INTERPHASE CORPORATION®

READ ME FIRST

SVC PCI ATM Drivers for NetWare 4.11/4.1/3.12

Description

This Read Me First supplements the Users Guide for Interphase SVC 5515TSI, 5525TSI (Token Ring) and 5515SI, 5525SI (Ethernet) PCI ATM adapters that use the Integrated Driver 1.2 (ID1.2) for Netware 4.1/ 4.11/3.12.

Release Notes

o ID1.2 supplies 3 NLM utilities to enable new capabilities. The CellView NLM allows configuration of the adapter and displays statistics. A companion NLM, cvconf, allows automatic re-configuration of the board from system boot. A third NLM, cvinit, will initialize the configuration file.

o After using CellView NLM to change or configure the adapter, the line “load cvconf” should be added to autoexec.ncf (after the load asig line and before the load cellview line) for automatic configuration. This NLM reads the configuration files built by CellView and issues board configuration commands. This is an alternate method from using command line parameters.

o Resetting CellView parameters.

In case of configuration file corruption or other problems. The command “load cvinit -d” will reset all configuration files to their proper defaults.

Enhancements

o Redundant link support has been added in the event of adapter failure.

o The driver is now fully multi-processor (MP) safe.

o SONET or SDH framing type and non-zero VPIs may be configured via Cellview.

o 4K VCs per adapter are now supported.

o ILMI autoconfiguration is now available.

NOTES

Information pertaining to pre-integrated driver usage but is still applicable.

o For Token-Ring support, add the following line to your STARTUP.NCF file.

SET MAXIMUM PHYSICAL RECEIVE PACKET SIZE = 5120

o We recommend that your system have at least 24 Meg memory or more.

o ID1.2 supports multiple MTU sizes (1516, 4K and 9K). If MTU size is not specified, it will default to 1516 for ethernet and 4k for Token Ring. To load a driver with 4K or 9K MTU size do the following to your 5515si load line.

For 4K support, add the following parameter to your 5515si load line:

MTU=4

Also, modify the startup.ncf file and add the following line.

SET MAXIMUM PHYSICAL RECEIVE PACKET SIZE = 5120

If you decide to load a driver with 9K support then add the following parameter to your 5515si load line;

MTU=9

For 9K MTU size, modify the startup.ncf file to the following:

SET MAXIMUM PHYSICAL RECEIVE PACKET SIZE = 10240

In CellView, you have an option to select different MTU size for each LEC that you enable. If you select an MTU size 4K or 9K, you will also need to add the MTU size to the load line as mentioned above.

The supplied ETHERTSM.NLM must be installed on the servers SYSTEM directory. This Ethertsm is only required for 9K ethernet support.

o ID1.2 also supports RFC 1577. To enable 1577, first load Ethernet_II frame type and bind it to an IP then add the following parameter to the load line.

IPENABLE=Y

Example:

load 5515si channel=1 frame=Ethernet_II Name=5515si_ip IPENABLE=Y bind IP 5515si_ip addr=xxx.xxx.xxx.xxx mask=xxx.xxx.xxx.xxx

After adding the parameter “IPENABLE=Y” to load line, modify the 1577 parameter in CellView.

Netware 3.12 Installation Notes

1. This driver is identical to the Netware 4.1 driver with the exception that it has specific module dependencies for NLMs (Netware Loadable Modules). Novell has provided for backward compatibility. ETHERTSM.NLM and MSM31X.NLM on the installation media are provided for this migration.

2. On Netware 3.12, the driver must be installed manually. To do a manual installation copy all of the files from the installation media to the server directory.

copy a:*.* c:\server.312

copy a:\nw312*.* c:\server.312

3. Edit the autoexec.ncf file to contain these lines. There is a minor difference between the Token-Ring driver.

For the ethernet (5515si or 5525si) driver add the following lines:

load c:\server.312\ethertsm

load c:\server.312\5515si or 5525si OPTIONAL PARAMETERS

<bind commands go here>

load c:\server.312\ASIG.NLM

For the Token-Ring (5515si or 5525si) driver add the following lines:

load c:\server.312\MSM31X.NLM

load c:\server.312\5515tsi or 5525tsi OPTIONAL PARAMETERS

<bind commands go here>

load c:\server.312\ASIG.NLM

Note: It is not necessary to have the ethertsm load line (loadc:\server.312\ethertsm) added for the Token-Ring driver.

