COMPAQ
White Paper

Contents

Armada Family Software Overview – Third Edition

Abstract: New models of the Armada E500, M700, and M300 computers are the latest additions to the Compaq Armada Series of Personal Computers.

The purpose of this white paper is to present an overview of the preinstalled software including operating system support, as well as a brief description of major software components and features.

This document is intended for Compaq personnel and customers with a need for information about the software provided on the Armada preinstall images.

Notice

Overview

To reduce the cost of ownership, Compaq has created a preinstall image based on common software drivers, utilities, and applications for the following new additions to the Compaq *Armada*™ E500, M700, and M300 series:

- Armada M300: Intel Pentium III 600 MHz

- Armada E500: Intel Celeron 550 and 600 MHz, Pentium III 750, 800, and 850 MHz, and select Pentium III 700 MHz

- Armada M700: Pentium III 750 and 850 MHz

This common preinstall image allows customers to maintain a single list of software for use on any of the new additions to the Armada E500, M700, and M300 series. The updated software components used to create this common preinstall image have been tested on previously released E500, M700, and M300 computers.

Note: For more information, please see "Frequently Asked Questions."

Highlights

The new Armada preinstall image offers the following benefits:

- All deliverables are common across the entire line of these new models

- Armada E500 SXGA models have updated video drivers and diagnostics in order to support the new display

- Updated software:
  - Video: Windows NT and Windows 2000 for E500 SXGA models only
  - Diagnostics: Windows NT and Windows 2000 for E500 SXGA models only

Note: Microsoft Windows 95 is no longer available as a standard preinstalled operating system

Preinstalled Operating Systems

The following preinstalled operating systems are available for the Armada E500, M700, and M300 series:

- Microsoft Windows 98 Second Edition (SE)

- Microsoft Windows NT Workstation 4.0 with Service Pack 6

- Microsoft Windows 2000 Professional with Service Pack 1 option available during unbundle

Note: Microsoft Windows 95 is no longer available as a standard preinstalled operating system.

Microsoft Windows 95

The version of Windows 95 formerly preinstalled on select Armada E500, M700, and M300 computers is Microsoft Windows 95 OSR 2.1 (OEM Service Release 2.1). Internet Explorer 4.01a is installed in addition to the operating system. Windows 95 OSR 2.1 continues to include features and fixes introduced with earlier releases from Microsoft.

Note: Microsoft Windows 95 is not available as a standard preinstalled operating system. Future editions of this white paper will not contain references to Windows 95.

Table 1 provides a Windows 95 software component version comparison.

Table 1. Windows 95 Software Component Version Comparison

Software Component	M700 with 700-MHz processor Preinstall	E500 with 650-MHz processor and M300 with 500-MHz processor Preinstall	Armada Family Preinstall	E500 with SXGA display Preinstall
3Com Etherlink 3C905C 10/100 PCI NIC	5.11 A	5.11 A	5.11 A	N/A
Adobe Acrobat Reader	N/A	4.00 A	4.05 A	N/A
Altiris Express Client	N/A	N/A	4.1 A	N/A
Armada M700 Quick Reference	1.00 A	N/A	N/A	N/A
Armada Netflex-3 Ethernet Drivers	2.00 A	N/A	2.00 A	N/A
Compaq Check Dock Type Utility	N/A	1.00 A	1.00 A	N/A
Compaq DVD Solution	4.00 B	N/A	1.00 B	N/A
Compaq Easy Access Buttons Software 32	N/A	N/A	1.00 B	N/A
Compaq Floppy Alert Application	1.00 B	N/A	N/A	N/A
Compaq Global Mini PCI 56K (V.90) Modem by 3COM	2.15 A	2.15 A	N/A	N/A
Compaq Internet Favorites	1.00 A	1.00 A	1.10 A	N/A
Desktop/Portable Web Agents (Win32)	4.20 G	4.20 G	4.20 J	N/A
Diagnostics for Win95/98	2.18 B	2.17 I	2.25 C	N/A
DOS Real Mode Support (Win95/98)	2.00 D	N/A	N/A	N/A
Easy Point IV	1.00 B	1.00 B	2.00 A	N/A
Hot Key Support Software (Win32)	1.00 D	1.00 D	1.00 H	N/A

