

Operations Guide for the HMC and Managed Systems Version 7 Release 3



ESCALA Power6

Operations Guide for the HMC and Managed Systems Version 7 Release 3

Hardware

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About this publication

This publication helps users to understand how to use the Hardware Management Console (HMC), describes the tasks you can use on the console, and how to navigate using the web-based user interface.

Note: The HMC user interface windows represented in this document are general samples. They may or may not represent the exact windows that are displayed for your user ID or version.

For information about the accessibility features of this product, for users who have a physical disability, see [accessibledoc.dita](#).

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Chapter 1. Introduction to the Hardware Management Console

This section briefly describes some of the concepts and functions of the Hardware Management Console (HMC) and introduces the user interface that is used for accessing those functions.

The HMC is a system that controls managed systems, logical partitions, Capacity on Demand (CoD), and updates. To provide flexibility and availability, you can implement HMCs as a local HMC or a redundant HMC.

Local HMC

A local HMC is an HMC that is physically located close to the system it manages and is connected by either a private or public network. An HMC in a private network is a DHCP server for the service processors of the systems it manages. An HMC may also manage a system over an open network, where the managed system's service processor IP address has been assigned manually using the Advanced System Management Interface (ASMI).

Remote HMC

A remote HMC is an HMC that is not physically located near its managed systems. This could be in another part of the same room or data center, in another building, or even on another site. Typically, a remote HMC would be attached to its managed servers via a public network, but configurations with a remote HMC attached to a private network are also possible. Prior to HMC version 7, at least one local HMC was required. With Version 7, any or all HMCs may be remote.

Redundant HMC

A redundant HMC manages a system that is already managed by another HMC. When two HMCs manage one system, they are peers, and each can be used to control the managed system. One HMC can manage multiple managed systems, and each managed system can have two HMCs. If both HMCs are connected to the server using private networks, each HMC must be a DHCP server set up to provide IP addresses on two unique, nonroutable IP ranges.

The HMC allows you to configure and manage servers. One HMC can manage multiple servers, and dual HMCs can provide redundant support by managing the same system. To help ensure consistent function, each HMC is shipped preinstalled with the Hardware Management Console Licensed Machine Code Version 7.

User interface style for the HMC

This HMC uses a Web-based user interface. This interface uses a tree style navigation model providing hierarchical views of system resources and tasks to enable direct access to hardware resources and task management capabilities. It provides views of system resources and provides tasks for system administration.

See Chapter 2, "Using the Web-based user interface," on page 5 for detailed information on how to use this HMC interface.

Predefined user IDs and passwords

Predefined user IDs and passwords are included with the HMC. It is imperative to your system's security that you change the hscroot predefined password immediately.

The following predefined user IDs and passwords are included with the HMC:

Table 1. Predefined HMC user IDs and passwords

User ID	Password	Purpose
hscroot	abc123	The hscroot user ID and password are used to log in to the HMC for the first time. They are case-sensitive and can only be used by a member of the super administrator role.
root	passw0rd	The root user ID and password are used by the service provider to perform maintenance procedures. They cannot be used to log in to the HMC.

Tasks and roles

Each HMC user can be a member of a different role. Each of these roles allows the user to access different parts of the HMC and perform different tasks on the managed system. HMC roles are either predefined or customized.

The roles discussed in this section refer to HMC users; operating systems running on logical partitions have their own set of users and roles. When you create an HMC user, you must assign that user a task role. Each task role allows the user varying levels of access to tasks available on the HMC interface. For more information about the tasks each HMC user role can perform, see Appendix A, "HMC tasks, user roles, IDs, and associated commands," on page 65.

You can assign managed systems and logical partitions to individual HMC users. This allows you to create a user that has access to managed system A but not to managed system B. Each grouping of managed resource access is called a managed resource role. To learn more about managed resource roles and how to create them, see Manage Task and Resource Roles.

The **predefined** HMC roles, which are the default on the HMC, are as follows:

Table 2. Predefined HMC Roles

Role	Description	HMC User ID
Operator	The operator is responsible for daily system operation.	hmcoperator
Super Administrator	The super administrator acts as the root user, or manager, of the HMC system. The super administrator has unrestricted authority to access and modify most of the HMC system.	hmcsuperadmin
Product Engineer	A product engineer assists in support situations, but cannot access HMC user management functions. To provide support access for your system, you must create and administer user IDs with the product engineer role.	hmcpe
Service Representative	A service representative is an employee who is at your location to install, configure, or repair the system.	hmcservicerep

Table 2. Predefined HMC Roles (continued)

Role	Description	HMC User ID
Viewer	A viewer can view HMC information, but cannot change any configuration information.	hmcviewer

You can create **customized** HMC roles by modifying predefined HMC roles. Creating customized HMC roles is useful for restricting or granting specific task privileges to a certain user. For more information about creating customized HMC roles, see Manage Task and Resource Roles.

