312) 463-0074

Computer Vectors, Inc.

Bear Bone\$, IND\$FILE External Protocol

74-5599 Luhia St. #E-7 Kailua-Kona, HI 96740 (808) 329-5426 -

(800) 262-RCOM - BBS (808) 329-5142

Extrasensory Software

Telepathy Clipper Library

4450 Murietta Ave. Suite 8 Sherman Oaks, CA 91423 (818) 981-8367

FactSet Data Systems

FactSet

One Greenwich Plaza Greenwich, CT 06830 (203) 863-1500

Fitzgerald Telecom, Inc.

AlphaPage MD2001, AlphaPage for Windows, Alphanumeric Paging

635 East 185th Street, Cleveland, OH 44119 216-531-1313

Fourth Wave Technologies

WinBeep, Alphanumeric Paging

560 Kirts Blvd. Troy, MI 48084 (313) 362-2288

Interactive Data

Remote Plus

95 Hayden Avenue Lexington, MA 02173 (617) 863-8100

Mead Data General

Lexis/Nexis, Lexis/Nexis for Windows

9595 Springboro Pike Miamisburg, OH 45342 (513) 865-6800

Pinnacle Publishing, Inc.

CommTools, Communications Library for FoxPro

18000 72ND Avenue South, Suite 217 Kent, WA 98032 (206) 251-1900

Prentice-Hall

Phinet Access Plus

2400 Lake Park Drive Smyrna, GA 30080 (404) 432-1996

QL Systems Limited

QUICKLINK for DOS V7.0, QUICKLINK for Windows v1.3

1 Gore Street, Kingston, ON K7L 5J8 Canada (613) 549-4611

Safeco Insurance Company

SAFETERM

Safeco Plaza Seattle, WA 98185 (206) 545-5000

SofDesign International Inc.

Magna-Com C, C Language Communications Library

1303 Columbia Drive, Ste. #209 Richardson, TX (214) 644-0098

Trax Softworks, Inc.

Cypress for Dow Jones News/Retrieval v2.2

5840 Uplander Way Culver City, CA 90230-6620 (310) 649-5800

West Publishing Company
Westmate v4.8, Westmate for Windows v5.1
610 Opperman Drive Eagen, MN 55123 (800) 328-9352

WINDOWS BASED APPLICATIONS

Commerce Clearing House
CCH Access for Windows

CompuServe
Navigator for Windows, WinCIM

Control Data Services Inc.
VistaCom for Windows

Crosstalk/DCA
Crosstalk for Windows

Crystal Point Software
Outside View for Windows v2.1

Datastorm Technologies, Inc.
Procomm Plus for Windows

Fitzgerald Telecom, Inc.
AlphaPage for Windows

Fourth Wave Technologies
WinBeep

Future Soft
Dynacomm for Windows

Hayes
Smartcom for Windows v1.0

Mead Data
Lexis/Nexis for Windows

M/H Group
VsCom for Windows

Microcom, Inc.

Carbon Copy for Windows v2.0

MiniSoft, Inc.

MiniSoft 92 for Windows

QL Systems Limited

QUICKLINK for Windows v1.3

Softklone

Mirror for Windows

Software Ventures

MicroPhone Pro for Windows v2.0

Symantec/DMA

pcANYWHERE for Windows v1.x

Walker, Richer & Quinn (WRQ)

Reflections 1 for Windows, Reflections 2 for Windows,

Reflections 4 for Windows

West Publishing Co.

Westmate for Windows v5.1