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Implementing Microsoft Windows .NET Beta 3 on Compaq ProLiant Servers

Abstract: Compaq wants to facilitate customers who want to test the pre-release versions of the new Microsoft® Windows® operating system (Microsoft® Windows® Codename “Whistler” or Microsoft® Windows® .NET Server) on Compaq ProLiant servers. Compaq began providing support for non-production deployments of the pre-release kits, beginning with the Beta 1 release.

This paper describes the level of support available for Microsoft® Windows® .NET Server Beta 3:

- Supported configurations of Compaq ProLiant servers
- Recommended minimum system configuration and server platforms
- Supported software, storage options, and network adapters
- Installation procedures and possible issues in moving to Windows .NET Beta 3
- Support limitations for Windows .NET Beta 3 and known issues with workarounds

This integration note describes the level of support available for Microsoft Windows .NET Standard Server and Enterprise Server editions of the Windows .NET Server Family. It does not describe support for Windows .NET Datacenter Server or Limited Edition for Intel Itanium 64-bit systems.

Compaq continues to test its server products with the Windows .NET Beta 3 release. At the time of publication, this paper was complete and accurate to the best of our knowledge.

For additional information about the Windows .NET Beta 3 release, visit the Compaq support page for Windows .NET at <http://www.compaq.com/partners/microsoft/whistler/index.html> and the Microsoft website (<http://www.microsoft.com/>).

Help us improve our technical communication. Let us know what you think about the technical information in this document. Your feedback is valuable and will help us structure future communications. Please send your comments to: OSIntegrationFeedback@Compaq.com

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Implementing Microsoft Windows .NET Beta 3 on Compaq ProLiant Servers
Integration Note prepared by ISSG Technology Communications

First Edition (December 2001)

Document Number 15TM-1101A-WWEN

Introduction to Windows .NET Beta 3 Release

Windows .NET does not represent a radical architectural departure from Microsoft Windows 2000. Rather, Windows .NET is an extension of the Windows 2000 operating system (OS) environment developed to enhance the customer experience and improve the overall usability and deployment. With few exceptions, code developed for use under Windows 2000 should work with Windows .NET.

Besides providing enhanced functionality, Windows unifies the Microsoft operating system code base and provides a common code base for all Microsoft OS versions, from the desktop to the data center. Microsoft is providing Windows .NET in both 32-bit and 64-bit editions. The 64-bit edition supports the Intel Itanium processors.

This paper covers the 32-bit editions of Windows .NET Standard Server and Windows .NET Enterprise Server running on Compaq ProLiant servers based on the IA-32 architecture.

Supported Configurations

Windows .NET Beta 3 should load and run on any Compaq ProLiant server that meets the recommended hardware requirements established by Microsoft. However, it is not possible for Compaq to test all hardware and software configurations during the early beta phase. The listing of a particular system or option in the tables that follow does not mean that all of the subsystems embedded in that system are fully tested or that all systems and options have undergone extensive functional testing.

Carefully review this document for the recommended minimum system configuration and possible issues you might encounter. Performing due diligence optimizes your resources and testing scenarios. Do not use this paper as your sole source of information. In addition to the Compaq websites mentioned, you might also want to visit the Compaq support page for Microsoft Windows .NET Beta 3 at <http://www.compaq.com/partners/microsoft/whistler/index.html> and the Microsoft website at <http://www.microsoft.com/>.

Recommended Minimum System Configuration

Table 1 lists the recommended minimum system configuration established by Microsoft for Windows .NET Beta 3. The recommended minimum system configuration may change, as the final release becomes imminent.

Table 1. Recommended minimum system configuration for Windows .NET Beta 3

Parameter	Standard Server	Enterprise Server
Processor	550 MHz	550 MHz
RAM	256 MB	256 MB
Monitor	VGA or higher resolution	VGA or higher resolution
Available Disk Space	4 GB	4 GB

Note: Available disk space refers to free disk space on the partition to contain the system files. Additional space is required if you copy the Windows .NET Beta 3 CD-ROM contents to the hard disk during installation.

IMPORTANT: Compaq has not tested and therefore does not support use of the Microsoft Windows XP client operating system on Compaq server platforms.

Server Platforms

Table 2 lists the Compaq servers and ROM version for which Compaq supports running Windows .NET Beta 3. The latest version of the ROMPaq is also provided. Refer to the following resources on the Compaq website to assist in determining the ROM version and family of your Compaq server products.

