

Roadmap for installing the HMC



ESCALA

Roadmap for installing the HMC

Hardware

May 2009

BULL CEDOC
357 AVENUE PATTON
B.P.20845
49008 ANGERS CEDEX 01
FRANCE

REFERENCE
86 A1 80FA 01

The following copyright notice protects this book under Copyright laws which prohibit such actions as, but not limited to, copying, distributing, modifying, and making derivative works.

Copyright © Bull SAS 2009

Printed in France

Trademarks and Acknowledgements

We acknowledge the rights of the proprietors of the trademarks mentioned in this manual.

All brand names and software and hardware product names are subject to trademark and/or patent protection.

Quoting of brand and product names is for information purposes only and does not represent trademark misuse.

The information in this document is subject to change without notice. Bull will not be liable for errors contained herein, or for incidental or consequential damages in connection with the use of this material.

Contents

Safety notices	v
Road map for installing the Hardware Management Console	1
Planning for HMC installation and configuration	1
Installing your rack-mounted HMC.	2
Installing your stand-alone HMC	3
Configuring the HMC for the first time	3
Appendix. Notices	5
Trademarks.	6
Electronic emission notices.	6
Class A Notices	6
Terms and conditions	9

Safety notices

Safety notices may be printed throughout this guide:

- **DANGER** notices call attention to a situation that is potentially lethal or extremely hazardous to people.
- **CAUTION** notices call attention to a situation that is potentially hazardous to people because of some existing condition.
- **Attention** notices call attention to the possibility of damage to a program, device, system, or data.

World Trade safety information

Several countries require the safety information contained in product publications to be presented in their national languages. If this requirement applies to your country, a safety information booklet is included in the publications package shipped with the product. The booklet contains the safety information in your national language with references to the U.S. English source. Before using a U.S. English publication to install, operate, or service this product, you must first become familiar with the related safety information in the booklet. You should also refer to the booklet any time you do not clearly understand any safety information in the U.S. English publications.

German safety information

Das Produkt ist nicht für den Einsatz an Bildschirmarbeitsplätzen im Sinne § 2 der Bildschirmarbeitsverordnung geeignet.

Laser safety information

IBM[®] servers can use I/O cards or features that are fiber-optic based and that utilize lasers or LEDs.

Laser compliance

All lasers are certified in the U.S. to conform to the requirements of DHHS 21 CFR Subchapter J for class 1 laser products. Outside the U.S., they are certified to be in compliance with IEC 60825 as a class 1 laser product. Consult the label on each part for laser certification numbers and approval information.

CAUTION:

This product might contain one or more of the following devices: CD-ROM drive, DVD-ROM drive, DVD-RAM drive, or laser module, which are Class 1 laser products. Note the following information:

- **Do not remove the covers. Removing the covers of the laser product could result in exposure to hazardous laser radiation. There are no serviceable parts inside the device.**
- **Use of the controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.**

(C026)

CAUTION:

Data processing environments can contain equipment transmitting on system links with laser modules that operate at greater than Class 1 power levels. For this reason, never look into the end of an optical fiber cable or open receptacle. (C027)

CAUTION:

This product contains a Class 1M laser. Do not view directly with optical instruments. (C028)

CAUTION:

Some laser products contain an embedded Class 3A or Class 3B laser diode. Note the following information: laser radiation when open. Do not stare into the beam, do not view directly with optical instruments, and avoid direct exposure to the beam. (C030)

Power and cabling information for NEBS (Network Equipment-Building System) GR-1089-CORE

The following comments apply to the IBM servers that have been designated as conforming to NEBS (Network Equipment-Building System) GR-1089-CORE:

The equipment is suitable for installation in the following:

- Network telecommunications facilities
- Locations where the NEC (National Electrical Code) applies

The intrabuilding ports of this equipment are suitable for connection to intrabuilding or unexposed wiring or cabling only. The intrabuilding ports of this equipment *must not* be metallically connected to the interfaces that connect to the OSP (outside plant) or its wiring. These interfaces are designed for use as intrabuilding interfaces only (Type 2 or Type 4 ports as described in GR-1089-CORE) and require isolation from the exposed OSP cabling. The addition of primary protectors is not sufficient protection to connect these interfaces metallically to OSP wiring.

Note: All Ethernet cables must be shielded and grounded at both ends.

The ac-powered system does not require the use of an external surge protection device (SPD).

The dc-powered system employs an isolated DC return (DC-I) design. The DC battery return terminal *shall not* be connected to the chassis or frame ground.

Road map for installing the Hardware Management Console

Follow the steps in this road map to perform a first-time HMC installation and configuration.

Use the information in this road map to guide you through the high-level tasks that you need to successfully set up the HMC for the first time. To install and configure the HMC, you must do the following:

1. Prepare for the installation and configuration
2. Install the HMC hardware
3. Configure the HMC software

Planning for HMC installation and configuration

This section describes the high-level planning tasks you must perform before you install and configure your HMC.

To plan for HMC installation and configuration, do the following:

1. Ensure that your HMC hardware meets the requirements to manage your server and obtain and install the latest HMC code.
2. Determine the physical location of the HMC in relation to the servers it will manage. If the HMC is more than 25 feet from its managed system, you must provide web browser access to the HMC from the managed system's location so that service personnel can access the HMC.
3. Identify the servers that the HMC will manage.
4. Determine whether you will use a private or an open network to manage servers.
5. If you will use an open network to manage a Flexible Service Processor (FSP), you must manually set the FSP's address through the Advanced System Management Interface (ASMI) menus. A private, nonroutable network is recommended.
6. If you have two HMCs, designate a primary and secondary HMC. The primary HMC should be physically closer to the machine, and should be the HMC that is configured to call home.
7. Determine the network settings that you will need to connect the HMC to remote workstations, logical partitions, and network devices.
8. Define how the HMC will connect to use the call-home function. Call home options include over an outbound-only Secure Socket Layer (SSL) Internet connection, a modem, or a Virtual Private Network (VPN) connection.
9. Determine the HMC users that you will create and their passwords, as well as which roles they will be given.
10. Document the following company contact information that will be needed when you configure call home:
 - Company name
 - Administrator contact
 - E-mail address
 - Telephone numbers
 - Fax numbers
 - The street address of the HMC's physical location
11. If you plan to use e-mail to notify operators or systems administrators when information is sent to IBM Service through call-home function, identify the Simple Mail Transfer Protocol (SMTP) server and the e-mail addresses you will use.

12. Define the following passwords:
 - The access password that will be used to authenticate the HMC to the FSP
 - The ASMI password that will be used for the admin user
 - The ASMI password that will be used for the general user

Create the passwords when you connect from the HMC to a new server for the first time. If the HMC is a redundant or second HMC, obtain the HMC user password and be prepared to enter it when you connect the first time to the managed server's FSP.

13. For detailed information about the planning tasks you should complete before performing a first-time installation, see *Preparing for HMC configuration*.

Install the HMC hardware. To install the HMC into a rack, see *"Installing your rack-mounted HMC."* To install a desk-side HMC, see *"Installing your stand-alone HMC"* on page 3.

Installing your rack-mounted HMC

A procedure that describes how to install the Hardware Management Console into an existing rack enclosure.

To install the HMC into a rack, do the following:

1. Complete a parts inventory.
2. Locate the rack-mounting hardware kit and the system rail assemblies that were included with your system unit.
3. Determine where to install the HMC and monitor into the rack and mark the location.
4. Install the slide rails for the HMC and monitor into the rack.
5. Install the HMC and Monitor on the slide rails.
6. Install the cable-management arm.
7. Identify the location of the HMC connectors.
8. Attach the monitor cable to the monitor connector, tighten the screws, and connect the keyboard and mouse to Universal Serial Bus (USB) ports on the HMC.
9. Attach the power cord to the monitor.
10. Ensure that the voltage selection switch on the HMC is set to the voltage used in your world region.
11. Plug the power cord into the HMC.
12. Connect the optional modem.
13. Connect the Ethernet cable to the HMC in eth0 port.
14. Connect the Ethernet port on the HMC to the Ethernet port that is labeled **HMC1** on the managed system. If you are connecting a second HMC to your managed server, connect to the Ethernet port that is labeled **HMC2** on the managed system.
15. If you use an external modem, plug the modem power supply cord into the HMC modem.
16. Plug the power cords for the monitor, HMC, and HMC external modem into electrical outlets.

Note: If you are connecting this HMC to a new, uninstalled managed system, do not connect the managed system to a power source at this time.

17. For detailed rack-mounted HMC installation procedures, go to: *Installing the HMC into a rack* (<http://publib.boulder.ibm.com/infocenter/systems/scope/hw/topic/iphai/hmccr4iphbf.htm>).

Configure the HMC. For more information, see *"Configuring the HMC for the first time"* on page 3.

Installing your stand-alone HMC

Use high-level tasks to install the stand-alone (or deskside) HMC. Describes how to physically install a deskside, or stand-alone, HMC.

To cable your stand-alone HMC, do the following:

1. Position the HMC in the correct location.
2. Identify the location of the HMC connectors.
3. Attach the monitor cable to the monitor connector, tighten the screws, and connect the keyboard and mouse to Universal Serial Bus (USB) ports on the HMC.
4. Attach the power cord to the monitor.
5. Ensure that the voltage selection switch on the HMC is set to the voltage used in your world region.
6. Plug the power cord into the HMC.
7. Connect the optional modem.
8. Connect the Ethernet cable to the HMC on the eth0 port.
9. Connect the Ethernet port on the HMC to the Ethernet port that is labeled **HMC1** on the managed system. If you are connecting a second HMC to your managed server, connect to the Ethernet port that is labeled **HMC2** on the managed system.
10. If you use an external modem, plug the modem power supply cord into the HMC modem.
11. Plug the power cords for the monitor, HMC, and HMC external modem into electrical outlets.

Note: If you are connecting this HMC to a new, uninstalled managed system, do not connect the managed system to a power source at this time.

12. For detailed stand-alone HMC cabling procedures, see *Cabling your stand-alone HMC* (<http://publib.boulder.ibm.com/infocenter/systems/scope/hw/topic/iphai/desksideinstall.htm>).

Configure the HMC. For more information, see “Configuring the HMC for the first time.”

Configuring the HMC for the first time

Learn more about how to configure the HMC for the first time.

You can configure the HMC by using several different methods. The following procedure describes the most common way to configure the HMC.

To configure the HMC, do the following steps:

1. Turn on the HMC by pressing the power button.
2. Wait for the HMC to automatically select the default language and locale preference.
3. Accept the HMC license agreements. If you decline the HMC license agreements, you cannot complete the HMC configuration.
4. Click **Log on and launch the Hardware Management Console web application**.
5. Log in to the HMC:
 - ID: hscroot
 - Password: abc123

The Guided Setup wizard opens.

6. Click **OK** on the Guided Setup entry window.
7. Complete the steps in the Guided Setup wizard. Click **Yes** to continue and complete the steps in the Connectivity and Call-Home Servers wizard.
8. On the Summary window, click **Finish**.

9. If you have not connected the Ethernet crossover cable to your managed system, do so now and power on the managed server.
10. In the HMC navigation area, click **Service Management**.
11. In the contents area, click **Authorize User**. The Authorize User window opens.
12. Enter your IBM ID in the field and click **OK**.

For more information about other ways to configure the HMC, see *Configuring the HMC* (<http://publib.boulder.ibm.com/infocenter/systems/scope/hw/topic/iphai/configure.htm>).

Appendix. Notices

This information was developed for products and services offered in the U.S.A.

The manufacturer may not offer the products, services, or features discussed in this document in other countries. Consult the manufacturer's representative for information on the products and services currently available in your area. Any reference to the manufacturer's product, program, or service is not intended to state or imply that only that product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any intellectual property right of the manufacturer may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any product, program, or service.

The manufacturer may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to the manufacturer.

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law: THIS INFORMATION IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. The manufacturer may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to Web sites not owned by the manufacturer are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this product and use of those Web sites is at your own risk.

