Hardware Management Console Readme

For use with Version 4 Release 4

Date: April 7, 2005

Introduction

This Readme contains hints and errata information about the Hardware Management Console. Please consult the HMC's technical support Web site for up to date information. (http://techsupport.services.ibm.com/server/hmc/power5)

> All releases of the HMC Version 4.x machine code will manage an iSeries Server. A pSeries Server requires HMC Version 4.2 (or greater) machine code.

PTF MH00222 (Required Maintenance Fix that must be installed on HMC Version 4 Release 4.0)

Note: The MH00222 eFix replaces the following eFixes: MH00219, MH00220, and MH00224 (all of the fixes that were in the previously released in the MH00219, MH00220, and HM00224 eFixes are in the MH00222 eFix)

This package includes fixes for the following issues:

Concurrent Power on/off support for nodes in p5 575 servers.

- Provides fix for copying the PC Client WebSM keys to the USB floppy drive.
- Command line fix for the chsystate –r sys –m <managed system> -o cleariotable.
- Access Management checks for resources like vterm, profile, partition and managed systems.
- Dual HMC locking problem causing the FSP's to go to the no connection state.
- R & V repair of BPC's.
- Guided Setup Wizard can be started at the local HMC by user(s) with no privileges to perform tasks provided by the Wizard.
- Provides a required fix that must be installed prior to performing a microcode upgrade on the p575, p5 595 or i5 595 servers.
- Backup Critical Console Data task does not backup all the data.
- Prevent dhcpd.conf from being removed during HMC code update.

PTF MH00223 (HMC V4 R4.0 Update with USB keyboard fix) can be installed using the Install Corrective Service

This package addresses the following issues:

- Provides required support for using a USB Keyboard with the 7310-CR3 (Rackmount). Without this fix users that have a CR3 and a USB keyboard will not be able to install the HMC recovery CDs or select a different language support setting during reboot.

Hints and Tips

HMC Desktop:

- To launch the browser, right mouse click on the desktop to bring up the menu. Select "Net" and then "Browser".
- To start a restricted shell terminal, right mouse click on the desktop to bring up the menu. Select "Terminals" and then "rshterm".
- Currently, HMC only stores 4 service processor dumps and 4 platform system dumps per managed system.
- Changes of a partition profile do not apply to the partition immediately. The changes will only take effect on the partition when activation is done through the profile.
- If users are interested in keylock positions and SRC values when performing Operator Panel Service Functions through Service Focal Point, they can be viewed from the Server and Partition plugin.
- To view system event logs, you must login as a user with 'hmcpe' role. From Service Applications, select Service Focal Point → Service Utilities → Actions → View Problem Logs.The HMC can support 16 concurrent licensed

internal code updates on all systems except the p5 595, i5 595 and p5 590. The HMC can only support one p5 595, i5 595, p5 590 and p5 575 concurrent licensed internal code update at a time.

- HMC Version 4 Release 2 or higher is required to manage pSeries Power5 servers.

Enhancements and Changes in V4R4

HMC Version 4 Release 3 now enables Ext3 File System. If you wish to take advantage of journaled file system, you must install or upgrade your HMC using the Version 4 Release 3 and up Recovery CDs.

Server and Partition:

- **Server Management:**
  - i5/OS partitions on pSeries systems

HMC Command Line:

- The following commands have been added:

  chusrtca – manages the display of a Terms and Conditions agreement to all users who log in locally to the HMC

  lsusrtca – lists the status of the display of a Terms and Conditions agreement to all users who log in locally to the HMC

  lssysconn – lists connection information for systems and frames managed by the HMC

  sendfile – transfers a file from the HMC to a remote system using File Transfer Protocol

- An option has been added to the **chsysstate** command to power off all of the unowned I/O units in a managed frame.

- An option has been added to the **lsvet** command to display the Virtualization Engine systems technologies activation history log.

Known Issues

Server and Partition:

- Dynamic partition configuration for memory move can take a while. During that time, no other operation can be performed.
- When selecting multiple I/O slots for dynamic partition configuration, it will stop on the first failure.
- After configuring your network setting, make sure to reboot your HMC. Otherwise, dynamic logical partitioning for AIX/Linux partitions may not work.
- Users cannot change virtual Opticonnect and HSL Opticonnect settings through the GUI without activating the changes through a partition profile. Users can change the settings dynamically through the command line interface.

  Usage: chhwres -m <managed system name> -r virtualio --rsubtype virtualopti -p <partition name> -o s –a virtual_opti_pool_id=[0|1]

  Usage: chhwres –m <managed system name> -r virtualio –rsubtype hsl –p <partition name> -o s –a hsl_pool_id=[0|1]

- Error messages for some Dynamic Logical Partitioning tasks give 'AIX' as the partition type even though it's actually a Linux partition.
- Unable to perform Dynamic Logical Partitioning virtual I/O remove operations if the partition does not have a current profile.
- The Dynamic Logical Partitioning of Processor resource is not handling 5250CPW percentage operations correctly. The problem occurs when trying to Vary On/Off the requested percentage. Currently the value being used is the input parameter, however that value is a percentage to be added or removed and should be used to calculate the target value. The result is that the Pending 5250CPW percentage does not match the Current/Runtime value. The rsthwres command does not resync 5250CPW values, so there is no way to correct this situation other than powering off the partition and restarting it with the desired percentage.
- After an MES upgrade, Lpar profiles that had Virtual Ethernet Adapters defined were missing the Port Virtual LAN ID (PVID). The problem is caused by an incorrect offset check which is causing the last byte of a profile not to be migrated. The last byte of a profile happens to be the PVID, or in the case where there are no Virtual

Ethernet Adapters in the profile, a zero.   To work around this problem, the user must edit the profile to add the PVID and then save the modified profile.

- Dynamic Logical Partitioning I/O move from the GUI between two OS/400 partition defaults to the force option even when not selected. User can use the command line to move the IO with out the force option.

    Usage: chhwres –m <managed system name> -r io –o m –l <drc index> -p <partition name> -t <target partition name>

HMC User Management:

- When creating a user from the HMC Console, using the Manage Users and Access task, the password expiration days is always set to never expire. After the user has been created, select the new user and modify the password expiration value or use the chhmcusr command to set the password expiration days.

USB Keyboard for 7310-CR3 HMC (x336):

- Intermittent keyboard/mouse hangs on reboot of the HMC. Unplug and replug the device(s) solves the problem.

National Language Support:

- Mnemonics are not supported in double byte and ru locales.
- The HMC uses several external components. These components are not developed by the HMC team and are translated as part of a separate translation plan and schedule. The mix of English and translated text is an unavoidable situation and has the potential to occur anytime the HMC is updated or pulls in a new version of an external application that is updated in between its normally scheduled translation cycles.
- Due to the limitation of groff, some characters in the output of "man" command might be corrupted in traditional Chinese, simplified Chinese and Korean when the window is too narrow. Widen the window and retry the command again.
- Korean input is not supported. Press Shift-Space to switch between English and Korean input mode.
- Traditional and Simplified Chinese input is supported in zh_TW and zh_CN locales. Press CTRL-Space to switch between English and Chinese input mode. Press CTRL-Shift to select an input method. Press space bar to see more Chinese characters.
- Japanese input is supported. Press Shift-Space to switch between English and Japanese input mode.
- User ID, User information, HMC User password, Partition name, managed system name, profile name and system profile name are in English only.
- IBM275 doesn't work well when connecting from IBM Personal Communications or iSeries Access to an HMC. Use another Brazil codepage. The codepage "IBM930 Japan Katakana" doesn't work well either. Use "IBM930 Japan Katakana Extended" instead.
- An ibm5250 session opened on the HMC locally will be in the same locale as the one that is set for the HMC. To open a session in a different locale, change the HMC locale first, logout, login and then invoke ibm5250. The other option is to connect to the HMC using a remote emulator, e.g. IBM Personal Communications or iSeries Access, in the desired locale.
- When upgrading from HMC V4R3 to HMC V4R4, the previous keyboard mapping is not restored, and the default English (en_US) settings will be used. To change the keyboard mapping during the next boot, run the following command from the restricted shell window, on the HMC:

    chhmc -c kbdcfg -s enable

    To reboot the HMC, run the following command:

        hmcshutdown -r -t now

    When the HMC reboots, you will be prompted to change the keyboard mapping again.

- To access the file remote_client.html on a HMC from a remote web browser, please set the HMC locale to one of the following: cs_CZ (Czech), de_DE (German), en_US (English), es_ES (Spanish), fr_FR (French), hu_HU (Hungarian), it_IT (Italian), ja_JP (Japanese), ko_KR (Korean), nl_NL (Dutch), pt_BR (Brazilian Portuguese), ru_RU (Russian), sk_SK (Slovak), zh_CN (Simplified Chinese) and zh_TW (Traditional Chinese).

Note: For each of the locales that is not supported in the V4 R2 HMC the numeric, date, time, calendar and currency formats that are specific to a given locale may not be displayed as expected.

Languages	Supported or Not Supported	Locales
English	Supported:	en_US, en_GB, en_GB@euro, en_AU, en_BE, en_BE@preeuro, en_CA, en_HK, en_Ne, en_IE, en_IE@preeuro, en_NZ, en_PH, en_PK, en_ZA, en_SG
German	Supported:	de_DE, de_DE@preeuro, de_CH, de_AT, de_AT@preeuro, de_LU, de_LU@euro
French	Supported:	fr_FR, fr_FR@preeuro, fr_CH, fr_CA, fr_BE, fr_BE@euro, fr_LU, fr_LU@euro
Italian	Supported:	it_IT, it_IT@preeuro, it_CH
Spanish	Supported:	es_ES, es_ES@preeuro, es_AR, es_BO, es_CL, es_CO, es_CR, es_DO, es_EC,es_SV, es_GT, es_HN, es_MX, es_NI, es_PA, es_PY,es_PE, es_PR, es_US, es_UY,es_VE
Brazilian Portuguese	Supported:	pt_BR
Japanese	Supported:	ja_JP
Simplified Chinese	Supported:	zh_CN, zh_SG
Traditional Chinese	Supported:	zh_TW, zh_HK
Korean	Supported:	ko_KR
Hungarian	Supported:	hu_HU
Dutch	Supported:	nl_NL, nl_NL@preeuro, nl_BE, nl_BE@preeuro
Russian	Supported:	ru_RU
Czech	Supported:	cs_CZ
Slovakian	Supported:	sk_SK

Miscellaneous Functions:

- Help Search is not supported. However, Find is supported for Help.
- Printing is not supported.
- The numerical keypad on some keyboards doesn't work. Use the normal numerical keys instead.
- When your power5 system is shipped to you it is in a non-HMC managed mode by default. Once you attach and set up an HMC to manage your power5 system, the default non-HMC managed mode is exited. The procedure to return to the default non-HMC managed mode is documented on the InfoCenter website under "Resetting the server to a non partitioned configuration".

  The following link will redirect you to the document.

  http://publib.boulder.ibm.com/infocenter/eserver/v1r2s/en_US/info/iphbl/iphblresetserver.htm

eServer i5 and p5 Education Available on Resource Link

The following customer courses will be available from Resource Link for the Product Announce on May 4, 2004.

- **How to Use the eServer i5 and p5 Hardware Management Console**
  This course explains how to install and configure the Hardware Management Console (HMC) for the Model 520/570. It also covers the HMC's basic operations by exploring the general user interface. Partitioning is discussed in detail, with explanations showing both command line and GUI support.

- **eServer i5 and p5 - Physical Planning for Installation**
  This course discusses considerations for the physical planning for installation of eServer Models 520 and 570. It then provides the user with links to obtaining the step-by-step installation procedures.

- **Resource Link Highlights**
  This course provides an overall look at the major Resource Link (RL) areas and how to use them; Planning, Education, Library, Forums, Fixes, Problem Solving, Services, Customer Initiated Upgrade, and Tools. It also provides step-by-step procedures in using the Subscription function.

Access to these courses requires a Resource Link user ID and password.

To register for a Resource Link user ID and password:

1. Go to http://www.ibm.com/servers/resourcelink
2. Select "Register for a user ID and password"
3. Accept the Security Alerts
4. Select "Customers: you may request a user ID"
5. On the Request a user ID page, fill in an e-mail address and a preferred user ID, then click Submit. A user ID and password will be sent to the e-mail address.

To view a course:

6. Sign in to Resource Link
7. Select Education in the navigation bar on the left
8. From the Education page, select "eServer i5 and p5 courses"
9. Select "How to Use the eServer i5 and p5 Hardware Management Console"
10. Double-click the link to open the course.

Notes:

11. The courses are browser based. For optimal viewing, we recommend Microsoft Internet Explorer 6.0 or higher with your display set at 1024 x 768. To set your display, go to My Computer ===> Display ===> Settings
12. Course pages can be book marked for easy retrieval.
13. Course simulations open in a separate window. Use the X in the upper right corner of the window to close the simulation.
14. If there are QuickTime videos in the course, you need to have the QuickTime viewer installed. A link to the free viewer is on each Resource Link course page and on the Related page within each course.

Security Fixes

Cert	bug summary
CAN-2004-0415	SECURITY: **kernel**: local privilege escalation, race condition in file offset pointer handling
VU#550464 CAN-2004-0644	SECURITY: **krb5**: remote unauthenticated DoS
no cert.	SECURITY: **Kernel**: unannounced security patches (audit & queued signals)...
CAN-2004-0817	Security: **imlib**: local execution via heap overflow
CAN-2004-0687 CAN-2004-0688	SECURITY: **xf86**: multiple buffer overflows with malformed xpm images
no cert.	SECURITY: **gettext**: Insecure temporary file handling
CAN-2004-0804	SECURITY: **tiff**: Buffer overflows in image decoding
CAN-2004-0975	SECURITY: **Openssl**: possible symlink attack via temp file mishandling
can-2004-0940	SECURITY: **Apache**: local buffer overflow in get_tag function in mod_include
no cert.	SECURITY: **xf86**: SuSE security updates for libxpm
no cert.	SECURITY: **imlib**: SuSE xpm security updates in imlib
CAN-2004-0989	SECURITY: **libxml**: remote code execution, buffer overflow
CAN-2004-0971	SECURITY: **krb5**: krb5-workstation: Possible symlink attack, priv escalation via temporary file mishandling
Trustix Secure Linux Security Advisory #2004-0053	SECURITY: **Cyrus-sasl**: (ver 1.5.27) Insecure handling of environment variable