Table 1. Windows 95 Software Component Version Comparison *(continued)*

Software Component	M700 with 700-MHz processor Preinstall	E500 with 650-MHz processor and M300 with 500-MHz processor Preinstall	Armada Family Preinstall	E500 with SXGA display Preinstall
Infrared Drivers (Win95)	1.20 A	1.20 A	1.20 A	N/A
Insight Management Agents (Win32)	4.20 F	4.20 F	4.20 G	N/A
Intel SpeedStep Application	1.00 A	1.00 A	1.00 B	N/A
IR Transfer	1.00 B	1.00 A	N/A	N/A
M2E Audio Driver (Win95/98)	4.04 G	4.04 F	4.04 H	N/A
Microsoft DirectX	6.10 A	6.10 A	7.00 A	N/A
Mini PCI Communications Support Software	2.00 C	2.00 E	3.00 A	N/A
MultiBay (Win95)	1.30 C	1.30 C	2.00 B	N/A
Online Modem Commands Guide	1.00 A	1.00 A	1.00 A	N/A
PowerCon (Win95/98)	3.30 B	3.30 E	3.30 H	N/A
PowerCon Enhancements	1.00 A	1.00 A	1.00 A	N/A
Rage LT Pro Video Driver (Win95/98)	6.10 B	6.10 B	6.11 A	N/A
Remote Management (Win95)	1.01 A	1.01 A	1.00 B	N/A
Safety & Comfort Guide	5.01 A	5.01 A	5.01 A	N/A
Security 32 (Win32)	1.10 H	2.00 A	2.20 D	N/A
System Enhancement Disk (Win95)	3.00 F	3.00 E	4.00 A	N/A
Touchpad Driver Synaptics (Win 95/98)	5.45 A	5.29 A	5.45 B	N/A
True File Flash System (Win95)	1.00 A	N/A	N/A	N/A
USB Support	2.00 A	N/A	N/A	N/A
WorldPort Application	1.20 A	1.20 A	N/A	N/A

Windows 98

The version of Windows 98 preinstalled on new Armada E500, M700, and M300 computers is Second Edition (SE). Windows 98 SE is fully supported on Armada E500, M700, and M300 computers. For more information about Windows 98 SE support on Armada E500, M700, and M300 computers, refer to the white paper *Operating System Support on Compaq Portables,* 4th ed., July 1999.

Table 2 provides a Windows 98 software component version comparison.

Table 2. Windows 98 Software Component Version Comparison

Software Component	M700 with 700-MHz processor Preinstall	E500 with 650-MHz processor and M300 with 500-MHz processor Preinstall	Armada Family Preinstall	E500 with SXGA display Preinstall
3Com Etherlink 3C905C 10/100 PCI NIC	5.11 A	5.11 A	5.11 A	5.11 A
Adobe Acrobat Reader	N/A	4.00 A	4.05 A	4.05 A
Altiris Express Client	N/A	N/A	4.1 A	4.1 A
Armada M700 Quick Reference	1.00 A	N/A	N/A	N/A
Armada Netflex-3 Ethernet Drivers	2.00 A	N/A	N/A	N/A
Compaq Check Dock Type Utility	N/A	1.00 A	1.00 A	1.00 A
Compaq DVD Solution	4.00 B	N/A	1.00 B	1.00 B
Compaq Easy Access Buttons Software 32	N/A	N/A	1.00 B	1.00 B
Compaq Floppy Alert Application	1.00 B	N/A	N/A	N/A
Compaq Global Mini PCI 56K (V.90) Modem by 3COM	2.15 A	2.15 A	N/A	N/A
Compaq Internet Favorites	1.00 A	1.00 A	1.10 A	1.10 A
Desktop/Portable Web Agents (Win32)	4.20 G	4.20 G	4.20 J	4.20 J
Diagnostics for Win95/98	2.18 B	2.17 I	2.25 C	N/A
DOS Real Mode Support (Win95/98)	2.00 D	N/A	N/A	N/A
Easy Point IV	1.00 B	1.00 B	2.00 A	2.00 A
Fax Central	4.40 C	4.40 C	4.45 A	4.45 A
Hot Key Support Software (Win32)	1.00 D	1.00 D	1.00 H	1.00 H

Table 2. Windows 98 Software Component Version Comparison *(continued)*

Software Component	M700 with 700-MHz processor Preinstall	E500 with 650-MHz processor and M300 with 500-MHz processor Preinstall	Armada Family Preinstall	E500 with SXGA display Preinstall
Insight Management Agents (Win32)	4.20 F	4.20 F	4.20 G	4.20 G
Intel SpeedStep Application	1.00 A	1.00 A	1.00 B	1.00 B
M2E Audio Driver (Win95/98)	4.04 G	4.04 F	4.04 H	4.04 H
Microsoft DirectX	6.10 A	6.10 A	7.00 A	7.00 A
Mini PCI Communications Support Software	2.00 C	2.00 E	3.00 A	3.00 A
MultiBay (Win98)	1.30 C	1.30 C	2.00 B	2.00 B
Online Modem Commands Guide	1.00 A	1.00 A	1.00 A	1.00 A
PowerCon (Win95/98)	3.30 B	3.30 E	3.30 H	3.30 H
PowerCon Enhancements	1.00 A	1.00 A	1.00 A	1.00 A
Rage LT Pro Video Driver (Win95/98)	6.10 B	6.10 B	6.11 A	6.11 A
Remote Management (Win95)	1.01 A	1.01 A	1.00 B	1.00 B
Safety & Comfort Guide	5.01 A	5.01 A	5.01 A	5.01 A
Security 32 (Win32)	1.10 H	2.00 A	2.20 D	2.20 D
System Enhancement Disk (Win98)	2.00 H	2.00 H	3.00 A	3.00 A
Touchpad Driver Synaptics (Win 95/98)	5.45 A	5.29 A	5.45 B	5.45 B
WorldPort Application	1.20 A	1.20 A	N/A	N/A

Microsoft Windows NT 4.0

Microsoft Windows NT 4.0 with Service Pack 6 is offered as a preinstalled operating system for new Armada E500, M700, and M300 computers.