Starting the HMC

Turn on the HMC by setting both the display and system unit to the *On* position. The initialization window, which includes the copyright information, is displayed. Learn about how to log in to the HMC interface.

When initialization is complete, the pre-login window is displayed.

Note: The pre-login window contains the link to log in to the HMC application, the ability to view the online help information, and the summarized status information for the HMC. You will need to log in to view the status information.

To log in to the HMC do the following:

1. In the pre-login window, click **Log on and launch the Hardware Management Console web application**.
2. Enter the user ID and password combination assigned to you.
3. Click **Logon**.

Note: If you previously disconnected from your session, the Choose a Disconnected Session window opens. Select the session you want to reconnect to and click **Reconnect**.

After you log in, the HMC workplace window opens and, if enabled, the **Tip of the Day** window appears. For more information about how to enable this feature, see Tip of the Day.

The HMC workplace window allows you to work with tasks for your console and managed systems. Not all tasks are available for each user ID. The user role assigned to your user ID determines what tasks you are able to perform. For example, if you are assigned a user ID with the operator role, you will have access to all the tasks that have *operator* access. See Appendix A, “HMC tasks, user roles, IDs, and associated commands,” on page 65 for a listing of all tasks and the user roles for which the tasks are available.

If at any time you do not know or remember what user ID you are currently logged in to the HMC, look at the task bar on the top of the Welcome page or you can click **HMC Management** in the navigation pane. Then click **Manage Users and Tasks** from the work pane (see Manage Users and Tasks for more information).

Chapter 2. Using the Web-based user interface

You can use the Web-based user interface to perform tasks on the Hardware Management Console (HMC) or on your managed resources.

This user interface comprises several major components: the banner, the task bar, the navigation pane, the work pane, and the status bar.

The *banner*, across the top of the workplace window, identifies the product and logo. It is optionally displayed. Use the **Change User Interface Settings** task to change the setting.

The *task bar*, located below the banner, displays the names of any tasks that are running, the user ID you are logged in as, online help information, and the ability to logoff or disconnect from the console.

The *navigation pane*, in the left portion of the window, contains the primary navigation links for managing your system resources and the HMC. The items are referred to as nodes.

The *work pane*, in the right portion of the window, displays information based on the current selection from the navigation pane. For example, when **Welcome** is selected in the navigation pane, the Welcome window content is displayed in the work pane.

The *status bar*, in the bottom left portion of the window, provides visual indicators of current overall system status. It also contains a status overview icon which may be selected to display more detailed status information in the work pane.

You can resize the panes of the HMC workplace by moving the mouse pointer over the border that separates the navigation pane from the work pane until the mouse pointer changes to a double-pointed arrow. When the pointer changes shape, press and hold the left mouse button while dragging the mouse pointer to the left or right. Release the button and your navigation pane or work pane is now larger or smaller in size. You can also do this within the work pane border that separates the resources table from the tasks pad.

Task bar

The Task bar contains the Help and Logoff tasks and a button that represents each currently running task.

Navigation pane

The Navigation pane contains the primary links for managing your system resources and the HMC. These include Systems Management, System Plans, HMC Management, and Service Management.

Systems Management

Systems Management contains a view of system resources such as servers, frames, and Custom groups. Custom groups include the predefined groups 'All Partitions', 'All Objects', and any user-defined groups.

System Plans

System Plans contains plans to deploy and manage the HMC on a managed system.

HMC Management

HMC Management contains categorized HMC management tasks. Related tasks are categorized alphabetically by links including HMC and user customization, console tasks, connectivity, and settings.

Service Management

Service Management contains a categorized or alphabetic view of tasks and their descriptions used to service the Hardware Management Console.

Updates

Updates provides a way for you to access information on both HMC and system firmware code levels at the same time without running a task.

Welcome

Welcome is the initial window that is displayed when you log on to the HMC.

The Welcome work pane lists the nodes of the navigation pane and their descriptions. It also includes the following Additional Resources:

Guided Setup Wizard

Provides a step-by-step process to configure your HMC.

HMC Operations Guide

Provides an online version of the *Managing the HMC* for system administrators and system operators using the HMC.

If you are accessing the HMC remotely, you can view the publication in PDF format or in HTML format (click **View as HTML**). If you are accessing the HMC locally, you can view the publication in HTML format.

