BullSequana Edge

Server Hardware Console Reference Guide

86 A1 05FS 04 - July 2020

Atos

Printed in France

Trademarks and Acknowledgements

Hardware

July 2020

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Preface

This guide explains how to use the Server Hardware Console (SHC) to manage a BullSequana Edge server.

See	The Bull support web site for the most up-to-date product information, documentation, firmware updates, software fixes and service offers: http://support.bull.com

Intended Readers

This guide is intended for use by system administrators and operators

Chapter 1. Getting started

1.1. Overview

The BullSequana Edge Server Hardware Console (SHC) provides a web based interface to manage, configure and monitor the server.

The SHC is powered by OpenBMC, an open source implementation of the Baseboard Management Controller (BMC) firmware stack.

1.2. Connecting to the Server Hardware Console (SHC)

Important	**The https protocol must always be used to connect to the SHC.**

Prerequistes

A laptop is connected to the server

A Chrome or Firefox browser is installed on the laptop

The server BMC has an IP address allocated

See	The Getting Started Guide for more information about allocating an IP address to the BMC.

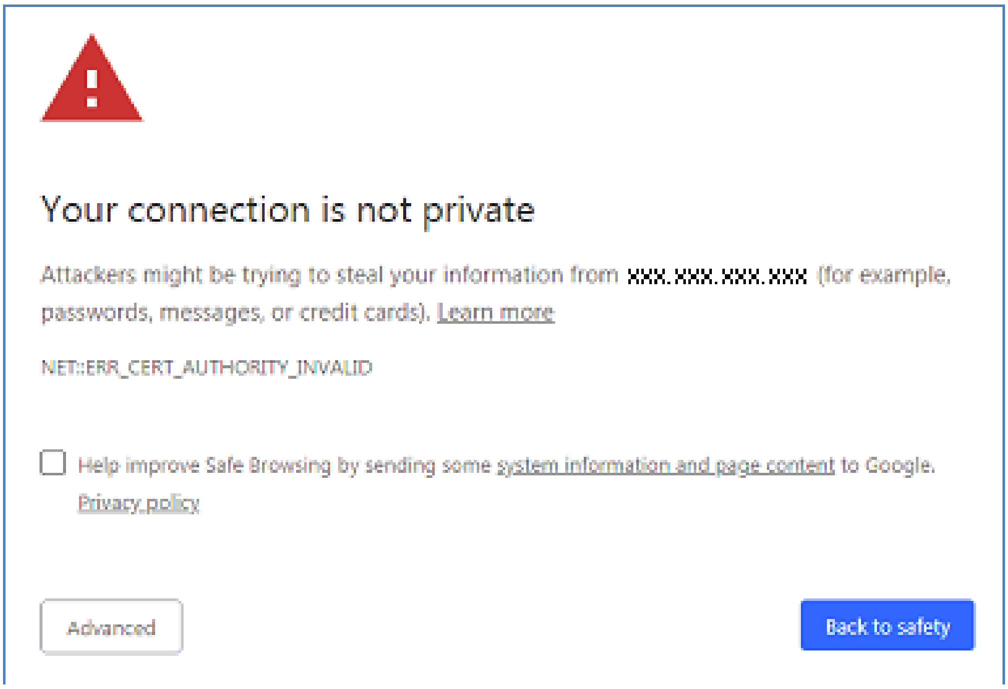
Procedure

1. **Enter the BMC IP address into the web browser address bar using the https protocol**

Note	The BMC IP address allocated will be in the https://192.168.xxx.xxx or the https://169.254.xxx.xxx ranges.

2. **Ignore any security warning messages**

   1. The following screens are displayed for the first connection with the Chrome browser.



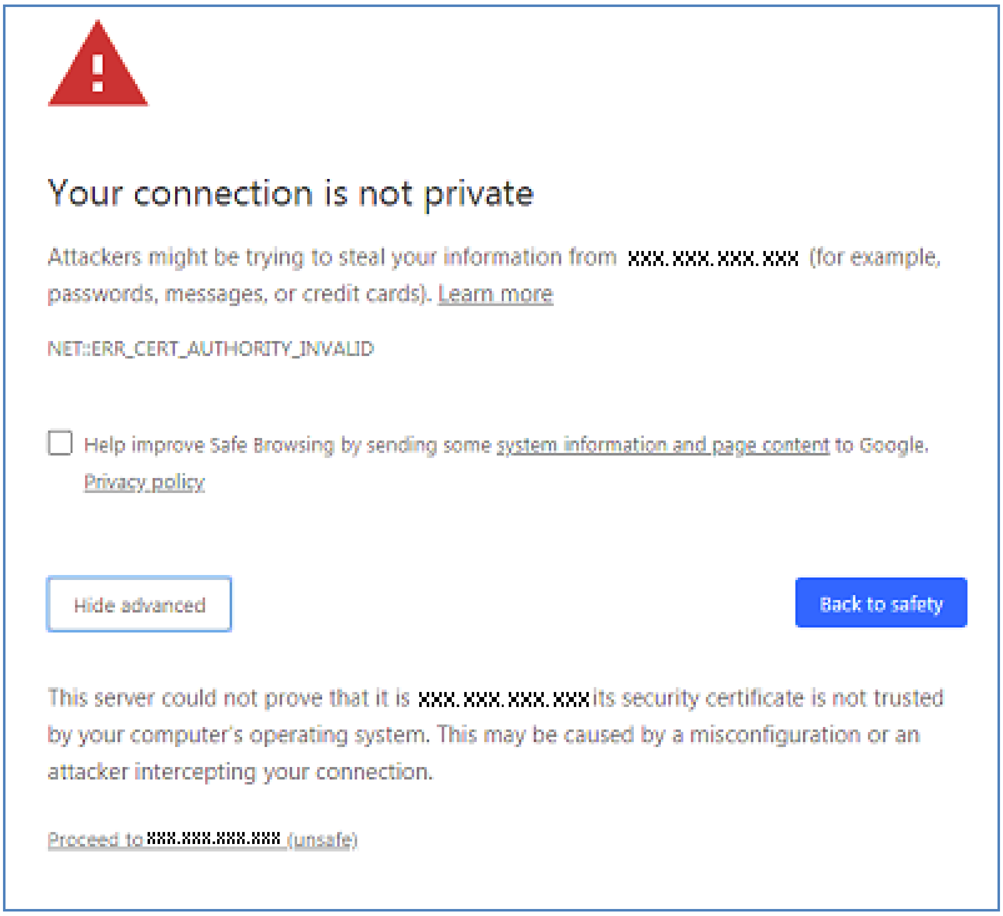
Your connection is not private

Attackers might be trying to steal your information from xxx.xxx.xxx.xxx (for example, passwords, messages, or credit cards). Learn more

NET::ERR_CERT_AUTHORITY_INVALID

☐ Help improve Safe Browsing by sending some system information and page content to Google. Privacy policy

2. Click **Advanced.**



Your connection is not private

Attackers might be trying to steal your information from XXX.XXX.XXX.XXX (for example, passwords, messages, or credit cards). Learn more

NET::ERR_CERT_AUTHORITY_INVALID

☐ Help improve Safe Browsing by sending some system information and page content to Google. Privacy policy

This server could not prove that it is XXX.XXX.XXX.XXX its security certificate is not trusted by your computer's operating system. This may be caused by a misconfiguration or an attacker intercepting your connection.

Proceed to XXX.XXX.XXX.XXX (unsafe)

3. Click **Proceed to XXX.XXX.XXX.XXX**
4. The Server Hardware Console (SHC) authentication page opens.

1.3. Logging in to the Server Hardware Console (SHC)

Prerequistes

A laptop is connected to the server

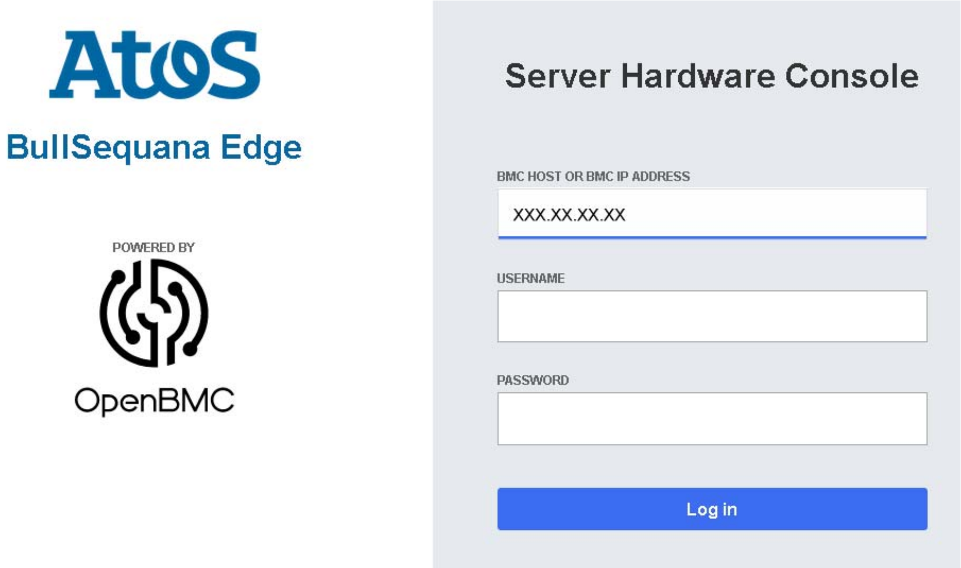
A Chrome or Firefox browser is installed on the laptop

The BMC has an IP address allocated

Procedure

1. **Connect to the SHC**

   The Server Hardware Console (SHC) authentication page opens.



Server Hardware Console

BMC HOST OR BMC IP ADDRESS: XXX.XX.XX.XX

USERNAME

PASSWORD

Server Hardware Console (SHC)	
Username	admin
Password	pass

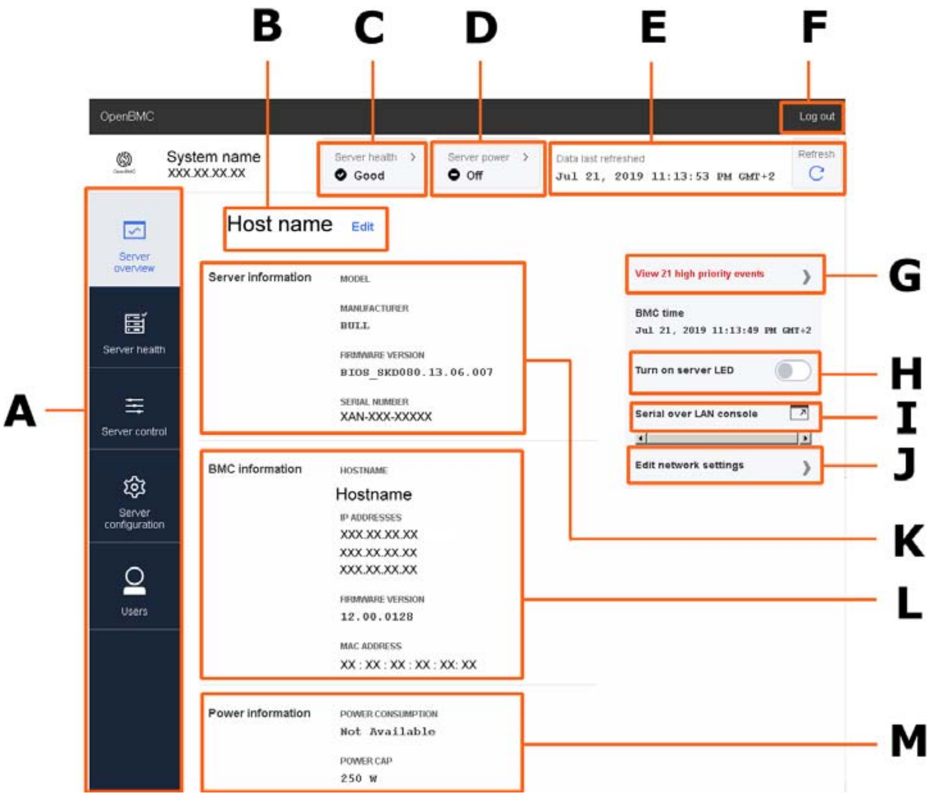
2. **Complete the Username and Password fields and click Log in.**

Important **It is strongly recommended to change the default user password once initial setup is completed, taking care to record the new account details for subsequent connections.**

1.4. The Server overview page

The Server overview page provides a summary of the BullSequana Edge system details and status. It also includes links to some server management and configuration features.

Note Some operations, for example, turning on the server LED, can be performed both from the shortcut (H) on the Server overview page or via the feature tab on the left hand side (A).



