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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 are currently shipping for Prosignia and ProLiant servers in European markets.

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 2000 Server: Euro currency symbol support is embedded in Microsoft Windows 2000 Server 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): NetWare 4.x support pack 6 (iwsp6.exe) released November 1998, provides euro currency symbol support. To download NetWare 4.x support pack 6 visit the following web site.

<http://support.novell.com/misc/patlst.htm#nw411>

Euro currency symbol support is embedded in NetWare 4.2, the latest version of NetWare 4.x.

NetWare 5: Euro currency symbol support is provided in user names, files, directories, and NDS objects in NetWare 5. No patch is required.

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 is available today on SCO's ftp site. The SCO ftp site is:

<ftp://ftp.sco.com/Supplements/euro/>

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

UnixWare 7.1: Euro currency symbol support is available in UnixWare 7.1 (Feature Pack 1), the latest release of UnixWare.

Support information on SCO Vision and Tarantella products can be found at the following web site.

<http://www.sco.com/support/ciservices/euro.html>

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 for e-business 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, 2.5.1, 2.6: Support for the euro currency symbol can be added to Solaris versions 2.5, 2.5.1, and 2.6 by downloading the patch containing the needed fonts and keyboard drivers. The recommended patches can be found at the following Internet address:

http://sunsolve.sun.com/sunsolve/us/pubpatches/patches.html#Solaris_Euro_Currency-rec

Solaris for Intel Platforms 7: The euro currency symbol is supported in the Solaris 7 operating environment. No additional patches are required.

For additional details on Solaris support of the euro currency, please refer to the following web site:

<http://www.sun.com/solaris/euro/>

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
Windows NT Server 3.51	None	-	-	-
Windows NT Server 4.0	Patch	Today	Unicode	Service Pack 4 available.
Windows 2000 Server	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	Today	Unicode	Support Pack 6 available. Embedded support provided in NetWare 4.2
NetWare 5	Embedded	Today	-	-
OpenServer 5.x	Patch	Today	ISO	-
UnixWare 2.x	None	-	-	-
UnixWare 7.1	Patch	Today	Unicode	Feature Pack 1 available.
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	Patch	Today	ISO / Unicode	Recommended patches can be downloaded from the Sun Internet site.
Solaris X86 7	Embedded	Today	ISO / Unicode	-
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

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 are currently available.
- Q. When will the keyboards with the euro currency symbol be shipped with Prosignia and ProLiant servers?**
- A. All keyboards are currently available. The opal and beach-gray tower keyboards began shipping with Prosignia and ProLiant tower model servers in European markets in December 1998. The rack server keyboards began shipping 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. The US International euro compliant rack keyboard will be available in April 1999.
- 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, Novell, SCO, and Sun are following the keystrokes recommended by the European Commission. A complete listing of keystrokes used to produce the euro currency symbol for Microsoft, SCO, and Sun can be found at the following Internet addresses:

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

<http://www.sco.com/support/ciservices/euro.html>

<http://www.sun.com/software/white-papers/wp-eurocurrency/>

The keystrokes used by IBM OS/2 differ from those recommended by the European Commission. IBM has also 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>

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

- A. No. Microsoft, IBM, and Sun have listed which fonts will display and print the euro currency symbol. The Internet addresses are:

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

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

<http://www.sun.com/software/white-papers/wp-eurocurrency/>

Loading the Enhanced Postscript Drivers will allow SCO users to print the euro currency symbol using postscript font containing all MES characters.

Novell has 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 was not required for PCs until 1999, but many customers were already asking for the support in 1998. By providing hardware support for the euro currency symbol ahead of the EC market requirement, Compaq took a leadership position in the marketplace. Compaq anticipates this position will ensure competitiveness of the new ProLiant and Prosignia servers through their lifecycles.