HMC Readme

Provides hints and errata information about the HMC.

Online Information

Provides information about the HMC.

Note: The following information is only available when you are accessing the HMC remotely.

IBM® System Support

supplies support and technical information for IBM Systems

HMC Support

supplies support and technical information for the HMC

Education and Tutorials

supplies course materials for training and updating HMC skills

To see what level of the HMC you are currently using, point your mouse over **HMC Version** at the top of the work pane.

Systems Management

Systems Management contains a tree view of managed resources. Resources may include Servers, Frames, and Custom Groups.

Servers

Servers represents the servers that are managed by this HMC.

To add servers, you can use the **Add Managed System** task under the **Connections** category in the tasks pad.

When you click **Servers** from the navigation pane a listing of individually defined servers is displayed in table form in the work pane, and under the **Servers** node in the navigation pane.

Selecting a server:

Learn about the information displayed when you select a server.

To work with a server, you can perform one of the following actions:

- Select a server under the **Servers** node from the navigation pane.
- Click on a server name from the work pane table.
- Click in the **Select** column next to the server name in the work pane table.

The Servers work pane table displays the following attributes by default.

Name Specifies the user-defined name of the managed system.

Status Displays the current status of the managed system (for example, Operating, Power off, Initializing) and, in addition, displays icons representing an unacceptable state or an active Attention LED. See “Status: Unacceptable” on page 15 or “Status: Attention LEDs” on page 15 for more information.

Available Processing Units

Displays the number of processing units that are available for assignment to logical partitions on the managed system. This is the total number of processing units that are activated on the managed system minus the number of processing units that are assigned to the logical partitions, including the logical partitions that are shut down, on the managed system. This number does not include any processing units that have not yet been activated with Capacity on Demand (CoD).

Available Memory

Displays the amount of memory that is available for assignment to logical partitions on the managed system. This is the total amount of memory that is activated on the managed system minus the amount of memory needed by managed system firmware minus the amount of memory that is assigned to the logical partitions, including the logical partitions that are shut down, on the managed system. This number does not include any memory that has not yet been activated with Capacity on Demand (CoD). The available memory amount can be shown in MB or GB. Click **MB** or **GB** in the Available Memory column title.

Reference Code

Displays the system reference codes for the server. Click the reference code in the table for a detailed description.

The Servers work pane table can also display the following optional attributes in the table.

Configurable Processing Units

Displays the configured processing units. Configured - Licensed and usable (not guarded) processing units.

Configurable Memory

Displays the configured memory. Configured - Licensed and usable (not guarded) memory.

Serial Number

Displays the serial number of the managed system.

Type-Model

Displays the type and model number of the managed system (for example, 9117-MMA).

CoD Processor Capable

Displays whether the managed system supports Capacity on Demand (CoD) for processors.

CoD Memory Capable

Displays whether the managed system supports CoD for memory.

Permanent Processors

Specifies the number of permanent licensed processors.

On/Off CoD Processors State

Displays the On/Off CoD processor state.

Trial CoD Processor State

Displays the Trial CoD processor state.

Reserved CoD Processor State

Displays the Reserved CoD processor state.

Utility CoD Processor State

Displays the Utility CoD processor state.

Permanent Memory (GB)

Displays the amount of permanent activated memory.

On/Off CoD Memory State

Displays the On/Off CoD memory state.

Trial CoD Memory State

Displays the Trial CoD memory state.

To show optional attributes, select the **Column configuration** icon on the table toolbar. This function allows you to select additional attributes that you want displayed as columns in the table. It also allows you to reorder the columns, see “Column configuration” on page 14 for more information.

You can also use **Views** from the table toolbar to display the **Default** server attributes in the table or to display the **Capacity On Demand** server attributes in the table. See “Views menu” on page 14 for more information.

Displaying server details:

Display a server’s properties.

To display details (properties) about a server, you can select the server by clicking in the **Select** column in the work pane table. Then you can either click **Properties** from the tasks pad or click on the double-arrow icon next to the server name and click **Properties** from the context menu. In both cases, the Properties window opens.

Launching tasks for managed objects:

After you have chosen the objects to work with, you are ready to perform the appropriate tasks on them. Learn about how to launch a task for your selected managed objects.

Appropriate tasks for a selected object are listed in the tasks pad, in context menus, and in the **Tasks** menu. If a particular task cannot be performed on an object, the task will not display.

Tasks pad:

The Tasks pad appears below the Work pane when you have selected an object you want to work with. This view contains available tasks for selected managed object(s).

The tasks contained in this view meet the following characteristics:

