

DELL™
PowerEdge™
Systems

Using the C410x Baseboard Management Controller



Notes, Cautions, and Warnings



NOTE: A NOTE indicates important information that helps you make better use of your computer



CAUTION: A CAUTION indicates potential damage to hardware or loss of data if instructions are not followed.



WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

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Regulatory Model B02S

January 2011

Rev. A00

Contents

Introduction	6
BMC Key Features and Functions	6
Using the Web UI	7
Remote Management Console	8
Overview	8
Enter Dell Remote Management Console	8
Properties	9
Configuration	10
Sessions	16
Updates	17
Utilities	18
Power	19

PCIE	21
Thermal	22
System Event Log	24
Event Management	25
Port Map	28
LED.....	29
User.....	32
Firmware Update.....	33
IPMI 1.5 / 2.0 Command Support List.....	35
IPMI Device Global Commands.....	35
BMC Device and Messaging Commands.....	36
BMC Watchdog Timer Commands.....	38
Chassis Commands.....	38
Event Commands.....	39
SEL Commands.....	39
SDR Repository Commands.....	40
SDR Repository Commands.....	41

FRU Inventory Device Commands	42
LAN Commands.....	43
PEF/PET Alerting Commands	43
OEM Command List.....	44
System Event	48
IP Control By Button.....	51
Static/DHCP IP Controlled by Front Panel Button.....	51
Getting Help	52
Contacting Dell.....	52
Index	53

Introduction

This section introduces the C410x Baseboard Management Controller (BMC) and includes the requirements for web-based graphical user interface (GUI)

BMC Key Features and Functions

- Support for IPMI v2.0
- Out-of-band monitoring and control for server management over LAN.
- Helps in generating FRU information report ,which includes main board part number, product name, manufacturer and so on.)
- Health status/Hardware monitoring report.
- View and clear events log.
- Event notification through Platform Event Trap (PET).
- Platform Event Filtering (PEF) to take selected action for selected events.
- Chassis management includes power control, status report, front panel buttons, and LEDs control.
- Support multi-session user, and alert destination for LAN channel.

Using the Web UI

The BMC firmware features an embedded web server, enabling users to connect to the BMC using an Internet browser (Microsoft Internet Explore).

The web server supports four concurrent connections

Web-based GUI is supported on the following browsers:

Microsoft Windows:

- Internet Explorer 6 and 7
- Mozilla Firefox 2.0 or later

Linux:

Mozilla Firefox 2.0 or later

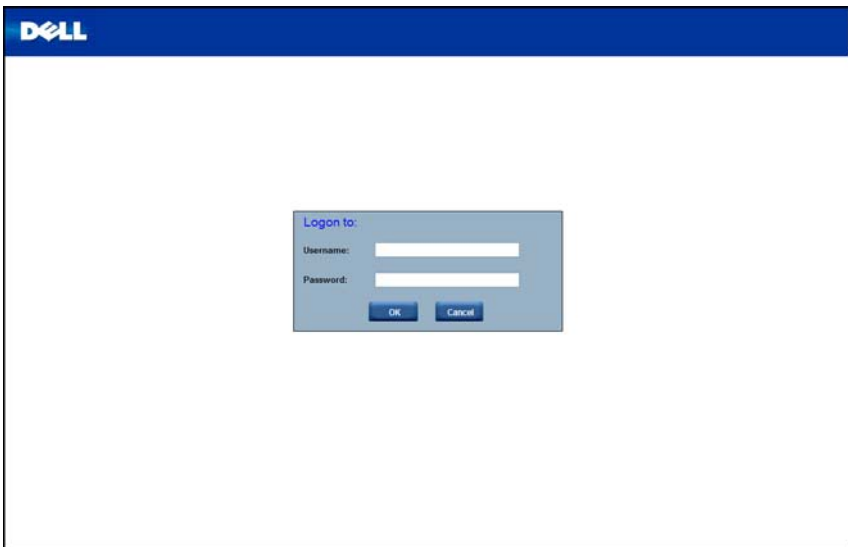
Chapters 3 to 6 describe the various features available on the UI.

Remote Management Console Overview

1. Open a web browser and type in your identified IP. The IP address can be found using your DHCP server.
2. A dialog box prompts you to enter Username and Password.
3. Enter the following values:

Username: **root**

Password: **root**

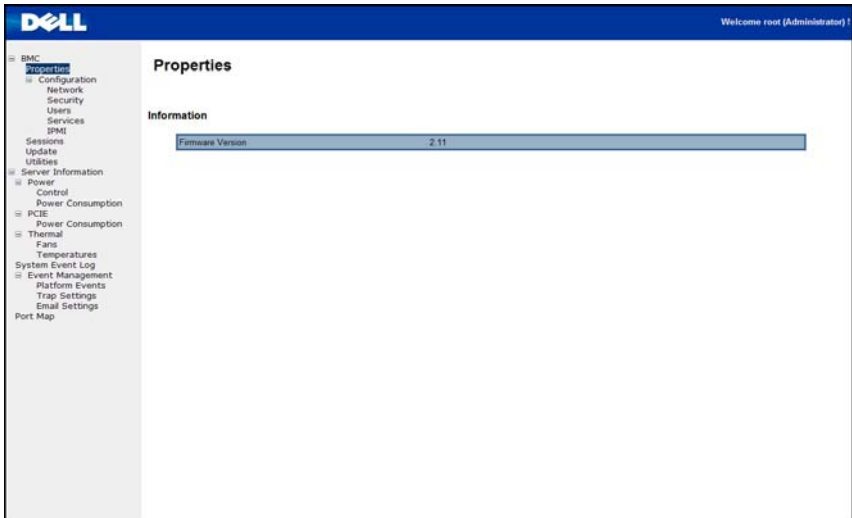


Enter Dell Remote Management Console

After you successfully log in to your Dell Remote Management Console, the Remote Management Console GUI appears.

Properties

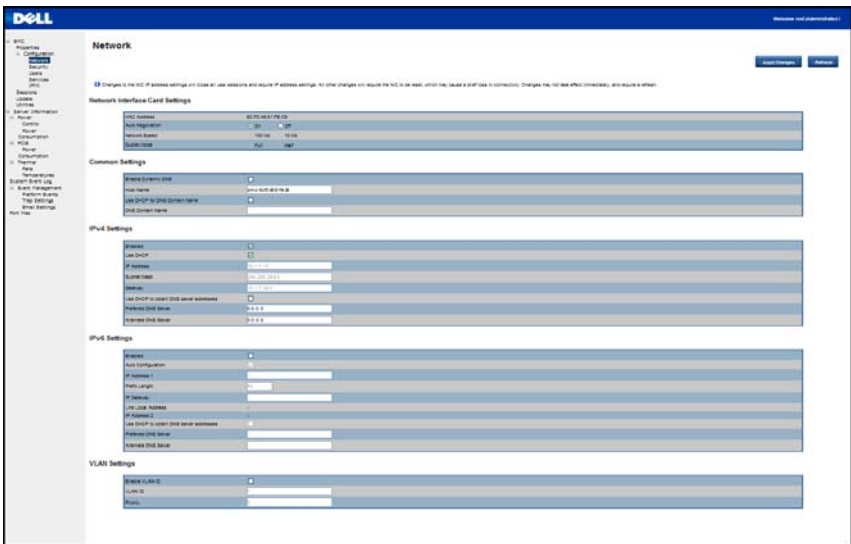
The Properties page displays the firmware version of the current remote client system.