The manufacturer may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning products not produced by this manufacturer was obtained from the suppliers of those products, their published announcements or other publicly available sources. This manufacturer has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to products not produced by this manufacturer. Questions on the capabilities of products not produced by this manufacturer should be addressed to the suppliers of those products.

All statements regarding the manufacturer's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

The manufacturer's prices shown are the manufacturer's suggested retail prices, are current and are subject to change without notice. Dealer prices may vary.

This information is for planning purposes only. The information herein is subject to change before the products described become available.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

If you are viewing this information in softcopy, the photographs and color illustrations may not appear.

The drawings and specifications contained herein shall not be reproduced in whole or in part without the written permission of the manufacturer.

The manufacturer has prepared this information for use with the specific machines indicated. The manufacturer makes no representations that it is suitable for any other purpose.

The manufacturer's computer systems contain mechanisms designed to reduce the possibility of undetected data corruption or loss. This risk, however, cannot be eliminated. Users who experience unplanned outages, system failures, power fluctuations or outages, or component failures must verify the accuracy of operations performed and data saved or transmitted by the system at or near the time of the outage or failure. In addition, users must establish procedures to ensure that there is independent data verification before relying on such data in sensitive or critical operations. Users should periodically check the manufacturer's support websites for updated information and fixes applicable to the system and related software.

Trademarks

IBM, the IBM logo, and ibm.com are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at Copyright and trademark information at www.ibm.com/legal/copytrade.shtml.

Other company, product, or service names may be trademarks or service marks of others.

Electronic emission notices

Class A Notices

The following Class A statements apply to the IBM servers that contain the POWER6 processor.

Federal Communications Commission (FCC) statement

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. IBM is not responsible for any radio or television interference caused by using other than

recommended cables and connectors or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Industry Canada Compliance Statement

This Class A digital apparatus complies with Canadian ICES-003.

Avis de conformité à la réglementation d'Industrie Canada

Cet appareil numérique de la classe A respecte est conforme à la norme NMB-003 du Canada.

European Community Compliance Statement

This product is in conformity with the protection requirements of EU Council Directive 2004/108/EC on the approximation of the laws of the Member States relating to electromagnetic compatibility. IBM cannot accept responsibility for any failure to satisfy the protection requirements resulting from a non-recommended modification of the product, including the fitting of non-IBM option cards.

This product has been tested and found to comply with the limits for Class A Information Technology Equipment according to European Standard EN 55022. The limits for Class A equipment were derived for commercial and industrial environments to provide reasonable protection against interference with licensed communication equipment.

European Community contact:
IBM Technical Regulations
Pascalstr. 100, Stuttgart, Germany 70569
Tele: 0049 (0)711 785 1176
Fax: 0049 (0)711 785 1283
E-mail: tjahn@de.ibm.com

Warning: This is a Class A product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

VCCI Statement - Japan

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

The following is a summary of the VCCI Japanese statement in the box above.

This product is a Class A Information Technology Equipment and conforms to the standards set by the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

Electromagnetic Interference (EMI) Statement - People's Republic of China

声 明

此为 A 级产品, 在生活环境中, 该产品可能会造成无线电干扰。在这种情况下, 可能需要用户对其干扰采取切实可行的措施。

Declaration: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may need to perform practical action.

Electromagnetic Interference (EMI) Statement - Taiwan

警告使用者：

這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

The following is a summary of the EMI Taiwan statement above.

Warning: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user will be required to take adequate measures.

IBM Taiwan Contact Information:

台灣IBM 產品服務聯絡方式：
台灣國際商業機器股份有限公司
台北市松仁路7號3樓
電話：0800-016-888

Electromagnetic Interference (EMI) Statement - Korea

이 기기는 업무용으로 전자파적합등록을 한 기기이오니 판매자 또는 사용자는 이점을 주의하시기 바라며, 만약 잘못 판매 또는 구입하였을 때에는 가정용으로 교환하시기 바랍니다.

Please note that this equipment has obtained EMC registration for commercial use. In the event that it has been mistakenly sold or purchased, please exchange it for equipment certified for home use.