If you have already installed the 5515si or 5525si driver and want to add Token-Ring support, do the following:

a. Unload the 5515si or 5525si (whichever is installed) driver.

b. Comment out the ethernet load line (load c:\server.312\ethertsm)

c. Change the name 5515si to 5515tsi or 5525si to 5525tsi as shown above in the load lines.

IMPORTANT NOTE: The Token-Ring and Ethernet drivers cannot be loaded simultaneously. You must install only one driver not both.

4. Refer to the 5515 Users Guide for the OPTIONAL PARAMETERS keyword usage. These parameters allow configuration of variables such as LECS addresses, ELAN names, etc. Netware 3.12 restricts command lines to 100 ASCII characters. This restricts usage of the OPTIONAL PARAMETERS, and a solution is under investigation.

Optional Parameter	Maximum bytes	Description
LECS_NP	13	Lane Emulation Configuration Server Network Prefix
LECS_ESI	7	Lane Emulation Configuration Server ESI/SEL
LES_NP	13	Lane Emulation Server Network Prefix
LES_ESI	7	Lane Emulation Server ESI/SEL
ELAN		This is the network name of the emulated LAN.
UNI		UNI Version - use “31” to enable UNI 3.1

5. Newer ETHERTSM.NLM and MSM.NLM files may be required. These may be obtained from the Novell Web site. www.novell.com

Multi-Board Installation Notes

1. For multi-board installation, the slot number must be specified.

For example, if you are installing 2 boards located in slots 2 and 3, set up your autoexec.ncf file and add the following lines.

load <driver> CHANNEL=<number> ELAN=<name> FRAME=<type> NAME=<name> SLOT=2

load <driver> CHANNEL=<number> ELAN=<name> FRAME=<type> NAME=<name> SLOT=3

2. For multi-board installation with BACKUP option, the backup slot number must be specified.

For example, if you are installing 2 boards located in slots 2 and 3, and if you want set up slot 2 as a primary board and slot 3 as a backup board, add the following lines to the autoexec.ncf file.

load <driver> CHANNEL=<number> ELAN=<name> FRAME=<type> NAME=<name> SLOT=2 BACKUP=3

load <driver> CHANNEL=<number> ELAN=<name> FRAME=<type> NAME=<name> SLOT=3

NOTE: Don’t BIND the backup board to any protocol.

3. Each 5515 adapter can support up to 16 emulated LAN’s (Channel 1 through Channel 16).

To add Multiple LAN Emulation Clients, copy the line as shown above including the slot number and increment the channel number.

Netware 4.x Installation Notes:

1. For Token-Ring driver, in step 7 on Page 98 of your 5515 Users Guide, specify the following path:

A:\token

2. Newer ETHERTSM.NLM and MSM.NLM files may be required. These may be obtained from the Novell Web site. www.novell.com

Outstanding Issues

This release has the following known issues. These issues are active and in progress.

1. If you unload the ASIG.NLM and then load ASIG.NLM again without first downing the Netware server the clients may not come up.

2. If you load multiple ELAN with different MTU sizes on one board, the largest MTU ELAN should be designated as CHANNEL 1.

3. When use INSTALL module to load multiple ELAN with multiple boards, only one instance of the drivers you loaded will be copied to the AUTOEXEC.NCF file, although multiple drivers can be loaded successfully. If so, the INETCFG module is recommended to use when you load multiple ELAN with multiple boards.

4. A page fault abend has been experienced on SMP machines running ethernet LAN emulation under high stress situations. This abend has been traced to a transmit buffer list corruption problem in ethertsm.nlm. Interphase engineering is working with Novell engineering on a solution.

5. If you use PVC ONLY option, the driver could not receive packets properly for this particular version.

Contact Information

Customer Support

United States:	Telephone:	(214) 654-5555
	Fax:	(214) 654-5500
	E-Mail:	intouch@iphase.com
Europe:	Telephone:	33 (0)1 41 15 44 00
	Fax:	33 (0)1 41 15 12 13

World Wide Web

http://www.iphase.com

Anonymous FTP Server

ftp.iphase.com