Configuration

Network

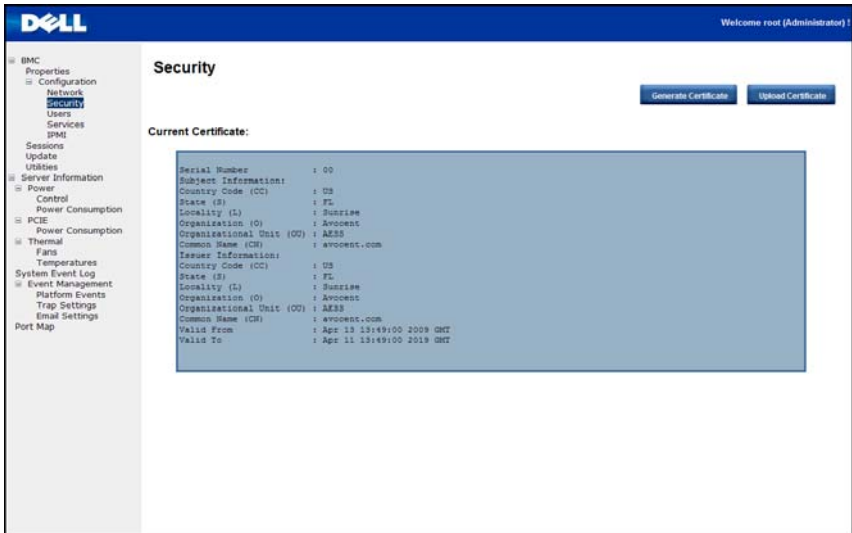
You can view and modify the network settings on this screen. Select whether to obtain an IP address automatically or configure one manually. It is recommended to use DHCP if your environment has a DHCP server. You can set DHCP (obtain the IP address automatically) or STATIC IP (configure the IP address manually). When you finish configuration, click **Apply Changes** or for re-configuration click **Refresh**.



Security

The Security page shows the current certificate status.

- 1 To generate a new certificate, click **Generate Certificate**.
- 2 To upload a certificate, click **Upload Certificate**.




The screenshot shows the Dell iDRAC Security page. The left sidebar contains a navigation menu with categories like BMC, Configuration, Network, Security, Users, Services, iPM, Sessions, Update, USBs, Server Information, Power, Control, Power Consumption, PCIe, Thermal, Fans, Temperatures, System Event Log, Event Management, Platform Events, Trap Settings, Email Settings, and Port Map. The 'Security' option is highlighted. The main content area is titled 'Security' and features two buttons: 'Generate Certificate' and 'Upload Certificate'. Below these buttons, the 'Current Certificate:' section displays the following details:

```
Serial Number          : 00
Subject Information:
Country Code (CC)     : US
State (S)              : FL
Locality (L)           : Sunrise
Organization (O)       : Avocent
Organizational Unit (OU) : AES3
Common Name (CN)       : avocent.com
Issuer Information:
Country Code (CC)     : US
State (S)              : FL
Locality (L)           : Sunrise
Organization (O)       : Avocent
Organizational Unit (OU) : AES3
Common Name (CN)       : avocent.com
Valid From              : Apr 13 13:49:00 2009 GMT
Valid To                : Apr 11 13:49:00 2019 GMT
```

Users

To configure a specific user, click the Users ID. To display new user information, click **Refresh**.

 **NOTE:** BMC convention for enabling an 'anonymous' login is to configure the entry for User ID 1 with a null username (all zero's) and a null password (all zero's). Applications may then present this to the user as an anonymous login.



The screenshot shows the Dell iDRAC 'Users' page. The left sidebar contains a navigation menu with categories like BMC, Properties, Configuration, Network, Security, Services, IPMI, Sessions, Update, USBs, Server Information, Power, Control, Power Consumption, PCI-E, Thermal, Fans, Temperatures, System Event Log, Event Management, Platform Events, Trap Settings, Email Settings, and Port Map. The main content area is titled 'Users' and includes a 'Refresh' button. Below the title is a table of users.

User ID	State	User Name	User Role	IPMI LAN Privilege	IPMI Serial Privilege
1	Disabled	None	Administrator	Administrator	Administrator
2	Enabled	root	Administrator	Administrator	Administrator
3	Disabled	None	None	None	None
4	Disabled	None	None	None	None
5	Disabled	None	None	None	None
6	Disabled	None	None	None	None
7	Disabled	None	None	None	None
8	Disabled	None	None	None	None
9	Disabled	None	None	None	None
10	Disabled	None	None	None	None
11	Disabled	None	None	None	None
12	Disabled	None	None	None	None
13	Disabled	None	None	None	None
14	Disabled	None	None	None	None
15	Disabled	None	None	None	None
16	Disabled	None	None	None	None

Services

You can configure the web server parameters (such as, HTTP Port Number, HTTPS Port Number, and Timeout) on a remote computer. By default, the timeout is 1800 seconds; 5 for the Max Sessions.

When you finish the configuration, click **Apply Changes**.



The screenshot displays the Dell iDRAC web interface. The top navigation bar includes the Dell logo and the user name 'Welcome root (Administrator)'. The left sidebar contains a tree view of system settings, with 'Services' highlighted. The main panel is titled 'Services' and features an 'Apply Changes' button. Below this, the 'Web Server' configuration is shown in a table format:

Parameter	Value
HTTP Port Number	80
HTTPS Port Number	443
Timeout	1800 seconds
Max Sessions	5
Active Sessions	2

IPMI

The IPMI page contains two tabs: IPMI Serial and IPMI Settings.

IPMI Serial

There are three serial configuration in IPMI Serial: Connection Mode Settings, Baud Rate, and Channel Privilege Level Limit.

The Connection Mode Settings allows user to select the Console redirection type and to manage the system from a remote location.

Once the connection mode is set, select the Baud Rate from the drop-down list.

With Channel Privilege Level Limit, users can be configured to operate with a particular maximum Privilege Level. Privilege levels tell the BMC which commands are allowed to be executed.

Table 3-1. Channel Privilege Level

Users	This may be considered the lowest privilege level.
Operator	All BMC commands are allowed, except for configuration commands that can change the behavior of the out-of-band interfaces. For example, Operator privilege does not allow the capability to disable individual channels, or change user access privileges.
Administrator	All BMC commands are allowed, including configuration commands. An Administrator can even execute configuration commands that would disable the channel that the Administrator is communicating over.

IPMI Settings

IPMI Settings provides remote configuration over LAN. To activate IPMI remote configuration by LAN, select the Enable IPMI Over LAN option, define the Channel Privilege Level Limit, and enter the Encryption Key.

When you finish the configuration, click **Apply Changes**.

- BMCI
- Properties
- Configuration
 - Network
 - Security
 - Users
 - Services
 - IPMI**
- Sessions
- Update
- USBs
- Server Information
- Power
 - Control
 - Power Consumption
- PCIe
 - Power Consumption
- Thermal
 - Fans
 - Temperatures
- System Event Log
- Event Management
 - Platform Events
 - Trap Settings
 - Email Settings
- Port Map

IPMI

Apply Changes

IPMI Serial

Connection Mode Settings	Direct Connect Terminal Mode
Baud Rate	19.2 Mbps
Channel Privilege Level Limit	Administrator

IPMI Settings

Enable IPMI Over LAN	<input checked="" type="checkbox"/>
Channel Privilege Level Limit	Administrator
Encryption Key	00000000000000000000000000000000

Sessions

This Sessions page displays information on Active Sessions. Additionally, the trash can icon provides the delete function for privileged users. Click **Refresh** to refresh the Sessions status.

DELL Welcome root (Administrator)!

Sessions Refresh

Use this page to view information about the active sessions. Additionally, privileged users can click on the trash can icon to kill an active session.

Session ID	User Name	IP Address	Session Type	Kill
1	root	10.17.64	GUI	
2	root	10.12.67	GUI	N/A

Navigation Menu:

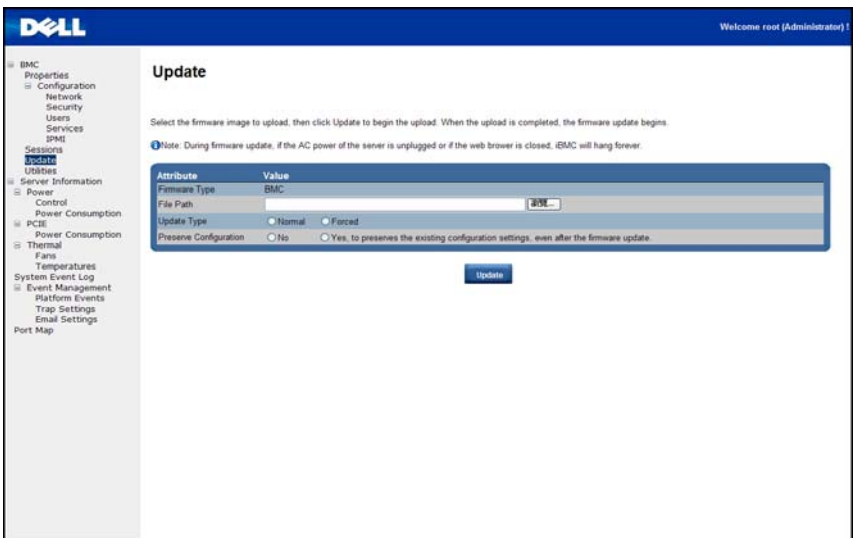
- BMC
 - Properties
 - Configuration
 - Network
 - Security
 - Users
 - Services
 - IPMI
 - License
 - Update
 - USBs
 - Server Information
 - Power
 - Control
 - Power Consumption
 - PCIE
 - Power Consumption
 - Thermal
 - Fans
 - Temperatures
 - System Event Log
 - Event Management
 - Platform Events
 - Trap Settings
 - Email Settings
 - Port Map

Updates

The firmware can be updated remotely.

To update firmware, follow the instructions given below:

- 3 Select the file on your local system using **Browse**.
- 4 Select **Update Type**.
- 5 Select **Preserve Configuration**.
- 6 Click **Update** to delete the current version and update to the new version.

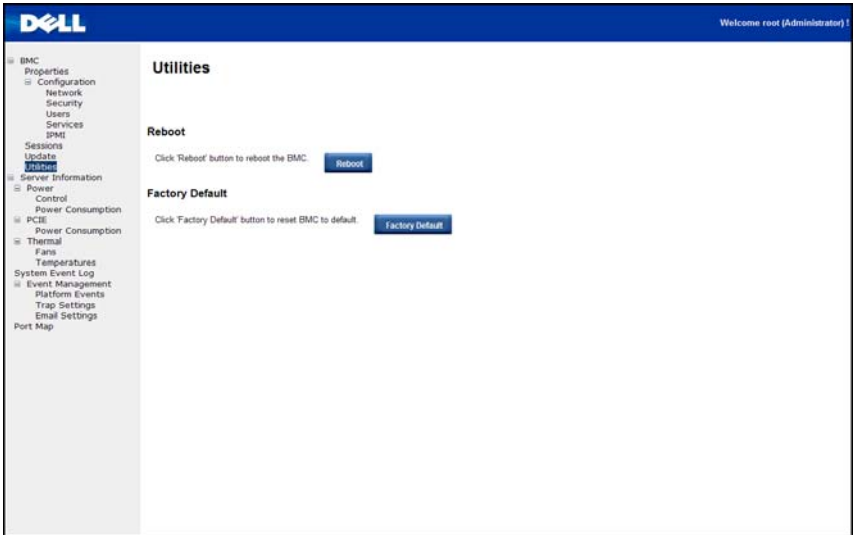


Utilities

The Utilities page provides BMC reboot and Factory default restore functions.

To reboot system, click **Reboot**.

To restore factory default setting, click **Factory Default**.

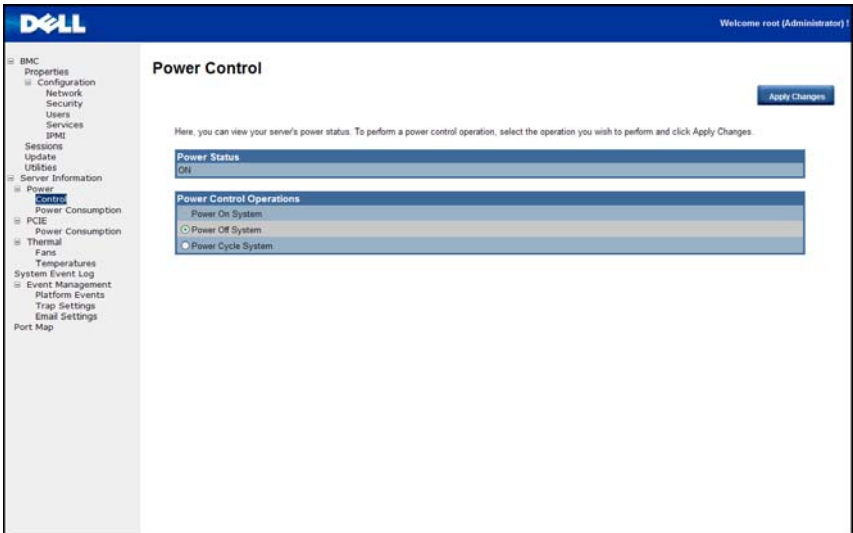


Power

Control

Power Control allows you to power on/off/cycle the remote host system. Additionally you can see the remote power status.

To perform the power control operation, select the operation and click **Apply Changes**.



Power Consumption

This screen displays information on the system power consumption. The information includes Current Power Consumption, Power Consumption Monitoring Start Date, Max/Min Power Consumption, and Average Power Consumption.



DELL Welcome root (Administrator)

Power Consumption

Power Reading

Current Power Consumption	96W 328 BTU/hr
Power Consumption Monitoring Start Date	Sat, 26 Aug 2000 09:58:54
Max Power Consumption	109W 368 BTU/hr
Min Power Consumption	69W 235 BTU/hr
Average Power Consumption	83W 317 BTU/hr




PCIe

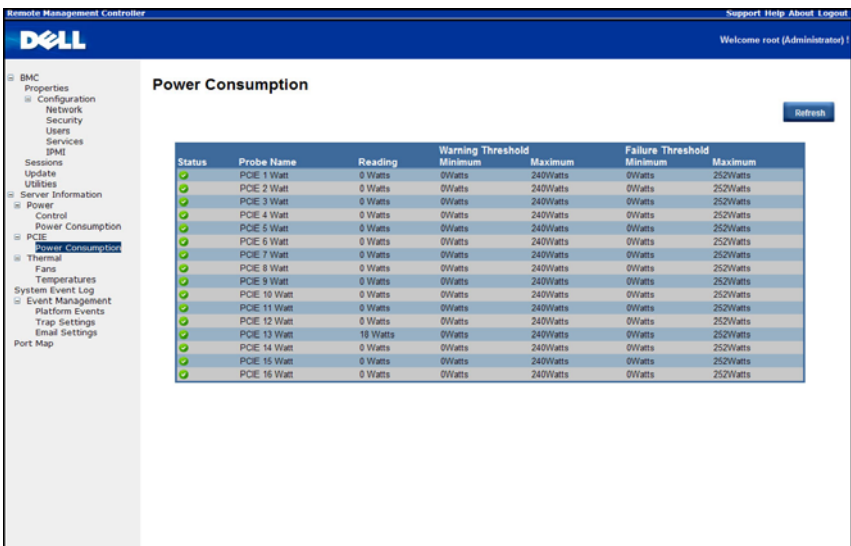
Power Consumption

This page displays the status of PCIe power consumption.

Each sensor displays a different color to indicate the health status of a specified PCIe device.

Table3-2. Power Consumption Sensor Description

	The green color indicates the device is healthy and there's no sensor that has any alert.
	The yellow color indicates the device has at least one sensor that has warning alert.
	The red color indicates the device has at least one sensor that has a critical alert.






The screenshot shows the Dell Remote Management Controller (iDRAC) interface. The left sidebar contains a navigation menu with categories like BMC, Server Information, Power, and PCIe. The main content area is titled "Power Consumption" and features a table of sensor data. A "Refresh" button is located in the top right corner of the table area.

Status	Probe Name	Reading	Warning Threshold		Failure Threshold	
			Minimum	Maximum	Minimum	Maximum
✔	PCIe 1 Watt	0 Watts	0Watts	240Watts	0Watts	252Watts
✔	PCIe 2 Watt	0 Watts	0Watts	240Watts	0Watts	252Watts
✔	PCIe 3 Watt	0 Watts	0Watts	240Watts	0Watts	252Watts
✔	PCIe 4 Watt	0 Watts	0Watts	240Watts	0Watts	252Watts
✔	PCIe 5 Watt	0 Watts	0Watts	240Watts	0Watts	252Watts
✔	PCIe 6 Watt	0 Watts	0Watts	240Watts	0Watts	252Watts
✔	PCIe 7 Watt	0 Watts	0Watts	240Watts	0Watts	252Watts
✔	PCIe 8 Watt	0 Watts	0Watts	240Watts	0Watts	252Watts
✔	PCIe 9 Watt	0 Watts	0Watts	240Watts	0Watts	252Watts
✔	PCIe 10 Watt	0 Watts	0Watts	240Watts	0Watts	252Watts
✔	PCIe 11 Watt	0 Watts	0Watts	240Watts	0Watts	252Watts
✔	PCIe 12 Watt	0 Watts	0Watts	240Watts	0Watts	252Watts
✔	PCIe 13 Watt	18 Watts	0Watts	240Watts	0Watts	252Watts
✔	PCIe 14 Watt	0 Watts	0Watts	240Watts	0Watts	252Watts
✔	PCIe 15 Watt	0 Watts	0Watts	240Watts	0Watts	252Watts
✔	PCIe 16 Watt	0 Watts	0Watts	240Watts	0Watts	252Watts

Thermal

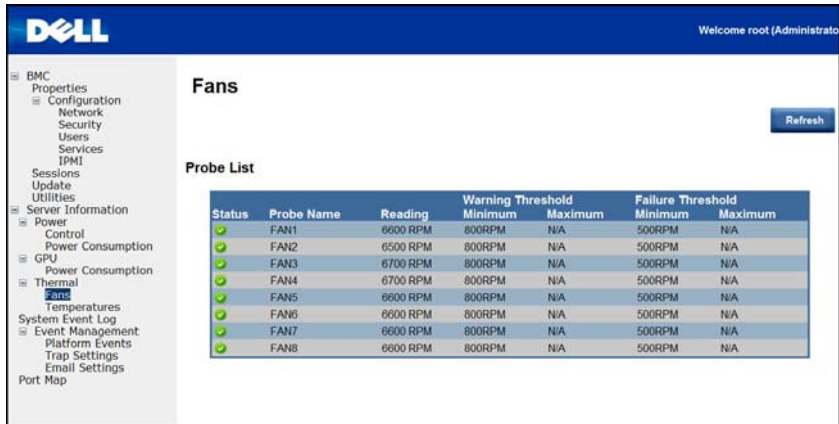
This page displays the Fans and Temperatures sensors of a remote host system. Click **Refresh** to update current health status for both Fans and Temperatures.

Table3-3. Thermal Sensor Description

	The green color indicates the device is healthy and there's no sensor that has any alert.
	The yellow color indicates the device has at least one sensor that has a warning alert.
	The red color indicates the device has at least one sensor that has a critical alert.

Fans

Fans page displays each independent system fan health status.



The screenshot shows the Dell iDRAC interface for the 'Fans' section. The top navigation bar includes the Dell logo and the user 'Welcome root (Administrator)'. A left-hand menu lists various system settings, with 'Fans' highlighted under the 'Thermal' category. A 'Refresh' button is located in the top right corner of the main content area.

Fans

Probe List

Status	Probe Name	Reading	Warning Threshold		Failure Threshold	
			Minimum	Maximum	Minimum	Maximum
✔	FAN1	6600 RPM	800RPM	N/A	500RPM	N/A
✔	FAN2	6500 RPM	800RPM	N/A	500RPM	N/A
✔	FAN3	6700 RPM	800RPM	N/A	500RPM	N/A
✔	FAN4	6700 RPM	800RPM	N/A	500RPM	N/A
✔	FAN5	6600 RPM	800RPM	N/A	500RPM	N/A
✔	FAN6	6600 RPM	800RPM	N/A	500RPM	N/A
✔	FAN7	6600 RPM	800RPM	N/A	500RPM	N/A
✔	FAN8	6600 RPM	800RPM	N/A	500RPM	N/A

Temperatures

Temperatures page displays each board and the PCI-E slot temperature status.

The screenshot shows the Dell iDRAC interface with the 'Temperatures' page selected. The left sidebar contains a navigation menu with categories like BMC, Configuration, Security, Updates, Power, and Thermal. The main content area displays a table of temperature data. A 'Refresh' button is located in the top right corner of the table area.

Status	Probe Name	Reading	Warning Threshold		Failure Threshold	
			Minimum	Maximum	Minimum	Maximum
OK	Board Temp 1	41.0 C	0.0C	70.0C	0.0C	75.0C
OK	Board Temp 2	42.0 C	0.0C	70.0C	0.0C	75.0C
OK	Board Temp 3	41.0 C	0.0C	70.0C	0.0C	75.0C
OK	Board Temp 4	39.0 C	0.0C	70.0C	0.0C	75.0C
OK	Board Temp 5	37.0 C	0.0C	70.0C	0.0C	75.0C
OK	Board Temp 6	42.0 C	0.0C	70.0C	0.0C	75.0C
OK	PCI-E 13 Temp	34.0 C	0.0C	85.0C	0.0C	90.0C

System Event Log

It records the event when sensor has an abnormal state. When the log matches the pre-defined alert, the system sends out the notification automatically, if it is pre-configured.

The screenshot shows the Dell System Event Log interface. On the left is a navigation menu with categories like BMC, Properties, Configuration, Network, Security, Users, Services, JPM, Sessions, Update, Utilities, Server Information, Power, Control, Power Consumption, PCIe, Power Consumption, Thermal, Fans, Temperatures, System Event Log (highlighted), Event Management, Platform Events, Trap Settings, Email Settings, and Port Map. The main area is titled 'System Event Log' and contains a table of log entries. Above the table are buttons for 'See Log', 'Clear Log', and 'Refresh'. The table has columns for Severity (with icons for error, warning, and info), Date/Time, and Description. The entries are sorted by date and time, showing various fan sensor and PSU events.

Severity	Date/Time	Description
[Error]	2000-08-26 09:55:24	FAN8: Fan sensor, failure event was asserted
[Warning]	2000-08-26 09:55:24	FAN8: Fan sensor, warning event was asserted
[Error]	2000-08-26 09:55:24	FAN7: Fan sensor, failure event was asserted
[Warning]	2000-08-26 09:55:24	FAN7: Fan sensor, warning event was asserted
[Error]	2000-08-26 09:55:24	FAN6: Fan sensor, failure event was asserted
[Warning]	2000-08-26 09:55:24	FAN6: Fan sensor, warning event was asserted
[Error]	2000-08-26 09:55:24	FAN5: Fan sensor, failure event was asserted
[Warning]	2000-08-26 09:55:24	FAN5: Fan sensor, warning event was asserted
[Error]	2000-08-26 09:55:24	FAN4: Fan sensor, failure event was asserted
[Warning]	2000-08-26 09:55:24	FAN4: Fan sensor, warning event was asserted
[Error]	2000-08-26 09:55:24	FAN3: Fan sensor, failure event was asserted
[Warning]	2000-08-26 09:55:24	FAN3: Fan sensor, warning event was asserted
[Error]	2000-08-26 09:55:24	FAN2: Fan sensor, failure event was asserted
[Warning]	2000-08-26 09:55:24	FAN2: Fan sensor, warning event was asserted
[Error]	2000-08-26 09:55:24	FAN1: Fan sensor, failure event was asserted
[Warning]	2000-08-26 09:55:24	FAN1: Fan sensor, warning event was asserted
[Error]	2000-08-26 09:58:03	PSU 1: Power Unit sensor, AC lost was asserted
[Error]	2000-08-26 09:50:51	Sys Per Monitor: Power Supply sensor, Predictive Failure was asserted

Event Management

Platform Events

A PEF can trigger an action and generate an alert when a critical hardware-related event occurs. For each PEF, you can choose the action to be taken when a platform event occurs.

You can also choose to generate and send an alert when a platform event occurs. In the Platform Events screen, you can enable the generation of platform event alerts globally by clicking **Global Alerting Enable**.

When you finish the configuration, click **Apply Changes**.

Platform Events

Global Alerting Enable Note (This enables/disables both PET and email alerts)

Filter Name	None	Power Cycle	Power Off	Generate PET
Fall Asset Filter	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="checkbox"/>
Temperature Warning Asset Filter	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="checkbox"/>
Temperature Critical Asset Filter	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="checkbox"/>

Traps Settings

In the **Trap Settings** page, you can set the IPv4 and IPv6 Destination List.

IPv6 and IPv4 are two completely separate protocols. IPv6 is not backwards compatible with IPv4, and IPv4 hosts and routers will not be able to deal directly with IPv6 traffic.

IPv6 has a significantly larger address space than IPv4. This results from the use of a 128-bit address, whereas IPv4 uses only 32 bits.

When you finish the configuration, click **Apply Changes**.

The screenshot shows the Dell iDRAC web interface for Trap Settings. The left sidebar contains a navigation menu with categories like BMC, Properties, Configuration, Network, Security, Users, Services, and BMC. The main content area is titled 'Trap Settings' and includes an 'Apply Changes' button in the top right. Below the title are two sections: 'IPv4 Destination List' and 'IPv6 Destination List'. Each section contains a table with columns for 'Enable', 'IP Address', and 'Send Test Trap'. The IPv4 list has four rows, with the first row enabled and the address '0.0.0.0'. The IPv6 list has four rows, all disabled. At the bottom, there is a 'Community String' section with a text input field containing 'public'.

Enable	IPv4 Address	Send Test Trap
<input checked="" type="checkbox"/>	0.0.0.0	Send Test Trap
<input type="checkbox"/>	0.0.0.0	Send Test Trap
<input type="checkbox"/>	0.0.0.0	Send Test Trap
<input type="checkbox"/>	0.0.0.0	Send Test Trap

Enable	IPv6 Address	Send Test Trap
<input type="checkbox"/>		Send Test Trap
<input type="checkbox"/>		Send Test Trap
<input type="checkbox"/>		Send Test Trap
<input type="checkbox"/>		Send Test Trap

Community String

Community Name: public

Email Settings

In order to enable email alert messages, you can configure e-mail settings by specifying the e-mail address, subject and message in the Email Settings screen. After you finish the configuration, click **Apply Change** to save the settings.

DELL Welcome root (Administrator) |

Email Settings Apply Changes

Destination Email Addresses

	Enable	Destination E-mail Address	Email Description	Test
Email Alert 1	<input type="checkbox"/>		ManagePoint email alert	Send Alert 1
Email Alert 2	<input type="checkbox"/>		ManagePoint email alert	Send Alert 2
Email Alert 3	<input type="checkbox"/>		ManagePoint email alert	Send Alert 3
Email Alert 4	<input type="checkbox"/>		ManagePoint email alert	Send Alert 4

SMTP (e-mail) Server IP Address

SMTP IP Address:

Port Map

You can identify the specified iPASS mapping to PCIe controller in the Port Map page. Click **Apply Change** to save the settings.

Port Map

Two host system in multi-host with two virtual switches inside, host 4 having taken over all of host 1's end-points

IPASS mapping to PCIe Controller

Control By	Jumper		BMC		IPASS	PCIe	IPASS	PCIe	IPASS	PCIe
	VS	VS	VS	VS						
Mapping 1	<input checked="" type="radio"/> 1	1,15	<input type="radio"/> 1	1,2,15,16	<input type="checkbox"/> 1	1,2,3,4,13,14,15,16	<input type="checkbox"/> 1	1,2,3,4,13,14,15,16	<input type="checkbox"/> 1	1,2,3,4,13,14,15,16
	<input type="radio"/> 5	2,16	<input type="radio"/> 5	N/A	<input type="checkbox"/> 5	N/A	<input type="checkbox"/> 5	N/A	<input type="checkbox"/> 5	N/A
Mapping 2	<input checked="" type="radio"/> 2	3,13	<input type="radio"/> 2	3,4,13,14	<input type="checkbox"/> 2	N/A	<input type="checkbox"/> 2	N/A	<input type="checkbox"/> 2	N/A
	<input type="radio"/> 6	4,14	<input type="radio"/> 6	N/A	<input type="checkbox"/> 6	N/A	<input type="checkbox"/> 6	N/A	<input type="checkbox"/> 6	N/A
Mapping 3	<input checked="" type="radio"/> 3	5,11	<input type="radio"/> 3	5,6,11,12	<input type="checkbox"/> 3	5,6,7,8,9,10,11,12	<input type="checkbox"/> 3	5,6,7,8,9,10,11,12	<input type="checkbox"/> 3	5,6,7,8,9,10,11,12
	<input type="radio"/> 7	6,12	<input type="radio"/> 7	N/A	<input type="checkbox"/> 7	N/A	<input type="checkbox"/> 7	N/A	<input type="checkbox"/> 7	N/A
Mapping 4	<input checked="" type="radio"/> 4	7,9	<input type="radio"/> 4	7,8,9,10	<input type="checkbox"/> 4	N/A	<input type="checkbox"/> 4	N/A	<input type="checkbox"/> 4	N/A
	<input type="radio"/> 8	8,10	<input type="radio"/> 8	N/A	<input type="checkbox"/> 8	N/A	<input type="checkbox"/> 8	N/A	<input type="checkbox"/> 8	N/A

Or you can change remote port mapping by running the port map script.

Download the script from support.dell.com.

Script usage

```
# sh ./port_map.sh bmc_ip bmc_un bmc_pw
```

Example

```
# sh ./port_map.sh 10.1.7.211 root root
```

You can reset each individual sled. See "Power control each slot command" section



NOTE: 8:1 feature is an optional feature and only supports on 8:1 ready system.

LED

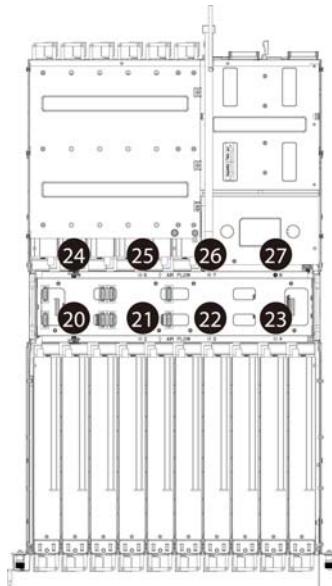
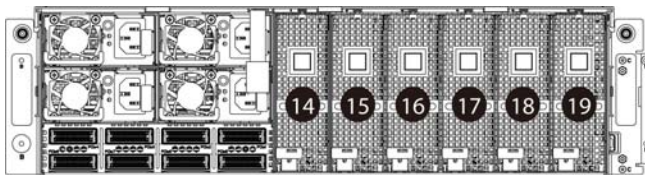
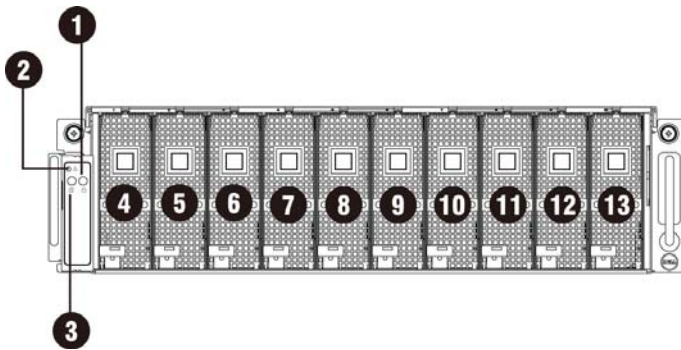
Table 4-1 lists the LED behavior

Table 4-1. LED Behavior Definition

	Color	Condition	When system issue error
Status LED	Amber	Blinking fast	PSU failure
		On	FAN failure or sensor error
		Blinking	PCIe card failure
Power LED	Green	Blinking	Power on failure or PCIe card missing
		On	Power on
FAN LED	Green	On	FAN normal
	Amber	On	FAN failure
ID LED	Blue	Blinking	Identifying chassis
PCIe power LED	Green	On	Power on

Blinking fast : 2Hz

Blinking : 0.5Hz



1	Power LED	15	PCIe power LED
2	System LED	16	PCIe power LED
3	UID LED	17	PCIe power LED
4	PCIe power LED	18	PCIe power LED
5	PCIe power LED	19	PCIe power LED
6	PCIe power LED	20	FAN LED 1
7	PCIe power LED	21	FAN LED 2
8	PCIe power LED	22	FAN LED 3
9	PCIe power LED	23	FAN LED 4
10	PCIe power LED	24	FAN LED 5
11	PCIe power LED	25	FAN LED 6
12	PCIe power LED	26	FAN LED 7
13	PCIe power LED	27	FAN LED 8
14	PCIe power LED		

User

Table 5-1 lists the User account information.

Table 5-1. User Account Information

Default User Table				
ID	Name	Password	Privilege	Status
1	Null	Null	Administrator	Disable
2	“root”	“root”	Administrator	Enabled
3	Null	Null	No Access	Disable
4	Null	Null	No Access	Disable
5	Null	Null	No Access	Disable
6	Null	Null	No Access	Disable
7	Null	Null	No Access	Disable
8	Null	Null	No Access	Disable
9	Null	Null	No Access	Disable
10	Null	Null	No Access	Disable
11	Null	Null	No Access	Disable
12	Null	Null	No Access	Disable
13	Null	Null	No Access	Disable
14	Null	Null	No Access	Disable
15	Null	Null	No Access	Disable
16	Null	Null	No Access	Disable

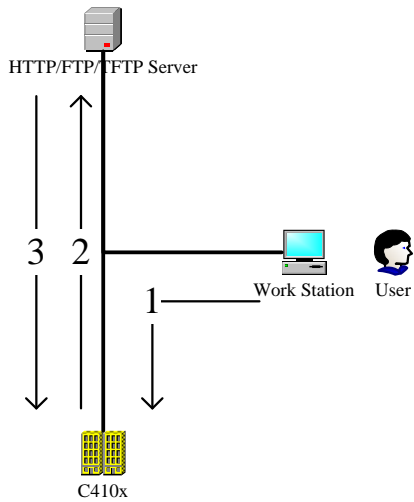
Firmware Update

Firmware Update by WebUI

- WebUI Update
 - Remote update can be achieved through the remote Web console.



- Remote Update
 - Remote update can be achieved through HTTP/FTP/TFTP.
 1. Put the firmware to HTTP/FTP/TFTP server.
 2. Run the script and wait for the BMC to download the firmware from Http/Ftp/ Tftp server.
 3. Complete the Update.



Download the script from support.dell.com.

Script usage

```
# sh ./fw_upgrade.sh bmc_ip bmc_sn bmc_pw fw_path
```

Example (TFTP)

```
# sh ./fw_upgrade.sh 10.1.7.211 root root tftp://10.1.7.136/fw.dcs
```

IPMI 1.5 / 2.0 Command Support List

This chapter lists all IPMI 2.0 mandatory, optional and OEM command support. For more detailed information please refer to the core IPMI commands support document.

IPMI Device Global Commands

Table 7-1. IPMI Device Globals

Command	NetFn	CMD	O/M	Supported
Get Device ID	App	01h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Cold Reset	App	02h	O	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Warm Reset	App	03h	O	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Get Self Test Results	App	04h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Manufacture Test On	App	05h	O	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Set ACPI Power State	App	06h	O	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get ACPI Power State	App	07h	O	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get Device GUID	App	08h	O	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Broadcast Commands				
Broadcast 'Get Device ID' BMC can process the	App	01h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

broadcast message, but cannot send broadcast to IPMB.				
---	--	--	--	--

BMC Device and Messaging Commands

Table 7-2. BMC Device and Messaging Commands

Command	NetFn	CMD	O/M	Supported
Set BMC Global Enables "Only Supported: SEL Logging Enable / Disable, Event message buffer Enable/disable"	App	2Eh	M	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Get BMC Global Enables	App	2Fh	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Clear Message Buffer Flags	App	30h	M	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Get Message Buffer Flags	App	31h	M	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Enable Message Channel Receive	App	32h	O	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Get Message	App	33h	M	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Send Message Not support Send Raw	App	34h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Read Event Message Buffer	App	35h	O	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Get BT Interface Capabilities	App	36h	M	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Get System GUID	App	37h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get Channel Authentication Capabilities	App	38h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get Session Challenge	App	39h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Activate Session Command	App	3Ah	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Set Session Privilege Level Command	App	3Bh	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Close Session	App	3Ch	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get Session Information	App	3Dh	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get Authentication Code	App	3Fh	O	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Command				
Set Channel Access Commands "Only support: always available	App	40h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get Channel Access Commands	App	41h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get Channel Info Command	App	42h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Set User Access Commands Not support user session limit (optional)	App	43h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get User Access Commands	App	44h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Set User Name Commands	App	45h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get User Name Commands	App	46h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Set User Password Commands	App	47h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Active Payload Command	App	48h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Deactivate Payload Command	App	49h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get Payload Activation Status	App	4Ah	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get Payload Instance Info Command	App	4Bh	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Set User Payload Access	App	4Ch	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get User Payload Access	App	4Eh	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get Channel Payload Support	App	4Fh	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get Channel Payload Version	App	50h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Master Write-Read I2C	App	52h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get Channel Cipher Suites	App	54h	O	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Suspend/Resume Payload Encryption	App	55h	O	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Set Channel Security Keys	App	56h	O	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get System Interface Capabilities	App	57h	O	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

BMC Watchdog Timer Commands

Table 7-3. BMC Watchdog Timer Commands

Command	NetFn	CMD	O/M	Supported
Reset Watchdog Timer	App	22h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Set Watchdog Timer Not support pre-timeout interrupt: "Messaging interrupt"	App	24h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get Watchdog Timer	App	25h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Chassis Commands

Table 7-4. Chassis Commands

Command	NetFn	CMD	O/M	Supported
Get Chassis Capabilities	Chassis	00h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get Chassis Status	Chassis	01h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Chassis Control Only support power on and power off	Chassis	02h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Chassis Reset This command is combined to Chassis Control command in IPMI v1.5	Chassis	03h	O	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Chassis Identify	Chassis	04h	O	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Set Chassis Capabilities	Chassis	05h	O	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Set Power Restore Policy	Chassis	06h	O	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get System Reset Cause	Chassis	07h	M	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Set System Boot Options	Chassis	08h	M	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Get System Boot Options	Chassis	09h	M	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Set Front Panel Button Enable	Chassis	0Ah	M	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Set Power Cycle Interval	Chassis	0Bh	M	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Get POH Counter	Chassis	0Fh	O	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Event Commands

Table 7-5. BMC Device and Messaging Commands

Command	NetFn	CMD	O/M		Supported
			Event Receiver	Event Generator	
Set Event Receiver	S/E	00h	M	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get Event Receiver	S/E	01h	M	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Platform Event	S/E	02h	M	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

SEL Commands

Table 7-6. SEL Commands

Command	NetFn	CMD	O/M	Supported
Get SEL Info	Storage	40h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get SEL Allocation Info	Storage	41h	O	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Reserve SEL	Storage	42h	O	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get SEL Entry	Storage	43h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Add SEL Entry	Storage	44h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Partial Add SEL Entry	Storage	45h	M	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Delete SEL Entry (* will be implemented after	Storage	46h	O	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

RFD)				
Clear SEL	Storage	47h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get SEL Time	Storage	48h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Set SEL Time	Storage	49h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get Auxiliary Log Status	Storage	5Ah	O	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Set Auxiliary Log Status	Storage	5Bh	O	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SDR Repository Commands

Table 7-7. SDR Repository Commands

Command	NetFn	CMD	O/M	Supported
Get SEL Info	Storage	40h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get SEL Allocation Info	Storage	41h	O	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Reserve SEL	Storage	42h	O	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get SEL Entry	Storage	43h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Add SEL Entry	Storage	44h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Partial Add SEL Entry	Storage	45h	M	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Delete SEL Entry (* will be implemented after RFD)	Storage	46h	O	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Clear SEL	Storage	47h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get SEL Time	Storage	48h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Set SEL Time	Storage	49h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get Auxiliary Log Status	Storage	5Ah	O	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Set Auxiliary Log Status	Storage	5Bh	O	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SDR Repository Commands

Table 7-8. SDR Repository Commands

Command	NetFn	CMD	O/M	Supported?
Get SDR Repository Info	Storage	20h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get SDR Repository Allocation Info	Storage	21h	O	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Reserve SDR Repository	Storage	22h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get SDR	Storage	23h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Add SDR	Storage	24h	M	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Partial ADD SDR	Storage	25h	O	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Delete SDR	Storage	26h	O	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Clear SDR Repository	Storage	27h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get SDR Repository Time	Storage	28h	O	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Set SDR Repository Time	Storage	29h	O	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Enter SDR Repository Update Mode	Storage	2Ah	O	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Exit SDR Repository Update Mode	Storage	2Bh	O	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Run Initialization Agent	Storage	2Ch	O	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

FRU Inventory Device Commands

Table 7-9. FRU Inventory Device Commands

Command	NetFn	CMD	O/M	Supported
Get FRU Inventory Area Info	Storage	10h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Read FRU Inventory Data	Storage	11h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Write FRU Inventory Data	Storage	12h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Sensor Device Commands

Table 7-10. Sensor Device Commands

Command	NetFn	CMD	O/M	Supported
Get Device SDR Info	S/E	20h	O	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Get Device SDR	S/E	21h	O	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Reserve Device SDR Repository	S/E	22h	O	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Get Sensor Reading Factors	S/E	23h	O	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Set Sensor Hysteresis	S/E	24h	O	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get Sensor Hysteresis	S/E	25h	O	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Set Sensor Threshold	S/E	26h	O	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get Sensor Threshold	S/E	27h	O	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Set Sensor Event Enable	S/E	28h	O	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get Sensor Event Enable	S/E	29h	O	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Re-arm Sensor Events	S/E	2Ah	O	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get Sensor Event Status	S/E	2Bh	O	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get Sensor Reading	S/E	2Dh	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Set Sensor Type	S/E	2Eh	O	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Get Sensor Type	S/E	2Fh	O	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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LAN Commands

Table 7-11. LAN Commands

Command	NetFn	CMD	O/M	Supported
Set LAN Configuration Parameters (Note: Parameter 9 and 25 are not supported.)	Transport	01h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get LAN Configuration Parameters (Note: Parameter 9 and 25 are not supported.)	Transport	02h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Suspend BMC ARP	Transport	03h	O	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Get IP/UDP/RMCP Statistics	Transport	04h	O	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

PEF/PET Alerting Commands

Table 7-12. PEF/PET Alerting Commands

Command	NetFn	CMD	O/M	Supported
Get PEF Capabilities	S/E	10h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Arm PEF Postpone Timer	S/E	11h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Set PEF Configuration Parameters Does not support parameter 14, 15.	S/E	12h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get PEF Configuration Parameters	S/E	13h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Does not support parameter 14, 15.				
Set Last Processed Event ID	S/E	14h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Get Last Processed Event ID	S/E	15h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Alert Immediate	S/E	16h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
PET Acknowledge	S/E	17h	M	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

OEM Command List

Port Map Configure Command

Table 7-13-1. Port Map Configure Command

Port Map Configure Command	NetFn	CMD
Fail Over OEM command	34h	C8h

Detail Information

Table 7-13-2. Port Map Configure Command Detail Information

Failover OEM command	Byte	Data Field
Request Data	1	Bit7 : Get/Set configure 0 : Get configure 1 : Set configure Bit6 ~ bit4: Control by 01 : Jumper 02 : BMC Bit3 : Enable/Disable Fail Over 1 0 : Enable(1 to 4) 1 : Disable(1 to 2)

		Bit2 : Disable/Enable Fail Over 2 0 : Enable(1 to 4) 1 : Disable(1 to 2) Bit1 : Disable/Enable Fail Over 3 0 : Enable(1 to 4) 1 : Disable(1 to 2) Bit0 : Disable/Enable Fail Over 4 0 : Enable(1 to 4) 1 : Disable(1 to 2)
	2	Optional Bit7 ~ bit4: slot 1,2,3,4,13,14,15,16 01 : 1:2 & 1:4 mode 02 : 1:8 mode Bit3 ~ bit0: slot 5,6,7,8,9,10,11,12 01 : 1:2 & 1:4 mode 02 : 1:8 mode
Response Data	1	Completion code
	2	Bit7 ~ bit4: Control by 01 : Jumper 02 : BMC Bit3 : Enable/Disable Fail Over 1 0 : Enable(1 to 4) 1 : Disable(1 to 2) Bit2 : Disable/Enable Fail Over 2 0 : Enable(1 to 4) 1 : Disable(1 to 2) Bit1 : Disable/Enable Fail Over 3 0 : Enable(1 to 4) 1 : Disable(1 to 2) Bit0 : Disable/Enable Fail Over 4 0 : Enable(1 to 4)

		1 : Disable(1 to 2)
	3	Optional Bit7 ~ bit4: slot 1,2,3,4,13,14,15,16 00 : Not support 1:8 mode 01 : 1:2 & 1:4 mode 02 : 1:8 mode Bit3 ~ bit0: slot 5,6,7,8,9,10,11,12 00 : Not support 1:8 mode 01 : 1:2 & 1:4 mode 02 : 1:8 mode

Power Control Each Slot Command

Table 7-13-3. Power Control Each Slot Command

Port Map Configure Command	NetFn	CMD
Slot power control OEM command	30h	F0h

Detail Information

Table 7-13-4. Power Control Each Slot Command Detail Information

Slot power control OEM command	Byte	Data Field
Request Data	1	Bit7 : Slot 8 Bit6 : Slot 7 Bit5 : Slot 6 Bit4 : Slot 5 Bit3 : Slot 4 Bit2 : Slot 3 Bit1 : Slot 2 Bit0 : Slot 1

	2	Bit7 : Slot 16 Bit6 : Slot 15 Bit5 : Slot 14 Bit4 : Slot 13 Bit3 : Slot 12 Bit2 : Slot 11 Bit1 : Slot 10 Bit0 : Slot 9
Response Data	1	Completion code

System Event

When the system events log is full, you must manually clear the log.

Table 8-1. System Event

Sensor name	Event	Flag
FB Temp	UC(50), UNC(45)	Assert, De-assert
Board Temp 1	UC(75), UNC(70)	Assert, De-assert
Board Temp 2	UC(75), UNC(70)	Assert, De-assert
Board Temp 3	UC(75), UNC(70)	Assert, De-assert
Board Temp 4	UC(75), UNC(70)	Assert, De-assert
Board Temp 5	UC(75), UNC(70)	Assert, De-assert
Board Temp 6	UC(75), UNC(70)	Assert, De-assert
PCIE 1 Temp	UC(90), UNC(85)	Assert, De-assert
PCIE 2 Temp	UC(90), UNC(85)	Assert, De-assert
PCIE 3 Temp	UC(90), UNC(85)	Assert, De-assert
PCIE 4 Temp	UC(90), UNC(85)	Assert, De-assert
PCIE 5 Temp	UC(90), UNC(85)	Assert, De-assert
PCIE 6 Temp	UC(90), UNC(85)	Assert, De-assert
PCIE 7 Temp	UC(90), UNC(85)	Assert, De-assert
PCIE 8 Temp	UC(90), UNC(85)	Assert, De-assert
PCIE 9 Temp	UC(90), UNC(85)	Assert, De-assert
PCIE 10 Temp	UC(90), UNC(85)	Assert, De-assert
PCIE 11 Temp	UC(90), UNC(85)	Assert, De-assert
PCIE 12 Temp	UC(90), UNC(85)	Assert, De-assert
PCIE 13 Temp	UC(90), UNC(85)	Assert, De-assert
PCIE 14 Temp	UC(90), UNC(85)	Assert, De-assert
PCIE 15 Temp	UC(90), UNC(85)	Assert, De-assert

PCIE 16 Temp	UC(90), UNC(85)	Assert, De-assert
PCIE 1 Watt	UC(252), UNC(240)	Assert, De-assert
PCIE 2 Watt	UC(252), UNC(240)	Assert, De-assert
PCIE 3 Watt	UC(252), UNC(240)	Assert, De-assert
PCIE 4 Watt	UC(252), UNC(240)	Assert, De-assert
PCIE 5 Watt	UC(252), UNC(240)	Assert, De-assert
PCIE 6 Watt	UC(252), UNC(240)	Assert, De-assert
PCIE 7 Watt	UC(252), UNC(240)	Assert, De-assert
PCIE 8 Watt	UC(252), UNC(240)	Assert, De-assert
PCIE 9 Watt	UC(252), UNC(240)	Assert, De-assert
PCIE 10 Watt	UC(252), UNC(240)	Assert, De-assert
PCIE 11 Watt	UC(252), UNC(240)	Assert, De-assert
PCIE 12 Watt	UC(252), UNC(240)	Assert, De-assert
PCIE 13 Watt	UC(252), UNC(240)	Assert, De-assert
PCIE 14 Watt	UC(252), UNC(240)	Assert, De-assert
PCIE 15 Watt	UC(252), UNC(240)	Assert, De-assert
PCIE 16 Watt	UC(252), UNC(240)	Assert, De-assert
PSU 1 Watt	UC(1328), UNC(1264)	Assert, De-assert
PSU 2 Watt	UC(1328), UNC(1264)	Assert, De-assert
PSU 3 Watt	UC(1328), UNC(1264)	Assert, De-assert
PSU 4 Watt	UC(1328), UNC(1264)	Assert, De-assert
FAN1	LC(500), LNC(800)	Assert, De-assert
FAN2	LC(500), LNC(800)	Assert, De-assert
FAN3	LC(500), LNC(800)	Assert, De-assert
FAN4	LC(500), LNC(800)	Assert, De-assert
FAN5	LC(500), LNC(800)	Assert, De-assert
FAN6	LC(500), LNC(800)	Assert, De-assert
FAN7	LC(500), LNC(800)	Assert, De-assert
FAN8	LC(500), LNC(800)	Assert, De-assert
PCIE 1	Plug, Unplug	N/A

PCIE 2	Plug, Unplug	N/A
PCIE 3	Plug, Unplug	N/A
PCIE 4	Plug, Unplug	N/A
PCIE 5	Plug, Unplug	N/A
PCIE 6	Plug, Unplug	N/A
PCIE 7	Plug, Unplug	N/A
PCIE 8	Plug, Unplug	N/A
PCIE 9	Plug, Unplug	N/A
PCIE 10	Plug, Unplug	N/A
PCIE 11	Plug, Unplug	N/A
PCIE 12	Plug, Unplug	N/A
PCIE 13	Plug, Unplug	N/A
PCIE 14	Plug, Unplug	N/A
PCIE 15	Plug, Unplug	N/A
PCIE 16	Plug, Unplug	N/A
PSU 1	Plug, Unplug	N/A
	AC fail, DC fail	Assert, De-assert
PSU 2	Plug, Unplug	N/A
	AC fail, DC fail	Assert, De-assert
PSU 3	Plug, Unplug	N/A
	AC fail, DC fail	Assert, De-assert
PSU 4	Plug, Unplug	N/A
	AC fail, DC fail	Assert, De-assert
Sys Pwr Monitor	System on fail	Assert

IP Control By Button

Static/DHCP IP Controlled by Front Panel Button

To switch from DHCP to static or vice versa:

1. Hold down the ID button for 5 seconds.
2. While pressing the ID button, press and hold the power button for 5 seconds.
3. Release the power button, and then the ID button.
4. It will take ~30 seconds to change the configuration.
5. The ID light indicates which mode has been selected:
 - Solid for 5 seconds indicates static IP
 - Flashing for 5 seconds indicates DHCP


Every time you change the IP mode to static, BMC IP will restore to the default settings. Default static IP address is “192.168.0.120”.

The power button does not work during the power on/off period.

Getting Help

Contacting Dell

For customers in the United States, call 800-WWW-DELL (800-999-3355).

 **NOTE:** If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog.

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues:

- 1 Visit **support.dell.com**.
- 2 Click your country/region at the bottom of the page. For a full listing of country/region click **All**.
- 3 Click **All Support** from **Support** menu.
- 4 Select the appropriate service or support link based on your need.
- 5 Choose the method of contacting Dell that is convenient for you.

Index

B

BMC Key Features, 6

C

Cautions, 2

Configuration, 11

contacting Dell, 52

E

Email Settings, 28

Event Management, 26

F

Firmware Update, 34

G

Getting Help, 52

GPU, 22

I

Introduction, 6

IP Control By Button, 51

IPMI, 15

IPMI 1.5 / 2.0 Command Support List,
36

L

LED, 30

N

Network, 11

Notes, 2

P

Platform Events, 26

Port Map, 29

Power, 20

Power Consumption, 21

Properties, 10

R

Remote Management Console, 8

S

Security, 12

Services, 14

Sessions, 17

System Event Log, 25

T

Traps Settings, 27

U

Updates, 18

Users, 13

Utilities, 19

W

Warnings, 2

Web UI, 7



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