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# Euro Currency Symbol on Compaq Tower and Rack Server Keyboards

**Abstract:** This paper provides a brief overview of Compaq's implementation of the euro currency symbol on Compaq tower and rack server keyboards. The paper discusses key placement, language, and operating system support. A question and answer section is also provided.

## Executive Summary

With the adoption by the European Community (EC) of euro currency, customers have needed euro currency symbol support for their ProSignia and ProLiant servers. Compaq has implemented euro currency symbol support through software and multiple operating systems

Compaq X86 servers provide OS support and Industry Standard Server Division support for the euro currency symbol via keyboard commands. Support for the euro currency symbol is dependent on the software, not the keyboard. If a customer has operating system support for the euro key, then by engaging the appropriate keystroke combination the euro symbol can be accessed. Euro compliant tower and rack keyboards will ship for ProSignia and ProLiant servers in European markets January 1, 1999.

By providing hardware support for the euro currency symbol ahead of the EC market requirement, Compaq takes a leadership position in the marketplace. Compaq anticipates this position will ensure competitiveness of ProLiant and ProSignia servers through their lifecycles. Compaq has followed the recommendations given by the European Commission for placement of the euro sign on the keyboard. The benefits for customers include convenience and investment protection.

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# Operating System Support

## Microsoft Support for Euro Key Placements

**Windows NT Server 3.51:** Microsoft currently has no plans to provide euro currency symbol support.

**Windows NT Server 4:** The current shipping version of Windows NT Server 4.0 does not support the euro currency symbol. A patch is required for euro currency symbol support in Windows NT Server 4.0. However, Microsoft provides support for the currency symbol in Windows NT Server 4.0 in the following two ways:

**Windows NT Server 4.0 QFE:** Currently available and distributed through the Microsoft Internet site, this executable patch provides the required software fonts and mapping instructions to use the symbol. The Microsoft address is:

<http://www.microsoft.com/windows/euro.asp>

Details on using the euro currency symbol are available in Q182005.TXT text file at the Microsoft FTP site listed above.

**Windows NT 4.0 Server Service Pack 4:** Microsoft is committed to providing euro currency symbol support in Service Pack 4. Service Pack 4 is currently available to customers on the Microsoft ftp site. The Microsoft ftp site is:

<ftp://ftp.microsoft.com/bussys/winnt/winnt-public/fixes/>

**Windows NT Server 5.0:** Euro currency symbol support is embedded in Microsoft Windows NT Server 5.0 and will be available when the operating system ships to customers. No patch will be required.

**Windows 95:** With no embedded support for the euro currency symbol planned for Windows 95, a patch has been created. To download the patch, visit the following web site.

<http://www.microsoft.com/windows/euro.asp>

**Windows 98:** Euro currency symbol support is embedded in Microsoft Windows 98. No patch will be required.

## Novell Support for Euro Key Placements

**Novell NetWare 3.x:** The currently shipping version of NetWare 3.x has no embedded support for the euro currency symbol and no support is planned.

**NetWare 4.x (intraNetWare):** With the new Unicode tables, intraNetWare should support the euro currency symbol. A support pack (iwsp6.exe) will be released in the next few months providing euro currency symbol support.

**NetWare 5:** Currently, the euro currency symbol is only supported as an NDS object in NetWare 5. Novell is working on providing euro support for NetWare 5 in the future.

## SCO Support for Euro Key Placements

**OpenServer 5.x:** Future versions of OpenServer will provide the euro currency symbol support via the new ISO8859-15 code set. A free downloadable patch should be available to customers late 1Q99.

**UnixWare 2.1.x:** SCO has no plans to provide euro currency symbol support in UnixWare 2.1.x.

**UnixWare 7:** Euro currency symbol support will be provided in UnixWare 7 early 1999, in Feature Pack 1. SCO is exploring how to make this patch available to customers.

## IBM OS/2 Support for Euro Key Placements

**OS/2 Warp Server 4:** FixPak 6 and higher for Warp Server customers and FixPak 35 or higher for WarpConnect customers have been released by IBM to provide euro currency symbol support for OS/2 Warp Server 4. IBM FixPaks can be downloaded via IBM's ftp site. The IBM ftp site is:

<ftp://service.boulder.ibm.com/ps/products/os2/fixes/>

News about OS/2 Euro support can be found at the following Internet address:

<http://ps.boulder.ibm.com/pbin-usa-ps/getobj.pl?/pdocs/usa/fixnews.html>

**OS/2 Warp Server for e-business (Aurora):** Euro currency symbol support is embedded in OS/2 Warp Server 5 and will be available to customers when the operating system ships to customers. No patch will be required.

