

ForeThought for the PC

Release Notes
Version 5.0.2

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1.0 General Description of Software Release

These release notes highlight the features and known issues associated with the *ForeThought* 5.0.2 release, which adds driver support for the *ForeRunnerHE* 155 adapter on the Windows NT operating system.

2.0 For More Information

2.1 Viewing the On-line Manual

The on-line manual included with this release contains complete installation procedures, an ATM, LANE, and Classical IP overview, troubleshooting information, and additional information for using your FORE adapter. You can read and print the on-line manual using an Acrobat Reader.

The on-line manual is available with the driver files downloaded from the FORE website or FTP site. You can download a reader from the Adobe website at:

http://www.adobe.com/

2.2 The FORE Website

For the latest technical documentation and release notes for the FORE ATM adapters and other FORE products, visit the FORE technical manual website at:

http://www.fore.com/products/manuals.htm

The website provides manuals in Portable Document Format (PDF). They can be viewed or printed using Adobe Acrobat Version 3.0 Readers.

The FORE Technical Assistance Center (TAC) website also includes the latest FORE drivers and technical tips.

3.0 System Requirements

The *ForeThought* 5.0.2 adapter software requires that *ForeThought* 4.0.x or greater software also run on a switch, *PowerHub* 7000, SunOS workstation, or Solaris workstation in your network, in order to accommodate the LAN Emulation Services. Please contact FORE Systems for information on upgrading your switch software if necessary.

4.0 Improvements

- The ForeThought driver for Windows NT now supports the ForeRunnerHE 155 adapter. This adapter supports UBR, CBR, and VBR.
- The ForeThought Windows NT driver now supports an SNMP agent.
- The ForeThought Windows NT and Windows 95/98 drivers support the FORE Service Provider Interface (SPI) for the Winsock2 SDK version 2.0. This SDK is available from:

ftp.microsoft.com/bussys/winsock/winsock2

5.0 Known Issues or Concerns

5.1 General Issues

- These drivers no longer support the OS/2 or Macintosh platforms.
- These drivers will not inter-operate with release 1.x of PC adapter software from FORE.
 - No SPANS support.
 - No FORE IP support.
 - No FORE LAN Emulation 0.4 support.
- When using IPX/SPX, the Auto-detect frame type may not always work. If it does not, set the frame type manually.
- Note that when you configure an ELAN driver, the LECS configuration applies to all ELAN drivers. All ELAN drivers must use the same LECS, whether you use the well-known address, PVC (0,17), or manually enter the address.
- Due to the default TCP buffer size, you might encounter poor performance during FTP operations. Increasing the TCP buffer size to a large number may improve performance.

5.2 Hardware Compatibility and Installation Issues

Miscellaneous Hardware Issues

- As indicated in the manual, be sure to install the FORE adapters in a Bus Master slot.
- FORE recommends that the HE 622 adapter be installed in the primary PCI bus rather than a secondary PCI bus to prevent possible UNI connectivity problems.
- When using these drivers with the PCA-200EPC adapter in some laptop computers and docking stations, you may receive the error "docking station failed request" when undocking from the docking station. You must shutdown and reboot the system.

HE Adapter DEC Alpha DMA Setting Issue

When used in DEC Alpha machines, the HE adapters (155 and 622) require that the DMA-window mode settings for the machine be set to maximum.

 For lower-end Alpha workstations which use ARC firmware (for example, the AlphaStation 600) you can use the DEC Alpha utility dmaconf.exe to increase the DMA map registers. This utility is available from the DEC website at:

http://www.windowsnt.digital.com/support/driver.asp

From this web page:

- Select the link labelled "DIGITAL Alpha Systems Drivers, Firmware, and Configuration Utilities." A new page appears, listing various driver and utility families.
- Select the "Windows NT" in the OS Family table. A new page appears, listing the Windows NT utilities.
- Find the dmaconf.exe utility in the list and download it. Run it as described in the readme file included with the utility, and set the DMA Window Mode to "Maximum Mode."
- For other Alpha workstations and servers that do not use ARC firmware, you can simply run the AlphaBIOS setup on the machine and use the Advanced CMOS feature to set the DMA Window Mode to "Maximum Mode."

IBM 320 Compatibility Issues

Depending on the BIOS version you are using, the FORE adapters might not run on the IBM 320. If you encounter this problem with an LE or PCA adapter, please install the latest BIOS for this machine, dated 6/19/96 or later. This BIOS is available from IBM's web site as the file 320BIOSE.EXE, where it is listed as:

PC Server PCI/EISA BIOS 16T3B (313191 bytes, 07-15-96)

After expanding 320biose.exe the BIOSLEVL file should contain:

BIOS Code version: M54Pe_16T3B dated: 06/19/96

HP Vectra Compatibility Issues

If you encounter problems when running the FORE drivers on an HP Vectra machine, turn off the Ethernet controller.

PCA Adapter DEC Alpha Compatibility Issues

- Alpha-based workstations using the Digital Semiconductor PC164 Motherboard with a SCSI based controller board along with a PCA-200EPC adapter may encounter booting difficulties. Contact DEC for the latest firmware upgrade to resolve the problem.
- An interoperability problem exists with the PCA-200EPC adapter in a DEC AlphaStation 500 that may result in a BIOS conflict with a SCSI controller. FTP to DEC at the following address to download the latest firmware (as500_v6_4.exe) to resolve the problem.

ftp://ftp.digital.com/pub/Digital/Alpha/firmware/v4.0/alpha500

5.3 Windows 98 Issues

WARNING!



Be sure to review this section before attempting to upgrade a PC with FORE drivers installed to Windows 98.

Before upgrading a PC from Windows 95 to Windows 98, you must completely remove the FORE adapter drivers from the Networking control panel.

If you do not remove the drivers prior to upgrading to Windows 98, the machine will hang and corrupt the ATM setup information, requiring a re-installation of the operating system.

To remove the drivers:

- 1. Display the Network control panel by using the following procedure:
 - a. Choose the Start button on the Taskbar.
 - b. Choose Settings.
 - c. Choose Control Panel. The Control Panel appears.
 - d. Double-click on the Network icon.
- Select each FORE adapter driver in the list and click the Remove button. Repeat for each FORE driver.

5.4 Windows 95 and 98 Issues

- Sporadically Windows 95 halts when the system is warm-booted. Power cycle the system to proceed.
- In some circumstances, the Windows 95 plug and play feature does not discover the adapter card and does not automatically install the *ForeRunner* ATM driver. This most often occurs in two situations:
 - At some previous time, when the adapter card was discovered by Windows 95 at boot-up and the New Hardware Found dialog box appeared, the Do not install a driver (Windows will not prompt you again) option was chosen.
 - Another adapter had been previously installed in the machine.

In this case, check for an unknown (question-mark) entry for the previously-installed adapter in the Device Manager tab of the System Properties control panel. You can delete the unknown entry using the procedure in the Windows 95 installation chapter of the manual, in the section "Installing the ATM Driver Manually." After deleting the unknown entry and re-booting, Windows 95 will discover the adapter card and you can install the driver via plug-and-play, as described in the manual.

5.5 Windows NT Issues

- Due to binding constraints in Windows NT, some machines can support only 12 Token Ring ELANs, rather than a total of 16. If your machine is unable to load 16 Token Ring ELANs, reduce the number of ELANs that the machine is attempting to join to
- When using a FORE adapter in a Windows NT machine acting as a router between a Token Ring ELAN and a legacy Token Ring LAN, note that the legacy Token Ring client workstations must set their default gateway to the address of the Token Ring NIC in the Windows NT machine serving as the router.
- Due to limits with Windows NT Services for Macintosh, you are limited to a combined total of eight ELAN and IP Over ATM drivers when using Windows NT Services for Macintosh.

5.6 InFOREmation Center Issues

- In the InFOREmation Center utility, depending on connection status, connection information may appear in yellow. If the yellow text is not readable on your machine, please adjust your screen resolution to improve clarity and contrast.
- In the InFOREmation Center Connection List, if a connection is a PVC opened by a WinSock application, the connection is shown as being an VC, rather than a PVC.

6.0 Contacting Technical Support

In the U.S.A., customers can reach FORE Systems' Technical Assistance Center (TAC) using any one of the following methods:

1. Select the "Support" link from FORE's World Wide Web page:

http://www.fore.com/

2. Send questions, via e-mail, to:

support@fore.com

3. Telephone questions to "support" at:

800-671-FORE (3673) or 724-742-6999

4. FAX questions to "support" at:

724-742-7900

Technical support for customers outside the United States should be handled through the local distributor or via telephone at the following number:

+1 724-742-6999

No matter which method is used to reach the TAC, customers should be ready to provide the following:

- · A support contract ID number
- The serial number of each product in question
- All relevant information describing the problem or question