Germany Compliance Statement

Deutschsprachiger EU Hinweis: Hinweis für Geräte der Klasse A EU-Richtlinie zur Elektromagnetischen Verträglichkeit

Dieses Produkt entspricht den Schutzanforderungen der EU-Richtlinie 2004/108/EG zur Angleichung der Rechtsvorschriften über die elektromagnetische Verträglichkeit in den EU-Mitgliedsstaaten und hält die Grenzwerte der EN 55022 Klasse A ein.

Um dieses sicherzustellen, sind die Geräte wie in den Handbüchern beschrieben zu installieren und zu betreiben. Des Weiteren dürfen auch nur von der IBM empfohlene Kabel angeschlossen werden. IBM übernimmt keine Verantwortung für die Einhaltung der Schutzanforderungen, wenn das Produkt ohne Zustimmung der IBM verändert bzw. wenn Erweiterungskomponenten von Fremdherstellern ohne Empfehlung der IBM gesteckt/eingebaut werden.

EN 55022 Klasse A Geräte müssen mit folgendem Warnhinweis versehen werden:
"Warnung: Dieses ist eine Einrichtung der Klasse A. Diese Einrichtung kann im Wohnbereich Funk-Störungen verursachen; in diesem Fall kann vom Betreiber verlangt werden, angemessene Maßnahmen zu ergreifen und dafür aufzukommen."

Deutschland: Einhaltung des Gesetzes über die elektromagnetische Verträglichkeit von Geräten

Dieses Produkt entspricht dem "Gesetz über die elektromagnetische Verträglichkeit von Geräten (EMVG)". Dies ist die Umsetzung der EU-Richtlinie 2004/108/EG in der Bundesrepublik Deutschland.

Zulassungsbescheinigung laut dem Deutschen Gesetz über die elektromagnetische Verträglichkeit von Geräten (EMVG) (bzw. der EMC EG Richtlinie 2004/108/EG) für Geräte der Klasse A.

Dieses Gerät ist berechtigt, in Übereinstimmung mit dem Deutschen EMVG das EG-Konformitätszeichen - CE - zu führen.

Verantwortlich für die Konformitätserklärung nach des EMVG ist die IBM Deutschland GmbH, 70548 Stuttgart.

Generelle Informationen:

Das Gerät erfüllt die Schutzanforderungen nach EN 55024 und EN 55022 Klasse A.

Electromagnetic Interference (EMI) Statement - Russia

ВНИМАНИЕ! Настоящее изделие относится к классу А.
В жилых помещениях оно может создавать радиопомехи, для снижения которых необходимы дополнительные меры

Terms and conditions

Permissions for the use of these publications is granted subject to the following terms and conditions.

Personal Use: You may reproduce these publications for your personal, noncommercial use provided that all proprietary notices are preserved. You may not distribute, display or make derivative works of these publications, or any portion thereof, without the express consent of the manufacturer.

Commercial Use: You may reproduce, distribute and display these publications solely within your enterprise provided that all proprietary notices are preserved. You may not make derivative works of these publications, or reproduce, distribute or display these publications or any portion thereof outside your enterprise, without the express consent of the manufacturer.

Except as expressly granted in this permission, no other permissions, licenses or rights are granted, either express or implied, to the publications or any data, software or other intellectual property contained therein.

The manufacturer reserves the right to withdraw the permissions granted herein whenever, in its discretion, the use of the publications is detrimental to its interest or, as determined by the manufacturer, the above instructions are not being properly followed.

You may not download, export or re-export this information except in full compliance with all applicable laws and regulations, including all United States export laws and regulations.

THE MANUFACTURER MAKES NO GUARANTEE ABOUT THE CONTENT OF THESE PUBLICATIONS. THESE PUBLICATIONS ARE PROVIDED "AS-IS" AND WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, NON-INFRINGEMENT, AND FITNESS FOR A PARTICULAR PURPOSE.

BULL CEDOC
357 AVENUE PATTON
B.P.20845
49008 ANGERS CEDEX 01
FRANCE

REFERENCE
86 A1 80FA 01