Note: Compaq supports customers who install Windows NT 4.0 using Service Pack 4 or Service Pack 5.

Compaq drivers, utilities, and applications for Windows NT 4.0 are discussed in detail in later sections of this white paper.

Hardware Functionality and Software Enhancements

Since Microsoft Windows NT 4.0 was originally positioned and designed for desktop computing, there are some portable computer features that are not supported by the native operating system or do not function in the same manner as they would under Windows 95. These features are primarily associated with PC Card and power management support.

Compaq provides software enhancements that complement Windows NT 4.0 by enabling the same level of features and hardware functionality provided under Windows 95. Native Windows NT 4.0 features and Compaq software deliverables include:

- Compaq Diagnostics for Windows NT

- Compaq enhanced audio, video, and network support

- Compaq enhanced multimedia support

- Optional PC Card support through preloaded CardWare NT

    − Traditional 16-bit PC Card and 32-bit CardBus support

    − Power Management for PC Cards

- Compaq-provided Power Management support

    − Suspend, Hibernation, and Power Utilities

- Compaq Intelligent Manageability

    − AssetControl, Fault Prediction, and Security Management

- Advanced hot swapping capability with the Compaq MultiBay utility

Table 3 provides a comparison of Windows NT 4.0 software components.

Table 3. Windows NT 4.0 Software Component Version Comparison

Software Component	M700 with 700-MHz processor Preinstall	E500 with 650-MHz processor and M300 with 500-MHz processor Preinstall	Armada Family Preinstall	E500 with SXGA display Preinstall
3Com Etherlink 3C905C 10/100 PCI NIC	5.11 A	5.11 A	5.11 A	5.11 A
Adobe Acrobat Reader	N/A	4.00 A	4.05 A	4.05 A
Altiris Express Client	N/A	N/A	4.10 B	4.10 B
Armada Integrated PCI V.90 Modem CD	2.15 A	2.15 A	N/A	N/A
Armada Netflex-3 Ethernet Drivers	2.00 A	N/A	2.00 A	2.00 A
CardWare (preloaded)	2.12 A	2.12 C	2.12 C	2.12 C
Compaq Check Dock Type Utility	N/A	1.00 A	1.00 B	1.00 B
Compaq DVD Solution	N/A	N/A	1.00 C	1.00 C
Compaq Easy Access Button Software 32	N/A	N/A	1.00 B	1.00 B
Compaq Global Mini PCI 56K (V.90) Modem by 3COM	2.17 A	2.17 A	N/A	N/A
Compaq Internet Favorites	1.10 A	1.10 A	1.10 A	1.10 A

Table 3. Windows NT 4.0 Software Component Version Comparison *(continued)*

Software Component	M700 with 700-MHz processor Preinstall	E500 with 650-MHz processor and M300 with 500-MHz processor Preinstall	Armada Family Preinstall	E500 with SXGA display Preinstall
Desktop/Portable Web Agents (Win32)	4.20 G	4.20 G	4.20 J	4.20 J
Diagnostics for Windows NT	2.04 E	2.04 E	2.08 F	2.08 G
Easy Point IV	1.00 B	1.00 B	N/A	N/A
Fax Central	4.40 C	4.40 C	4.45 B	4.45 B
Hot Key Support Software (Win32)	1.00 D	1.00 D	1.00 H	1.00 H
Insight Management Agents (Win32)	4.20 F	4.20 F	4.20 G	4.20 G
Intel SpeedStep Application	1.00 B	1.00 B	1.00 B	1.00 B
M2E Audio Driver (WinNT 4.0)	4.02 D	4.02 D	4.03 B	4.03 B
Mini PCI Communications Support Software	2.00 E	2.00 E	3.00 A	3.00 A
MultiBay Plug & Play Manager (WinNT 4.0)	1.20 C	1.20 B	2.00 B	2.00 B
Online Modem Commands Guide	1.00 A	1.00 A	1.00 A	1.00 A
PowerCon (WinNT 4.0)	2.30 G	2.30 L	2.30 R	2.30 R
PowerCon Enhancements	1.00 A	1.00 A	1.00 A	1.00 A
Rage LT Pro Video Driver (WinNT 4.0)	3.00 B	3.00 B	3.00 C	3.00 D
Remote Management (WinNT 4.0)	1.01 A	1.01 A	1.00 B	1.00 B
Safety & Comfort Guide	5.01 A	5.01 A	5.01 A	5.01 A
Security 32 (Win32)	1.10 H	2.00 A	2.20 D	2.20 D
System Enhancement Disk (WinNT 4.0)	2.00 B	2.00 C	3.00 A	3.00 A
Touchpad Driver Synaptics (WinNT 4.0)	5.45 A	5.45 A	N/A	N/A
WorldPort Application	1.20 A	1.20 A	N/A	N/A

Microsoft Windows 2000

Microsoft Windows 2000 Professional is offered as a preinstalled operating system for Armada E500, M700, and M300 computers. Compaq also supports customers who install Windows 2000 on their own. Compaq drivers, utilities, and applications for Windows 2000 are discussed in detail in later sections of this white paper. MultiBay swapping functionality is provided by the operating system. Table 4 provides a comparison of Windows 2000 software components.

Table 4. Windows 2000 Software Component Version Comparison

Software Component	M700 with 700-MHz processor Preinstall	E500 with 650-MHz processor and M300 with 500-MHz processor Preinstall	Armada Family Preinstall	E500 with SXGA display Preinstall
Adobe Acrobat Reader	4.05 A	4.05 A	4.05 A	4.05 A
Altiris Express Client	4.10 A	4.10 A	4.10 B	4.10 B
ATI Video Driver	1.00 A	1.00 A	1.00 B	1.00 C
Compaq Armada Dock Driver	1.20 B	1.20 B	1.20 C	1.20 C
Compaq Check Dock Type Utility	1.00 B	1.00 B	N/A	N/A
Compaq DVD Solution	1.00 A	1.00 A	1.00 C	1.00 C
Compaq Easy Access Button Software	N/A	N/A	1.00 B	1.00 B
Compaq Internet Favorites	1.10 A	1.10 A	1.10 A	1.10 A
Diagnostics for Windows	2.08 A	2.08 A	2.08 F	2.08 G
Easy Point IV	2.00 A	2.00 A	N/A	N/A
Hot Key Support Software (Win32)	1.00 G	1.00 G	1.00 H	1.00 H
Insight Management Agents (Win32)	4.36 B	4.36 B	4.36 E	4.36 E
Intel SpeedStep Application	1.00 B	1.00 B	1.00 B	1.00 B
M2E Audio Driver	4.10 C	4.10 C	4.10 C	4.10 C
Mini PCI Communications Support Software	2.00 E	2.00 E	3.00 A	3.00 A
Power Management	N/A	N/A	4.00 B	4.00 B
Power Management Enhancements	1.00 A	1.00 A	1.00 A	1.00 A
Remote Management	1.00 A	1.00 A	1.00 B	1.00 B
Safety & Comfort Guide	5.01 A	5.01 A	5.01 A	5.01 A
Security Management 32	2.20 A	2.20 A	2.20 D	2.20 D
System Enhancement Disk (W2000)	1.00 B	1.00 B	2.00 A	2.00 A
Touchpad Driver Synaptics	5.45 A	5.45 A	N/A	N/A

Software Delivery

The following software deliverables are common to the Armada E500, M700, and M300 computers:

- Compaq QuickRestore CD Kit

- Compaq Support Software CD

- Compaq World Wide Web Site and Download Facility

Compaq QuickRestore CD Kit

The Compaq QuickRestore CD (QRCD) Kit is shipped with each Armada E500, M700, and M300 computer. The QRCD System Recovery provides an easy-to-use complete restore solution. The preinstalled operating system and all Compaq software enhancements are provided in the kit. This complete restore solution allows customers to perform a complete destructive format and restore the system to its factory settings. The QRCD Application Recovery provides a majority of drivers, utilities, and applications that are preinstalled on the computer. Users select one component at a time to reinstall.

Compaq Support Software CD

The Compaq Support Software CD (SSCD) includes the latest updates to drivers and utilities for Armada portable, desktop, and workstation computers. Key drivers and utilities in all supported languages for Armada E500, M700, and M300 computers are included on the Compaq SSCD. The user interface is in English, French, Italian, German, Spanish, and Japanese. The Compaq SSCD is updated regularly and is available either through an annual subscription or as a one-time purchase. Subscriptions can be purchased through Compaq Customer Support or a Compaq authorized dealer.

Compaq World Wide Web Site and Download Facility

Individual drivers and utilities can be downloaded, in the form of SoftPaqs, from the Compaq Download Facility or the Compaq Web site (http://www.compaq.com or ftp://ftp.compaq.com). SoftPaqs provide a distribution method for driver and ROM updates as well as product software enhancements. Multiple files and bootable diskettes can be distributed conveniently and electronically through diskettes or the Web.