System name XXX.XX.XX.XX

Server health: Good

Server power: Off

Data last refreshed: Jul 21, 2019 11:13:53 PM GMT+2

Host name

View 21 high priority events

BMC time: Jul 21, 2019 11:13:49 PM GMT+2

Turn on server LED

Serial over LAN console

Edit network settings

Server information
MODEL
MANUFACTURER: BULL
FIRMWARE VERSION: BIOS_SKD080.13.06.007
SERIAL NUMBER: XAN-XXX-XXXXX

BMC information
HOSTNAME: Hostname
IP ADDRESSES: XXX.XX.XX.XX
XXX.XX.XX.XX
XXX.XX.XX.XX
FIRMWARE VERSION: 12.00.0128
MAC ADDRESS: XX : XX : XX : XX : XX: XX

Power information
POWER CONSUMPTION: Not Available
POWER CAP: 250 W

Mark	Description
A	Feature tabs with sub-items used to monitor, manage and configure a BullSequana Edge server.
B	The host name for the server. Click **Edit** to change the host name.
C	Summary of the server health status with a link to the Event log page
D	Server power state
E	Refresh button for the overview page with the date and time of the last refresh
F	Log out button
G	Number of high priority SELs. Click the link for more details.
H	Button to turn on the server identification LED on the front of the server
I	Link to the Serial over LAN (SoL) console page
J	Link to the Network Settings page
K	Summary of the server information
L	Summary of the BMC information
M	Summary of the power information

1.5. Server Hardware Console (SHC) features

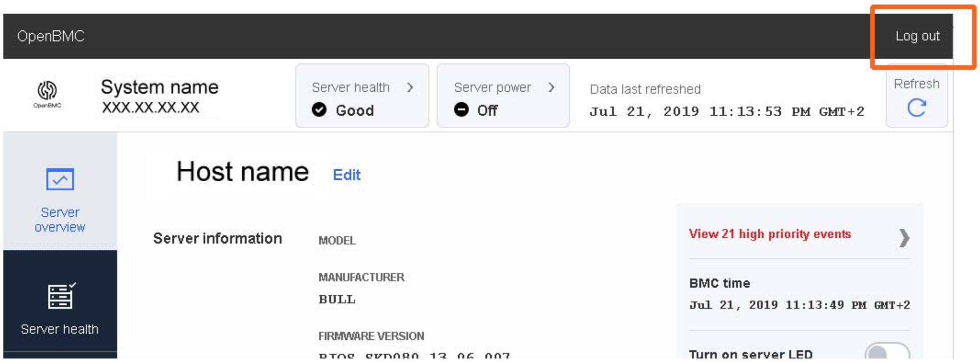
The SHC tabs include features to:

- Provide an overview of the server
- Monitor the health of the server
- Manage the server
- Configure the server
- Configure user settings for the server

Tab	**Menu item**
Server overview	Server information
	BMC information
	Power information
	Events
Server health	Event log
	Hardware status
	Sensors
	System logs
Server control	Server power operations
	Manage power usage
	Server LED
	Reboot BMC
	Serial over LAN console
	KVM
	Intrusion Detection
Server configuration	Network settings
	Firmware
	Date and time settings
Users	Manage user accounts

1.6. Stopping the Server Hardware Console (SHC)

Click the **Logout** button in the top right corner to stop the SHC.



System name
XXX.XX.XX.XX

Server health: Good

Server power: Off

Data last refreshed
Jul 21, 2019 11:13:53 PM GMT+2

Host name

Server information

MODEL

MANUFACTURER
BULL

FIRMWARE VERSION

BMC time
Jul 21, 2019 11:13:49 PM GMT+2

Chapter 2. Monitoring the server

2.1. Checking the System Event Logs (SELs)

Prerequisites

A laptop computer with the Chrome or Firefox browser installed

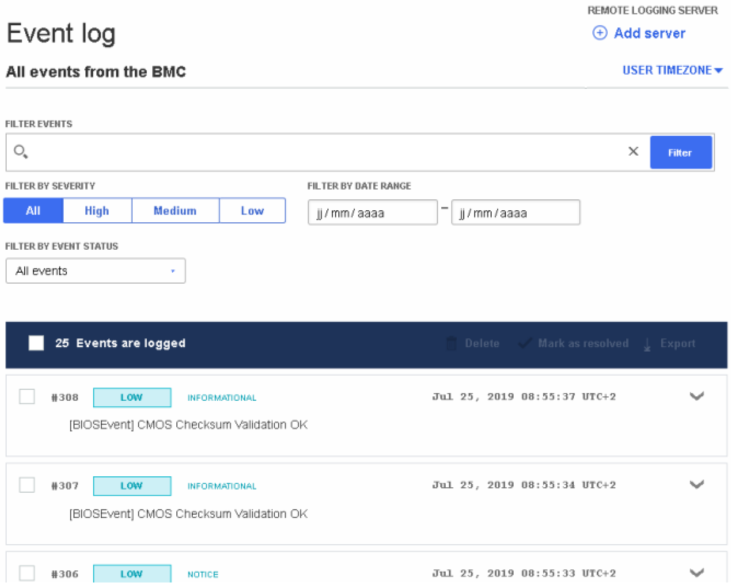
The laptop is connected to the server BMC port

The server BMC has an IP address allocated

The server is in the powered on state

Procedure

1. From the **Server health** tab, click **Event log**. The **Event log** page opens.

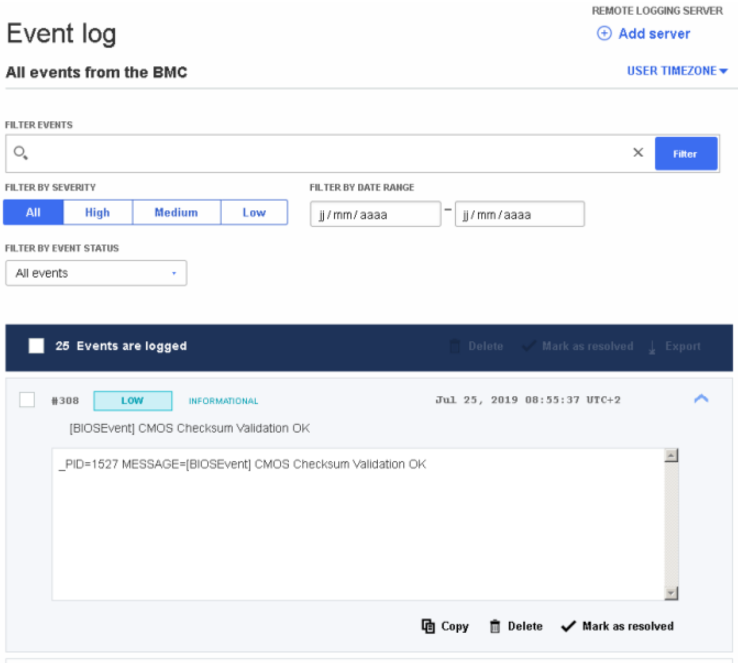


25 Events are logged

```
#308  LOW  INFORMATIONAL    Jul 25, 2019 08:55:37 UTC+2
      [BIOSEvent] CMOS Checksum Validation OK
#307  LOW  INFORMATIONAL    Jul 25, 2019 08:55:34 UTC+2
      [BIOSEvent] CMOS Checksum Validation OK
#306  LOW  NOTICE           Jul 25, 2019 08:55:33 UTC+2
```

2. Enter the event name or number in the search field.
3. Set the severity, date range and status parameters.
4. Click **Filter**.

5. Click the downward pointing arrow on the right hand side to expand the information details for a log.



Event log

All events from the BMC

All events

☐ 25 Events are logged

```
☐ #308  LOW  INFORMATIONAL    Jul 25, 2019 08:55:37 UTC+2
[BIOSEvent] CMOS Checksum Validation OK
_PID=1527 MESSAGE=[BIOSEvent] CMOS Checksum Validation OK
```

6. Use the available options to **Copy**, **Delete** or **Mark as resolved** for events that were in a High or Medium state and have been corrected.
7. **Export** the logs, as required.

Note The SELS are exported as .json data files.

2.2. Adding a log server

Prerequisites

A laptop computer with the Chrome or Firefox browser installed

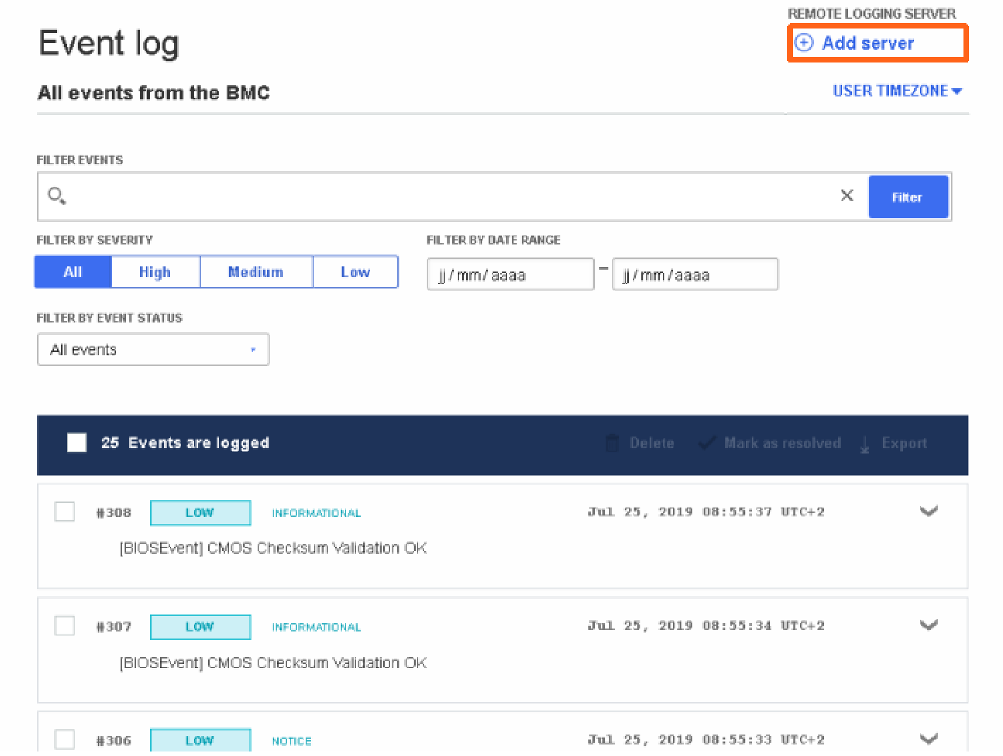
The laptop is connected to the BullSequana Edge BMC port

The server BMC has an IP address allocated

The BullSequana Edge server is in the powered on state

Procedure

1. From the **Server health** tab, click **Event log**. The **Event log** page opens.
2. Click **Add server**.



☐ 25 Events are logged

☐ #308 LOW INFORMATIONAL Jul 25, 2019 08:55:37 UTC+2

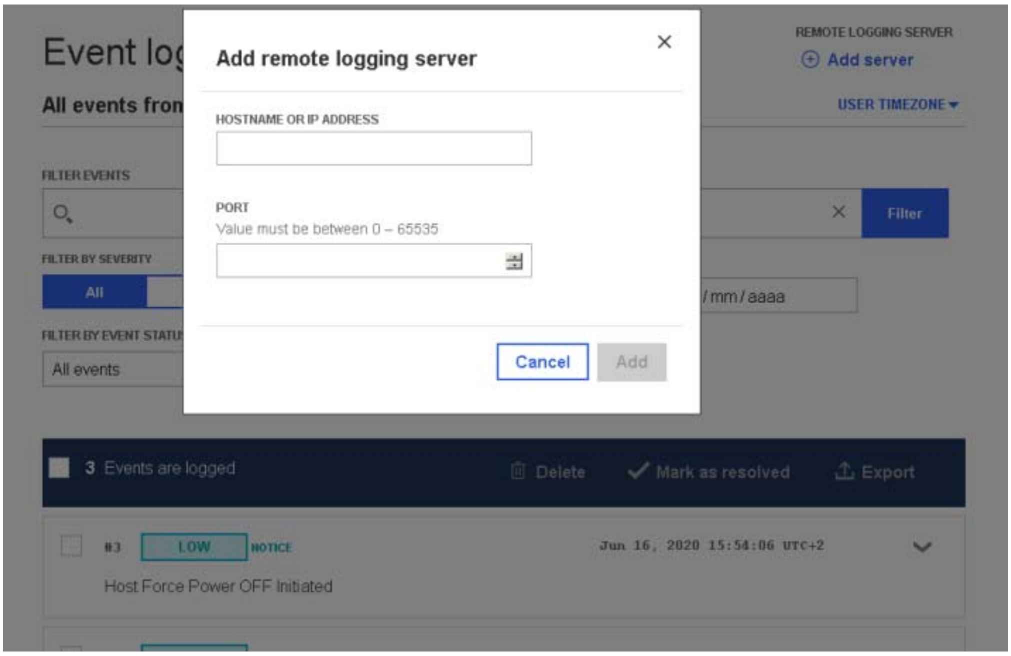
[BIOSEvent] CMOS Checksum Validation OK

☐ #307 LOW INFORMATIONAL Jul 25, 2019 08:55:34 UTC+2

[BIOSEvent] CMOS Checksum Validation OK

☐ #306 LOW NOTICE Jul 25, 2019 08:55:33 UTC+2

3. Enter the server host name or IP address and port parameters.



4. Click **Add**.

2.3. Checking the hardware status

Prerequisites

A laptop computer with the Chrome or Firefox browser installed

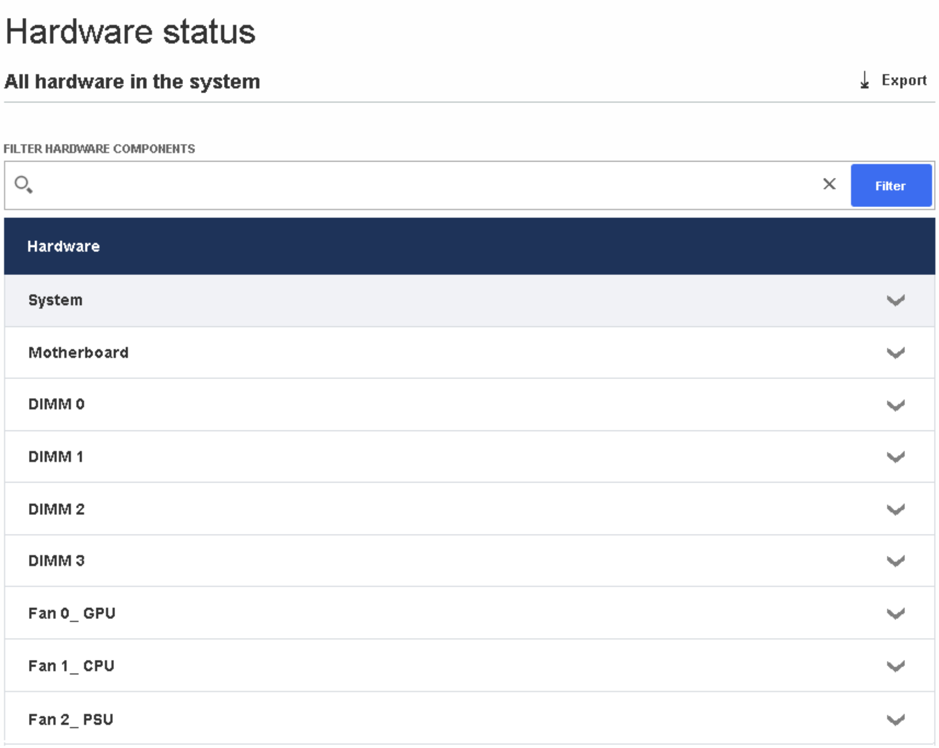
The laptop is connected to the server BMC port