## Sun Solaris Support for Euro Key Placements

**Solaris for Intel Platforms 2.5, 2.51, 2.6, 2.7:** There is no embedded support for the euro currency symbol and currently no support is planned.

**Java 1.1.X:** Euro currency support will be provided beginning with JDK 1.1.7. The changes will be based on the latest Unicode version available at the time of its release.

**Java 1.2:** Euro currency support will be embedded in JDK 1.2 and will be available to customers at the time of its release.

## Operating System Euro Symbol Ready Reference

	Euro Support	Euro Support Availability	How	Comments
NT 3.51	None	-	-	-
Windows NT Server 4.0	Patch	Today	Unicode	Service Pack 4 available.
Windows NT Server 5.0	Embedded	At Launch	Unicode	-
Windows 95	Patch	Today	-	Euro symbol cannot be used in a filename.
Windows 98	Embedded	Today	-	-
NetWare 3.20	None	-	-	Clients should be able to produce euro symbol.
NetWare 4.x	Patch	4Q98	Unicode	Euro symbol cannot be used in a volume name.
NetWare 5	Patch	Future	-	Euro symbol is currently supported as NDS object only.
OpenServer 5.x	Patch	Late1Q99	ISO	-
UnixWare 2.x	None	-	-	-
UnixWare 7	Patch	Early 1Q99	Unicode	Available in Feature Pack 1.
OS/2 Warp Server 4 and Warp Connect	Patch	Today	-	Euro support can be found in Warp 4 FixPak 6 and 7.
OS/2 Warp Server for e-business (Aurora)	Embedded	At Launch	-	-
Solaris X86 2.5x, 2.6, 2.7	None	-	-	No plans for supporting the euro symbol.
Java 1.1.7, 1.2	Embedded	At Release	Unicode	-

## Languages and Key Placements

Compaq uses the euro key assignments outlined below for International keyboards. By using these key assignments, Compaq products provide appropriate compatibility with the EC recommendations while also maintaining full compatibility with current and future network operating systems.

Beach-Gray Rack Part #	Opal Rack Part #	Beach-Gray Tower Part #	Opal Tower Part #	Description	Key Placement
185152-003	185152-036	296435-032	296435-036	ENHC,KYB -UK	AltGr+4
185152-004	185152-046	296435-042	296435-046	ENHC,KYB -GER	AltGr+e
185152-005	185152-056	296435-052	296435-056	ENHC,KYB -FRN	AltGr+e
185152-006	185152-066	296435-062	296435-066	ENHC,KYB -ITL	AltGr+e
185152-007	185152-076	296435-072	296435-076	ENHC,KYB -SPA	AltGr+e
185152-008	185152-086	296435-082	296435-086	ENHC,KYB -DAN	AltGr+e
185152-009	185152-096	296435-092	296435-096	ENHC,KYB -NOR	AltGr+e
185152-010	185152-106	296435-102	296435-106	ENHC,KYB -SWE	AltGr+e
185152-011	185152-116	296435-112	296435-116	ENHC,KYB -SWI	AltGr+e
185152-013	185152-136	296435-132	296435-136	ENHC,KYB -PRT	AltGr+e
-	-	296435-142	296435-146	ENHC,KYB -TURK	AltGr+e
-	-	296435-152	296435-156	ENHC,KYB -GRE	AltGr+e
18152-018	185152-186	296435-182	296435-186	ENHC,KYB -BEL	AltGr+e
-	-	296435-212	296435-216	ENHC,KYB -HUNG	AltGr+u
-	-	296435-222	296435-226	ENHC,KYB -CZH	AltGr+e
-	-	296435-232	296435-236	ENHC,KYB -SLO	AltGr+e
-	-	296435-242	296435-246	ENHC,KYB -POL	AltGr+u
-	-	296435-332	296435-336	ENHC,KYB -DUTCH	AltGr+e
-	-	296435-352	296435-356	ENHC,KYB -FIN	AltGr+e
-	185152-B36	296435-B32	296435-B36	ENHC,KYB -INTL/U.S	AltGr+5
-	-	296435-B42	296435-B46	ENHC,KYB -BCHSY	AltGr+e

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**Note:** The following euro key assignments differ from EC recommendations due to the non-availability of the recommended combination:

1. The US-International (USX) keyboard uses the AltGr+5 combination.
2. The Hungarian and Polish keyboards use the AltGr+u combination.
3. All other keyboards use the AltGr+e or AltGr+4 combinations as recommended by the EC.

