



www.hp.com/desktops/diagtools

hp e-diagtools 3.5x user's guide

hp business pcs

hp e-pc hp brio hp vectra

hp workstations

including: hp visualize hp kayak

hp notebook pcs

hp omnibook hp pavilion



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HP e-Diagtools 3.5x User's Guide

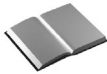
Who Should Read This Book?



This manual is for anyone who wants to:

- Diagnose hardware problems on an HP computer
- Understand the purpose of e-Diagtools
- Learn how to use e-Diagtools
- Know what to do when an e-Diagtools test fails
- Provide their support provider with more information for solving problems quickly and effectively
- Find out where to get more information and support.

Other e-Diagtools Documentation



Apart from this User's Guide, the following documentation is also available:

- *HTML Quick Tour*
Provides a useful online introduction and overview of e-Diagtools. It is available on the Diagtools web site www.hp.com/desktops/diagtools.
- *e-Diagtools Administrator's Guide*
Explains to IT or MIS personnel how to configure the HP e-Diagtools diagnostic solution to obtain optimal e-support and remote capabilities. It is available on your HP computer's support web site (refer to page 6 for web addresses).
- *Virtual Call Assistant User's Guide*
Explains how to install, configure and use the Virtual Call Assistant, an e-Diagtools diagnostic aid that is capable of detecting and recognizing audio error signals from remote computers. It is available on your HP computer's support web site (refer to page 6 for web addresses).
- *HP Utility Partition Whitepaper*
Describes the HP Utility Partition, a hard disk partition provided on most HP computers that contains most of the e-Diagtools software. It is available on the Vectra support web site www.hp.com/go/vectrasupport.

What is e-Diagtools?

The first step in solving a problem with a computer is *diagnosis*.

HP's e-Diagtools helps you diagnose hardware-related problems on a HP computer.

It is a series of tools designed to help you to:

- Distinguish between software and hardware problems
- Diagnose hardware-related problems
- Provide precise information to support providers so that they can solve any problem quickly and effectively.

e-Diagtools is not a repair tool.

Overview of e-Diagtools

e-Diagtools has three main components:

- ❑ The e-Diagtools pre-boot diagnostic capability. This generates an audible set of beeps that helps diagnose a problem manually or automatically when the computer cannot boot. You can also present the beep error code to your support provider for remote diagnosis and enhanced problem solving. Available on HP Business PCs and Workstations only.
- ❑ The e-Diagtools core tests, which provide hardware detection, basic and advanced system tests, and a Support Ticket with a complete record of the test results and the computer's configuration.
- ❑ A set of functions to forward the Support Ticket to your authorized support provider via email, and to retrieve and flash the latest BIOS version for your computer.

What's New in e-Diagtools Version 3.5x

Version 3.5x of e-Diagtools has these new features:

- Supports the latest HP computers
- Incorporates new, more efficient hardware diagnostics tests
- Has an improved user interface, especially for advanced tests
- Available in these languages: English, French, German, Italian, Spanish, Portuguese, Simplified Chinese and Japanese
- Has a context sensitive help system
- Minimizes the number of reboots (restarts) required
- For HP Business PCs, provides a new activation from the HP logo screen (using <F8> key)
- Provides step-by-step troubleshooting recommendations if there is a test warning or error
- Issues a warning message in the basic tests if any main hardware components are missing.
- Provides more information in the support ticket, such as the history of the computer's configuration from the first time e-Diagtools was run up to the last time e-Diagtools was run.



Media

This version of HP e-Diagtools is supplied on the following media:

- The Utility Partition pre-installed on your hard disk — on most new HP computers.
- The recovery CD supplied with your computer:
 - The *HP PC Image Engineer - Image Library and Diagnostics CD-ROM* for e-pc and Vectra PCs.
 - The *Recovery CD* for HP Notebook PCs.
- The *HP Diagtools CD-ROM* for Linux HP computer models.
- The generic *HP Diagtools CD-ROM* — this CD contains all e-Diagtools versions to cover a wide range of HP e-pc, Vectra, Kayak, Brio, Notebook and Visualize computers. This CD-ROM can be ordered from the Diagtools web site www.hp.com/desktops/diagtools.



e-Features

The “e-features” of e-Diagtools are network functions that enable you to do remote BIOS updates, and send the Support Ticket by email to your support provider.

These e-features can be extended using HP Tootools or HP Instant Support to include remote troubleshooting and diagnosis via your LAN.

NOTE

Only the HP Utility Partition version of e-Diagtools 3.5x supports the full range of e-features. When you run e-Diagtools 3.5x from a CD-ROM you will not be able to update the BIOS.

Compatibility

e-Diagtools version 3.5x can run on the latest models of HP computers.

Other versions of e-Diagtools are available for older HP Business PCs, Notebook PCs and Workstations.

To learn which version of e-Diagtools to use for your HP computer, refer to the HP Support web sites, described on page 6.

Upgrading e-Diagtools on your computer's Utility Partition

For HP Business PCs	You can download the latest version of the HP Utility Partition version of e-Diagtools from the support web site for your HP Business PC (refer to page 6 for web addresses).
For HP Notebook PCs	You can upgrade the HP Utility Partition version of e-Diagtools using <i>e-Diagtools for Windows</i> , described in chapter 8, “e-Diagtools for Windows”.



HP Instant Support

For selected HP computers, e-Diagtools can also be run as part of the HP Instant Support framework.

This e-Diagtools capability is not described in this manual. For more information on HP Instant Support, refer to: **www.hp.com/go/instantsupport**



More Information and HP Support Web Sites

For more information about e-Diagtools, refer to the e-Diagtools web site:

www.hp.com/desktops/diagtools

For more information about support for your HP computer, including e-Diagtools information, refer to the HP Support web sites:

HP Support	www.hp.com/go/support
HP Vectra Support	www.hp.com/go/vectrasupport
HP Brio Support	www.hp.com/go/briosupport
HP Kayak Support	www.hp.com/go/kayaksupport
HP e-pc Support	www.hp.com/go/e-pcsupport
HP Workstation Support	www.hp.com/workstations/support
HP Notebook Support	www.hp.com/go/support

For more information about HP Customer Care Service and Support, refer to chapter 9, “HP Customer Care Service and Support”.

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this chapter applies to

hp business pcs ✓

hp workstations ✓

hp notebook pcs ✗

Pre-Boot Diagnostics and BIOS Errors

This chapter describes Pre-boot Diagnostics and BIOS errors, which help you troubleshoot hardware problems when your HP Business PC or HP Workstation cannot boot (start) properly. Pre-boot diagnostics are not provided on all HP Workstations.

It also describes a web-based troubleshooting tool related to pre-boot diagnostics, BIOS EMU errors, and e-Diagtools for HP Business PCs or HP Workstations.

Overview

What do you do if your computer does not start properly and you cannot run e-Diagtools to diagnose the problem? The answer is to use e-Diagtools' pre-boot diagnostic capabilities or BIOS error messages.

If your computer powers on but does not start properly, it attempts to report the error in two ways:

- It emits a modulated audio signal followed by one or more distinct beeps – this is pre-boot diagnostics
- It displays an error message on the screen – this is a BIOS error.

Pre-Boot Audio Signal and Beeps

NOTE

Pre-boot diagnostics are not provided on all HP Workstations.

The pre-boot audio signal can be used to identify the hardware component that needs troubleshooting or replacement:

- The modulated audio signal can be interpreted by a support provider equipped with the Virtual Call Assistant. (For more information about the Virtual Call Assistant, refer to the *Virtual Call Assistant User's Guide*, available on your HP computer's support web site – refer to page 6 for web addresses).
- The distinct beeps form a beep code that you can interpret using the following table:

Problem	Number of beeps
If there is a buzzing sound: • If you pushed the power button for more than 5 seconds, this is normal; there is no error • The power button may be stuck. If there is no buzzing sound, the computer has no power. This could mean: • Computer is not plugged in • Power supply failure • System board failure.	0
Absent or incorrectly connected processor	1
Power supply in protected mode	2
Memory failure	3
Video controller failure	4
PCI device initialization failure	5
Corrupted BIOS	6
BIOS terminal error	7

If you miss the beep code, press and hold the power button for at least five seconds until the modulated sound is emitted again. This “playback” of the memorized code can also be used to diagnose an intermittent fault on a computer that appears to be working again.

NOTE

Avoid disconnecting the computer’s power cord as this will delete some of the computer’s error diagnostic information encoded in the modulated audio signal.

BIOS Error Messages

Error Message on Screen

If your computer encounters a BIOS error, it will display a BIOS error message on the screen, such as:

**Error message 1 of 1: Error code 0103
Keyboard not detected - Keyboard error**

Sometimes, recommendations for troubleshooting are also displayed below the error message, or you need to press **<Enter>** to get the recommendations.

The error message and recommendations (if provided) can be used to troubleshoot the problem.

Audio Error Signal

For many errors, some HP computers can also emit the modulated audio signal that corresponds to the displayed error. This can be especially useful when you call your support provider (this feature is described below in “Calling Your Support Provider”). To emit the audio error signal, press **<Enter>** then **<F11>**.

What to Do if You Get a Pre-boot, BIOS, or e-Diagtools Error

There are two ways to deal with the error. You can call your support provider or troubleshoot the error yourself.

Calling Your Support Provider

A service provider equipped with the Virtual Call Assistant kit can interpret modulated audio error signals to determine the source of the error, whether from pre-boot diagnostics (beep errors), from the BIOS (BIOS error messages), or from e-Diagtools. The audio signal should contain all the necessary information, including computer model and serial number.

To do this, simply call your service provider and, when prompted, play the audio error signal into the telephone handset. To play the audio error signal:

- For BIOS error messages, press **<Enter>** then **<F11>**
- For pre-boot errors (beep errors), press the computer's power button for at least five seconds
- For e-Diagtools errors, press **<F11>** when indicated on the screen.

The support provider can then decode the signal and provide a solution.

For more information about Virtual Call Assistant, refer to the *Virtual Call Assistant User's Guide*, available in PDF format on your HP computer's support web site (refer to page 6 for web addresses).

Troubleshooting the Error Yourself

If you got a pre-boot error, you can count the number of beeps then determine the problem by referring to the table on page 12.

For extensive web-based troubleshooting, use e-Diagtools online troubleshooting, described on page 15.

NOTE

Ensure you are using the most recent BIOS version for your computer. This will help to ensure that you have full BIOS error message reporting.

e-Diagtools Online Troubleshooting

You can use the e-Diagtools web-based troubleshooting tools if your computer has:

- Pre-boot diagnostic errors (beep errors)
- BIOS EMU error messages (also called “configuration diagnostics”)
- e-Diagtools hardware diagnostic errors (described on page 51 and page 60).

These web-based troubleshooting tools can provide valuable support information and help you solve your problem.

The tools are available for HP e-pc, HP Brio, HP Vectra, and HP Kayak computers.

You can access e-Diagtools online troubleshooting by connecting to your computer’s support web site (refer to page 6 for web addresses).

1 Pre-Boot Diagnostics and BIOS Errors

e-Diagtools Online Troubleshooting

this chapter applies to

hp business pcs ✓

hp workstations ✓

hp notebook pcs ✓

Starting e-Diagtools

This chapter describes how to start and run e-Diagtools from the HP Utility Partition or from a CD-ROM.

Before Starting e-Diagtools

This section applies to HP Business PCs and Workstations. If you have an HP Notebook PC, you can ignore this section.

Before you start e-Diagtools, do the following:

- 1 Enter the computer's BIOS Setup program.
 - To enter the Setup program on new HP Business PCs, restart the computer, press **F8** when the logo screen appears, then press **F2**.
 - To enter the Setup program on other HP computers (including HP Notebook PCs), restart the computer and press **F2** when the HP logo appears.
- 2 If present, ensure all **Hardware Protection** items in the **Security** menu are set to **Enabled** or **Unlocked**.
- 3 If you are using a CD-ROM to run e-Diagtools, ensure the option to start from the CD-ROM is enabled and the CD-ROM is configured to be the first device to boot from.

After running e-Diagtools, you can restore the original Setup values on your computer.

Starting e-Diagtools from the Utility Partition on your Hard Disk

How you start e-Diagtools depends on your HP computer model. Most of the latest HP Business PCs have a new configuration and diagnostics startup menu.

Option 1: Starting e-Diagtools on new HP Business PCs

- 1 Restart your computer.
- 2 When the HP logo appears, press <F8> to enter the Configuration and Diagnostics menu.

If you do not have the screen shown below, refer to "Option 2: Starting e-Diagtools on Other HP Computers (Including HP Notebook PCs)", on page 22.



F8

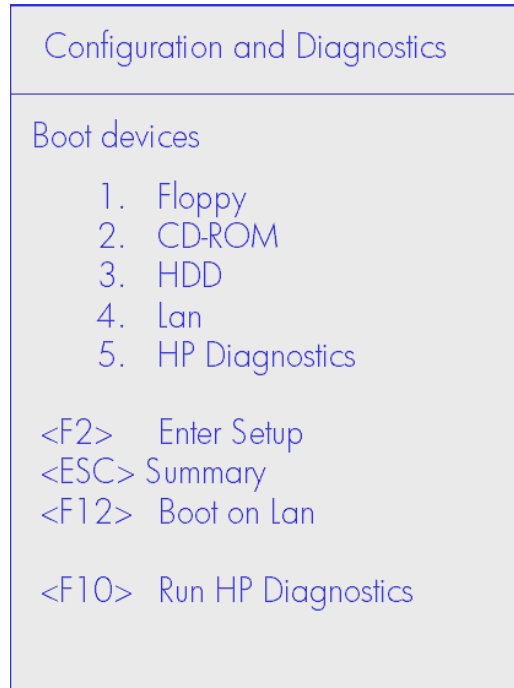
Configuration and Diagnostics

2 Starting e-Diagtools

Starting e-Diagtools from the Utility Partition on your Hard Disk

- 3 In the Configuration and Diagnostics menu, use the arrow keys to select HP Diagnostics and press **<Enter>**. On some computers you can also press **<F10>** to run e-Diagtools.

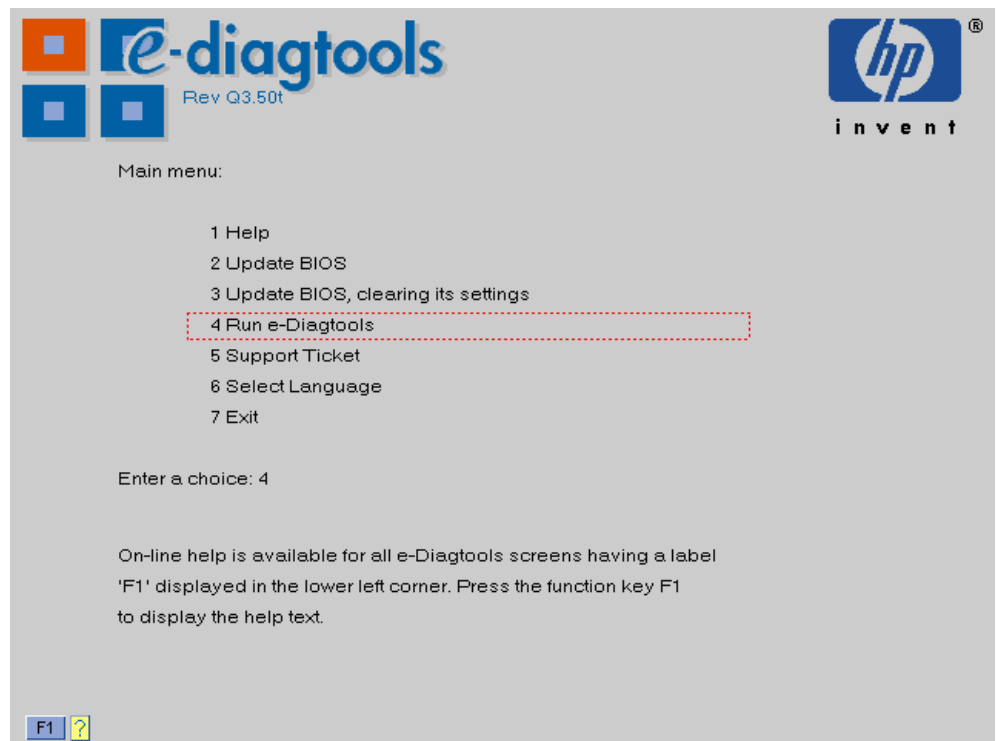
The actual Configuration and Diagnostics screen may differ between computer models



If you get an error message after choosing the option to run e-Diagtools, it probably means that the Utility Partition has been disabled. Refer to "If You Are Unable to Start e-Diagtools From the Hard Disk", on page 23.

- 4 The e-Diagtools main menu appears. Highlight the desired option and press **<Enter>**. This menu is described in more detail on "The e-Diagtools Main Menu", on page 25.

Some menu options are not available on all HP computers



2 Starting e-Diagtools

Starting e-Diagtools from the Utility Partition on your Hard Disk

Option 2: Starting e-Diagtools on Other HP Computers (Including HP Notebook PCs)

- 1 Restart your computer.
- 2 After the initial splash screen with the HP logo, a message is displayed. The exact message may vary; here are two examples:

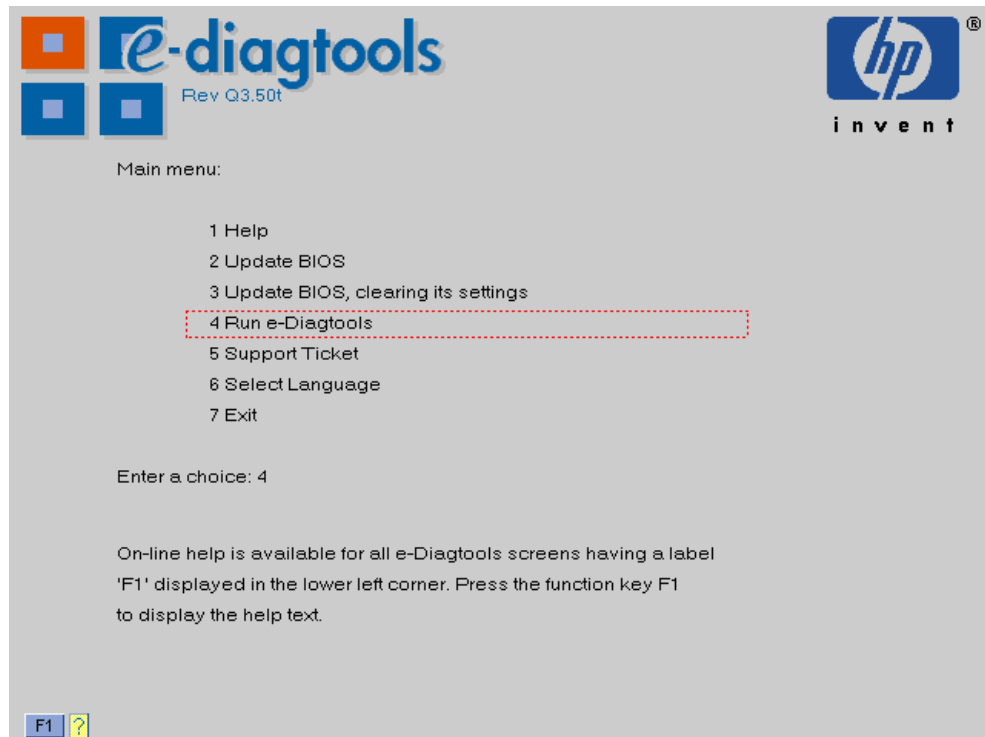
**Press <F10> to enter HP Utility Partition ...
or any other key to proceed**

Press <F10> to start diagnostics

Press the <F10> key.

If this message does not appear, it probably means that the Utility Partition has been disabled or deleted. Refer to "If You Are Unable to Start e-Diagtools From the Hard Disk", on page 23.

- 3 The following menu appears: Select the desired option. This menu is described in more detail in "The e-Diagtools Main Menu", on page 25.



Some menu options are not available on all HP computers

If You Are Unable to Start e-Diagtools From the Hard Disk

If you are unable to start e-Diagtools from the hard disk, it probably means that the Utility Partition where e-Diagtools is stored has been deleted. Try running e-Diagtools from a CD-ROM instead (refer to "Starting e-Diagtools from a CD-ROM", on page 23).

Starting e-Diagtools from a CD-ROM

When you run e-Diagtools from a CD-ROM you will have all the features available in the hard disk version, with the exception of the BIOS update feature. However, you can always update your computer's BIOS using other standard methods described on the HP computer's support web site (refer to page 6 for web addresses).

Which CD-ROM to Use

Different CD-ROMs are provided with each type of HP computer. To know which CD-ROM to use for running e-Diagtools on your computer, refer to the section "Media", on page 5.

How to Start e-Diagtools

To start e-Diagtools from the recovery CD-ROM provided with your computer:

- 1 Insert the HP CD-ROM in your CD-ROM drive. Restart your computer.
- 2 For HP Business PCs and Workstations, ensure that the option to start from the CD-ROM drive is enabled and that the CD-ROM is configured to be the first device to boot from (refer to "Before Starting e-Diagtools" on page 18 for more information).

For HP Notebook PCs, press **<Esc>** during startup and set computer to boot from the CD-ROM first.

- 3 e-Diagtools either starts automatically or, depending on the HP CD-ROM used, a menu appears. In the latter case, select the option to run the hardware diagnostics.

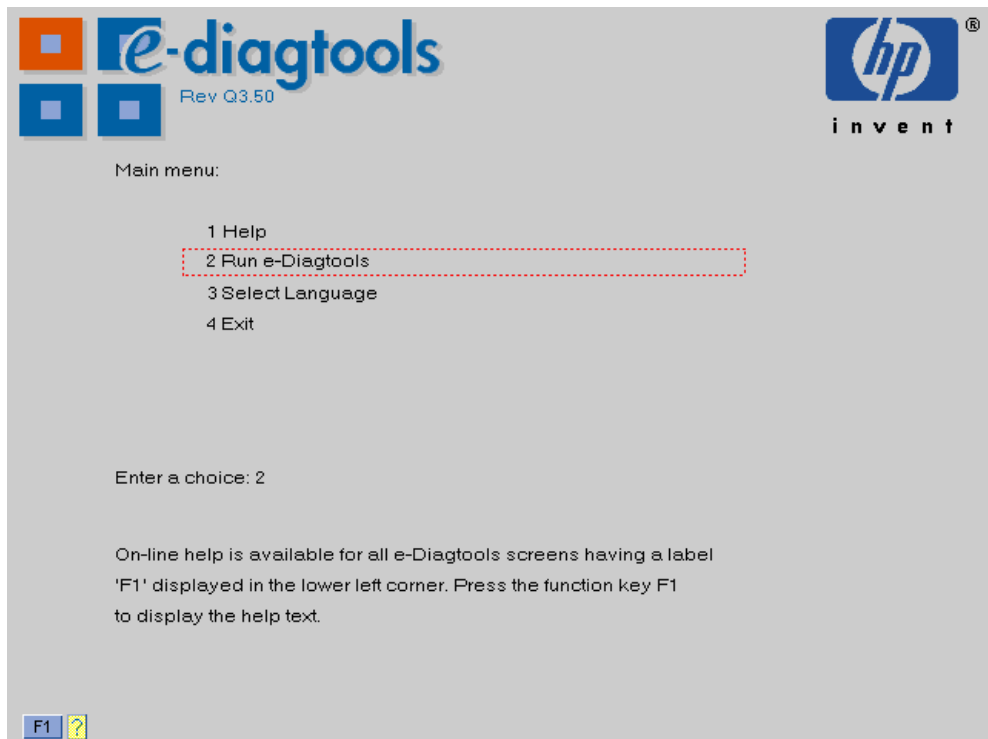
2 Starting e-Diagtools

Starting e-Diagtools from a CD-ROM

- 4 In the next screen, select the desired language:

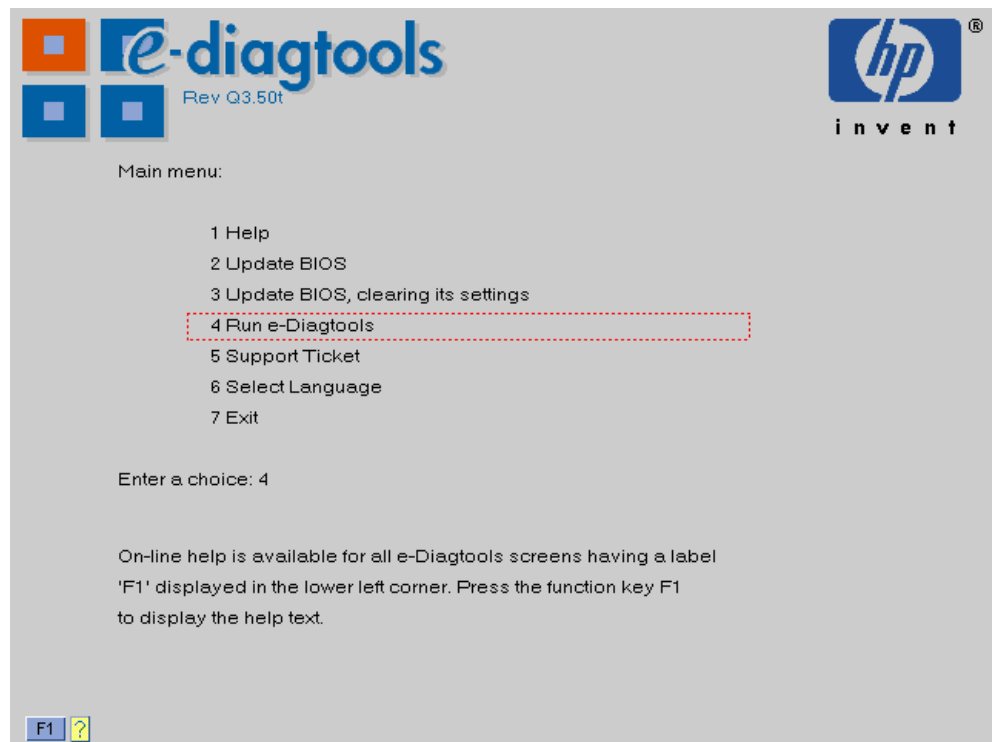


- 5 The main menu appears. Select the desired option. This menu is described in more detail on "The e-Diagtools Main Menu", on page 25.



The e-Diagtools Main Menu

Some menu options are not available on all HP computers



Help

Gives a brief explanation of menu options.

In all e-Diagtools screens where  appears, you can get help information by pressing <F1>.

Update BIOS (when available)

Checks for a BIOS update and, if available, installs it on your system. Your system's BIOS settings are retained.

Refer to "Updating the BIOS", on page 38 to learn how to do this.

For information on how to configure e-Diagtools to update the BIOS, refer to chapter 3.

Update BIOS, Clearing its Settings (when available)

Checks for a BIOS update and, if available, installs it on your system and resets the BIOS settings to their default values. For HP Notebook PCs, the BIOS update must already be present in the utility partition (you can download the latest BIOS into the utility partition using *e-Diagtools for Windows*, described in chapter 8).

2 Starting e-Diagtools

The e-Diagtools Main Menu

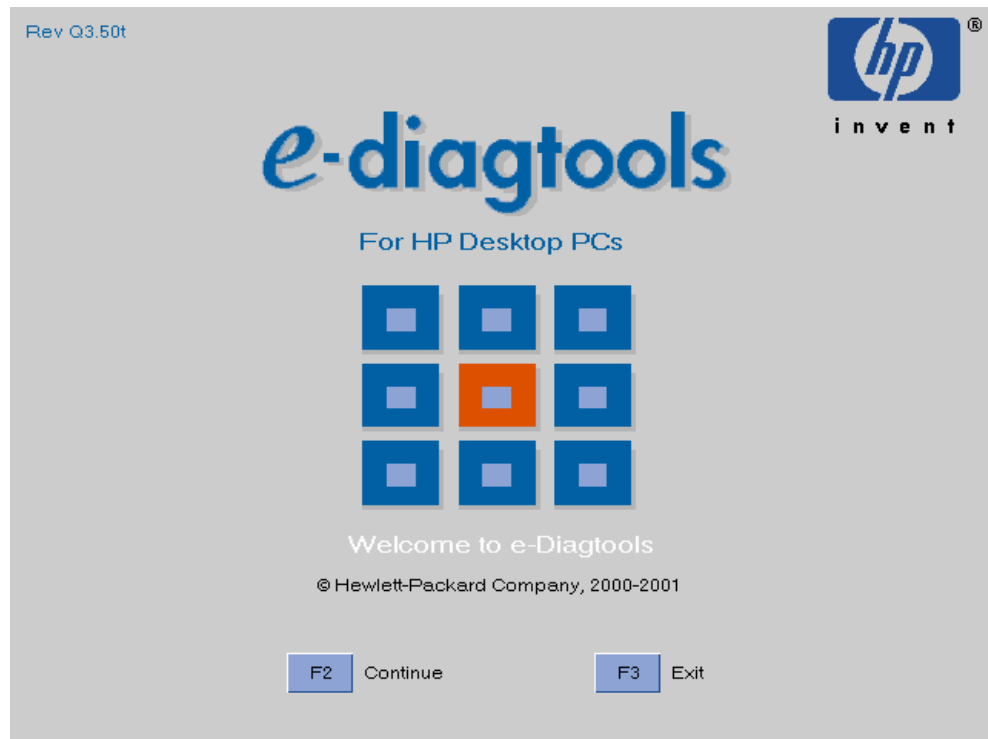
Refer to "Updating the BIOS", on page 38 to learn how to do this.

For information on how to configure e-Diagtools to update the BIOS refer to chapter 3.

Run e-Diagtools

Runs e-Diagtools hardware diagnostics, and optionally sends the Support Ticket to your support provider by email. This process is described in subsequent chapters of this manual.

Select this option and the welcome screen appears:



Press <F2> to continue running e-Diagtools hardware diagnostics. You will enter the first phase, hardware detection, described in chapter 4, "e-Diagtools Hardware Detection".

Support Ticket (when available)

Allows you to:

- View the last available Support Ticket.
- Copy the last available Support Ticket onto floppy disk.
- Send the last available Support Ticket to your support provider by e-mail. Your support provider can be an Authorized Support Provider, an internal helpdesk, or HP.

To learn more about sending the Support Ticket to your support provider, refer to "Sending the Support Ticket", on page 40.

For more information on how to configure e-Diagtools to send the support ticket via email refer to chapter 3.

For an up-to-date Support Ticket, run e-Diagtools first. If you do not run e-Diagtools first, the last available Support Ticket will be sent.

This main menu option is only available on the hard disk version. However, if you are using the CD-ROM version, run Diagtools first, then you can send, view or save the support ticket as needed.

Select Language

Allows you to choose the language for the e-Diagtools screens.



Exit

Exits the e-Diagtools and restarts the system.

2 Starting e-Diagtools

The e-Diagtools Main Menu

this chapter applies to

hp business pcs ✓

hp workstations ✓

hp notebook pcs ✗

Updating the BIOS and Sending the Support Ticket

This chapter describes how to set up and use the e-features of e-Diagtools: updating the BIOS and sending the Support Ticket.

If you have a HP Notebook PC, refer to chapter 8, “e-Diagtools for Windows“ for all information about setting up and using e-features.

Overview of e-Diagtools e-Features

e-Diagtools has powerful e-support features that use your computer's networking and Internet facilities. These features include:

- Sending the Support Ticket to your support organization via email
- Updating the computer's BIOS.

HP Business PCs and HP Workstations

You can perform the e-support tasks from the e-Diagtools main menu (described on page 25). Also, you also have the opportunity to send the Support Ticket several times when using e-Diagtools to diagnose your computer's hardware.

Most of the parameters necessary to accomplish these operations are collected automatically by the HP e-Diagtools LAN Configuration Agent, described on page 34.

NOTE

For HP Business PCs and HP Workstations, the e-features of e-Diagtools do not work over a modem connection or if using automatic proxy server configuration.

HP Notebook PCs

For HP Notebook computers, use *e-Diagtools for Windows* to configure and perform all e-support tasks. *e-Diagtools for Windows* allows you to use a modem or local network connection for e-support.

If you have a HP Notebook computer, refer to chapter 8, "e-Diagtools for Windows" for all information about setting up and using e-features.

Basic to Intermediate Users: Setting Up the e-Features

For most users, follow the instructions in this section to easily set up the e-support features.

The e-Diagtools LAN Configuration Agent automatically sets up most of the required network parameters. For more information about the LAN Configuration Agent, refer to page 37.

HP Notebook PCs

If you have an HP Notebook computer, refer to chapter 8, “e-Diagtools for Windows” for all information about setting up and using e-features.

Before You Begin

Before you begin, your computer should have:

- ☐ An HP Utility Partition on the hard disk (or e-Diagtools on CD-ROM if you do not need the use the e-Diagtools BIOS update feature).
- ☐ One of these supported operating systems:
 - Microsoft Windows 95 OSR 2.0 or higher
 - Microsoft Windows 98 and Windows 98 Second Edition
 - Microsoft Windows NT 4.0 SP4 through 7
 - Microsoft Windows 2000
 - Microsoft Windows XP.
- ☐ One of these supported web browsers:
 - Microsoft Internet Explorer 4.x and 5.x
 - Netscape Communicator 4.5 or higher.
- ☐ One of these supported mail clients:
 - Microsoft Outlook Express (Windows 98 or Windows 2000/IE5 version)
 - Microsoft Outlook 97 and 98
 - Microsoft Outlook 2000
 - Netscape Messenger (in Netscape Communicator 4.x).

These requirements do not apply if you set up your computer using the advanced configuration, as described in “Advanced Users: Setting Up the e-Features” on page 34.

3 Updating the BIOS and Sending the Support Ticket

Basic to Intermediate Users: Setting Up the e-Features

Step 1: Open the e-Diagtools Networking Parameters Screen

You can do this by running e-Diagtools as usual (for instructions, refer to chapter 2, “Starting e-Diagtools”), then clicking the menu option to update the BIOS or send the Support Ticket. The Networking Parameters screen will open automatically.

e-diagtools Rev 3.50b 

The following network parameters will be used when sending the Support Ticket or updating your system BIOS.
Please follow the instructions provided by your support contact to fill in the empty fields.

Client IP address:	Domain Name Server address:
15.1.1.10	15.1.1.110
Sub-net mask:	SMTP mailer-relay server:
255.0.0.0	megara.brazil.hp.com
Gateway address:	HTTP proxy server address and port:
15.1.1.1	proxy:8080
Domain name:	☐ DHCP
domain1	
Update server URL:	
http://ftp.hp.com/pub/ccd/epackages/master.ini	
Your e-mail address:	
my.email.address@myplace.com_	
Support provider e-mail address:	
troubleshoot@support-provider.com	

Warning: This feature should not be used outside of a monitored troubleshooting session.
Unsolicited e-mails will not be read nor trigger any action.

F1 ? **ESC** Back **F2** Continue **F3** Exit **F5** Advanced Config

Step 2: Set the BIOS Update Parameters

Check the **Update server URL** parameter. This should already be correct and set to the location of the BIOS packages on HP’s server, as follows.

- For HP Business PCs and Workstations:
http://ftp.hp.com/pub/ccd/epackages/master.ini
- For HP Notebook PCs:
http://ftp.hp.com/pub/mobile_computing/software/edtpackages/master.ini

If this parameter is not correct, press <**F5**> and then type in the correct FTP address.

Step 3: Set the Parameters for Sending the Support Ticket

Enter your email address and your support provider's email address in the space provided.

NOTE

It is important that you have a prior agreement with your support provider before sending the Support Ticket.

Step 4: Save the Parameters

At this stage, all networking parameters should be correct. Press **<F2>** to continue; this will ensure that these parameters are saved.

Advanced Users: Setting Up the e-Features

This section is recommended for advanced users.

HP Notebook PCs

If you have an HP Notebook computer, refer to chapter 8, “e-Diagtools for Windows” for all information about setting up and using e-features.

Before You Begin

Before you begin, your computer should have the HP Utility Partition on the hard disk (or e-Diagtools on CD-ROM if you do not need to use the e-Diagtools BIOS update feature).

Step 1: Open the e-Diagtools Networking Parameters Screen

You can do this by running e-Diagtools as usual (for instructions, refer to chapter 2, “Starting e-Diagtools”), then clicking the menu option to update the BIOS or send the Support Ticket. The Networking Parameters screen will open automatically.

e-diagtools Rev 3.50b  **invent**

The following network parameters will be used when sending the Support Ticket or updating your system BIOS.
Please follow the instructions provided by your support contact to fill in the empty fields.

Client IP address:	Domain Name Server address:
15.1.1.10	15.1.1.110
Sub-net mask:	SMTP mailer-relay server:
255.0.0.0	megara.brazil.hp.com
Gateway address:	HTTP proxy server address and port:
15.1.1.1	proxy:8080
Domain name:	☐ DHCP
domain1	
Update server URL:	
http://ftp.hp.com/pub/ccd/epackages/master.ini	
Your e-mail address:	
my.email.address@myplace.com	
Support provider e-mail address:	
troubleshoot@support-provider.com	

Warning: This feature should not be used outside of a monitored troubleshooting session.
Unsolicited e-mails will not be read nor trigger any action.

F1  **ESC** Back **F2** Continue **F3** Exit **F5** Advanced Config

Step 2: Enter the Basic Network Parameters or Set to DHCP

If the computer has a fixed IP address:

Press <F5> and manually enter the basic network parameters:

- ☐ Web proxy IP address and port number
- ☐ SMTP mail relay address and host name
- ☐ Domain name and server address
- ☐ TCP/IP properties (local IP address/DHCP, IP Subnet Mask, default gateway, DNS).

This can also be performed automatically by the LAN Configuration Agent. However, you must satisfy the prerequisites described in “Before You Begin” on page 31. For more information about the LAN Configuration Agent, refer to page 37.

If the computer does not have a fixed IP address, press <F5> to enter the advanced configuration screen, then press <F12> to get the DHCP setting:

e-diagtools Rev 3.50b **hp** invent

The following network parameters will be used when sending the Support Ticket or updating your system BIOS.
Please follow the instructions provided by your support contact to fill in the empty fields.

Client IP address: - DHCP -	Domain Name Server address: - DHCP -
Sub-net mask: - DHCP -	SMTP mailer-relay server: megara.brazil.hp.com
Gateway address: - DHCP -	HTTP proxy server address and port: proxy:8080
Domain name: - DHCP -	☒ DHCP - Press F12 to change
Update server URL: http://ftp.hp.com/pub/ccd/epackages/master.ini	
Your e-mail address: my.email.address@myplace.com	
Support provider e-mail address: troubleshoot@support-provider.com	

Warning: This feature should not be used outside of a monitored troubleshooting session.
Unsolicited e-mails will not be read nor trigger any action.

F1 ? ESC Back F2 Continue F3 Exit F12 Change DHCP

Step 3: Set the BIOS Update Parameters

Check the **Update server URL** parameter. This should already be correct and set to the location of the BIOS packages on HP's server, as follows.

- For HP Business PCs and Workstations:
http://ftp.hp.com/pub/ccd/epackages/master.ini
- For HP Notebook PCs:
http://ftp.hp.com/pub/mobile_computing/software/edtpackages/master.ini

If this parameter is not correct, press <F5> and then type in the correct FTP address.

Step 4: Set the Parameters for Sending the Support Ticket

Enter your email address and your support provider's email address in the space provided.

NOTE It is important that you have a prior agreement with your support provider before sending the Support Ticket.

Step 5: Save the Parameters

At this stage, all networking parameters must be correct. Press <F2> to continue; this will ensure that these parameters are saved.

HP Toptools

It is also possible to enter all the network parameters needed by e-Diagtools using HP Toptools Device Manager (version 5.0 or higher) or Toptools Agents (version 5.0 or higher). For more information, refer to the *e-Diagtools Administrator's Guide*, available on your HP computer's support web site (refer to page 6 for web addresses).

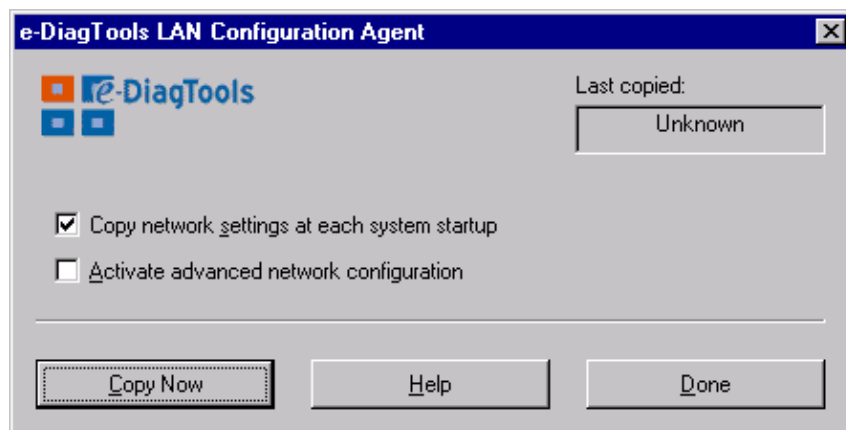
Information About The LAN Configuration Agent

The LAN Configuration Agent is a Windows-based utility that automatically records your computer's network parameters (every time Windows starts) and stores them in the Utility Partition. Note that since some of the network parameters listed above are user-dependent, the values associated with the last user who logged into Windows will be used.

In Windows, you can also access the LAN Configuration Agent setup screen. You can use this to:

- Make an immediate copy of the current network settings (for use by e-Diagtools)
- Choose whether or not the agent copies your network settings every time Windows starts up. If you use HP Tootools to set up e-Diagtools network configuration, this option should be set so the agent copies your network settings at every startup. By default, this option is set so that Windows copies your network settings every time it starts up.
- Choose whether or not the **F5 - Advanced Config** button is enabled in the Network Parameters screen. This allows users to set or modify the basic network parameters when sending the support ticket or updating the BIOS.

To access the agent in Windows, click **Start > Programs > HP e-Diagtools > HP e-Diagtools LAN Configuration Agent**.



Updating the BIOS

Using the Utility Partition version of e-Diagtools, you can update the computer's BIOS. To do this, e-Diagtools looks for the latest BIOS version for your computer on HP's server. If a more recent version is available, e-Diagtools downloads the new BIOS, and then, after a few checks with the user, installs (or "flashes") the new BIOS.

Two BIOS update options are available:

- Update BIOS and keep all BIOS settings.
- Update BIOS and reset all BIOS settings to default values.
If you use this option, note down all your computer's BIOS settings *before* updating the BIOS. You can then recover any of the original settings, if needed.
This option is recommended if you have a hardware error.

Prerequisites	For the BIOS update feature to work correctly, your computer must satisfy the prerequisites described in "Before You Begin" on page 31. Additionally, your computer's networking parameters must be set correctly, as described in "Advanced Users: Setting Up the e-Features" on page 34.
CD-ROM Versions	The CD-ROM versions of e-Diagtools do not have the BIOS update feature.
HP Notebook PCs	BIOS updates for HP Notebook PCs are performed by <i>e-Diagtools for Windows</i> ; refer to "BIOS Options" on page 71 for instructions.

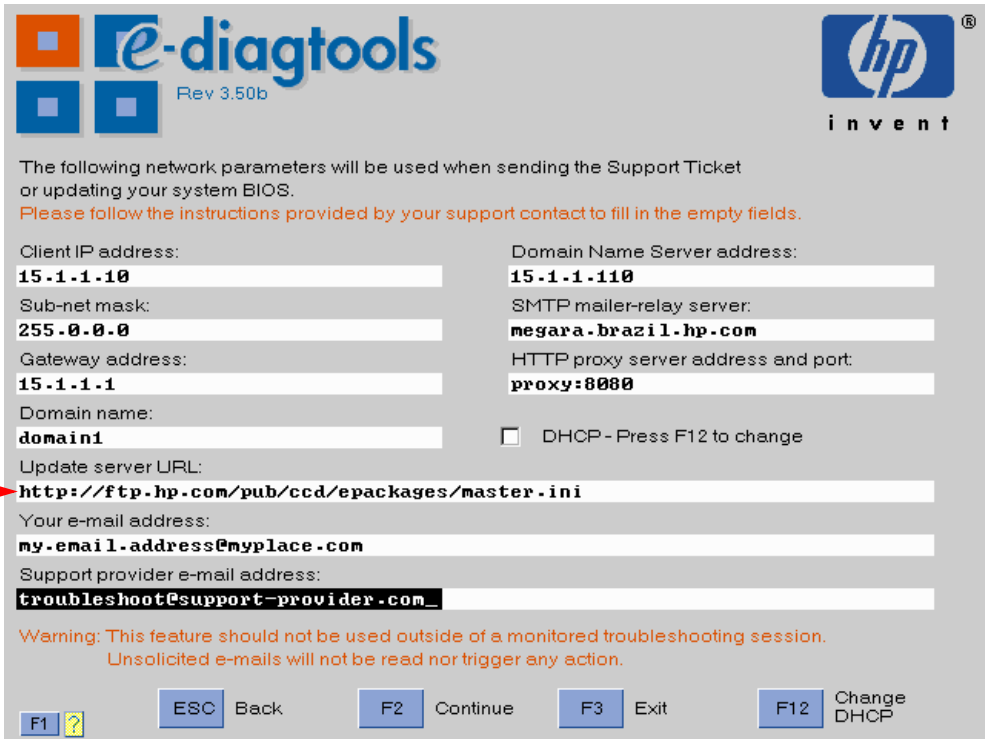
How To Update the BIOS

CAUTION

During the BIOS update do not turn off your computer.

- 1 If your computer has an Administrator password, enter this password during startup. You must enter the Administrator password before BIOS upgrading is permitted.
- 2 Start the Utility Partition version of e-Diagtools and enter the main menu. This is described in detail in "Starting e-Diagtools from the Utility Partition on your Hard Disk" on page 19.
- 3 In the main menu, select the required BIOS update option.

- 4 The Networking Parameters screen appears. All settings should already be correct, in particular the **Update server URL** parameter. Refer to the section “Advanced Users: Setting Up the e-Features” on page 34 for more information.



e-diagtools Rev 3.50b **hp invent**

The following network parameters will be used when sending the Support Ticket or updating your system BIOS.
Please follow the instructions provided by your support contact to fill in the empty fields.

Client IP address: 15.1.1.10	Domain Name Server address: 15.1.1.110
Sub-net mask: 255.0.0.0	SMTP mailer-relay server: megara.brazil.hp.com
Gateway address: 15.1.1.1	HTTP proxy server address and port: proxy:8080
Domain name: domain1	☐ DHCP - Press F12 to change
Update server URL: http://ftp.hp.com/pub/ccd/epackages/master.ini	
Your e-mail address: my.email.address@myplace.com	
Support provider e-mail address: troubleshoot@support-provider.com	

Warning: This feature should not be used outside of a monitored troubleshooting session.
Unsolicited e-mails will not be read nor trigger any action.

F1 ? **ESC** Back **F2** Continue **F3** Exit **F12** Change DHCP

Click **<F2>** to continue.

- 5 e-Diagtools retrieves the latest BIOS update for your computer (if available), and then, after a few checks with the user, updates the BIOS.

Once completed, you may be asked to restart your computer.

Sending the Support Ticket

You can automatically email the Support Ticket produced by e-Diagtools to your support provider. Your support provider could be an HP-Authorized support provider, an internal help desk, or HP.

NOTE

It is important that you have a prior agreement with your support provider before sending the Support Ticket.

To send the Support Ticket successfully, your computer must satisfy the prerequisites described in “Before You Begin” on page 31. Additionally, your computer’s networking parameters must be set correctly, as described in “Advanced Users: Setting Up the e-Features” on page 34.

HP Notebook PCs

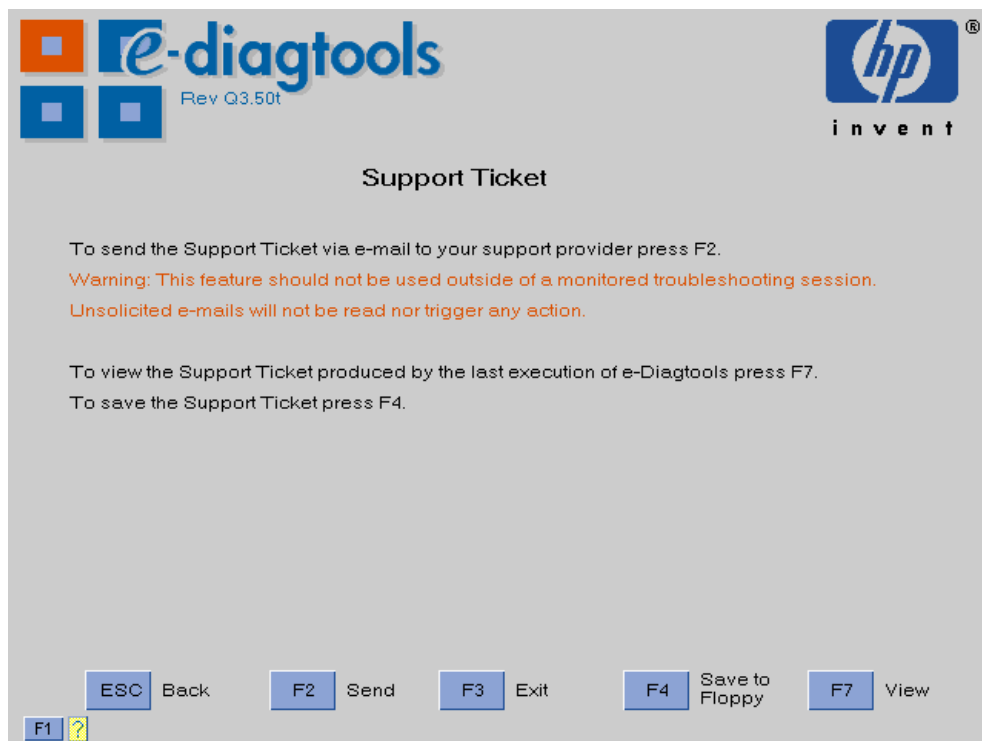
For HP Notebook PCs, use *e-Diagtools for Windows* to send the Support Ticket. Refer to “Support Ticket” on page 70 for instructions.

How To Send the Support Ticket

- 1 Start e-Diagtools and enter the main menu. This is described in detail in “Starting e-Diagtools from the Utility Partition on your Hard Disk” on page 19.
- 2 If you ran the Utility Partition version of e-Diagtools and you want to send the latest Support Ticket (produced when you last ran e-Diagtools), select the Support Ticket option.

If you have not yet run e-Diagtools, you must do this before sending the Support Ticket. In this case, select the option to run e-Diagtools. (Running e-Diagtools is described in chapters 4, 5 and 6.) Once you have completed the tests, you can select the Support Ticket option to enter the Support Ticket screen.

- 3 The Support Ticket screen appears. Press <F2> to send the Support Ticket.



For information about the other the Support Ticket options, refer to page 66.

3 Updating the BIOS and Sending the Support Ticket

Sending the Support Ticket

- 4 The Networking Parameters screen appears. All settings should already be correct, in particular your email address and your support provider's email address. Refer to the section "Advanced Users: Setting Up the e-Features" on page 34 for more information.

e-diagtools Rev 3.50b  **invent**

The following network parameters will be used when sending the Support Ticket or updating your system BIOS.
Please follow the instructions provided by your support contact to fill in the empty fields.

Client IP address:	Domain Name Server address:
15.1.1.10	15.1.1.110
Sub-net mask:	SMTP mailer-relay server:
255.0.0.0	megara.brazil.hp.com
Gateway address:	HTTP proxy server address and port:
15.1.1.1	proxy:8080
Domain name:	☐ DHCP
domain1	
Update server URL:	
http://ftp.hp.com/pub/ccd/epackages/master.ini	
Your e-mail address:	
my.email.address@myplace.com	
Support provider e-mail address:	
troubleshoot@support-provider.com	

Warning: This feature should not be used outside of a monitored troubleshooting session.
Unsolicited e-mails will not be read nor trigger any action.

F1 ? **ESC** Back **F2** Continue **F3** Exit **F5** Advanced Config

Click <F2> to continue.

- 5 e-Diagtools emails the Support Ticket to your support provider.

Once completed, exit e-Diagtools.

this chapter applies to

hp business pcs ✓

hp workstations ✓

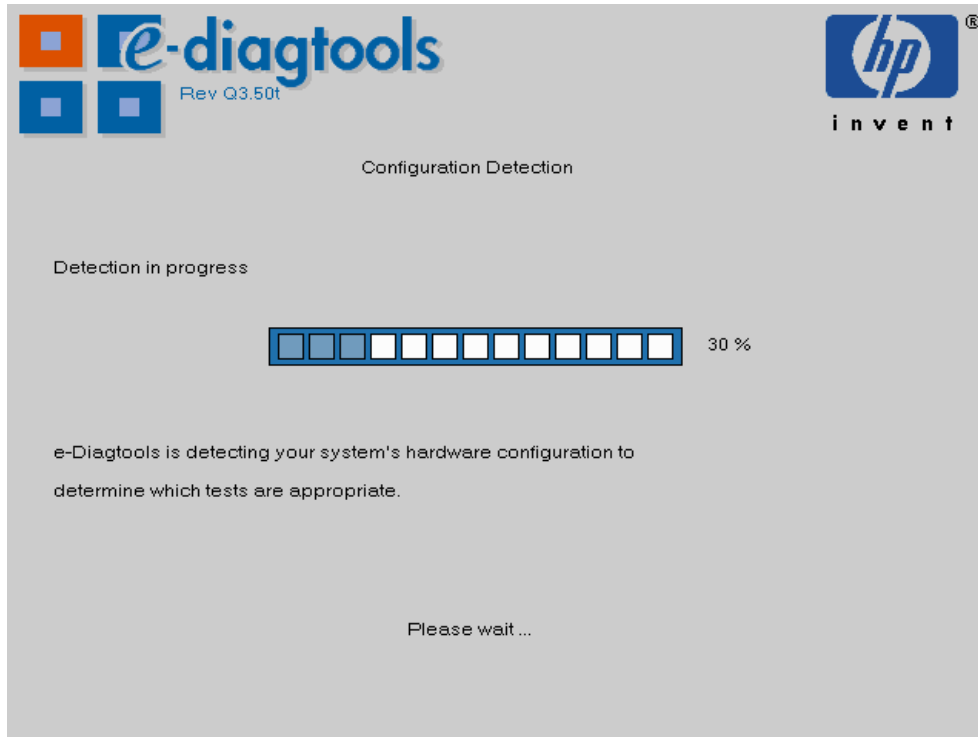
hp notebook pcs ✓

e-Diagtools Hardware Detection

This chapter describes the hardware detection phase of e-Diagtools.

Overview of Hardware Detection

Once launched, e-Diagtools begins by detecting the hardware components of your computer.



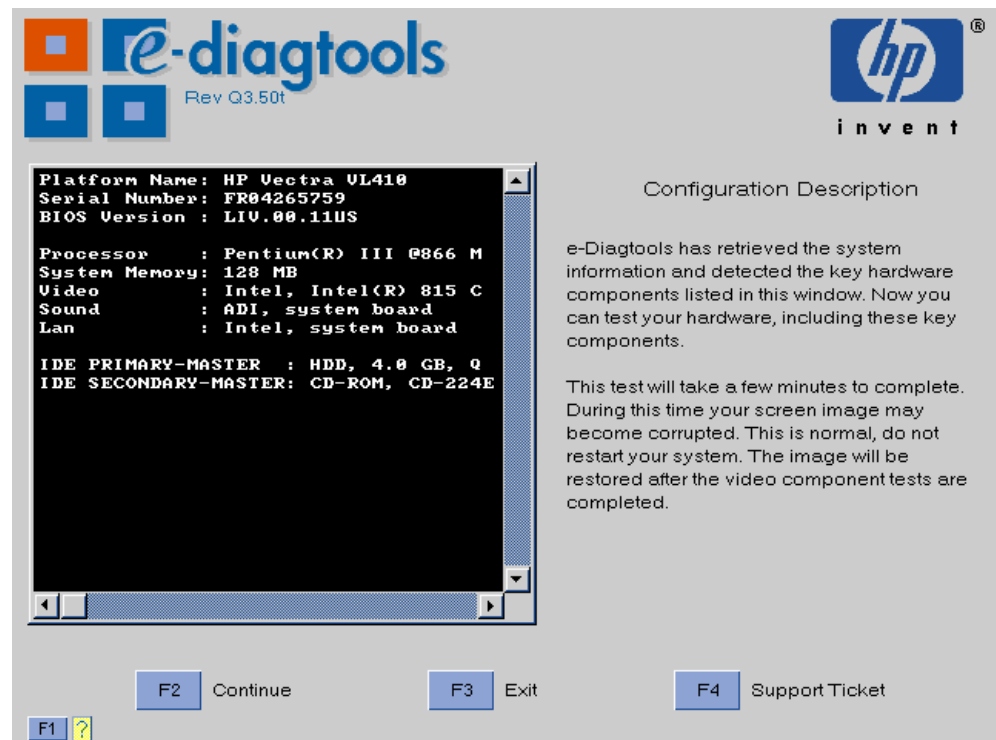
Hardware detection finds and lists the computer's major hardware components. It also determines which tests are appropriate for your computer. For example, if your computer has an IDE or SCSI hard disk drive, it will be checked as part of the basic system test.

NOTE

Hardware detection may be so fast that the above screen simply flickers on and off, without giving you time to read it. This is normal. The time required for hardware detection varies greatly between the different systems and different configurations.

Hardware Detection Results

The following is an example of the screen that appears after the hardware detection phase. All main hardware components are listed after the computer product name and model.



You can use the arrow keys to scroll through the list of detected components.

If a Component is Not Detected

If one of your computer's hardware components does not appear in the hardware detection screen:

- The component may not be working. Consult your computer's documentation (available on the HP support web site, described on page 6) for information about troubleshooting for this component.
- The component is not an HP component.
- You are not using an up-to-date version of e-Diagtools. If this is the case, you can download the latest version from the HP support web site (described on page 6).
- The keyboard and mouse are tested, even though they do not appear in the hardware detection screen.

NOTE

e-Diagtools does not test components that have not been detected. However, we recommend that you continue with the basic system test to verify that the underlying components are functioning correctly.

this chapter applies to

hp business pcs ✓

hp workstations ✓

hp notebook pcs ✓

e-Diagtools Basic System Test

This chapter describes the basic system test performed by e-Diagtools.

Overview of the Basic System Test

The basic system test is performed after hardware detection. The purpose of test is to verify the correct operation of the computer's main hardware components. For each detected hardware component, the test will confirm that:

- The component is powered on
- The component has been initialized for use
- The component is operating correctly under MS-DOS.

Unlike the advanced system tests, the basic system test is done automatically and no user input or guidance is needed. This test phase is suitable for all types of users, including novice and non-technical users.

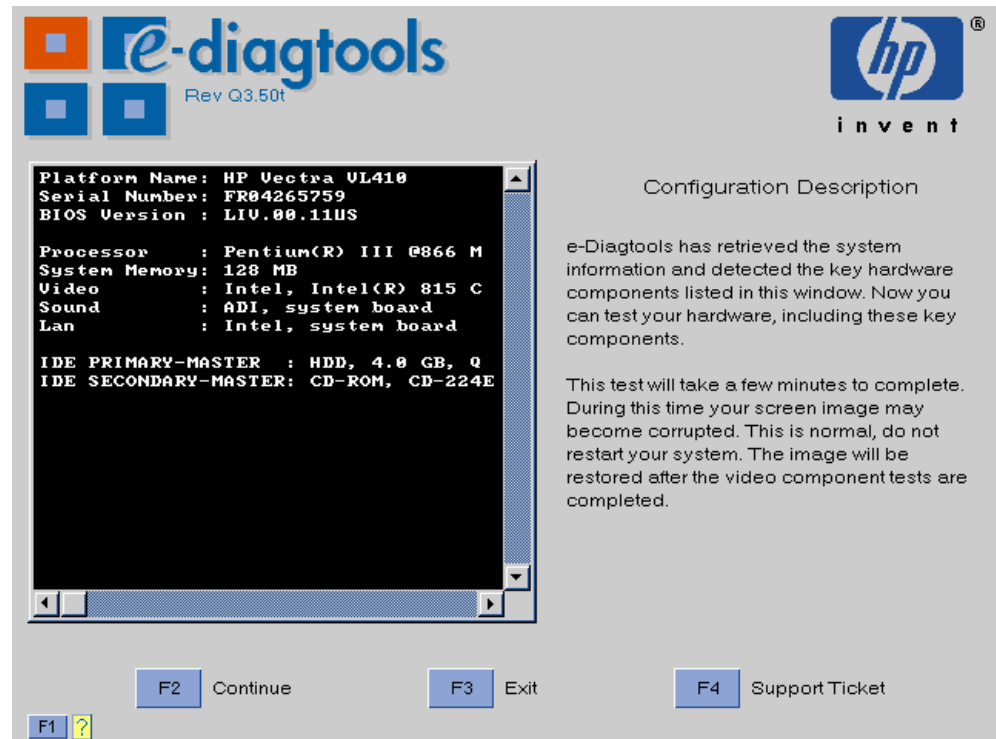
Most of the computer's components are tested during the basic system test. To test *each* component individually, use the advanced system tests (described in chapter 6).

How to Run the Basic System Test

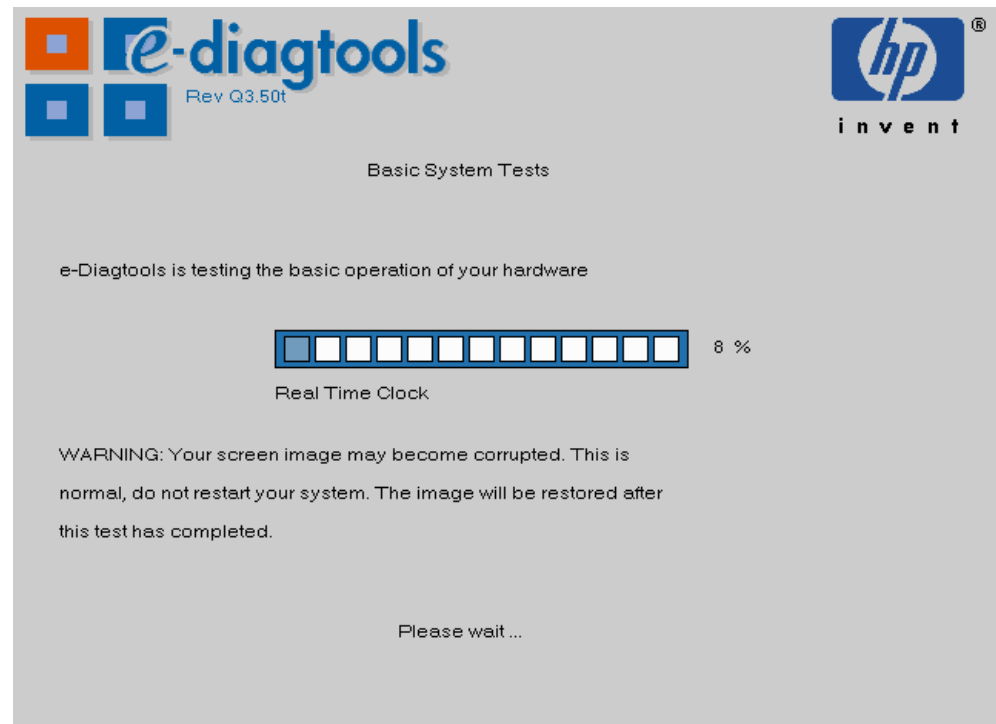
The basic system test is performed after the hardware detection phase. To run the basic system test:

- 1 Start e-Diagtools. To learn how to do this, refer to chapter 2.
- 2 Follow the instructions on the screen to proceed with hardware detection. Hardware detection is described in chapter 4.

- 3 Once hardware detection is complete, this screen appears:



- 4 Press <F2> and the basic system testing starts.



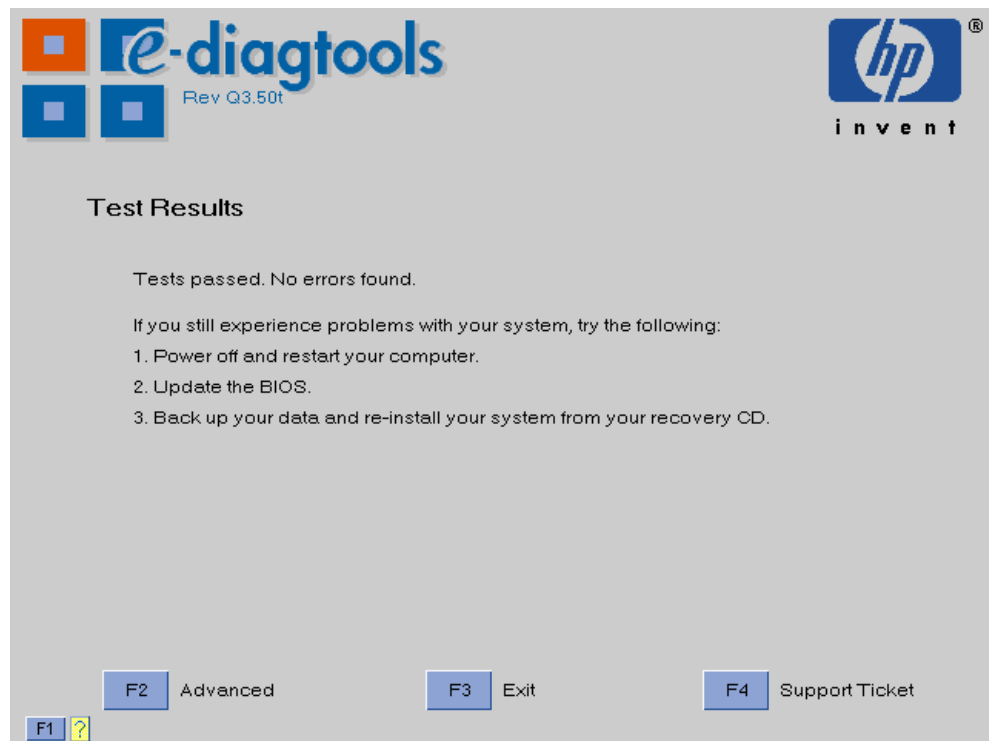
NOTE

The screen image may become momentarily corrupted during the basic system test. This is normal when the graphics system is being tested. Do not restart your system. The image will be restored after the test is complete.