The server BMC has an IP address allocated

The server is in the powered on state

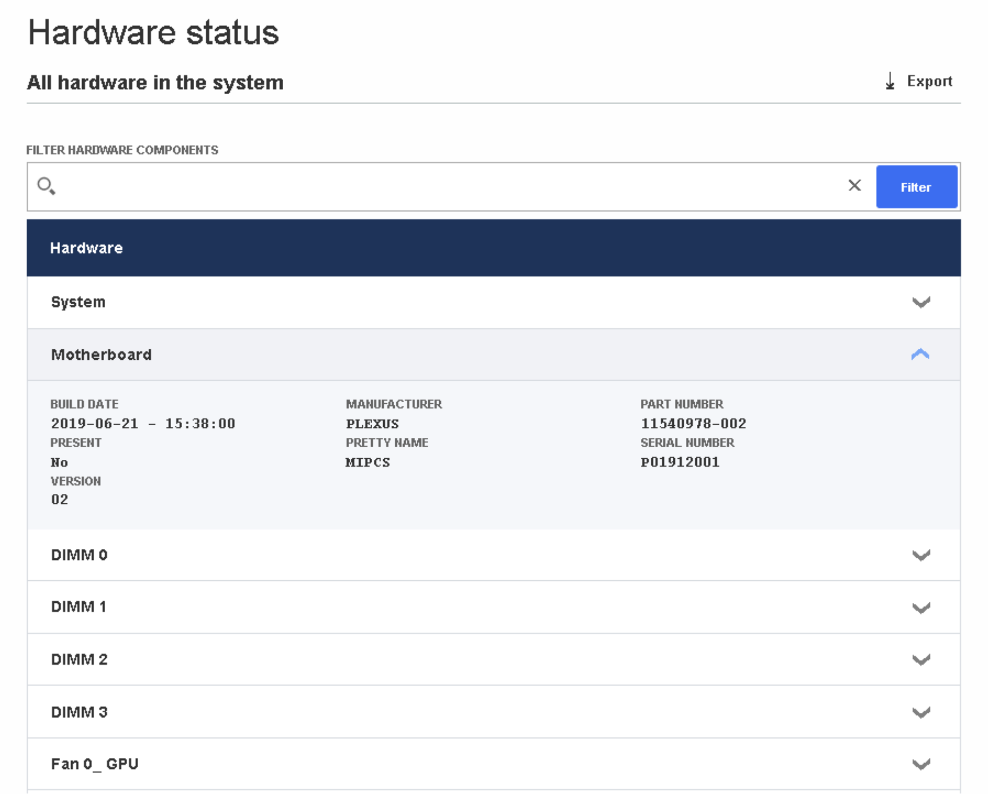
Procedure

1. From the **Server health** tab, click **Hardware status**. The **Hardware status** page opens.



2. Enter the hardware component in the search field.
3. Click **Filter**.

4. Click the downward pointing arrow on the right hand side to expand the information details for a component. Full details including the presence status for the component is displayed.



BUILD DATE
2019-06-21 - 15:38:00
PRESENT
No
VERSION
02

MANUFACTURER
PLEXUS
PRETTY NAME
MIPCS

PART NUMBER
11540978-002
SERIAL NUMBER
P01912001

5. **Export** the hardware details, as required.

Note The hardware details are exported as .json data files.

2.4. Collecting BMC logs

Prerequisites

A laptop computer with the Chrome or Firefox browser installed

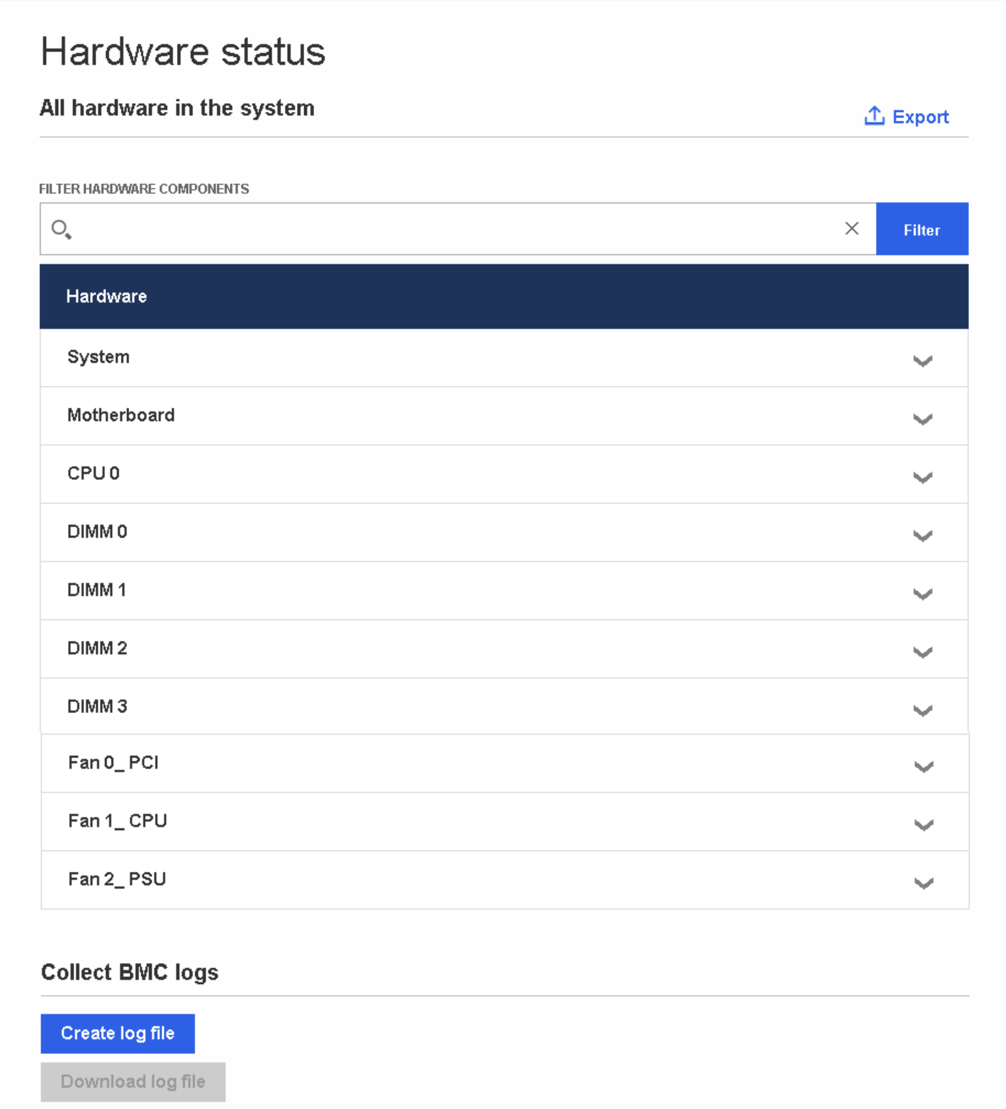
The laptop is connected to the BullSequana Edge BMC port

The server BMC has an IP address allocated

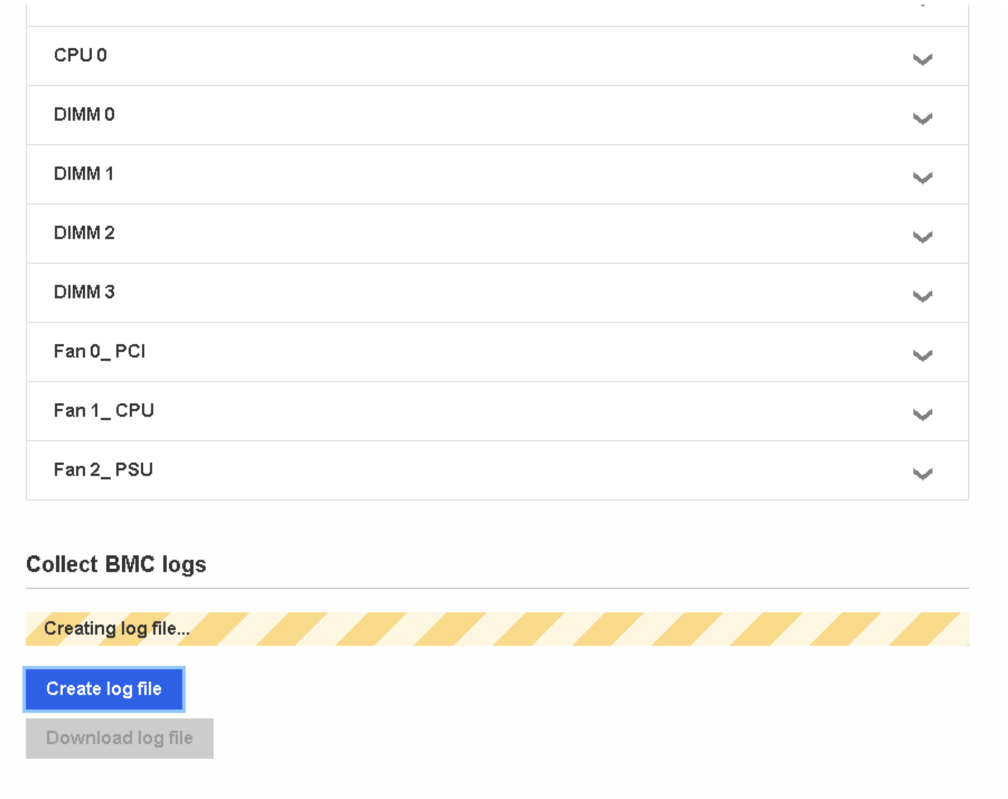
The BullSequana Edge server is in the powered on state

Procedure

1. From the **Server health** tab, click **Hardware status**. The **Hardware status** page opens.

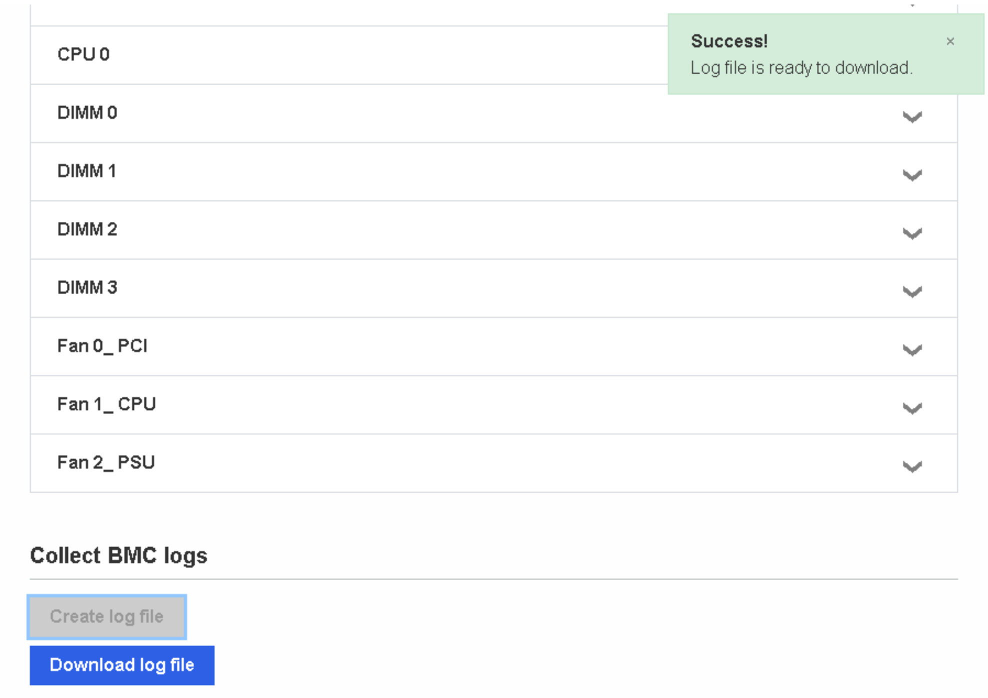


2. Click **Create log file**.



Creating log file...

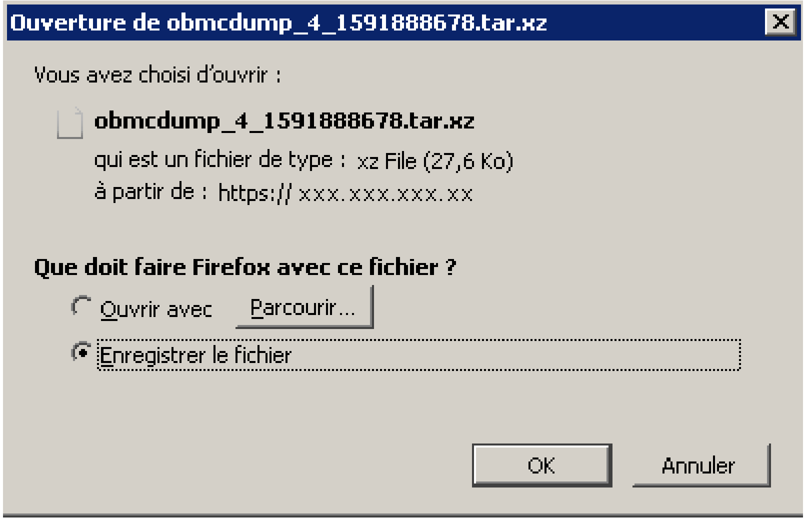
3. Wait for the BMC log file to be created.



Success!
Log file is ready to download.

4. When the **Success** message appears, click **Download log file**

5. Save the archive of the BMC logs, as required.



Ouverture de obmcdump_4_1591888678.tar.xz

Vous avez choisi d'ouvrir :

obmcdump_4_1591888678.tar.xz

qui est un fichier de type : xz File (27,6 Ko)

à partir de : https:// xxx.xxx.xxx.xx

Que doit faire Firefox avec ce fichier ?

○ Ouvrir avec

● Enregistrer le fichier

2.5. Checking the sensors

Prerequisites

A laptop computer with the Chrome or Firefox browser installed

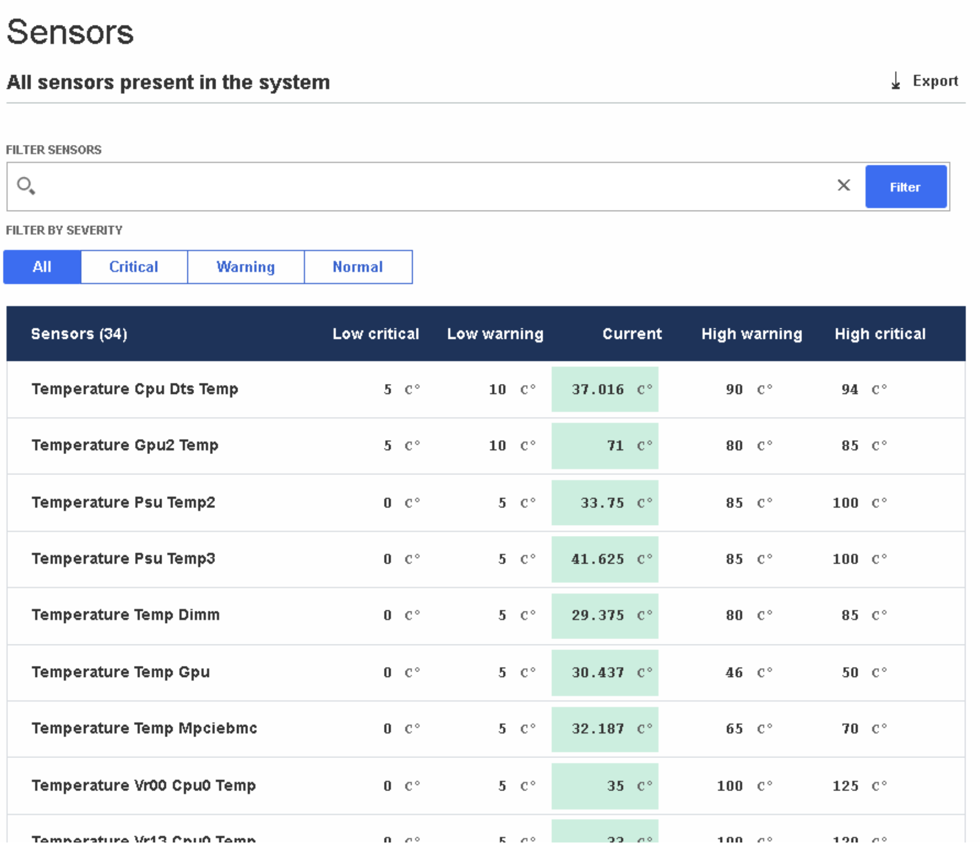
The laptop is connected to the server BMC port

The server BMC has an IP address allocated

The server is in the powered on state

Procedure

1. From the **Server health** tab, click **Sensors**. The **Sensors** page opens.



Sensors (34)	Low critical	Low warning	Current	High warning	High critical
Temperature Cpu Dts Temp	5 C°	10 C°	37.016 C°	90 C°	94 C°
Temperature Gpu2 Temp	5 C°	10 C°	71 C°	80 C°	85 C°
Temperature Psu Temp2	0 C°	5 C°	33.75 C°	85 C°	100 C°
Temperature Psu Temp3	0 C°	5 C°	41.625 C°	85 C°	100 C°
Temperature Temp Dimm	0 C°	5 C°	29.375 C°	80 C°	85 C°
Temperature Temp Gpu	0 C°	5 C°	30.437 C°	46 C°	50 C°
Temperature Temp Mpciebmc	0 C°	5 C°	32.187 C°	65 C°	70 C°
Temperature Vr00 Cpu0 Temp	0 C°	5 C°	35 C°	100 C°	125 C°

2. Enter the sensor name in the search field.
3. Set the severity parameter.
4. Click **Filter**.
5. Use the **Export** option to export the sensor states, as required.

Note The sensor states are exported as .json data files.

2.6. Checking the system logs

Prerequisites

A laptop computer with the Chrome or Firefox browser installed

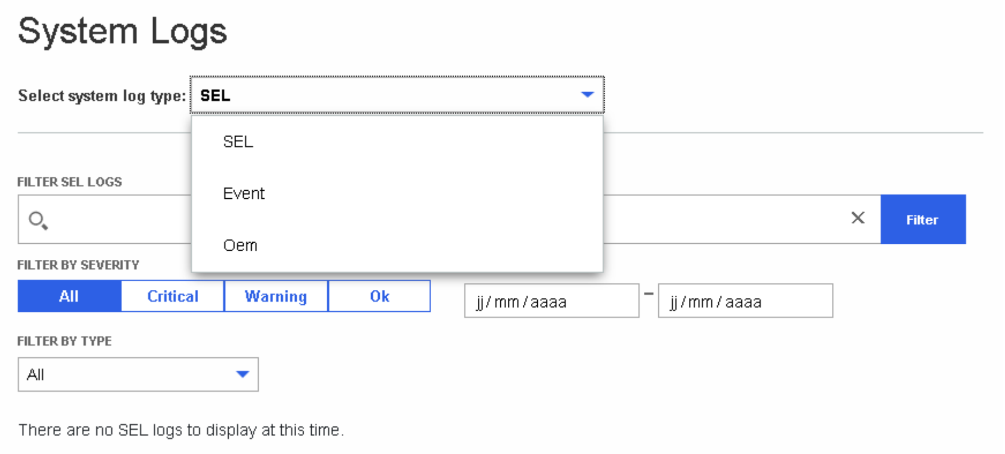
The laptop is connected to the server BMC port

The server BMC has an IP address allocated

The server is in the powered on state

Procedure

1. From the **Server health** tab, click **System logs**. The **System logs** page opens.



There are no SEL logs to display at this time.

2. Select the system log type from the drop down list.
3. Set the log name, severity and date range parameters.
4. Click **Filter**.

Chapter 3. Controlling the server

3.1. Checking the power status

Prerequisites

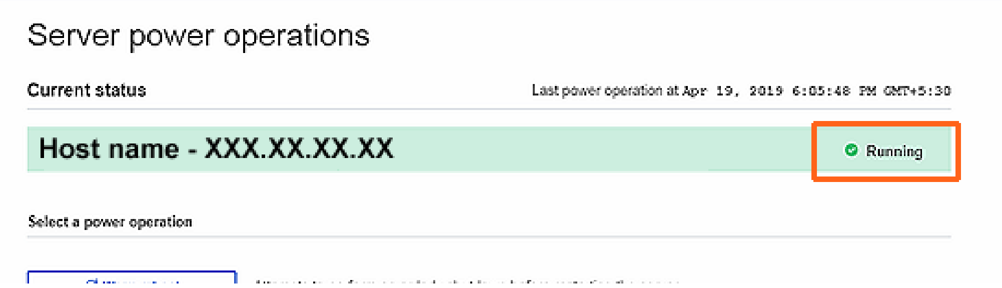
A laptop computer with the Chrome or Firefox browser installed

The laptop is connected to the BullSequana Edge BMC port

The server BMC has an IP address allocated

Procedure

1. From the **Server control** tab, click **Server power operations**. The **Server power operations** page opens.



Server power operations

Current status

Last power operation at Apr 19, 2019 6:05:48 PM GMT+5:30

Host name - XXX.XX.XX.XX

Running

Select a power operation

2. Check the current status. Three power states are possible **Unreachable, Off** or **Running**. The date and time of the last power operation is also indicated.

3.2. Powering on the server

Important **The https protocol must always be used to connect to the SHC.**

Prerequisites

A laptop computer with the Chrome or Firefox browser installed

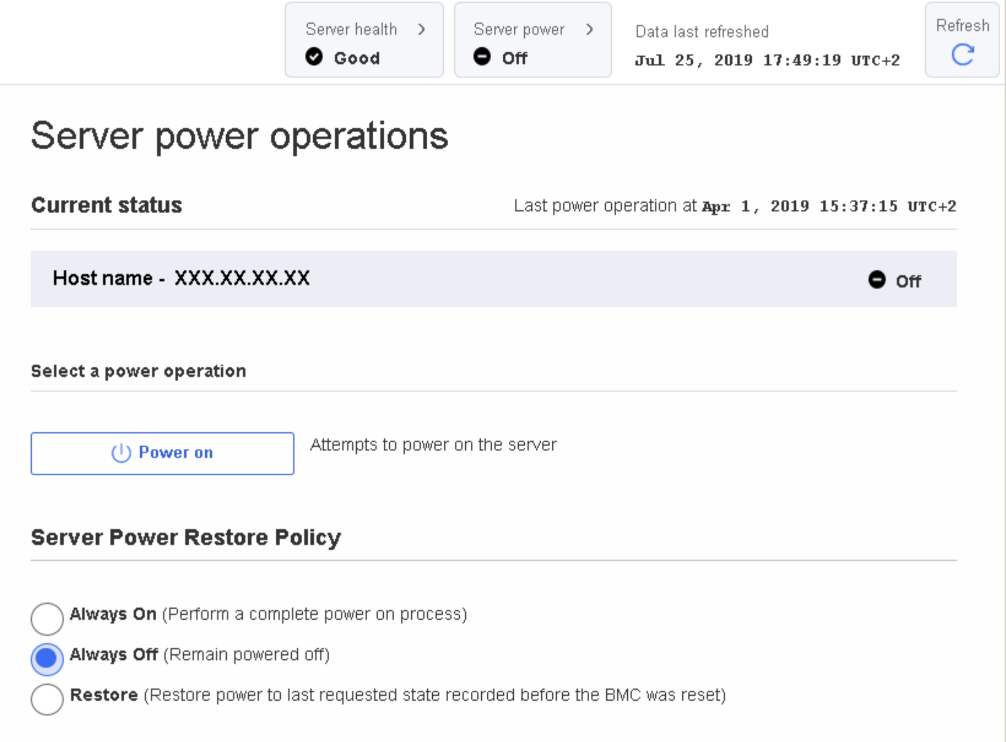
The laptop is connected to the server BMC port

The server BMC has an IP address allocated

The server is in standby power mode

Procedure

1. From the **Server control** tab, click **Server power operations**. The **Server power operations** page opens.



○ **Always On** (Perform a complete power on process)
● **Always Off** (Remain powered off)
○ **Restore** (Restore power to last requested state recorded before the BMC was reset)

Power Restore Policy	Description
Always On	Returns the server to power on mode with the BMC ON and the OS launched.
Always Off	Returns the server to standby power mode with the BMC ON but the OS is not launched.
Restore	Returns the server to the power mode already in place before the reboot.

2. Click **Power on**.
3. Select the power restore policy required

3.3. Powering off the server

W087 ⚠ **WARNING**
W087:
The Cold reboot and Immediate shutdown buttons should only be used if the Operating System is unable to respond to a Warm reboot or Orderly shutdown request.
These sequences may result in data loss and file corruption.

Note A BullSequana Edge server can also be powered off by pushing the front power button or via the Machine Intelligence System Management (MISM) console.

See The Getting Started Guide or the Management Console User's Guide for more information.