## Questions and Answers

- Q. When will euro compliant tower and rack keyboards be available?**
- A. Compaq euro compliant tower and rack keyboards will be available 4Q98.
- Q. When will the keyboards with the euro currency symbol be shipped with ProSignia and ProLiant servers?**
- A. The opal and beach-gray tower keyboards will begin shipping with ProSignia and ProLiant tower model servers in European markets mid to late December 1998. The rack server keyboards will ship in January 1999.
- Q. Why is Compaq producing keyboards in two different colors?**
- A. All currently shipping servers, storage, and options products are beach-gray in color. In 1999 all new Compaq servers, storage, and options products will be opal in color. Eventually all keyboards for both tower and rack servers will ship in the opal color only.
- Q. Is there a difference between the opal and beach-gray keyboards?**
- A. The only difference between the opal and beach-gray keyboards is color.
- Q. Will all ProSignia and ProLiant servers ship with the keyboards with the euro currency symbol?**
- A. Customers in North America, Latin America, Asia Pacific, and Japan will not receive the euro compliant keyboards with the euro currency symbol. However, this in no way limits customers in these geographic locations from being able to produce the euro currency symbol. Support for the euro currency symbol is dependent upon the software or operating system, not the keyboard. Customers should check with operating system and software vendors to find out whether or not they provide euro currency symbol support.
- Q. What if my operating system supports the euro currency symbol, but my keyboard does not have the euro currency symbol printed on it?**
- A. Support for the euro currency symbol is dependent on the software, not the keyboard. If a customer has operating system support for the euro key, then by engaging the appropriate keystroke combination the euro symbol can be accessed.
- Q. I recently purchased a Compaq server with a non-euro compliant keyboard. How can I obtain a euro compliant keyboard?**
- A. Customers should contact their local Compaq representative or reseller for information on how to obtain a euro compliant tower or rack keyboard.
- Q. When will I be able to purchase a US International euro compliant rack keyboard?**
- A. Customers will be able to purchase a US International euro compliant rack keyboard early 1Q99.
- Q. Are there any limitations for using the euro currency symbol in each operating system?**
- A. Yes. The euro currency symbol can not be used in a filename in Windows 95 and can not be used in a filename, directory name, and a volume name in NetWare 5 and NetWare 4.x. However, all three operating systems will support the euro currency symbol in files, directories, and volumes.

**Q. Will all operating systems use the same keystrokes to produce the euro currency symbol?**

- A. No. Microsoft is already following and SCO plans to follow the keystrokes recommended by the European Commission. A complete listing of keystrokes used to produce the euro currency symbol for Microsoft Windows NT server can be found at the following Internet address:

<http://www.microsoft.com/typography/faq/faq12.htm>

The keystrokes used by IBM OS/2 differ from those recommended by the European Commission. IBM has posted information on the Internet detailing what keystrokes will produce the euro currency symbol in all the European languages. The IBM Internet address is:

<http://ps.boulder.ibm.com/pbin-usa-ps/getobj.pl?pdocs-usa/euro.html>

Novell and Sun have not communicated what keystrokes must be used to produce the euro currency symbol for NetWare and Java.

**Q. Will all fonts display and print the euro currency symbol?**

- A. No. Microsoft and IBM have listed which fonts will display and print the euro currency symbol. The Microsoft Internet address is:

<http://www.microsoft.com/typography/fontpack/default.htm>

The IBM Internet address is:

<http://ps.boulder.ibm.com/pbin-usa-ps/getobj.pl?pdocs-usa/euro.html>

Novell, SCO, and Sun have not indicated which fonts will display and print the euro currency symbol.

**Q. Will I have any problems printing out the euro currency symbol?**

- A. Possibly. Problems arise when the printer substitutes the font sent by the computer for a resident font to increase print speeds. This problem can be prevented by downloading euro-enabled fonts to the printer instead of using resident fonts. Compaq recommends that customers check their printer manufacturer's web site for more information.

**Q. Is Compaq following the key placement recommendations given by the European Commission?**

- A. Yes. The Internet address for the European Commission's paper, "Recommendations for the Placement of the Euro Sign on Computer Keyboards and Similar Information Processing Equipment" is:

<http://europa.eu.int/euro/html/dossiers/00124/00124-en.pdf>

**Q. Why did Compaq implement the euro currency symbol before the software was available to support it?**

- A. The euro currency symbol support is not required for PCs until 1999, but many customers are already asking for the support. By providing hardware support for the euro currency symbol ahead of the EC market requirement, Compaq takes a leadership position in the marketplace. Compaq anticipates this position will ensure competitiveness of the new ProLiant and ProSignia servers through their lifecycles.