Test Result: *PASSED*

The following actions are recommended:

- If you are running e-Diagtools for verification purposes only, there is no need to continue with the Advanced Tests. (If desired, you can view or send the support ticket by pressing <F4>.) Press <F3> to exit e-Diagtools.
- Follow the on-screen recommendations.



Support Ticket

If you are investigating a problem with your computer, press <F4> to view or send the support ticket. Although no failure was detected, the Support Ticket will be effective for communicating the test results and computer configuration to your support provider. To learn more about the Support Ticket, refer to chapter 7.

Advanced System Tests

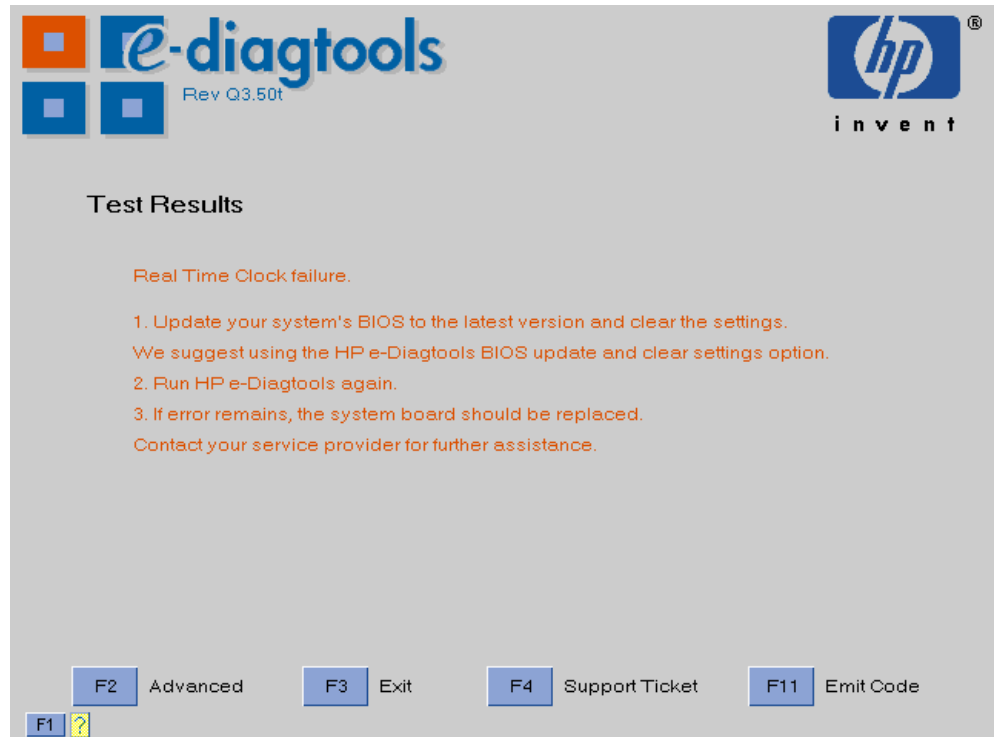
Intermediate and experienced users should proceed to the Advanced System Tests by pressing <F2>, since no problem was found using the basic system test. If you are a less experienced user, contact your support provider for assistance. You may be asked by your support agent to conduct an advanced system test.

Test Result: *WARNING* or *FAILED*

NOTE

A test warning or failure does not necessarily mean that a component needs replacement. For example, it may simply mean that there is a configuration error or that there is a loose cable.

Example of a
test error



Here are a few recommended actions and tips:

- Follow any on-screen recommendations that may appear.
- Check the component, update the computer's BIOS if necessary, and run the Basic System Test again.
To learn how to update the BIOS for Business PCs and Workstations, refer to "Updating the BIOS" on page 38; for Notebook PCs, refer to "BIOS Options" on page 71.
- Run the Advanced Tests to investigate the error in greater depth.
- Send the Support Ticket to your service provider by email or fax.
You can use e-Diagtools to email the Support Ticket. To learn how to do this for Business PCs and Workstations, refer to "Sending the Support Ticket" on page 40; for Notebook PCs, refer to "Support Ticket" on page 70.

The Support Ticket is a complete record of the test results. It is the most effective way to communicate the problem to your support provider. To learn more about the Support Ticket, refer to chapter 7.

- For Business PCs and some Workstations:
If the **F11 - Emit Code** button appears on the screen, you can press <F11> to emit the audio error code signal for the error. This is useful if your Service Provider is equipped with a Virtual Call Assistant, because you can emit the audio signal over the phone so your Support Provider can analyze the audio signal to help solve your problem.

Important Recommendation

Since e-Diagtools displays only one error at a time whereas the Support Ticket will list all errors, it is recommended that:

- 1 You consult the Support Ticket to see the full list of errors. It may help you determine the source of the error more easily.
- 2 After fixing the problem detected by the hardware diagnostics, run e-Diagtools again.

What is Tested

The tests vary to some extent from platform to platform. For the most up-to-date list of tests, refer to the Readme or Whatsnew file provided with the e-Diagtools software.

The following components are included in the basic tests.

- ☐ System board: timer and real time clock
- ☐ Main memory
- ☐ IDE hard disk drives
- ☐ SCSI hard disk drives
- ☐ Optical drives (CD-ROM, DVD, CD-RW drives)
- ☐ Floppy disk drive
- ☐ Graphics system
- ☐ Audio system
- ☐ LAN
- ☐ Keyboard
- ☐ Mouse
- ☐ Modem (PCI modem only)
- ☐ Serial and parallel ports.

Each test listed above is performed only if it is appropriate for your computer's configuration. For example, if your computer does not have a SCSI controller, or no SCSI hard disk is connected to the SCSI controller, no SCSI tests will be done.

NOTE

e-Diagtools does not test components that have not been detected (refer to “If a Component is Not Detected” on page 46 for more information).

5 e-Diagtools Basic System Test

What is Tested

this chapter applies to

hp business pcs ✓

hp workstations ✓

hp notebook pcs ✓

Advanced System Tests

This chapter describes the advanced system tests. Individual computer components can be thoroughly tested using the advanced system tests.

Overview of the Advanced System Tests

The advanced system tests can be used to test each of the computer's components. These tests are more thorough and cover a wider range of functionality than the basic system tests. Some of the advanced tests require user interaction.

Unlike the basic system test which tests numerous components automatically, you must manually select each test you want to run. You can run the test just once or, in many cases, select the loop option to run the test repeatedly until you choose to stop it. Loop mode is useful for hardware problems that occur intermittently.

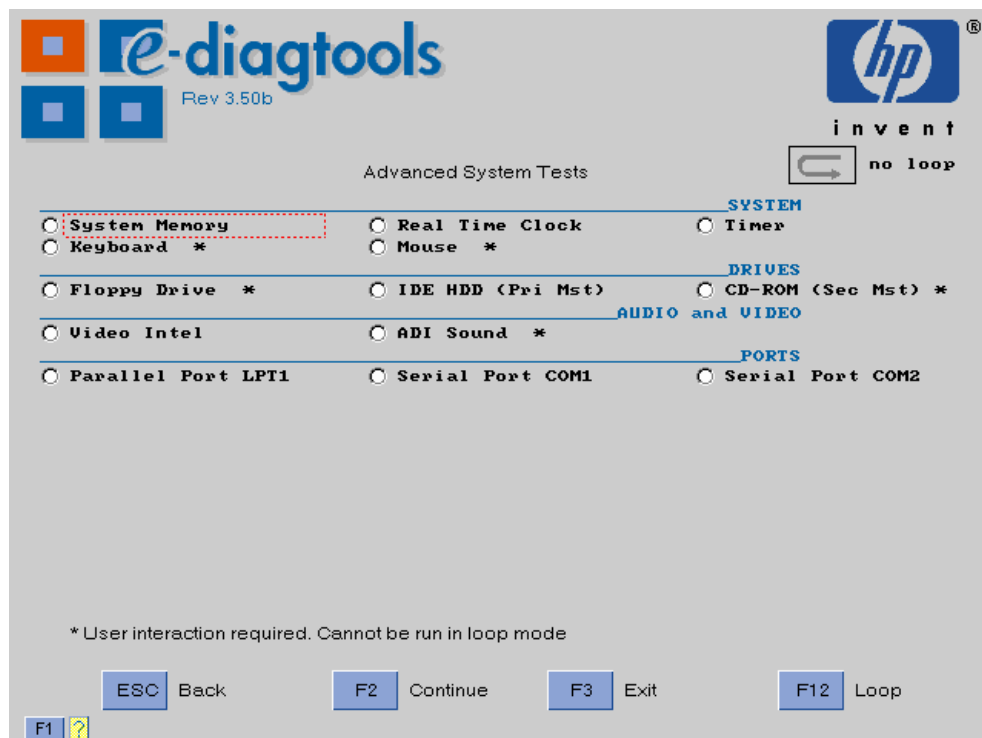
How to Enter the Advanced System Tests

The advanced system tests can only be entered after the basic system tests have been completed. To enter the advanced system tests:

- 1 Start e-Diagtools. To learn how to do this, refer to chapter 2, "Starting e-Diagtools".
- 2 Follow the instructions on the screen to proceed with hardware detection. Hardware detection is described in chapter 4.
- 3 Follow the instructions on the screen to complete the basic system test. The basic system test is described in chapter 5.
- 4 Press <F2> to enter the advanced system tests.

Example of an advanced system test screen

For Notebook PCs:
Unlike the screen shown, the advanced system test screen for Notebook PCs contains check boxes. This allows you to select multiple tests.

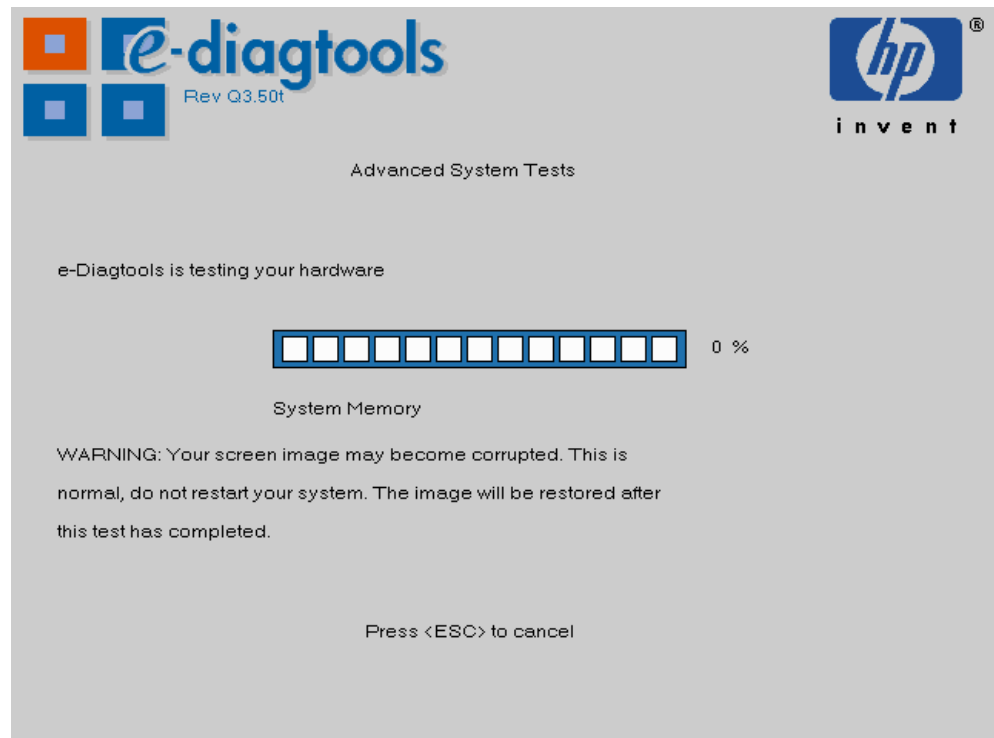


How to Run an Advanced System Test

To perform an advanced test:

- 1 Highlight the test by using the keyboard arrow keys, then select the test by pressing the **Enter** key or the keyboard space bar.
If you have an HP Notebook, you can select more than one test at a time.
Some tests may not be available for your HP computer. These will appear in grey.
- 2 Select loop mode (if you want to run the test many times) by pressing **F12**. Loop mode is very useful if there are intermittent problems with a component.
You can press **F12** again to deselect loop mode.
- 3 Press **F2** to start the test.

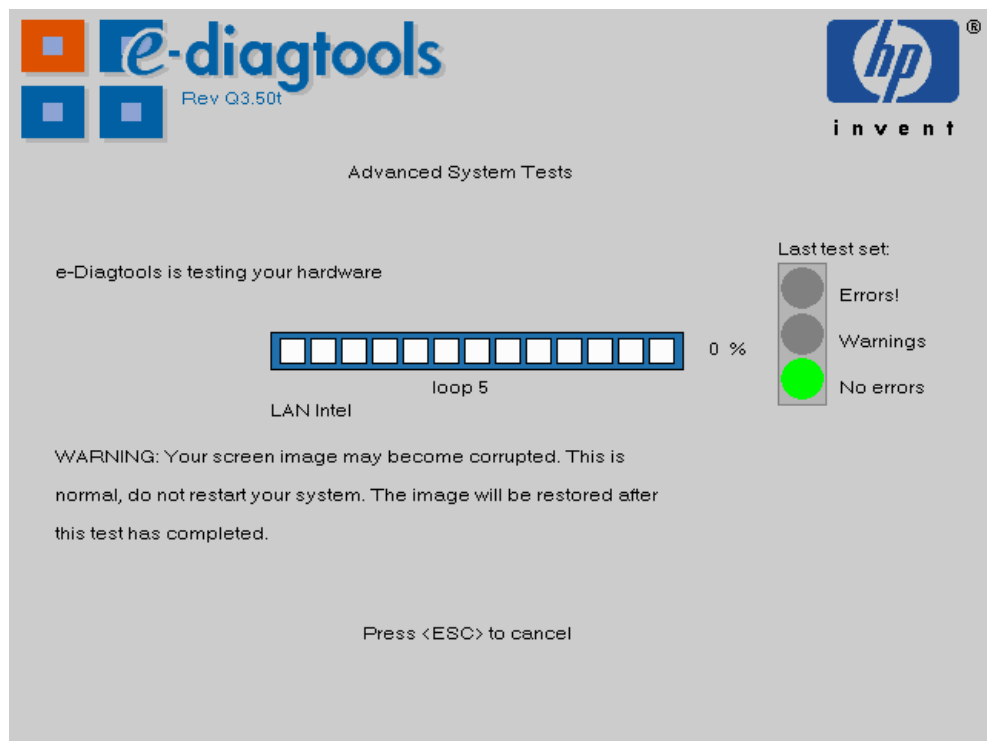
Example of a
test without
loop mode



6 Advanced System Tests

How to Run an Advanced System Test

Example of a test
in loop mode



To Stop a Test

You can press **<Esc>** to stop the test. This is especially useful to stop testing in loop mode. Note that some test sequences are critical and must be completed before testing can be stopped.

If you press **Esc**, you may have to wait several moments before testing is stopped.

Test Result: *PASSED*

Once the test is finished, the test results screen appears.

Example of a
results screen
with no errors



At this stage you can:

- If applicable, follow the onscreen recommendations.
- Press <F2> to do further advanced tests.
- Press <F3> to exit e-Diagtools.
- Press <F4> to go to the Support Ticket screen.

Test Result: *WARNING* or *FAILED*

Example of a
test warning



Here are a few recommended actions and tips:

- Follow any on-screen recommendations that may appear.
- Check the component, update the computer's BIOS if necessary, and run the Advanced System Test again.
To learn how to update the BIOS for Business PCs and Workstations, refer to "Updating the BIOS" on page 38; for Notebook PCs, refer to "BIOS Options" on page 71.
- Send the Support Ticket to your service provider by email or fax.
You can use e-Diahtools to email the Support Ticket. To learn how to do this for Business PCs and Workstations, refer to "Sending the Support Ticket" on page 40; for Notebook PCs, refer to "Support Ticket" on page 70.

The Support Ticket is a complete record of the test results. It is the most effective way to communicate the problem to your support provider. To learn more about the Support Ticket, refer to chapter 7.

- For Business PCs and some Workstations:
If the **F11 - Emit Code** button appears on the screen, you can press <**F11**> to emit the audio error code signal for the error. This is useful if your Service Provider is equipped with the Virtual Call Assistant because you can emit the audio signal over the phone so your Support Provider can analyze the audio signal to help solve your problem.

Important Recommendation

Since e-Diagtools displays only one error at a time whereas the Support Ticket will list all errors, it is recommended that:

- 1 You consult the Support Ticket to see the full list of errors. It may help you determine the source of the error more easily.
- 2 After fixing the problem detected by the hardware diagnostics, run e-Diagtools again.

6 Advanced System Tests

Test Result: WARNING or FAILED

this chapter applies to

hp business pcs ✓

hp workstations ✓

hp notebook pcs ✓

The Support Ticket

This chapter describes the Support Ticket, which is a record of the test results and the computer's configuration.

What is the Support Ticket?

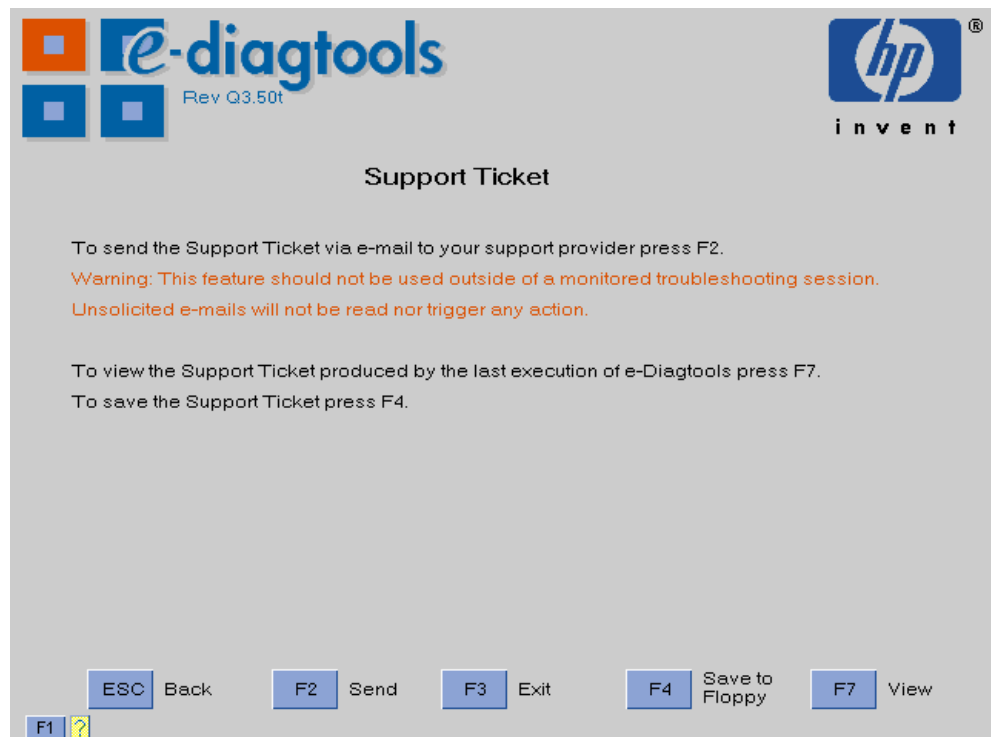
The Support Ticket is a text file that contains a complete record of the test results and the computer's configuration information. It is the most effective way of communicating this essential information to your support provider. If necessary, you can email or fax the Support Ticket to your support provider.

e-Diagtools Error Codes	The Support Ticket contains the list of all errors encountered. Each error message is listed with error code and recommended actions. By contrast, the e-Diagtools screen displays only one error message with its corresponding recommendations. No error code is displayed. For a full list of error codes and recommendations, refer to the <i>e-Diagtools Administrator's Guide</i> , available on the support web site (refer to page 6 for web addresses).
Hardware Traceability Feature	This is a new feature of e-Diagtools and is reported in the Support Ticket. It is useful for tracking changes to the computer's hardware. e-Diagtools compares the computer's current hardware configuration with the system configuration history. It then reports: • Changes to the hardware configuration since the first time e-Diagtools was run • Changes to the hardware configuration since the last time e-Diagtools was run. For example, if you install or remove an add-on accessory card, this will be reported in the Support Ticket.

Using the Support Ticket Functions

Accessing the Support Ticket Screen

To access the Support Ticket screen and use these functions, start e-Diagtools as normal (refer to chapter 2, “Starting e-Diagtools” for more information). During the hardware diagnostic process you will have the opportunity to access the Support Ticket screen several times.



Performing Actions in the Support Ticket Screen

The Support Ticket screen in e-Diagtools enables you to:

- Send the Support Ticket to your service provider via email.
For more information about setting up and using this feature, refer to chapter 3, “Updating the BIOS and Sending the Support Ticket”.
If you have a HP Notebook computer, you must use *e-Diagtools for Windows* to send the Support Ticket (refer to chapter 8, “e-Diagtools for Windows”).
- View the Support Ticket.
- Save the Support Ticket to floppy disk (if your computer has a floppy disk drive) for later faxing, printing or consultation.
The default filename for the Support Ticket file is **HPSUPPT.TXT**.

NOTE

If you choose to store the Support Ticket on a floppy disk, ensure that the disk is formatted and empty. If you want to keep a Support Ticket, ensure that you copy it to a safe place before creating the new one. You can do this by copying the Support Ticket file to another floppy disk or to a suitable directory on your hard disk drive.

this chapter applies to

hp business pcs	✗
hp workstations	✗
hp notebook pcs	✓

e-Diagtools for Windows

This chapter describes e-Diagtools for Windows, the Windows-based application for HP Notebook PCs.

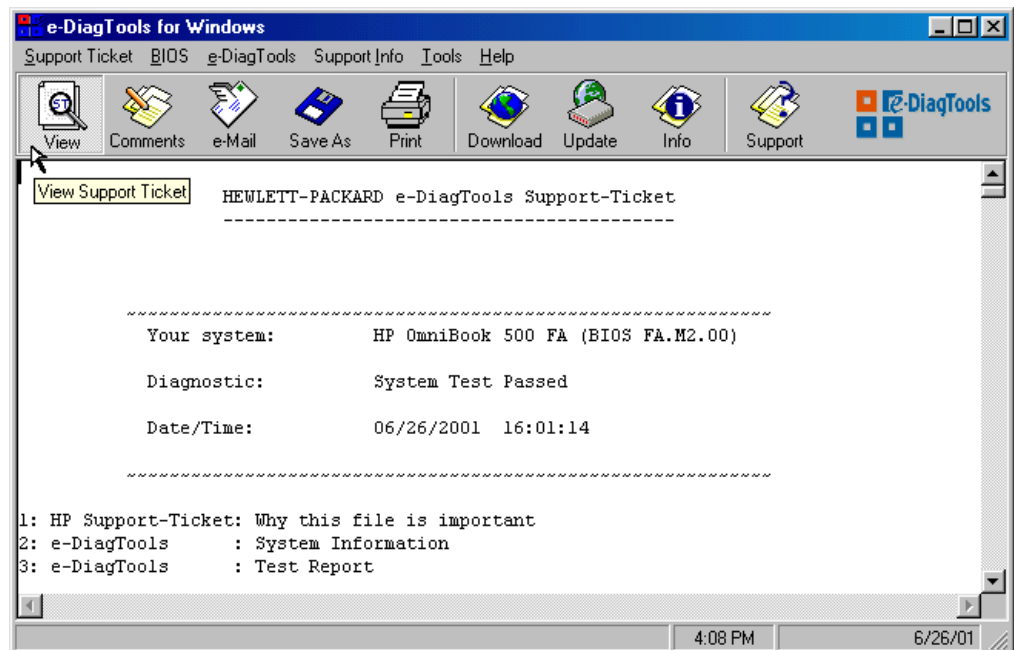
What is e-Diagtools for Windows?

A new component of e-Diagtools named “e-Diagtools for Windows” is designed to extend Internet connectivity to HP notebook PCs, featuring Internet access via modem or LAN connection. This Windows application is available in conjunction with e-Diagtools Version 3.x for Notebook PCs.

e-Diagtools for Windows includes the e-Diagtools LAN Configuration Agent and enables the user to get the Support Ticket from the HP Utility Partition, edit it, and send it to the Support Provider or copy it to hard disk.

From the operating system, e-Diagtools for Windows will download the BIOS, copy it to the Utility Partition and update the BIOS. When updating the BIOS, automatic reboots are necessary to complete the operation.

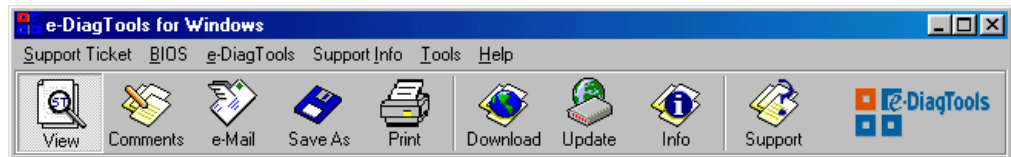
e-Diagtools for Windows also enables you to update the e-Diagtools hardware diagnostics software in the hard disk's Utility Partition.



When you run e-Diagtools for Windows on an HP Notebook PC, an e-Diagtools splash screen opens briefly, followed by the application's main window.

The image above shows the main window of “e-Diagtools for Windows”. The principal functions of the program are available via the Command Bar at the top of the window.

Click on a command on the Command Bar to open a pulldown list of options associated with that command.



In addition to the Command Bar, the main window features a Toolbar of icons located just below the Command Bar. A function can be opened by clicking on the corresponding icon. This offers rapid, intuitive access to key “e-Diagtools for Windows” program functions. The option **View Support Ticket** has already been selected in the example shown, and the GUI displays the support Ticket and related information.

NOTE

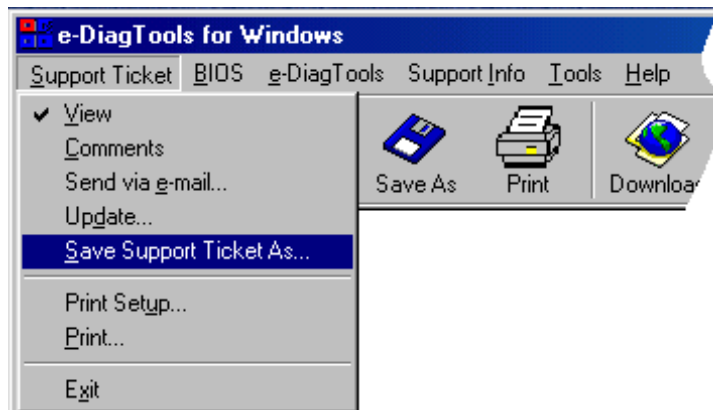
When a function is not available at any stage of the program the icon which represents it is greyed out on the Icon Bar. In the illustration, all the icons are shown active simultaneously to facilitate their recognition.