Prerequisites

A laptop computer with the Chrome or Firefox browser installed

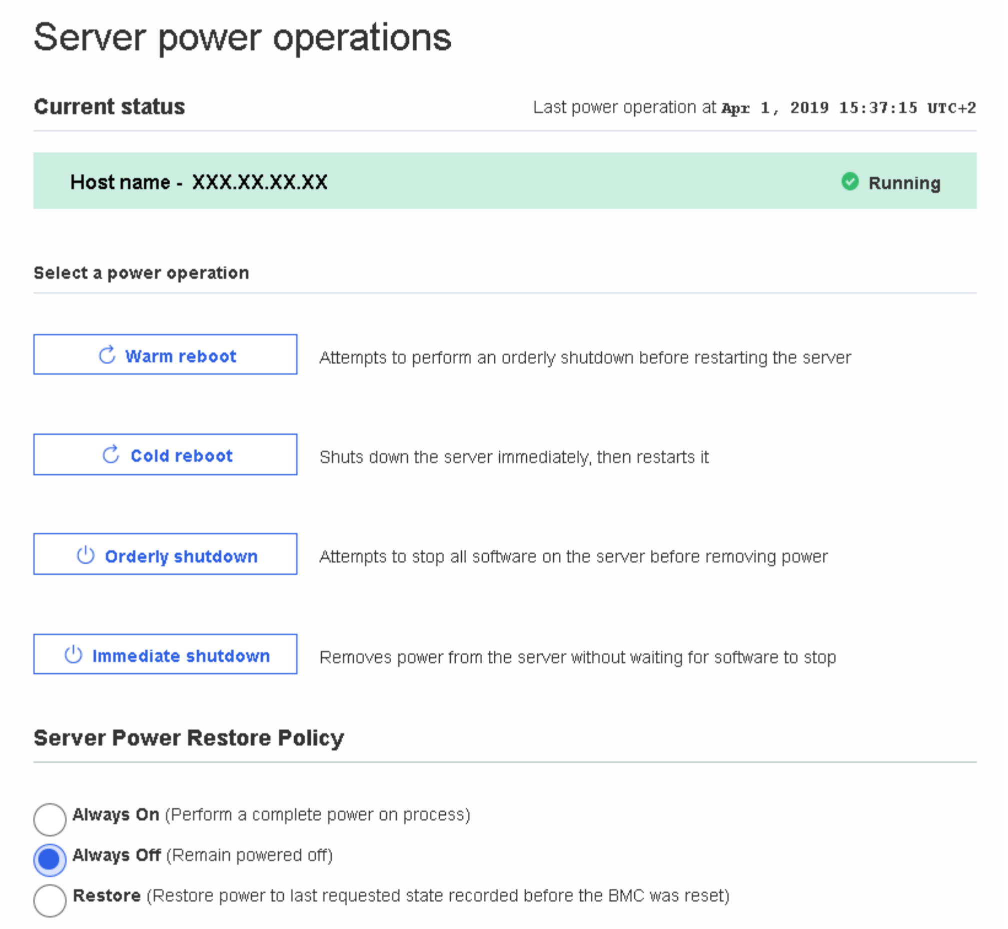
The laptop is connected to the server BMC port

The server BMC has an IP address allocated

The server is in the powered on state

Procedure

1. From the **Server control** tab, click **Server power operations**. The **Server power operations** page opens.



Server power operations

Current status Last power operation at Apr 1, 2019 15:37:15 UTC+2

Host name - XXX.XX.XX.XX ✓ Running

Select a power operation

Attempts to perform an orderly shutdown before restarting the server

Shuts down the server immediately, then restarts it

Attempts to stop all software on the server before removing power

Removes power from the server without waiting for software to stop

Server Power Restore Policy

○ **Always On** (Perform a complete power on process)
● **Always Off** (Remain powered off)
○ **Restore** (Restore power to last requested state recorded before the BMC was reset)

Power Restore Policy	**Description**
Always On	Returns the server to power on mode with the BMC ON and the OS launched.
Always Off	Returns the server to standby power mode with the BMC ON but the OS is not launched.
Restore	Returns the server to the power mode already in place before the reboot.

2. Click the power operation required.
3. Select the power restore policy required.

3.4. Managing power usage

Prerequisites

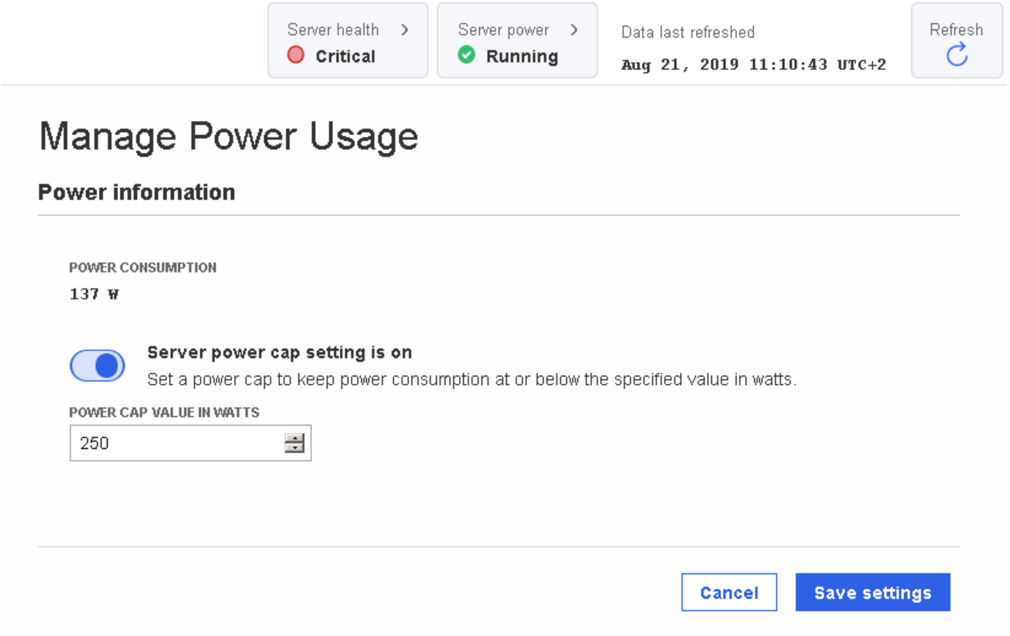
A laptop computer with the Chrome or Firefox browser installed

The laptop is connected to the BullSequana Edge BMC port

The server BMC has an IP address allocated

Procedure

1. From the **Server control** tab, click **Manage power usage**. The **Manage Power Usage** page opens.



Data last refreshed Aug 21, 2019 11:10:43 UTC+2

Manage Power Usage

Power information

POWER CONSUMPTION
137 W

Server power cap setting is on

Set a power cap to keep power consumption at or below the specified value in watts.

POWER CAP VALUE IN WATTS
250

2. Change the power cap settings as required.
3. Click **Save settings**.

Note The power consumption and power cap value are indicated on the Server overview page.

3.5. Enabling / disabling the identification LED

Prerequisites

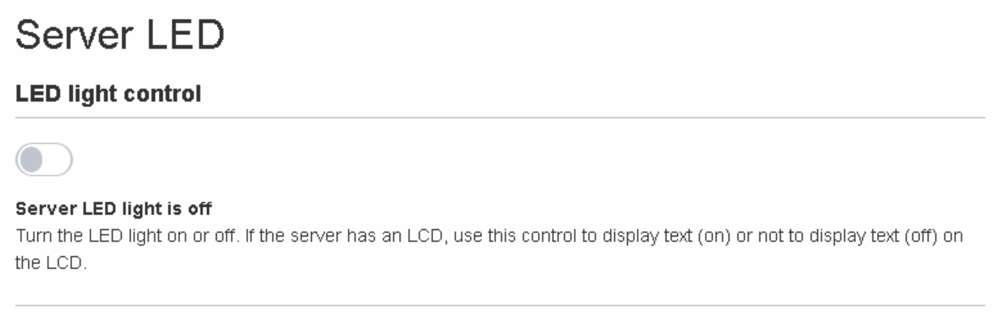
A laptop computer with the Chrome or Firefox browser installed

The laptop is connected to the BullSequana Edge BMC port

The server BMC has an IP address allocated

Procedure

1. From the **Server control** tab, click **Server LED**. The **Server LED** page opens.



Server LED

LED light control

○

Server LED light is off

Turn the LED light on or off. If the server has an LCD, use this control to display text (on) or not to display text (off) on the LCD.

2. Turn the server identification LED off / on.

See The Description Guide to locate the blue server identification LED at the front of the server.

3.6. Rebooting the Baseboard Management Controller (BMC)

Prerequisites

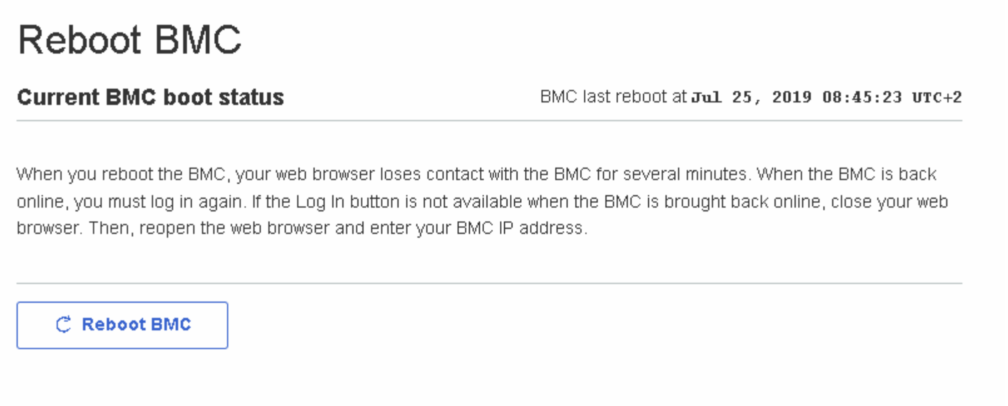
A laptop computer with the Chrome or Firefox browser installed

The laptop is connected to the BullSequana Edge BMC port

The server BMC has an IP address allocated

Procedure

1. From the **Server control** tab, click **Reboot BMC**. The **Reboot BMC** page opens.



Reboot BMC

Current BMC boot status

BMC last reboot at Jul 25, 2019 08:45:23 UTC+2

When you reboot the BMC, your web browser loses contact with the BMC for several minutes. When the BMC is back online, you must log in again. If the Log In button is not available when the BMC is brought back online, close your web browser. Then, reopen the web browser and enter your BMC IP address.

2. Click the **Reboot BMC** button.

Note When the BMC is rebooted the browser loses contact with the BMC for several minutes. The log in procedure must be performed when the BMC is back online. If the log in button is not available, close the browser, reopen it and enter the BMC IP address.

3.7. Connecting to the Serial over LAN (SoL) console

Prerequisites

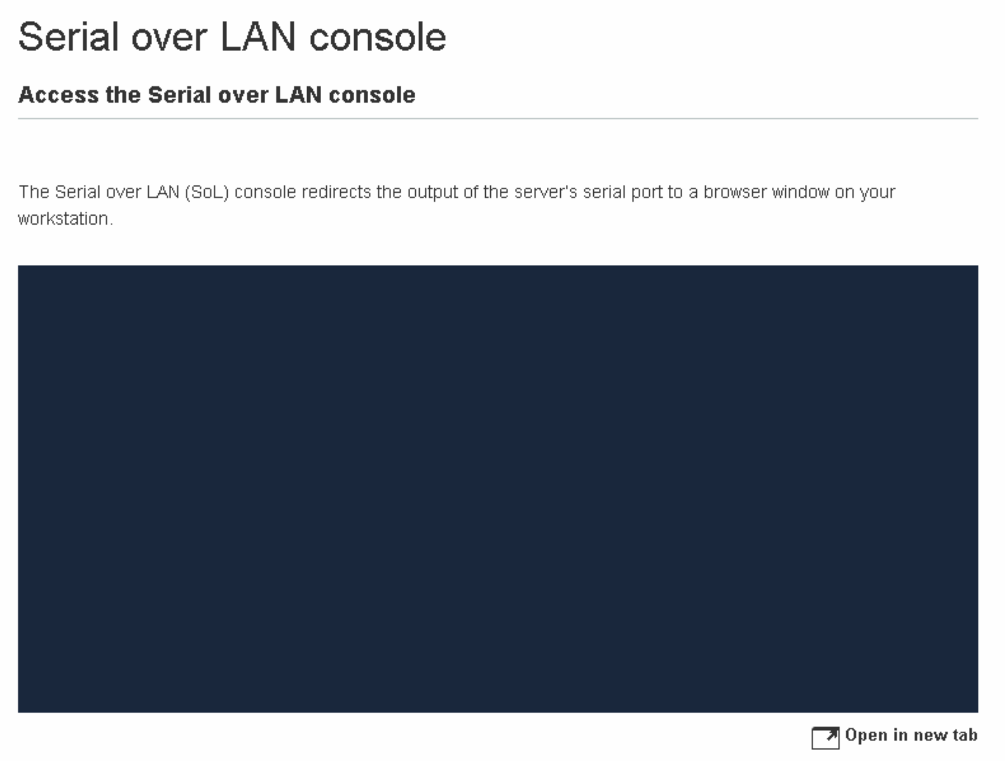
A laptop computer with the Chrome or Firefox browser installed

The laptop is connected to the BullSequana Edge BMC port

The server BMC has an IP address allocated

Procedure

1. From the **Server control** tab, click **Serial over LAN console**. The **Serial over LAN console** page opens.



Serial over LAN console

Access the Serial over LAN console

The Serial over LAN (SoL) console redirects the output of the server's serial port to a browser window on your workstation.

2. If required, click the **Open in new tab** link to open the console in a new window.

3.8. Connecting to the Keyboard Video Mouse (KVM)

KVM is used by the remote console to transmit the screen data to the administrator machine and the keyboard and mouse data back to the host.