Table 5 lists and describes the SoftPaq^{TM} files available as of this white paper. Refer to the Compaq Web site regularly for updates.

Table 5. SoftPaq Descriptions

SoftPaq	Description
3Com Etherlink 10/100 PCI NIC	Supports PCI NIC that is used in select Armada docking station models
3Com Global Mini PCI 56K (V.90) Modem	Enables internal modem device on select E700 and M700 models
CardWare	Enables hot plug ability and CardBus support under Windows NT 4.0
Compaq Check Dock Utility	Identifies supported docking stations for V300 models
Compaq Floppy Alert (E700 only)	Verifies that the floppy is installed in the correct internal MultiBay
Diagnostics	Provides tools to test hardware components
Easy Access Button Software	Enables the use of integrated Easy Access buttons
Easy Point IV	Provides added functionality for the pointing stick device
Hot Key Support	Allows users to quickly access BIOS and operating system features
Insight Management Agents	Provides asset management, security features, and alerting capabilities
Insight Management Web Agents	Provides Web-based asset management, security features and alerting capabilities
M2E Audio Driver	Enables the integrated audio hardware
Mini PCI Communications Support and Drivers	Enables internal modem and modem/NIC combination devices and supports Intel PCI NIC that is used in select Armada docking station models
MultiBay Plug and Play Manager	Provides support for swapping MultiBay devices
Netflex-3 Ethernet Drivers	Enables the integrated network adapter on ArmadaStation I and II
Power Management	Allows users to customize power requirements of the computer to maximize battery life and set up hibernation functionality
Power Management Enhancements	Increases battery life by managing SMART drive data collection
ATI Video Drivers	Enables the integrated video hardware
Remote Management	Enables system administrator to update client ROM and setup over the network
Security 32	Allows users to access Compaq security options
Synaptics TouchPad Driver	Provides added functionality for the touchpad pointing device
System Enhancements	Provides users with an easy to install compilation of hardware-enabling operating system enhancements and fixes
System ROMPaq	System Firmware
Worldport Application	Allows homologation of 3Com modems

Software Enhancements

This section discusses the following software enhancements common to the Armada E500, M700, and M300 computers:

- Setup and Diagnostics
- Intelligent Manageability
- Video
- Multimedia
- Audio
- Security
- Power Management
- MultiBay swapping
- Easy Access button support
- Fast infrared
- Communications
- Reference guides
- Internet Explorer

The check boxes following each enhancement description indicate which operating systems support these enhancements and if the enhancements are provided on the SSCD, CQRCD, and Compaq Web site.

Setup and Diagnostics

Computer Setup

Windows 98	Windows NT 4.0 & Windows 2000	Compaq Support Software CD	Compaq QuickRestore CD	Compaq Web Site

Computer Setup is an operating system–independent utility that allows customers to modify the configuration of their notebook. Computer Setup allows the user to resolve resource conflicts among devices, enable many of the Compaq-specific features without resorting to an operating system–dependent Compaq utility, change the system settings, and quickly and easily set up the Armada E500, M700, and M300 computers.

Compaq Diagnostics for Windows

Windows 98	Windows NT 4.0 & Windows 2000	Compaq Support Software CD	Compaq QuickRestore CD	Compaq Web Site

This current version of Compaq Diagnostics represents a significant upgrade to the version included with the Armada 7800 and 7400. This version includes a feature called Configuration Record. Users can create a detailed snapshot of the system hardware and software configuration with this utility. Multiple snapshots can be recorded for use in troubleshooting technical issues. Diagnostics for Windows is the only application that can locally retrieve detailed information specific to Compaq notebook and desktop computers. With an expanded set of features, Diagnostics for Windows is an indispensable troubleshooting tool for users, system administrators, and technical support providers.

Intelligent Manageability

Windows 98	Windows NT 4.0 & Windows 2000	Compaq Support Software CD	Compaq QuickRestore CD	Compaq Web Site

With Intelligent Manageability, Compaq responds to customers' need for easy-to-manage computers in stand-alone and networked environments. Compaq addresses this need by focusing on five primary customer concerns:

- **Asset Management**—provides the user with detailed configuration information about the computer and allows the system administrator to inventory and track computers and their components from one central location.

- **Fault Management**—provides the user and system administrator with pre-failure and other alerts. Pre-failure alerts generate advance warning to minimize downtime and data loss from hardware failures.

- **Security Management**—prevents unauthorized access to critical data and valuable computer components.

- **Integration Management**—uses industry-standard technologies while partnering with industry leading computer management software vendors.

- **Configuration Management**—provides the latest drivers, utilities, and support software to optimize computer performance; available on CD-ROM and the Compaq Web site at www.compaq.com

Intelligent Manageability also addresses the following concepts:

- **New industry-leading hardware and software**—Intelligent Manageability enables customers to manage computers intelligently. This management tool is designed for computers in both mobile and connected environments.