Place the mouse pointer over an icon for a short explanation of the icon’s function.

"e-Diagtools for Windows" Commands

This section describes the e-Diagtools for Windows commands available on the Command Bar.

Support Ticket



The **Support Ticket** command opens a drop-down menu with options to view the latest Support Ticket, send the Support Ticket to the service provider's support address via email, or to generate a new Support Ticket and update the stored Support Ticket data.

The **Comments** option permits a user to create or update text in dedicated comment fields, which supplement the information provided by the Support Ticket. This can be useful where notes or special explanations are required.

The Support ticket can also be printed or saved to a file.

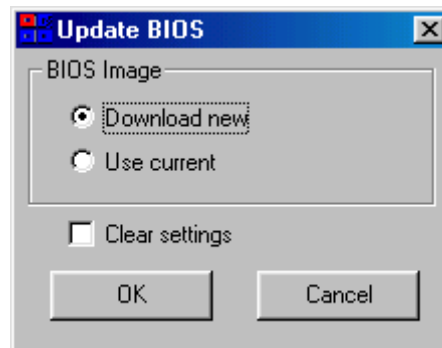


The Icon Bar contains icons to view the Support Ticket (**View**), to add comments (**Comments**) to save the Support Ticket to file (**Save As**) and to print out the Support Ticket (**Print**).

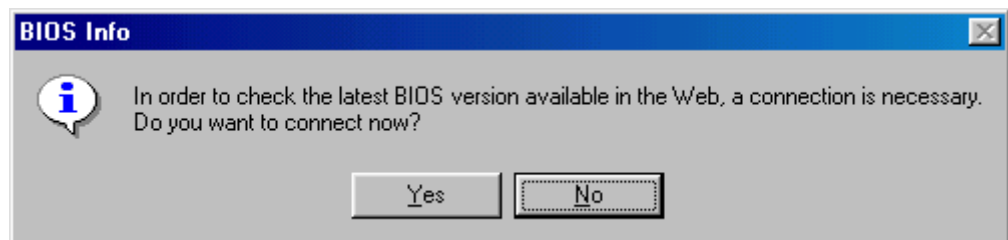
BIOS Options

- Download to Utility Partition
- Update
- Info

The BIOS can be updated, by LAN or by modem connection, from an HP server containing new BIOS versions for specific HP notebook computers.



When you choose **Update BIOS** you are first prompted to select either "**Download new**" or "**Use current**" to determine the source of the local version to be flashed. You can either download the latest BIOS from the server, or update the BIOS using the files you previously downloaded to your notebook.



If you select **Download new** you will be asked if you want to connect to the web to check for the latest BIOS version. Click on **Yes** to launch the connection process.

NOTE

The option "**Use Current**" can be used, for instance, to repair a corrupted BIOS.

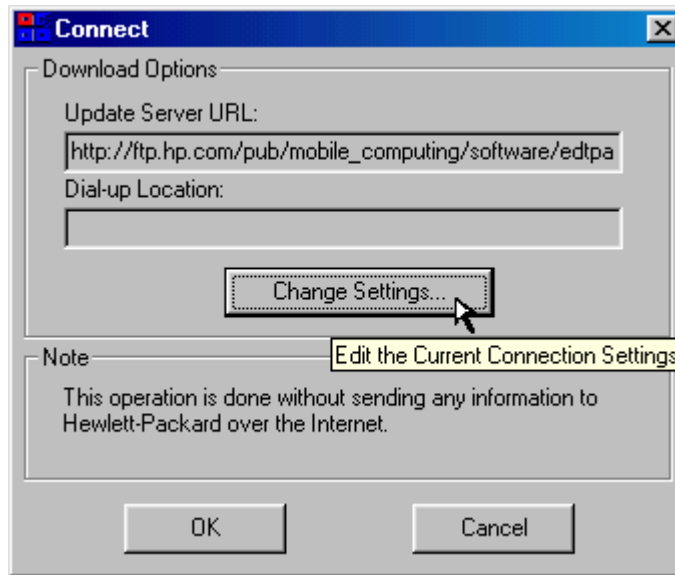
Download and Update



The icons **Download** and **Update** provide rapid access to each of the two steps needed to carry out a BIOS update:

- downloading a new BIOS from the sever
- updating the existing BIOS in the local Notebook PC.

Connection Parameters



You can verify the connection parameters for the download in the **Connect / Download Options** window before attempting to connect to the Server. Click on the **Change Settings** button if you want to alter any parameters.

For HP Notebook PCs, the update server URL should be:
**`http://ftp.hp.com/pub/mobile_computing/software/edtpackages/
master.ini`**

To check the connection parameters for sending the Support Ticket, open the **Connection Options /Connection** window.

This window includes an option for Dial-up or for LAN connection to the support provider (via a choice of radio button). If you set **Dial-up** as the active option, you need only add the **Dial-up Location**.

Connection Options

Connection

☐ Dial-up Dial-up Location:

☒ LAN

Send Support Ticket

SMTP Mailer-Relay Server:

Your e-mail Address:

Support Provider e-mail Address:

BIOS Download

HTTP Proxy Server: Port:

Update Server URL:

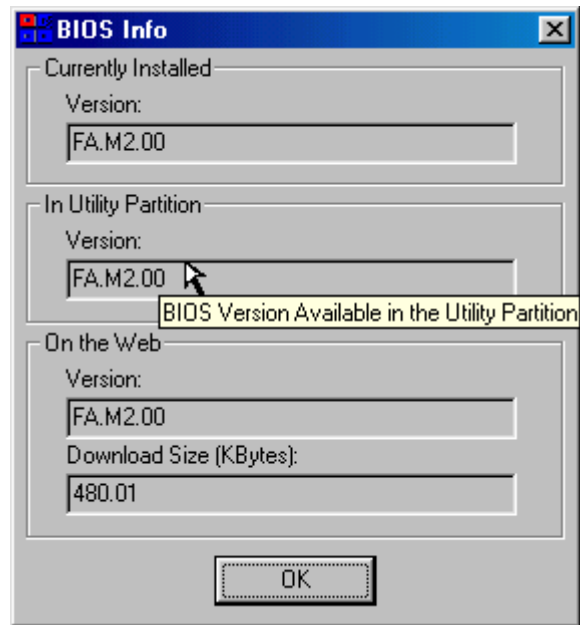
OK Cancel

If you select LAN connection (Internet), then you must ensure that the SMTP-Mailer Relay service name is included.

For the Support Ticket you must provide your email address and the support provider email address.

For BIOS download you must have a valid Update Server URL and the correct Proxy Server name and port number.

Info



The BIOS Info window provides:

- the version number of the currently installed BIOS
- the version number of the downloaded BIOS stored in the HP Utility Partition
- the version number and download size in Kbytes of the BIOS available on the HP Server suitable for download and installation on this type HP Notebook PC.

this chapter applies to

hp business pcs ✓

hp workstations ✓

hp notebook pcs ✓

HP Customer Care Service and Support

Your HP Authorized Reseller

HP Authorized Resellers have been trained on HP equipment and are familiar with its configuration and environment. Authorized Resellers can also answer questions regarding non-HP hardware, software and systems as well as answer queries about usage intended for, or not commonly used with HP computers.

HP Authorized Resellers can also offer consulting services tailored to your specific needs regarding product development or custom installations, as will third party support services, or the HP Customer Support organization in your country.

Hewlett-Packard Support and Information Services

The HP Web site gives you access to information about HP, its products, including product data sheets, service and support information, electronic newsletters and technical tips. You can also download the latest versions of drivers, BIOS and software utilities.

HP Home Page	www.hp.com
HP e-Diagtools Page	www.hp.com/desktops/diagtools
HP Tootools Page	www.hp.com/tootools
HP Instant Support	www.hp.com/go/instant-support
HP Brio Support	www.hp.com/go/briosupport
HP Vectra Support	www.hp.com/go/vectrasupport
HP Kayak Support	www.hp.com/go/kayak-support
HP e-pc Support	www.hp.com/go/e-pc-support
HP Notebook Support	www.hp.com/go/support
HP Workstation Support	www.hp.com/workstations/support

HP Customer Care Center Phone Numbers



HP Customer Care Centers can help you solve issues related to HP products and, if necessary, initiate appropriate service procedures. In the U.S.A, telephone support is available 24 hours a day, 7 days a week. Elsewhere, it is available during normal office hours.

North & Latin America

Argentina	(54 11) 4778 8380 (international and Buenos Aires area) 0810 555 5520 (other locations)
Brazil	(011) 3747 7799 (Sao Paulo) 0800 157751 (other locations)
Canada	905-206-4663
Chile	800 360 999
Mexico	800 427 6684
United States	(970) 635-1000
Venezuela	800 477 7777

Asia Pacific

Australia	(+ 61-3) 8877-8000
China	+ 86 (0) 10 6564 5959 (800) 810-5959
Hong Kong	(+ 852) 3002 8555
India	(+ 91-11) 682-6035
Indonesia	(+ 62-21) 350-3408
Japan	(+ 81-3) 5344 7181
Korea, Republic of	(+ 82-2) 3270 0700 (Seoul) (+ 82) 80 999 0700 (outside Seoul)
Malaysia	(+ 60-3) 2695 2566
Penang	1 300 88 00 28
New Zealand	(+ 64-9) 356-6640
Philippines	(+ 63-2) 867-3551
Singapore	(+ 65) 272-5300
Taiwan	(+ 886) 2- 2717-0055
Thailand	(+ 66-2) 661-4000
Viet Nam	(+ 84-8) 823-4530

Europe, Middle East & Africa

Austria	(+ 43) 0711 420 10 80
Belgium	Dutch (+ 32) 02 626 88 06 French (+ 32) 02 626 88 07
Denmark	(+ 45) 39 29 40 99
English International	(+ 44) 0171 512 52 02
Finland	(+ 358) 0203 472 88
France	(+ 33) 01 43 62 34 34
Germany	(+ 49) 0180 525 81 43 (24PF/min)
Israel	Tel. (+ 972) 9-9524848 Fax. (+ 972) 0 9 9524849
Italy	(+ 39) 02-264 10350
Middle-East	Tel. + 971 4 883 8454 Fax + 971 4 883 9495
Netherlands	(+ 31) 020 606 87 51
Norway	(+ 47) 22 11 62 99
Poland	Tel. (+ 48) 22 519 0600; Fax. (+ 48) 22 519 0601
Portugal	+ (351) 21 317 6333
Russian Federation	(+ 7) 095 797 3520 (Moscow) (+ 7) 812 346 7997 (St-Peter) Fax. (+ 7) 095 916 98 35
South Africa	(+ 27) 11 258 9301 (outside RSA) 086 000 1030 (inside RSA)
Spain	(+ 34) 902 32 11 23
Sweden	(+ 46) 08 619 21 70
Switzerland	(+ 41) 084 880 11 11
Turkey	(+ 90) (216) 579 71 71
United Kingdom	(+ 44) 0207 512 5202

9 HP Customer Care Service and Support

HP Customer Care Center Phone Numbers

Glossary

advanced system tests	Together with the basic system tests, the advanced system tests comprise the complete suite of hardware diagnostic tests in e-Diagtools. The advanced system tests are available after the basic tests.	LAN configuration agent	A Windows-based utility that automatically gathers networking information and stores it in the Utility Partition. This helps simplify setting up your computer to use the e-support features of e-Diagtools.
basic system tests	Together with the advanced system tests, the basic system tests comprise the complete suite of hardware diagnostic tests in e-Diagtools. The complete set of basic system tests are done automatically after the hardware detection phase.	pre-boot diagnostics	A processor that diagnoses the computer's hardware prior to starting the operating system. It typically reports any errors using a series of audio signals. It is available on HP Business PCs and HP Workstations.
e-ddiagtools for Windows	This is part of the e-Diagtools family of tools. It runs under Windows and is used exclusively for HP Notebook PCs.	support ticket	This is the text file that contains a complete record of the test results and computer's configuration. It can be viewed, saved onto floppy disk or, more typically, emailed or faxed to your support provider.
e-features	The ability of e-Diagtools to email support tickets and update the BIOS using your computer's networking and Internet facilities.	virtual call assistant	A software utility that can automatically detect and analyze audio signals emitted by a remote computer for troubleshooting purposes. Support provider's may have the Virtual Call Assistant to aid them with support.
EMU	Error Message Utility. This is a utility that the computer's BIOS uses to display BIOS error messages on the screen.	utility partition	This is a small, hidden hard disk partition provided on most HP computers. It is used to store and run e-Diagtools. It is also used to store any e-Diagtools work files and BIOS updates downloaded by e-Diagtools. <i>e-Diagtools LAN Configuration Agent</i> and <i>e-Diagtools for Windows</i> are not in the utility partition.
hp business pcs	Family of HP computers consisting of HP e-pcs, HP Brio PCs, and HP Vectra PCs.		
hp notebook pcs	Family of HP computers consisting of HP Pavillion Notebook PCs and HP Omnibook PCs.		
hp workstations	Family of HP computers consisting of many workstation models, including HP Visualize Workstations and HP Kayak Workstations.		



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