Prerequisites

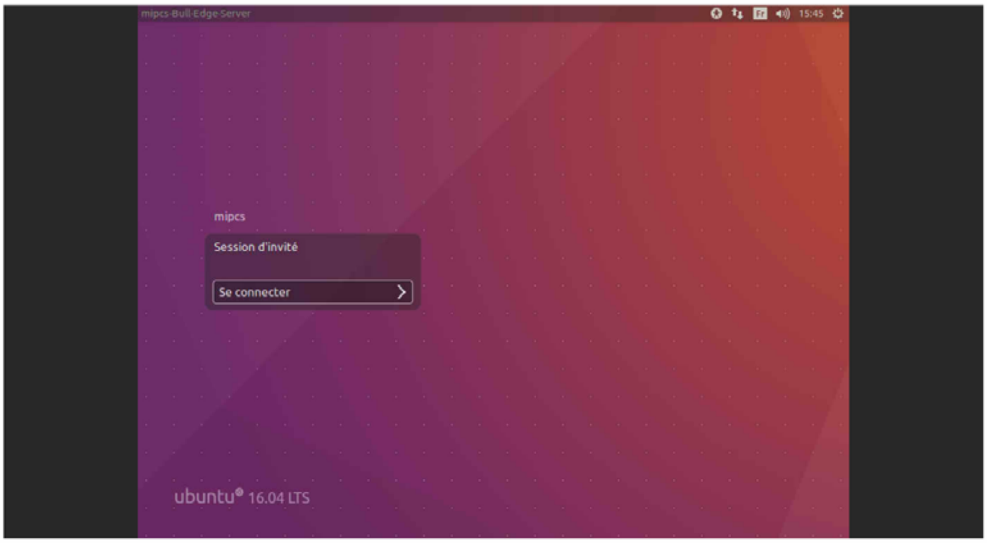
A laptop computer with the Chrome or Firefox browser installed

The laptop is connected to the BullSequana Edge BMC port

The server BMC has an IP address allocated

Procedure

From the **Server control** tab, click **KVM**. The **KVM** page opens.



3.9. Managing intrusions

Different actions can be configured in the event of an intrusion being detected by the BullSequana Edge server intrusion detection switch. The history and of the intrusions detected are recorded in the System Event Logs.

3.9.1. Configuring actions for intrusions

Prerequisites

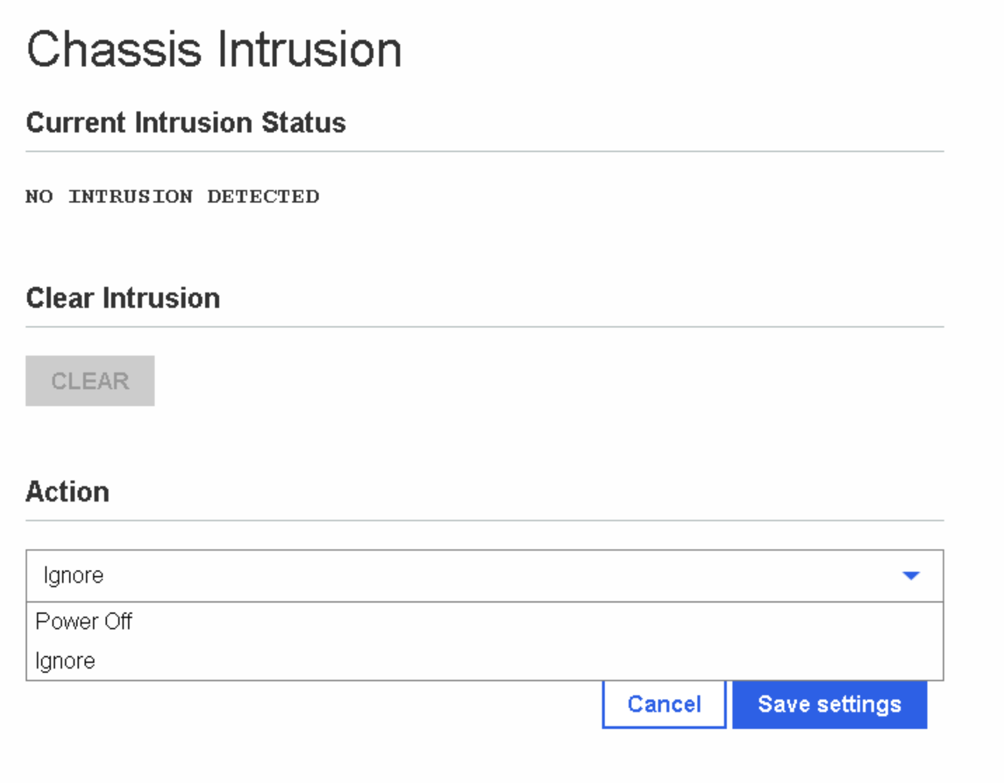
A laptop computer with the Chrome or Firefox browser installed

The laptop is connected to the BullSequana Edge BMC port

The server BMC has an IP address allocated

Procedure

1. From the **Server control** tab, click **Intrusion Detection**. The **Intrusion Detection** page opens.



Chassis Intrusion

Current Intrusion Status

NO INTRUSION DETECTED

Clear Intrusion

Action

Ignore

2. Select the action, **Power Off** or **Ignore**, for any intrusions detected.

Important	**If the Power Off action is set, the server will not start until the intrusion is removed from the Current Intrusion Status list.**

3. Click **Save settings**.

3.9.2. Checking intrusions detected

Prerequisites

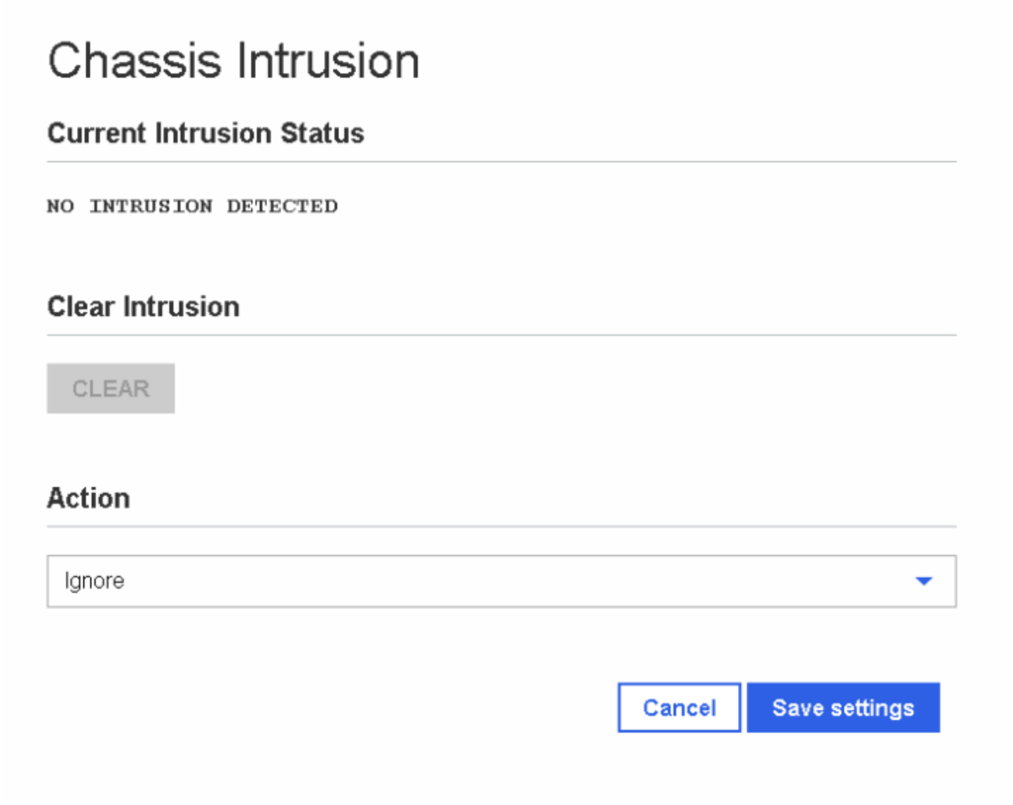
A laptop computer with the Chrome or Firefox browser installed

The laptop is connected to the BullSequana Edge BMC port

The server BMC has an IP address allocated

Procedure

1. From the **Server control** tab, click **Intrusion Detection**. The **Intrusion Detection** page opens.



Chassis Intrusion

Current Intrusion Status

NO INTRUSION DETECTED

Clear Intrusion

Action

Ignore

2. All intrusions detected are listed under **Current Intrusion Status.**

3.9.3. Clearing intrusions detected

Prerequisites

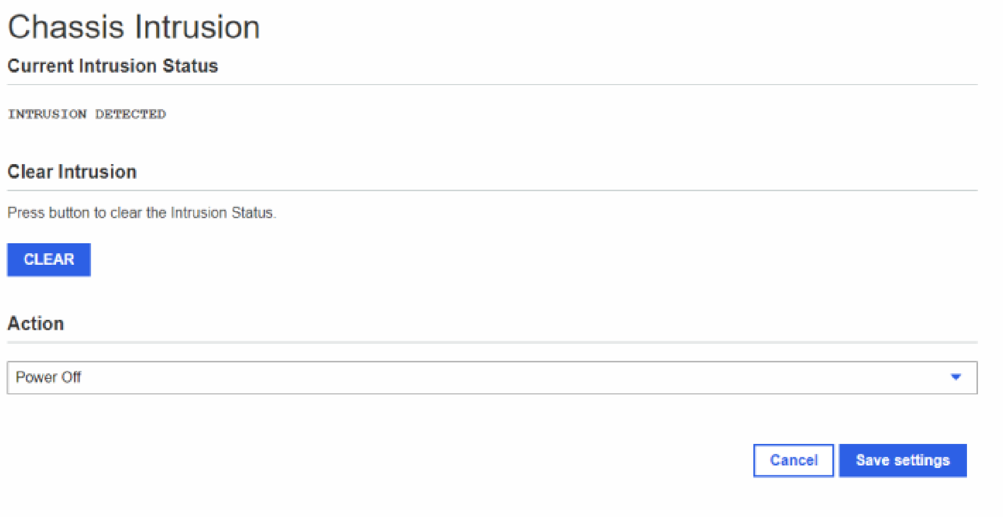
A laptop computer with the Chrome or Firefox browser installed

The laptop is connected to the BullSequana Edge BMC port

The server BMC has an IP address allocated

Procedure

1. From the **Server control** tab, click **Intrusion Detection**. The **Intrusion Detection** page opens.



Chassis Intrusion

Current Intrusion Status

INTRUSION DETECTED

Clear Intrusion

Press button to clear the Intrusion Status.

Action

Power Off

2. Click **CLEAR** to remove any actions detected from the list.

Chapter 4. Configuring the server

4.1. Configuring network settings

4.1.1. Configuring common settings

Prerequisites

A laptop computer with the Chrome or Firefox browser installed

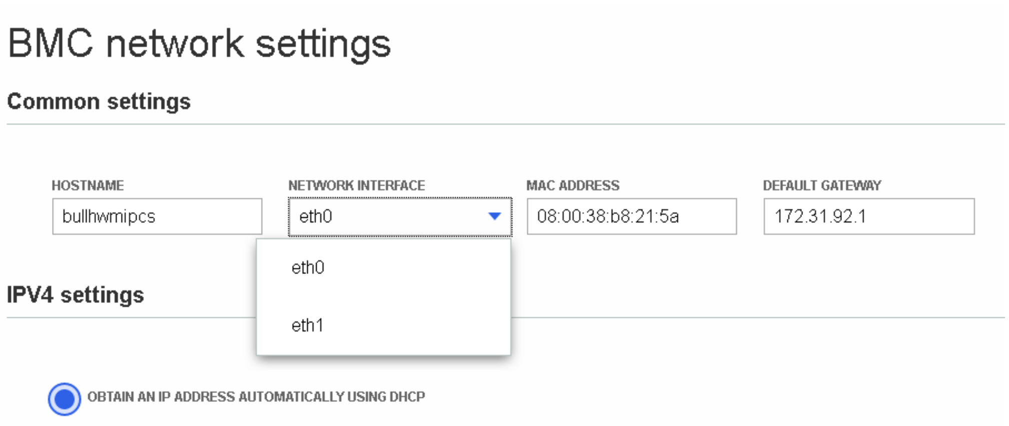
The laptop is connected to the BullSequana Edge BMC port

The server BMC has an IP address allocated

The laptop computer is connected to the LAN

Procedure

1. From the **Server configuration** tab, click N**etwork settings**. The **Network Settings** page opens.
2. In the **Common settings** section, select the network interface from the drop-down list.



BMC network settings

Common settings

HOSTNAME: bullhwmipcs

NETWORK INTERFACE: eth0

MAC ADDRESS: 08:00:38:b8:21:5a

DEFAULT GATEWAY: 172.31.92.1

IPV4 settings

● OBTAIN AN IP ADDRESS AUTOMATICALLY USING DHCP

Note The MAC address and default gateway for the BMC are configured automatically.