- **Innovation and standardization**—The Compaq Management Solutions Partners Program establishes a non-proprietary approach to solving customers' manageability issues, ensuring tight integration and compatibility with leading computer management software vendors.

- **Total Cost of Ownership**—Protecting the investment by increasing its value over the life of the product reduces the total cost of owning one or more computers.

- **Product Parity**—Currently, all commercial portable and desktop computers include virtually the same Intelligent Manageability functionality across all platforms.

For additional information on Intelligent Manageability, please refer to the *Intelligent Manageability for Portables* white paper.

Video

Windows 98	Windows NT 4.0 & Windows 2000	Compaq Support Software CD	Compaq QuickRestore CD	Compaq Web Site

The Armada M300 computer features the ATI Rage Pro video chipset. The E500 and M700 computers feature the ATI Mobility-P video chipset. Software drivers enable all functionality of the chipset. Driver support is complemented by a display utility that provides easy access to video settings through the Windows Control Panel.

Multimedia

Microsoft Multimedia Support

The version of Windows 95 preinstalled on select models of the Armada E500, M700, and M300 computer includes Microsoft DirectShow, which enables the following types of video playback:

- AVI, MOV, and MPEG1 playback support
- Indeo4-compressed AVI playback support
- MCI support for both 16- and 32-bit applications

Software MPEG Support

DirectX is a collection of application program interfaces (APIs) designed to create and play back multimedia content on personal computers. With these APIs developers can easily develop cutting-edge graphic media such as 3D VRML, and support Web technologies like streaming, moving picture playback, and online gaming and modeling.

Note: Active Movie has been replaced by Microsoft DirectShow.

DirectShow provides enhancements over its Active Movie predecessor, most notably by providing MPEG1 software playback that has been optimized for Intel MMX processors. DirectX 6.1 and Internet Explorer 4.01a are included as part of the Windows 98 preinstall images.

Compaq continues to preinstall an MMX-optimized Active Movie filter for Windows NT 4.0, providing playback support for popular video formats such as MPEG1.

Audio

Windows 98	Windows NT 4.0 & Windows 2000	Compaq Support Software CD	Compaq QuickRestore CD	Compaq Web Site

Audio drivers on the Armada E500, M700, and M300 computers enable the ESS Maestro-2EM audio chipset to run multimedia applications using Microsoft DirectSound audio capability. This PCI audio chipset accelerates Microsoft DirectSound applications. In addition to playing WAV and MIDI files, DirectSound provides a high-quality wave-mixing facility, as well as an industry-standard MIDI playback system. DirectSound also provides added control over the memory utilization of the sound controller, allowing user-selection of sounds to be cached.

Security

DriveLock

DriveLock is a security feature that offers customers advanced protection against unauthorized access to valuable data on their computer's hard drives. Two passwords control access to the hard drives, which provide customers with a means to unlock a protected drive for which the day-to-day user password has been lost. Hard drives protected with DriveLock remain protected even if removed from the notebook. Features and settings are accessed through the Compaq F10 Setup Utility.

For more information about DriveLock, refer to the Compaq white paper *DriveLock Hard Drive Protection for the Armada,* 2nd ed., February 1998.

Compaq Security Extension

Windows 98	Windows NT 4.0 & Windows 2000	Compaq Support Software CD	Compaq QuickRestore CD	Compaq Web Site

Security32 is a Windows Control Panel extension that provides an intuitive interface to security features unique to Compaq portable computers. Through the Control Panel security applet, users are able to set the computer's power-on password and enable QuickLock and QuickBlank features.

Power-On Password

Windows 98	Windows NT 4.0 & Windows 2000	Compaq Support Software CD	Compaq QuickRestore CD	Compaq Web Site

The power-on password prevents an unauthorized user to power on the system. Once a power-on password is established, the user is required to type the password during the power-on process.

The power-on password allows the user to enable QuickLock, a hot-key combination used to lock the keyboard. Under QuickLock, any keys pressed are ignored until the power-on password is entered. If QuickLock is enabled, the user can elect to have the keyboard locked when the computer enters suspend mode, or the user can have the screen blanked when QuickLock is activated. Setting the screen to blank when QuickLock is activated is called QuickBlank.

Administrator Password

Windows 98	Windows NT 4.0 & Windows 2000	Compaq Support Software CD	Compaq QuickRestore CD	Compaq Web Site

The administrator password, also known as the setup password, prevents unauthorized changes to the system configuration. Unless the Administrator Password is known, F10 Setup is inaccessible.

Power Management

The Armada E500, M700, and M300 computers use Advanced Power Management (APM) version 1.2 to provide power conservation features under Windows 95. An equivalent feature set is supported under Windows NT 4.0. Users access these features through the Compaq Power Management Utility. This Windows Control Panel applet provides an easy-to-use interface for setting and controlling power management features. Power management features are categorized into one of the four groups, which appear as pages in the Power Utility. These groups are outlined below.