- Determining System ROM family code and version:
<http://www.compaq.com/support/files/server/us/romhowto.html>
- Latest ROMPaq Downloads:
<http://www.compaq.com/support/files/server/us/romtabl.html>
- Server Software Download Center:
<http://www.compaq.com/support/files/server/us/index.html>

Table 2. Supported system platforms for Windows .NET Beta 3

Server Platform	ROM Family	ROMPaq Version	ROM Date
ProLiant CL1850	P07	4.14A	07/20/01
ProLiant CL380	P17	4.07A	08/04/01
ProLiant DL320	D05	4.03A	09/10/01
ProLiant DL320 (with server feature board)	F05	4.03A	09/10/01
ProLiant DL360	P21	4.09A	08/03/01
ProLiant DL380 G2 (1133 MHz and greater)	P24	4.00A	08/28/01
ProLiant DL380 (667-1000 MHz)	P17	4.08A	08/04/01
ProLiant DL580	P20	4.05A	04/05/01
ProLiant DL760	P46	4.00A	02/16/01
ProLiant ML330 G2	D10	N/A	10/23/01
ProLiant ML330	D03	4.06A	05/21/01
ProLiant ML330 (with server feature board)	F03	4.06A	05/21/01
ProLiant ML330e	D06	4.01A	08/03/01
ProLiant ML350 G2 (1133 MHz and greater)	D11	4.00A	10/23/01
ProLiant ML350 (1 GHz)	D04	4.09A	08/04/01
ProLiant ML350 (1 GHz with server feature board)	F04	4.09A	08/04/01
ProLiant ML350 (600, 733, 800, 866, 933 MHz)	D02	4.08A	05/21/01
ProLiant ML350 (600, 733, 800, 866, 933 MHz with server feature board)	F02	4.08A	05/21/01
ProLiant ML370 G2 (1133 MHz and greater)	P25	4.00A	08/28/01
ProLiant ML370 (667-1000 MHz)	P17	4.09A	08/04/01
ProLiant ML530	P19	4.08A	08/04/01
ProLiant ML570	P20	4.05A	04/05/01

continued

Table 2. Supported system platforms for Windows .NET Beta 3 (continued)

Server Platform	ROM Family	ROMPaq Version	ROM Date
ProLiant ML750	P45	4.00A	10/23/01
Prosignia Server 720	D01	4.06A	04/19/00
Prosignia Server 720 (with server feature board)	F01	4.06A	04/19/00
Prosignia Server 740	S01	4.09A	11/08/00
ProLiant 400	D01	4.06A	04/19/00
ProLiant 400 (with server feature board)	F01	4.06A	04/19/00
ProLiant 800 (Pentium II Processor 350e, 400, 450, 500, 550, 600 MHz with 100 MHz bus)	P14	4.13A	11/08/00
ProLiant 800 (Pentium II Processor 350 MHz with 66 MHz bus)	P18	4.14A	11/08/00
ProLiant 800 (Pentium Pro Processor)	P02	4.08A	04/19/00
ProLiant 1200	E35	4.08A	04/19/00
ProLiant 1600 (Pentium II Processor 266 and 300 MHz)	E34	4.08A	04/19/00
ProLiant 1600 (Pentium II Processor 350, 400, 450, 500, 550, and 600 MHz)	P08	4.14A	11/08/00
ProLiant 1850R	P07	4.14A	07/20/01
ProLiant 3000 (Pentium II Processor 400, 450, 500, 550, and 600 MHz)	P09	4.13A	11/08/00
ProLiant 3000 (Pentium Pro and Pentium II Processor 333 MHz)	E39	4.08A	04/19/00
ProLiant 5500 (Pentium II Xeon Processor 400, 450, 500, 550, and 600 MHz)	P12	4.08A	11/08/00
ProLiant 5500 (Pentium Pro Processor)	E39	4.08A	04/19/00
ProLiant 6000 (Pentium II Xeon Processor 400, 450, 500, 550, and 600 MHz with Cirrus Logic Video)	P40	4.08A	12/27/99
ProLiant 6000 (Pentium II Xeon Processor 400, 450, 500, 550, and 600 MHz with ATI 3D RAGE IIC Video)	P43	4.08A	12/27/99
ProLiant 6400R	P11	4.14A	11/08/00
ProLiant 6500 (Pentium II Xeon Processor)	P11	4.14A	11/08/00
ProLiant 7000 (Pentium II Xeon Processor with Cirrus Logic Video)	P40	4.08A	12/27/99
ProLiant 7000 (Pentium II Xeon Processor with ATI 3D RAGE IIC Video)	P43	4.08A	12/27/99
ProLiant 8000	P41	4.04A	02/16/01
ProLiant 8500	P42	4.04A	02/16/01

Supported Software

Table 3 lists supported Compaq utilities, drivers, and other value-add software and their corresponding version necessary for the Windows .NET Beta 3 release.

Table 3. Supported Compaq value-add software for Windows .NET Beta 3

Utility	Minimum Version	Location
Compaq Support Paq for Microsoft Windows .NET ¹	1.00A	http://www.compaq.com/partners/microsoft/whistler/index.html
Compaq Array Configuration Utility for Windows 2000	2.70.66.0	http://www.compaq.com/support/files/server/us/download/10575.html
Compaq PCI Hot Plug Filter Driver	6.1.0.3	http://www.compaq.com/partners/microsoft/whistler/index.html
Compaq System Configuration Utility	2.57	http://www.compaq.com/support/files/server/us/download/10786.html
Compaq Insight Manager XE	2.1C	http://www.compaq.com/support/files/server/us/download/10914.html
Compaq Insight Manager	5.30	http://www.compaq.com/support/files/server/us/locate/1924.html

Note 1: Some elements of the Compaq Support Paq for Microsoft Windows .NET are superseded by the complimentary components on the Windows .NET Beta 3 media, or are otherwise supported for use with Windows .NET Beta 3. For more information, refer to the "Support Limitations" section.

Supported Storage Options

Table 4 lists supported Compaq storage options and recommended driver revisions needed to interface with Windows .NET Beta 3.

Table 4. Supported Compaq storage options for Windows .NET Beta 3

Option	Driver	Location	Digital Signature
Compaq 4.3 – 36 GB Hard Disk Drives	<i>DISK.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq 4/8-GB SLR Tape Drive	<i>TANDQIC.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq 4x-32x CD-ROM Drives	<i>CDROM.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq AIT Tape Drives	<i>SONYAIT.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq 4/8 GB Autoloader	<i>DDSMC.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq DDS2 4/16 GB Autoloader	<i>DDSMC.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq DDS3 12/24 GB DAT Autoloader	<i>DDSMC.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq DDS4 20/40 GB DAT Autoloader	<i>DDSMC.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq DAT Tape Drives	<i>4MMDAT.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq DLT 15 Cartridge Library Model 15/30	<i>HPMC.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq DLT 15 Cartridge Library Model 20/40	<i>HPMC.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq DLT 15 Cartridge Library Model 35/70	<i>HPMC.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq DLT Tape Drives	<i>DLTTAPE.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes

continued

Table 4. Supported Compaq storage options for Windows .NET Beta 3 (continued)

Option	Driver	Location	Digital Signature
Compaq StorageWorks MSL5026DLX DLT Mini-Library	<i>LIBXPRMC.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq StorageWorks MSL5026SL SDLT Mini-Library	<i>LIBXPRMC.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq StorageWorks SSL2020 AIT Mini-Library	<i>LIBXPRMC.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq StorageWorks TL881 DLT Mini-Library	<i>LIBXPRMC.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq StorageWorks TL891 DLT Mini-Library	<i>LIBXPRMC.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq Drive Array Notification	<i>CPQDAEN.SYS</i>	Compaq Support Paq for Microsoft Windows .NET Version 1.00A	Yes
Compaq Smart Array 5300 Controller	<i>CPQCISSM.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq Smart Array 532 Controller	<i>CPQCISSM.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq Smart Array 5i Controller	<i>CPQCISSM.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq Smart Array 5300 Notification Driver	<i>CPQCISSE.SYS</i>	Compaq Support Paq for Microsoft Windows .NET Version 1.00A	Yes
Compaq Fibre Channel Host Controller /P (32bit/33MHz Fibre Channel Host Adapter)	<i>CPQFCALM.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq Fibre Channel Host Controller /P (64-bit/66-MHz Fibre Channel Host Adapter)	<i>CPQFCALM.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq Fibre Channel Filter Driver	<i>CPQFCFTR.SYS</i>	Compaq Support Paq for Microsoft Windows .NET Version 1.00A	Yes
Compaq Fibre Channel Array	<i>CPQFCAC.SYS</i>	Compaq Support Paq for Microsoft Windows .NET Version 1.00A	Yes
Compaq Smart Array 431, 4200, Smart Array 4250ES, and Integrated Smart Array Controllers	<i>CPQARRY2.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq SMART, SMART-2 family, Smart Array 221, Smart Array 3100ES Smart Array 3200 Controllers	<i>CPQARRAY.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq Integrated Dual Channel Wide Ultra2 SCSI Adapter	<i>SYM_HI.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq Integrated Wide Ultra2 SCSI Adapter	<i>SYM_HI.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq Integrated Ultra2 SCSI Adapter	<i>SYMC8XX.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq 64-Bit Dual Channel Wide Ultra2 SCSI Adapter	<i>SYM_HI.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq Dual Channel Wide-Ultra SCSI-3 Controller	<i>SYMC8XX.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq 32-bit Fast-Wide SCSI Controller /P	<i>SYMC8XX.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Compaq 32-bit Ultra SCSI Controller /P	<i>SYMC8XX.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes

continued

Table 4. Supported Compaq storage options for Windows .NET Beta 3 (continued)

Option	Driver	Location	Digital Signature
Compaq 64-bit/66MHz Dual Channel Wide Ultra 3 SCSI Adapter	ADPU160M.SYS	Windows .NET Beta 3 CD-ROM	Yes
Compaq 64-bit/66MHz Single Channel Wide Ultra 3 SCSI Adapter	ADPU160M.SYS	Windows .NET Beta 3 CD-ROM	Yes
Compaq ProLiant Storage System	PRLNTSS.SYS	Compaq Support Paq for Microsoft Windows .NET Version 1.00A	Yes

Note 1: Many of these devices have firmware upgrades available through variations of the Options ROMPaq. The latest version of each Options ROMPaq is available on the Compaq website at <http://www.compaq.com/support/files/server/us/index.html>.

Note 2: Driver upgrades for many of the listed devices are available from the Compaq Support Paq for Microsoft Windows .NET Version 1.00A. After installing Windows .NET Beta 3, you should update those drivers to enhance their reliability and functionality.

Supported Network Interface Controllers

Table 5 lists supported Compaq network interface controllers and driver revisions supported by Windows .NET Beta 3.

Table 5. Supported Compaq network interface controllers for Windows .NET Beta 3

Compaq NIC	Driver	Location	Digital Signature
Compaq NC3120 Fast Ethernet	N100325.SYS	Windows .NET Beta 3 CD-ROM	Yes
Compaq NC3121 Fast Ethernet	N100325.SYS	Windows .NET Beta 3 CD-ROM	Yes
Compaq NC3122 Fast Ethernet	N100325.SYS	Windows .NET Beta 3 CD-ROM	Yes
Compaq NC3123 Fast Ethernet	N100325.SYS	Windows .NET Beta 3 CD-ROM	Yes
Compaq NC3131 Fast Ethernet	N100325.SYS	Windows .NET Beta 3 CD-ROM	Yes
Compaq NC3132 Fast Ethernet Upgrade Module	N100325.SYS	Windows .NET Beta 3 CD-ROM	Yes
Compaq NC3133 Fast Ethernet Upgrade Module	N100325.SYS	Windows .NET Beta 3 CD-ROM	Yes
Compaq NC3134 Fast Ethernet	N100325.SYS	Windows .NET Beta 3 CD-ROM	Yes
Compaq NC3135 Fast Ethernet Upgrade Module	N100325.SYS	Windows .NET Beta 3 CD-ROM	Yes
Compaq NC3160 Fast Ethernet (Embedded)	N100325.SYS	Windows .NET Beta 3 CD-ROM	Yes
Compaq NC3161 Fast Ethernet (Embedded)	N100325.SYS	Windows .NET Beta 3 CD-ROM	Yes
Compaq NC3162 Fast Ethernet (Embedded)	N100325.SYS	Windows .NET Beta 3 CD-ROM	Yes
Compaq NC3163 Fast Ethernet (Embedded)	N100325.SYS	Windows .NET Beta 3 CD-ROM	Yes
Compaq NC4621 Token Ring NIC	CPQTRND5.SYS	Windows .NET Beta 3 CD-ROM	Yes

continued

Table 5. Supported Compaq network interface controllers for Windows .NET Beta 3 (continued)

Compaq NIC	Driver	Location	Digital Signature
Compaq NC6132 Gigabit Module ¹	<i>N1000NT5.SYS</i>	Compaq Support Paq For Microsoft Windows .NET Version 1.00A	No
Compaq NC6133 Gigabit Module ¹	<i>N1000NT5.SYS</i>	Compaq Support Paq For Microsoft Windows .NET Version 1.00A	No
Compaq NC6134 Gigabit Module ¹	<i>N1000NT5.SYS</i>	Compaq Support Paq For Microsoft Windows .NET Version 1.00A	No
IBM 16/4 TOKEN RING PCI SPECIAL	<i>IBMTRP.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Netelligent 10/100 TX Embedded UTP	<i>NETFLX3.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Netelligent 10/100 TX Embedded UTP/AUI	<i>NETFLX3.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Netelligent 10/100 TX PCI Dual UTP	<i>NETFLX3.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Netelligent 10/100 TX PCI UTP	<i>NETFLX3.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Netelligent 16/4 PCI IBM UTP/STP Controller	<i>IBMTRP.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
Netelligent 10T PCI UTP Controller	<i>NETFLX3.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
NetFlex-3/P ²	<i>NETFLX3.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes
NetFlex-3 Embedded ²	<i>NETFLX3.SYS</i>	Windows .NET Beta 3 CD-ROM	Yes

IMPORTANT: The drivers for the network interface controllers are on the Windows .NET Beta 3 CD-ROM and have undergone some preliminary testing by Microsoft and Compaq. However, only the embedded network adapters have undergone extensive functional testing.

Note 1: The Windows .NET Beta 3 CD-ROM includes an earlier version of the N1000NT5.SYS driver that contains a digital signature.

Note 2: The Windows .NET Beta 3 CD-ROM includes *NETFLX3.SYS*. However, to ensure the highest level of service and reliability, after installing Windows .NET Beta 3, update the driver to the version on the Compaq Support Paq for Microsoft Windows .NET Version 1.00A.

ProLiant Cluster Support

The supported Compaq ProLiant cluster servers and solutions for Windows .NET Beta 3 are the ProLiant CL380, ProLiant HA/F100, and ProLiant HA/F500 Single Path configuration. The ProLiant HA/F200 and ProLiant HA/F500 Dual Path configuration are not supported for Windows .NET Beta 3.

For more information on ProLiant Cluster support for Windows .NET Beta 3, see the support paper entitled *Support of Microsoft Windows .NET Beta 3 on Compaq ProLiant Cluster Servers and Solutions* on the Compaq support page for Windows .NET at <http://www.compaq.com/partners/microsoft/whistler/index.html>.

PCI Hot Plug Support

PCI Hot Plug is the ability to physically insert, remove, or replace PCI adapters while a ProLiant server is powered on. PCI Hot Plug operations may be performed under Windows .NET Beta 3 on supported ProLiant servers with the Compaq PCI Hot Plug Filter Driver installed. Compaq storage options and network interface controllers are supported for PCI Hot Plug operations.

Compaq ProLiant servers that are capable of PCI Hot Plug may include but are not limited to the following:

- ProLiant DL380 G2
- ProLiant DL750
- ProLiant DL760
- ProLiant ML370 G2
- ProLiant ML570
- ProLiant ML580
- ProLiant 8500
- ProLiant 8000
- ProLiant 7000 Xeon
- ProLiant 7000
- ProLiant 6500 Xeon
- ProLiant 6500
- ProLiant 6400R

Headless Support

Headless support is the Microsoft Windows .NET initiative for providing remote system management and recovery tasks for systems that have no mouse, keyboard, or video. Headless support is used for setup, configuration, and management. Management is done through the EMS - Emergency Management Services (VT100+ text based command window - SAC).

Headless support requires the use of the serial port and additional ACPI support in the system ROM. Modification of network stack and network drivers is unnecessary.

Remote Insight Lights-Out Edition Support

The following Remote Insight Lights-Out Edition features and functionality are supported with Windows .NET Beta 3:

- Virtual Graphical Remote Console
- Dedicated LAN Network Connectivity
- Virtual Power Button
- Virtual Floppy Drive
- Power Cycle (Reset)
- Auto-Configuration of IP Address via DNS/DHCP
- External Power Backup
- Reset and Failure Sequence Replay
- Compaq Insight Manager and Web-Enabled Agent Integration

- SmartStart Integration
- ROM-based Configuration Utility
- Integration with Compaq Survey
- Customizable Accounts
- Group Administration
- SSL Security
- Headless Server Deployment
- Alert Administration
- Integrated Management Log
- Remote Insight Event Log

For more information about Remote Insight Lights-Out Edition, review the Compaq QuickSpecs located at http://www.compaq.com/products/quickspecs/10452_ca/10452_ca.HTML.

Limited Compaq SmartStart Support for Windows .NET Beta 3

Installing Windows .NET Beta 3 via SmartStart Assisted Path is not supported for pre-release versions of Windows .NET. Compaq SmartStart Assisted Path does not provide an option to install Windows .NET.

SmartStart can be used to perform a simple system configuration by using the SmartStart manual path and by selecting **Windows 2000** as the operating system.

⚠ CAUTION: Selecting **Other** as the operating system in the Compaq System Configuration Utility forces a default that causes the system to act in an unpredictable manner.

Once the system configuration completes, follow the instructions starting with step 5 on page 14 of this document.

Pre-Installation

To prepare for installation, Compaq recommends obtaining the supported software.

1. Obtain Compaq Support Paq (CSP) for Microsoft Windows .NET Version 1.00A at <http://www.compaq.com/partners/microsoft/whistler/index.html>. This CSP contains the device drivers, management agents, and utilities, supported under the Windows .NET Beta 3 release.

Once Compaq Support Paq for Microsoft Windows .NET Version 1.00A is installed, you can use Compaq Insight Manager XE 2.1C available at <http://www.compaq.com/support/files/server/us/download/10914.html> to manage your Windows .NET Beta 3 servers. Compaq Insight Manager XE requires installing Microsoft SQL Server or Microsoft Database Engine (MSDE) before installing Compaq Insight Manager XE. MSDE is delivered in the Compaq Insight Manager XE SoftPaq. Compaq Insight Manager XE 2.1C currently runs under Microsoft Windows NT 4.0 and Microsoft Windows 2000.

2. Obtain Compaq System Configuration Utility Version 2.57 (or later) at <http://www.compaq.com/support/files/server/us/locate/1950.html> and create the associated bootable diskette set. Invoke the utility and verify that all system configuration options conform to those listed for the platform you have chosen.

Note: The Prosignia Server 720, ProLiant 400, ProLiant ML330, ProLiant ML330 G2, ProLiant ML350, ProLiant ML350 G2, ProLiant ML370, ProLiant ML370 G2, ProLiant ML750, ProLiant DL320, ProLiant DL380, ProLiant DL380 G2, and ProLiant DL760 servers do not need the Compaq System Configuration Utility because they are pre-configured with the Compaq ROM-Based Setup Utility (RBSU). It is necessary to use RBSU to specify the operating system on these servers.

Installation Procedure

The sections that follow contain procedures for installing Windows .NET Beta 3 as a new installation and for upgrading from Windows 2000 to Windows .NET Beta 3.

Installing a New Installation

The procedures detailed in this section support installing the Windows .NET Beta 3 operating system on Compaq ProLiant servers as a new installation.

IMPORTANT: Compaq does not recommend installing Windows .NET Beta 3 in a production environment. Windows .NET Beta 3 tests should only be performed in isolated test environments.

To produce a Windows .NET Beta 3 installation fully supported by Compaq, follow these steps when setting up the system. Read the sequence completely before you begin.

1. Select a supported system platform from the server platforms listed in Table 2.
2. Inspect the system to confirm that it conforms to the platform-specific configuration listed in Table 2. If necessary, update the system and option ROMs as specified in Table 2 and the drivers as specified in Table 4.

IMPORTANT: When configuring the system for Windows .NET, select **Windows 2000** as the primary OS via the System Configuration Utility or the ROM-Based Setup Utility.

3. Use the System Configuration Utility to configure the hardware for your server.

Note: The Prosignia Server 720, ProLiant 400, ProLiant ML330, ProLiant ML330 G2, ProLiant ML350, ProLiant ML350 G2, ProLiant ML370, ProLiant ML370 G2, ProLiant ML750, ProLiant DL320, ProLiant DL380, ProLiant DL380 G2, and ProLiant DL760 servers do not need the Compaq System Configuration Utility because they are pre-configured with the Compaq ROM-Based Setup Utility (RBSU). It is necessary to use RBSU to specify the operating system on these servers.

4. If the server has a Smart Array 5300, Smart Array 531, Smart Array 5i, Smart Array 431, or Integrated Smart Array Controller installed as the boot controller, configure these arrays by accessing the Option ROM Configuration for Arrays utility via the [F8] key during boot. Once the configuration is complete, exit the utility to continue the boot process.

Note: If a Compaq array controller that does not use Option ROM Configuration for Arrays utility is installed as the boot controller, use the Manual Path option in Compaq SmartStart for Servers Release 5.30 to configure the array as a boot controller. Otherwise, set your array controller as the secondary controller and install the OS to a SCSI controller. Once the OS is installed, configure the array via the Compaq Array Configuration Utility using the Compaq Support Paq for Microsoft Windows .NET Version 1.00A.

IMPORTANT: The *README.TXT* for this utility reads: The Compaq Array Configuration Utility (ACU) is online under Microsoft® Windows NT™ 4.0 or Windows 2000®. This version cannot be installed on the system partition nor can it be run directly from diskette.

5. Insert the Windows .NET Beta 3 CD-ROM into CD-ROM drive to begin installation.
6. After Windows .NET Beta 3 has been installed, begin installation of the Compaq Support Paq (CSP) for Microsoft Windows .NET Version 1.00A, which is available at <http://www.compaq.com/partners/microsoft/whistler/index.html>. The CSP contains numerous files. All files must be present in the same directory as the SETUP.EXE program for the CSP to be installed properly.

Primary Installation Method

- Run the SETUP.EXE program included with the CSP. By default, all software components are selected for installation. In most circumstances, this default selection should not be altered.
- Click the **Install** button to proceed with the installation. Although all software components are selected for installation by default, only those required by the server will install. After the installation is complete, the utility will display successfully installed components, non-applicable components, and any component installation failures.

Command Prompt Installation

- A BP000066.CMD file is also provided with the CSP for installing it from a command prompt without user interaction. As with the SETUP.EXE program, all components appropriate for the selected server will be installed.

For additional usage information, refer to the BP000066.TXT file included in the Bundle Package.

Upgrading From Windows 2000

The procedures detailed in this section support upgrading from Windows 2000 to Windows .NET Beta 3 on Compaq ProLiant servers.

IMPORTANT: Compaq does not recommend installing Windows .NET Beta 3 in a production environment. Windows .NET Beta 3 tests should be performed in isolated test environments until such time as the operating system and support elements form a fully supported combination.

To upgrade a Windows 2000 server to Windows .NET Beta 3 in a manner supported by Compaq, follow these steps. Read the sequence completely before you begin.

1. Select a supported system platform from the server platforms listed in Table 1.
2. Inspect the system to confirm that it conforms to the platform-specific configuration listed in Table 1. If necessary, update the system and option ROMs as specified in Table 1 and the drivers as specified in Table 3.
3. Double-click on **My Computer**, then select **Help** from the menu bar and click on the **About Windows** option. Verify whether the system has the latest Microsoft Service Pack installed. If this is not the case, download the latest service pack from the Microsoft website (<http://www.microsoft.com/windows2000/downloads/servicepacks/sp2/default.asp>) and install it on your server. This action will ensure that the server has the latest software components Microsoft supplied prior to the upgrade.
4. Download and install Compaq Support Paq for Windows 2000 Version 5.14A from the Compaq Server Software Download Center website (<http://www.compaq.com/support/files/server/us/index.html>). This action will ensure that all drivers and utilities provided by Compaq are suitable for upgrade to Windows .NET Beta 3.

IMPORTANT: Failure to update the drivers provided by Compaq prior to the upgrade may result in unexpected failures during the upgrade to Windows .NET Beta 3.

5. Insert the Windows .NET Beta 3 CD-ROM into CD-ROM drive to begin installation. Follow all instructions for upgrading the server.
6. After Windows .NET Beta 3 has been installed, begin installation of the Compaq Support Paq (CSP) for Microsoft Windows .NET Version 1.00A, which is available at <http://www.compaq.com/partners/microsoft/whistler/index.html>. The CSP contains numerous files. All files must be present in the same directory as the SETUP.EXE program for the CSP to be installed properly.

Primary CSP Installation Method

- Run the SETUP.EXE program included with the CSP. By default, all software components are selected for installation. In most circumstances, this default selection should not be altered.
- Click the **Install** button to proceed with the installation. Although all software components are selected for installation by default, only those required by the server will install. After the installation is complete, the utility will display successfully installed components, non-applicable components, and any component installation failures.

Support Limitations

This section details the known issues with running Microsoft Windows .NET Beta 3 on Compaq ProLiant servers and provides information about resolving them.

Compaq Network Management Protocol Driver Service Fails to Start Error Message in System Log

An error message occurs in the system log indicating that the Compaq Network Management Protocol Driver Service has failed to start. Test results indicate this error message really means that Token Ring Adapters are not viewable in Compaq Insight Manager XE.

Workaround:

No workaround is available at this time.

Solution:

Compaq is working to provide a solution in the next version of Compaq Support Paq for Microsoft Windows .NET and the Compaq Management CD-ROM.

Yellow Exclamation Mark Displayed in ATI Device Manager with Remote Insight Lights-Out Edition

When using Compaq Remote Insight Lights-Out Edition, the ATI device in the Windows .NET Device Manager is displayed with a yellow exclamation mark beside it. However, when this happens, there is no loss of functionality or other reported symptoms.

Workaround:

No workaround is available at this time.

Solution:

Compaq is working with Microsoft to resolve this issue.

Hibernation Issue with 4 GB or More System Memory

The Hibernation tab does not install on servers with 4 GB or more system memory.

Workaround:

With /PAE enabled in the *BOOT.INI* file, the server will not hibernate.

Solution:

Hibernation with 4 GB or more system memory is not supported in Windows .NET Beta 3.

Windows 2000 Upgrade to Windows .NET Beta 3 Prompts Message Reporting the Need for CPQTEAM.DLL

While upgrading to Windows .NET Beta 3 from Windows 2000 Server, a message pops up informing the user that *CPQTEAM.DLL* is needed.

Workaround:

Before the upgrade, uninstall network interface controller (NIC) teaming or drop the teaming of the network interface controllers participating in the teaming.

Solution:

Compaq is working to provide a solution in the next version of the Compaq Support Paq for Microsoft Windows .NET.

Components Appear to be Installed after Upgrade

When upgrading from Microsoft Windows 2000 Server to Microsoft Windows .NET Beta 3, components will appear to be installed, even though they are not included in the Compaq Remote Deployment Utility used to perform the installation.

Workaround:

No workaround is available at this time.

Solution:

Compaq is working to provide a solution in the next version of Compaq Support Paq for Microsoft Windows .NET.

Disabled NIC Ports Report as Failed after Applying CSP

After CSP is applied to the system, disabled NIC ports are reported as failed.

Workaround:

Subsequent reboots resolve this issue.

Solution:

Compaq is working to provide a solution in the next version of Compaq Support Paq for Microsoft Windows .NET.

Device Manager Displays Compaq PCI Hot Plug Filter Driver as a Supporting Driver for All System Devices

When the user views the properties for any system through the Device Manager, the Compaq PCI Hot Plug Filter Driver will be listed as a supporting driver for all devices on Compaq ProLiant servers with PCI Hot Plug capability. The affected servers are configured with the Windows .NET Beta 3 operating system and the Compaq PCI Hot Plug Filter Driver.

Solution:

Disregard the Compaq PCI Hot Plug Filter Driver being listed as a supporting driver for any unrelated system device in the Device Manager. This display functions as designed.

Compaq PCI Hot Plug Filter Driver Appears to be Installed after Upgrading from Microsoft Windows 2000 to Microsoft Windows .NET Beta 3

After upgrading from Windows 2000 to Windows .NET Beta 3 on Compaq ProLiant servers with PCI Hot Plug capability, when the user views the properties of the Compaq PCI Hot Plug Controller using the Device Manager, the Compaq PCI Hot Plug Filter Driver appears to be installed. However, the driver is not properly installed.

Solution:

After upgrading to Windows .NET Beta 3, install the Compaq PCI Hot Plug Filter Driver.

TL892 Tape Library Not Detected when Attached to Compaq Fibre Channel Host Controller /P (64-bit/66-MHz Fibre Channel Host Adapter)

TL892 and Compaq DLT tape library 2 tape libraries are not seen in the Windows .NET Beta 3 Device Manager. This issue occurs when the libraries are connected to a Compaq Fibre Channel Host Controller /P (64-bit/66-MHz Fibre Channel Host Adapter) via a Compaq tape array or Compaq tape array II bridge.

Workaround:

No workaround is available at this time.

Solution:

Compaq is working to provide a solution in the next version of Compaq Support Paq for Microsoft Windows .NET.

ACPI BIOS Error in Event Log after Each Reboot on ProLiant ML570

After installing Windows .NET Beta 3 on a ProLiant ML570, the following ACPI BIOS error message is logged in the Event Log after every subsequent reboot:

12: ACPI BIOS is trying to reference a GPE Index (%3) when there are no GPE blocks defined by the BIOS. Please contact your system vendor for technical

Workaround:

No workaround is available at this time.

Solution:

Compaq is working to provide a solution in the next version of Compaq Support Paq for Microsoft Windows .NET and the Compaq Management CD-ROM.

Dynamic Disk Drives Attached to Compaq Fibre Channel Host Controller /P (64-bit/66-MHz Fibre Channel Host Adapter) Disappear after “Hot-Swap”

After hot removal and subsequent hot addition of the Compaq Fibre Channel Host Controller /P (64-bit/66-MHz Fibre Channel Host Adapter) from one slot to another, the dynamic disk drive letters associated with the drives attached to this adapter are no longer listed in the Device Manager.

Workaround:

Reboot the server for the correct dynamic disk drive letters to return.

Solution:

Compaq is working to provide a solution in the next version of Compaq Support Paq for Microsoft Windows .NET and the Compaq Management CD-ROM.

Dynamic Disk Drives Attached to Compaq Fibre Channel Array disappear after “Hot-Swap”

After hot removal and subsequent hot addition of the Compaq Fibre Channel Array from one slot to another, the dynamic disk drive letters associated with the drives attached to the Compaq Fibre Channel Array are no longer listed in the Device Manager.

Workaround:

Reboot the server for the correct dynamic disk drive letters to return.

Solution:

Compaq is working to provide a solution in the next version of Compaq Support Paq for Microsoft Windows .NET and the Compaq Management CD-ROM.

Compaq Management Agents Version 5.30 Do Not Uninstall Properly Under Microsoft Windows .NET Server

The uninstall process for the Compaq Management Agents Version 5.30 does not work properly on a Compaq server running Microsoft Windows .NET Server. The uninstall process appears to complete properly, but none of the management agents are deleted. No error messages occur during the execution of the uninstall program and the system performs normally after the uninstall program has been run.

Solution:

Compaq is working to provide a solution in the next version of Compaq Support Paq for Microsoft Windows .NET and the Compaq Management CD-ROM.