3. If required, enter the settings for the MAC address and default gateway.
4. Click **Save settings.**

4.1.2. Configuring IPV4 address with DHCP

Prerequisites

A laptop computer with the Chrome or Firefox browser installed

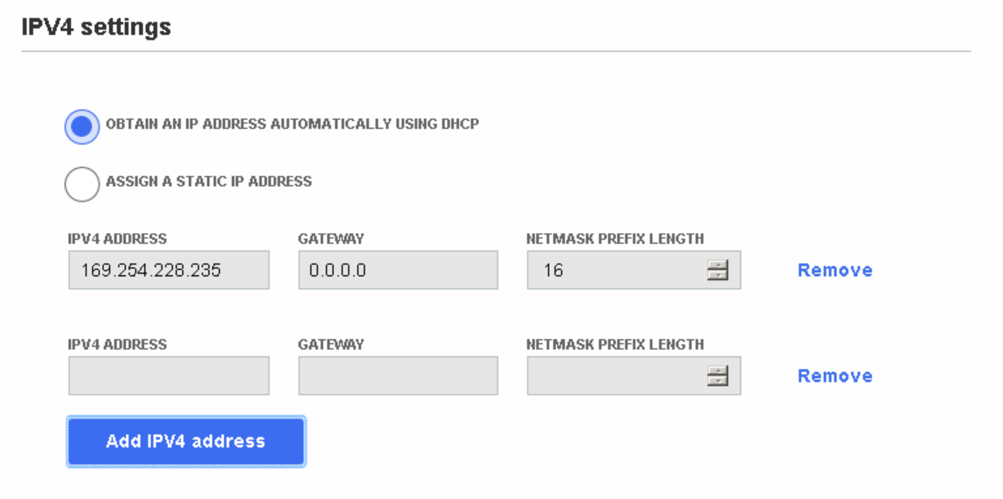
The laptop is connected to the BullSequana Edge BMC port

The server BMC has an IP address allocated

The laptop computer is connected to the LAN

Procedure

1. From the **Server configuration** tab, click N**etwork settings**. The **Network Settings** page opens.
2. In the **IPV4 settings** section, click **OBTAIN AN IP ADDRESS AUTOMATICALLY USING DHCP.**



IPV4 settings

● OBTAIN AN IP ADDRESS AUTOMATICALLY USING DHCP

○ ASSIGN A STATIC IP ADDRESS

IPV4 ADDRESS	GATEWAY	NETMASK PREFIX LENGTH	
169.254.228.235	0.0.0.0	16	Remove
			Remove

3. Click **Save settings.**

4.1.3. Assigning a static IP address

Prerequisites

A laptop computer with the Chrome or Firefox browser installed

The laptop is connected to the BullSequana Edge BMC port

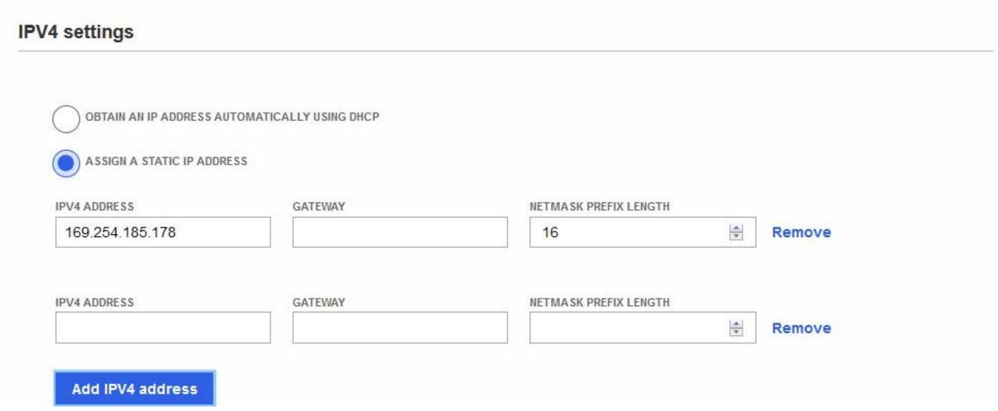
The server BMC has an IP address allocated

The laptop computer is connected to the LAN

The network parameters for static IP addresses are known

Procedure

1. From the **Server configuration** tab, click N**etwork settings**. The **Network Settings** page opens.
2. In the **IPV4 settings** section, click **ASSIGN A STATIC IP ADDRESS**.



IPV4 settings

○ OBTAIN AN IP ADDRESS AUTOMATICALLY USING DHCP

● ASSIGN A STATIC IP ADDRESS

IPV4 ADDRESS	GATEWAY	NETMASK PREFIX LENGTH	
169.254.185.178		16	Remove
			Remove

3. Click **Remove** to remove the existing IP address.
4. Enter the network parameters for the static IP address.
5. Click **Save settings.**
6. Click **Add IPV4 address** if additional addresses are to be configured.

4.1.4. Configuring an IPV4 custom route

It is possible to customize a SSH connection to the BMC from a different network.

Prerequisites

A laptop computer with the Chrome or Firefox browser installed

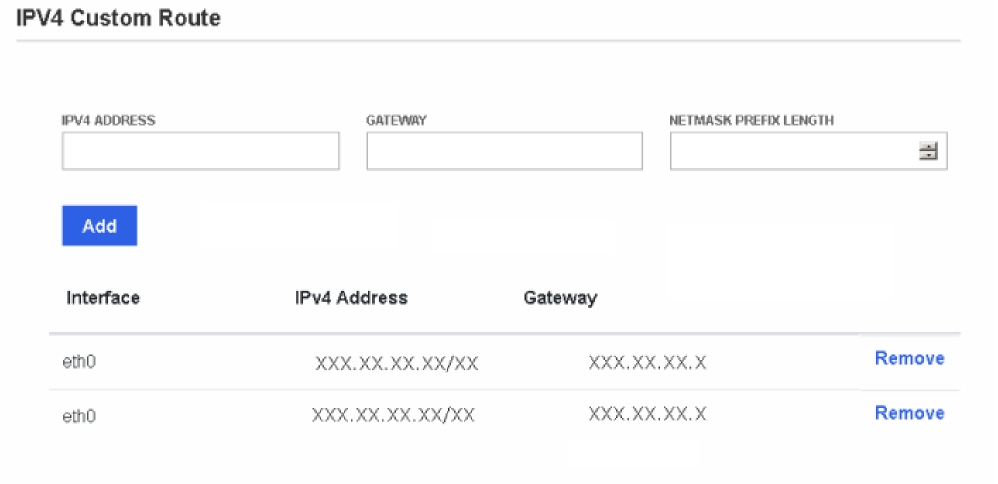
The laptop is connected to the BullSequana Edge BMC port

The server BMC has an IP address allocated

The laptop computer is connected to the LAN

Procedure

1. From the **Server configuration** tab, click **Network settings**. The **Network Settings** page opens.
2. In the **IPV4 Custom Route** section, enter the network parameters for customized connection.



Interface	IPv4 Address	Gateway	
eth0	XXX.XX.XX.XX/XX	XXX.XX.XX.X	Remove
eth0	XXX.XX.XX.XX/XX	XXX.XX.XX.X	Remove

3. Click **Add.**

4.1.5. Configuring DNS settings

Prerequisites

A laptop computer with the Chrome or Firefox browser installed

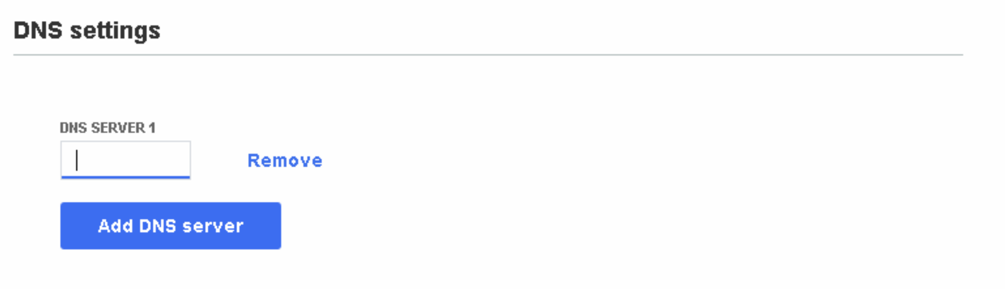
The laptop is connected to the BullSequana Edge BMC port

The server BMC has an IP address allocated

The laptop computer is connected to the LAN

Procedure

1. From the **Server configuration** tab, click **Network settings**. The **Network Settings** page opens.
2. In the **DNS settings** section, click **Remove** to remove the existing DNS server



3. Enter the DNS server to be used.
4. Click **Add DNS server**.
5. Click **Save settings**.

4.1.6. Configuring WIFI settings

Prerequisites

A laptop computer with the Chrome or Firefox browser installed

The laptop is connected to the BullSequana Edge BMC port

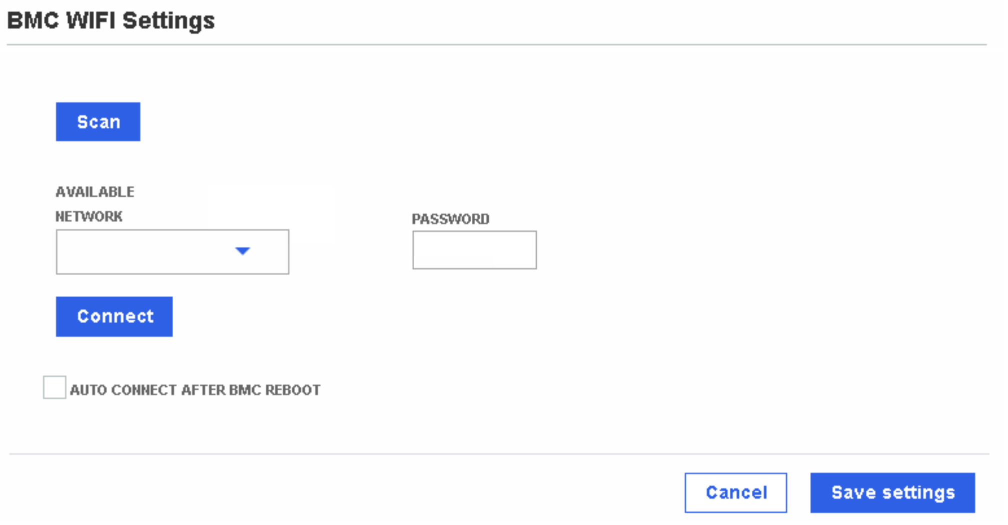
The server BMC has an IP address allocated

The laptop computer is connected to the WIFI LAN

The WiFi network and password must be known

Procedure

1. From the **Server configuration** tab, click **Network settings**. The **Network Settings** page opens.
2. In the **BMC WIFI Settings** section, click **Scan**.



3. Select the network required from the list of available networks.
4. Enter the password.
5. Click **Connect.**
6. Check the Auto Connect box to reconnect after a BMC reboot.

4.2. Managing firmware versions

Important **The BMC firmware must be updated before the BIOS and CPLD firmware.**

See The Bull support web site for the most up-to-date product information, documentation, firmware updates, software fixes and service offers: http://support.bull.com

The SHC can be used to change firmware boot priorities and to update BMC, BIOS and CPLD firmware files.

4.2.1. Checking firmware versions

Prerequisites

A laptop computer with the Chrome or Firefox browser installed

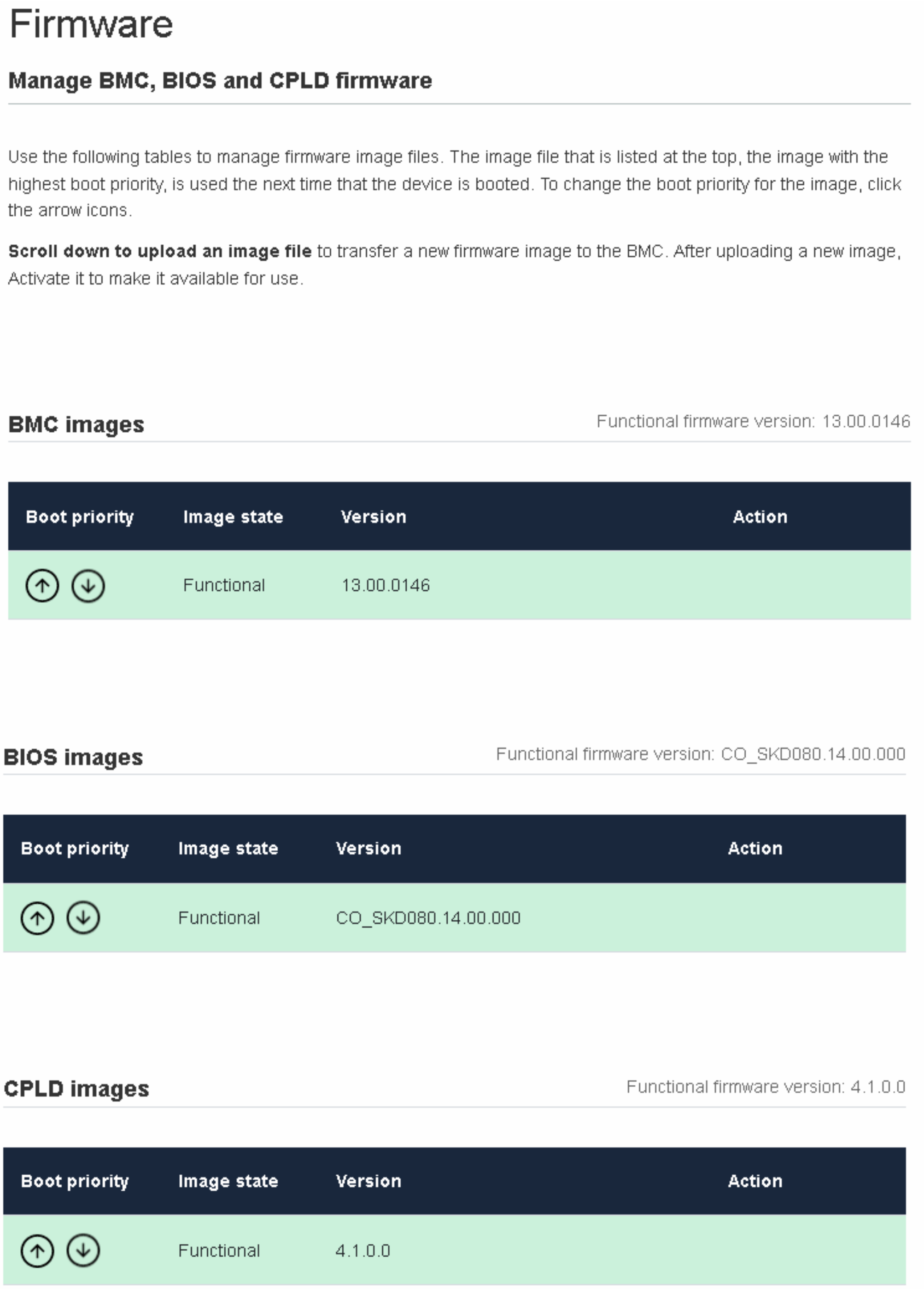
A laptop is connected to the server BMC port

The server BMC has an IP address allocated

The server is in the powered on state

Procedure

1. From the **Server configuration** tab, click **Firmware**. The **Firmware** page opens.



Firmware

Manage BMC, BIOS and CPLD firmware

Use the following tables to manage firmware image files. The image file that is listed at the top, the image with the highest boot priority, is used the next time that the device is booted. To change the boot priority for the image, click the arrow icons.