AC Energy Saver Page

Windows 98	Windows NT 4.0 & Windows 2000	Compaq Support Software CD	Compaq QuickRestore CD	Compaq Web Site

AC Energy Power Conservation features provide the ability to turn AC power conservation on or off, utilize the energy saving features of the monitor, if available, set hard drive timeouts for AC, and set screen save timeouts for AC power use.

Battery Conservation Settings Page

Windows 98	Windows NT 4.0 & Windows 2000	Compaq Support Software CD	Compaq QuickRestore CD	Compaq Web Site

Battery Power Conservation features include four possible battery conservation levels: high, medium, drain, and custom. When a custom level has been selected, the user can modify such custom timeouts as suspend, processor speed, and brightness. This feature also enables and disables low battery warning beeps.

Hibernation Settings Page

Windows 98	Windows NT 4.0 & Windows 2000	Compaq Support Software CD	Compaq QuickRestore CD	Compaq Web Site

The Hibernation features turn hibernation on or off, set hibernation timeouts, and select the logical partition where the hibernation file will reside.

Battery Status Page

Windows 98	Windows NT 4.0 & Windows 2000	Compaq Support Software CD	Compaq QuickRestore CD	Compaq Web Site

The Battery Status feature shows the position of multiple battery locations in the computer. If a battery is present in a given location, the status (high, low, critical, charging) and a percentage of charge remaining for that battery is shown. The Multiple Battery Status provides a critical value-add for Compaq customers, reporting the status of each individual battery, in addition to the cumulative battery status.

Advanced Configuration and Power Interface (ACPI)

Windows 98	Windows 2000

Advanced Configuration and Power Interface (ACPI) represents a significant innovation in power and configuration management, allowing operating systems and applications to manage power based on activity and usage. The Armada E500, M700, and M300 computers use ACPI to provide power conservation features under Windows 98 SE and Windows 2000.

The new models of the Armada E500, M700, and M300 computers are ACPI hardware-ready.

MultiBay Swapping Support

Windows 98	Windows NT 4.0	Compaq Support Software CD	Compaq QuickRestore CD	Compaq Web Site

MultiBay Interchange Support is provided for Windows 98 and NT 4.0. This feature allows for hot swapping of the MultiBay CD-ROM, DVD-ROM, Super Disk LS-120, 3.5-inch diskette drive, and an additional MultiBay battery in a standalone configuration. MultiBay swapping support is inherent to Windows 2000.

Easy Access Button Support

Windows 98	Compaq Support Software CD	Compaq QuickRestore CD	Compaq Web Site

Easy Access buttons can be assigned to open an Internet destination site, open an application on the computer, or bring up a document. This utility supports the Easy Access buttons that are integrated on new models of the Armada E500, M700, and M300 computers.

Fast Infrared

Windows 98	Windows 2000	Compaq Support Software CD	Compaq QuickRestore CD	Compaq Web Site

Windows 98 and Windows 2000 support standard infrared (IR) transfer rates. Compaq supplies enhanced IR drivers to provide the user the ability to use IR at 4 MB/s.

Communications

Windows 98	Windows NT 4.0	Compaq QuickRestore CD

The Armada E500, M700, and M300 computers feature Fax Central from Ring Zero, a data/fax application for Windows NT 4.0. This application allows users to fax directly from their Armada E500, M700, and M300 computers.

Reference Guides

Windows 98	Windows NT 4.0 & Windows 2000	Compaq QuickRestore CD

Armada E500, M700, and M300 computers have three reference guides available, including the *Safety & Comfort Guide,* the *Modem Command Reference Guide,* and the *Armada Reference Guide* on the QRCD.

The *Safety & Comfort Guide* provides the user with instructions on how to properly use items like the keyboard and mouse to reduce the potential of repetitive motion injuries like carpal tunnel syndrome.

The *Modem Command Reference Guide* includes information on the AT command set and S registers used for the integrated modem.

The *Armada Reference Guide* includes information about the computer, such as identifying connectors, inserting and removing hardware, major hardware subsystems, upgrades, and troubleshooting.

Internet Explorer

Windows 98	Windows NT 4.0 & Windows 2000	Compaq QuickRestore CD

All Windows 98, Windows 2000, and Windows NT 4.0 preinstall images include Microsoft Internet Explorer 5.01 preinstalled.

Frequently Asked Questions

How is the internal hard drive partitioned on the new Armadas?

On Armada notebooks with Windows 98, the hard drive comes formatted using FAT32. FAT32 provides a number of advantages over its predecessor, FAT16, including support for partitions larger than 2 GB and smaller cluster sizes.

On new Armada notebooks with Windows NT 4.0, the 2-GB bootable partition uses FAT16. The remainder of the drive is partitioned with NTFS. Windows NT 4.0 does not support FAT32, since NTFS provides comparable features and performance improvements. Customers using Windows NT 4.0 on the Armada E500, M700, and M300 computers are able to easily manipulate the primary bootable partition using OS-inherent tools.

How can DVD movies be viewed on an Armada E500, M700, and M300 Computer?

The Compaq DVD Solution is preinstalled on new Armada family products that are shipped with DVD-ROM drives. A software-based DVD decoder/player features an easy-to-use interface and allows users to view DVD video releases. This application is designed for use with Windows 98, Windows NT 4.0, and Windows 2000.

What exactly is a Common Preinstall?

The Common Preinstall is a preinstall image that consists of software components that will work on all current generation Armada platforms (this does not include the Armada 100 or any 100 Family follow-on products).

Will the software image on an Armada M700 with a 750-MHz processor be identical to the image on an Armada E500 with a 700-MHz processor?

Every effort will be made to keep these preinstall images identical. Minor changes may occur when products are not shipped simultaneously, but any updated software components will be tested on other current Armada families. The latest list of Armada software will work on current Armada product families. This list will be provided in the *Armada Software Overview* white paper.

What about backward compatibility?

New Armada preinstall images will consist of software components that will be tested on previous generations of the same family. If an updated video driver is produced to support a new M700 family product, it will be tested on previous M700 products.

If a new model is introduced, will all of the other models that are still being manufactured be updated with the new preinstall image?

No, many of our customers have expressed a need for consistency. Therefore, Compaq will not refresh software on Armada E500, M700, and M300 computer products during their life (this does not apply to the S products). We will supply white papers that will provide the necessary information to those customers who want to maintain a single list of software components for all current-generation Armada families. Maintaining a specific list for each Armada family will no longer be necessary.

Why doesn't the Common Preinstall work on the Notebook 100?

Significant architectural differences between the Compaq Armada 100 and current-generation Armadas prevent the Common Preinstall Software components from working on the Armada 100.

What about the next generation of Armada products? Will they also use the Common Preinstall?

Efforts will be made to maintain as high a level of compatibility as possible, but new technology may force additional or new software to be family-specific. Information on these differences will be documented in revisions to the *Armada Software Overview* white paper.

How do I get these updated software components?

The latest software updates are available from the Compaq Web site at www.compaq.com. For customers without Web access, we offer the Compaq Software Support CD Kit. In North America, call (800) 952-7689 for more information.

How do I know what these software components do?

Armada Family Software white papers will describe the functionality provided by each of the listed software components. As updated software versions are introduced with new products, these white papers will be updated.

As an IT Manager, how does a common preinstall image benefit me?

Standardization is an important part of lowering total cost of ownership. With the common set of software components used across these Armada Families, IT Managers will no longer have to keep track of different versions of software to support Compaq Armada products.

Can I use the same installation procedures for all models?

Yes, the same installation procedures can be used for the supported Armada Family models.

What happens if I move my image from an M700 to an E500?

Due to minor differences between Armada families, new hardware will be detected under Windows 98 or Windows 2000. Once this initial hardware detection has occurred under these plug and play operating systems, the image will work on both units.

Where can I learn more if I want to install the OS and all of the Compaq software myself?

The *Installing Microsoft Windows on Compaq Armada EM & V Products* white papers will describe the steps required to install the supported Microsoft operating systems.

Will this image change significantly if new E500, M700, and M300 computers are introduced?

The goal for our classic line of Armada products is to provide as much stability as possible. Changes made to the preinstall images will be limited to those that will support new hardware features or significantly improve overall performance.

Why aren't pointing device drivers being preinstalled?

Pointing device drivers are hardware specific and do not work well in a common environment. The pointing device drivers that are native to Windows provide all of the required basic features.

How will I know what has changed?

Updated Armada Family Software white papers will describe any updates or differences in software versions that are introduced with new products.

Can I use these same software components on my Armada 7800 (or any previous Armada families)?

While some software will be backward compatible with previous Armada families, most software is not, due to the architectural changes made to the current line of products.

References

For comprehensive online support, visit the Compaq Web site at
www.compaq.com

For international information, visit the Compaq Web site at
www.compaq.com/corporate/overview/world_offices.html

Table 6. Departments and Telephone Numbers for Canada and the United States

Department	Telephone Numbers
Consumer Direct	1-800-888-0220
Compaq DirectPlus	1-800-888-5858 (U.S.)
Compaq Partner Direct	1-800-888-5874
Compaq Reseller Locator	1-800-345-1518 (Option 3)
Compaq Canadian Reseller Locator & Product Literature	1-800-567-1616
Diskette Fulfillment (backup diskettes for preinstalled software)	1-800-952-7689 (U.S.) 1-800-349-8498 (Canada)
Compaq Product Information	1-800-345-1518 (U.S.) 1-800-567-1616 (Canada)
Compaq Technical Support	1-800-OK-COMPAQ (U.S. and Canada) 1-800-652-6672