Scroll down to upload an image file to transfer a new firmware image to the BMC. After uploading a new image, Activate it to make it available for use.

BMC images

Functional firmware version: 13.00.0146

Boot priority	Image state	Version	Action
↑ ↓	Functional	13.00.0146	

BIOS images

Functional firmware version: CO_SKD080.14.00.000

Boot priority	Image state	Version	Action
↑ ↓	Functional	CO_SKD080.14.00.000	

CPLD images

Functional firmware version: 4.1.0.0

Boot priority	Image state	Version	Action
↑ ↓	Functional	4.1.0.0	

2. Check the BMC, BIOS and CPLD functional image versions listed.

4.2.2. Updating the BMC firmware

Prerequisites

A laptop computer with the Chrome or Firefox browser installed

A laptop is connected to the server BMC port

The server BMC has an IP address allocated

The server is in the standby power mode

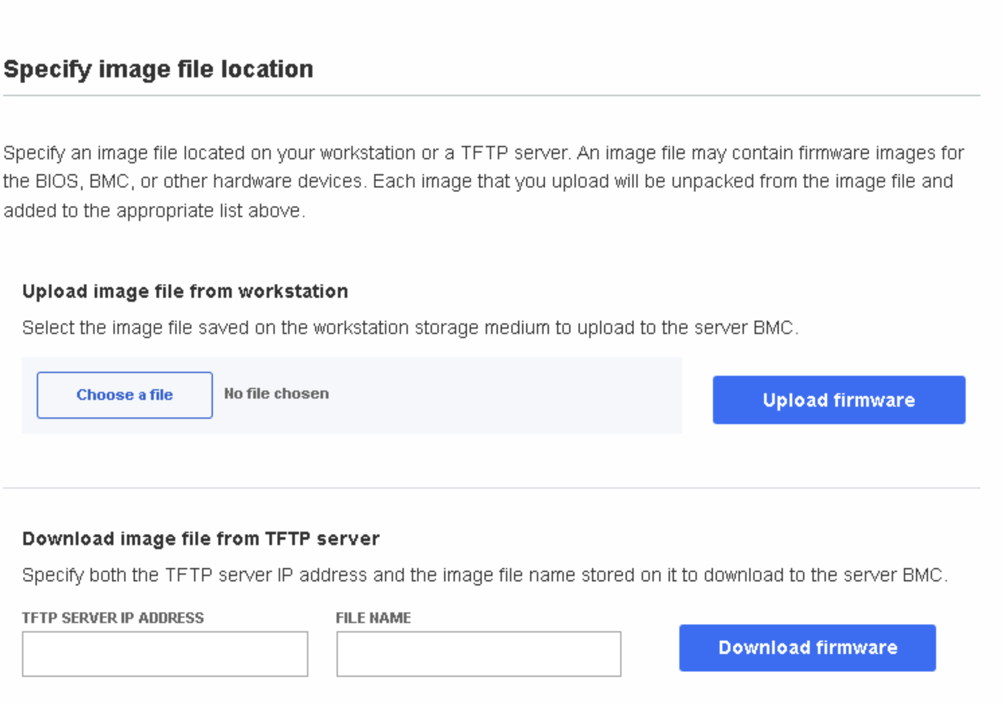
Procedure

1. **Check the server power status**

   Check that the server is in the standy power mode.

2. **Upgrade the firmware**

   1. From the **Server configuration** tab, click **Firmware**. The **Firmware** page opens.
   2. Specify the new firmware file location.
      a. Either click **Upload firmware** to upload an image file from a workstation.
      b. Or click **Download firmware** to download an image file from a TFTP server.



Specify image file location

Specify an image file located on your workstation or a TFTP server. An image file may contain firmware images for the BIOS, BMC, or other hardware devices. Each image that you upload will be unpacked from the image file and added to the appropriate list above.

Upload image file from workstation

Select the image file saved on the workstation storage medium to upload to the server BMC.

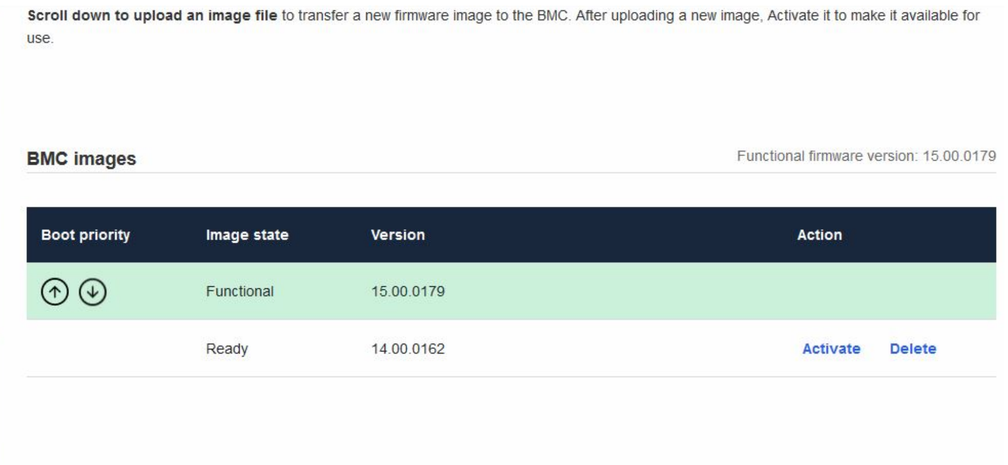
No file chosen

Download image file from TFTP server

Specify both the TFTP server IP address and the image file name stored on it to download to the server BMC.

3. Activate the new BMC image

1. Click **Activate** for the new BMC image.

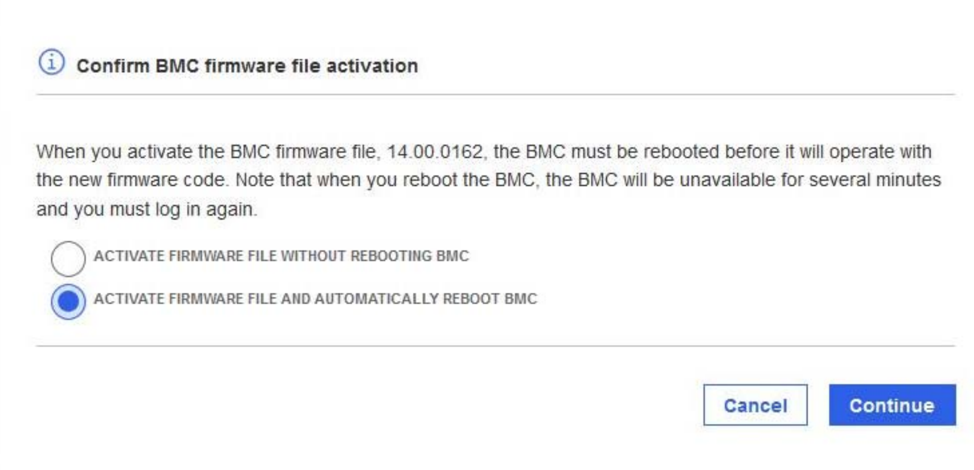


Scroll down to upload an image file to transfer a new firmware image to the BMC. After uploading a new image, Activate it to make it available for use.

BMC images Functional firmware version: 15.00.0179

Boot priority	Image state	Version	Action
↑ ↓	Functional	15.00.0179	
	Ready	14.00.0162	Activate Delete

2. Confirm the activation with a BMC reboot. Click **Continue**.



Confirm BMC firmware file activation

When you activate the BMC firmware file, 14.00.0162, the BMC must be rebooted before it will operate with the new firmware code. Note that when you reboot the BMC, the BMC will be unavailable for several minutes and you must log in again.

○ ACTIVATE FIRMWARE FILE WITHOUT REBOOTING BMC

● ACTIVATE FIRMWARE FILE AND AUTOMATICALLY REBOOT BMC

Notes

- When the BMC is rebooted the browser loses contact with the BMC for several minutes. The normal log in procedure must be performed when the BMC is back online. If the log in button is not available, close the browser, reopen it and enter the BMC IP address.
- Earlier firmware versions disappear from the BMC image list once a new version has been activated.

4.2.3. Updating the BIOS and CPLD firmware

Important **Check that the latest BMC firmware version is installed. If not, the BMC firmware must be updated before the BIOS and CPLD firmware.**

Prerequisites

A laptop computer with the Chrome or Firefox browser installed

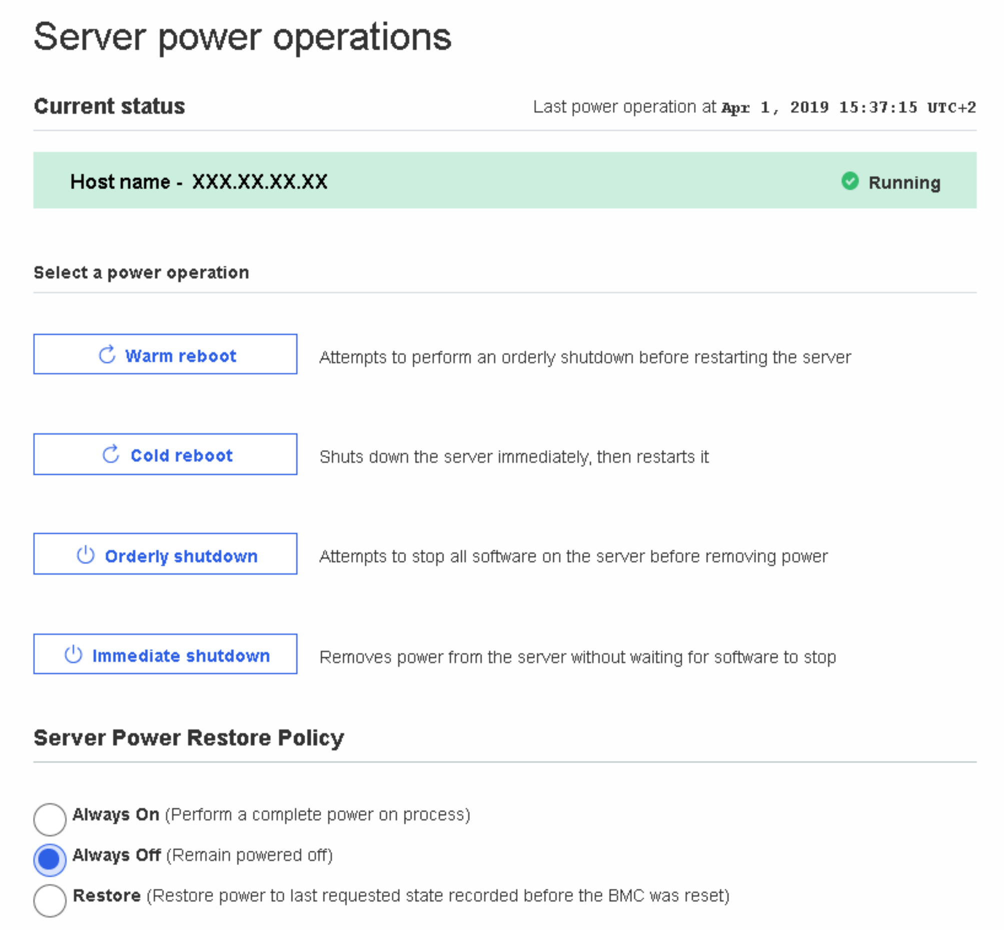
A laptop is connected to the server BMC port

The server BMC has an IP address allocated

The server is in the powered on state

Procedure

1. **Power off the server**
   1. From the **Server control** tab, click **Server power operations**. The **Server power operations** page opens.



Server power operations

Current status

Last power operation at Apr 1, 2019 15:37:15 UTC+2

Host name - XXX.XX.XX.XX

Running

Select a power operation

Warm reboot: Attempts to perform an orderly shutdown before restarting the server

Cold reboot: Shuts down the server immediately, then restarts it

Orderly shutdown: Attempts to stop all software on the server before removing power

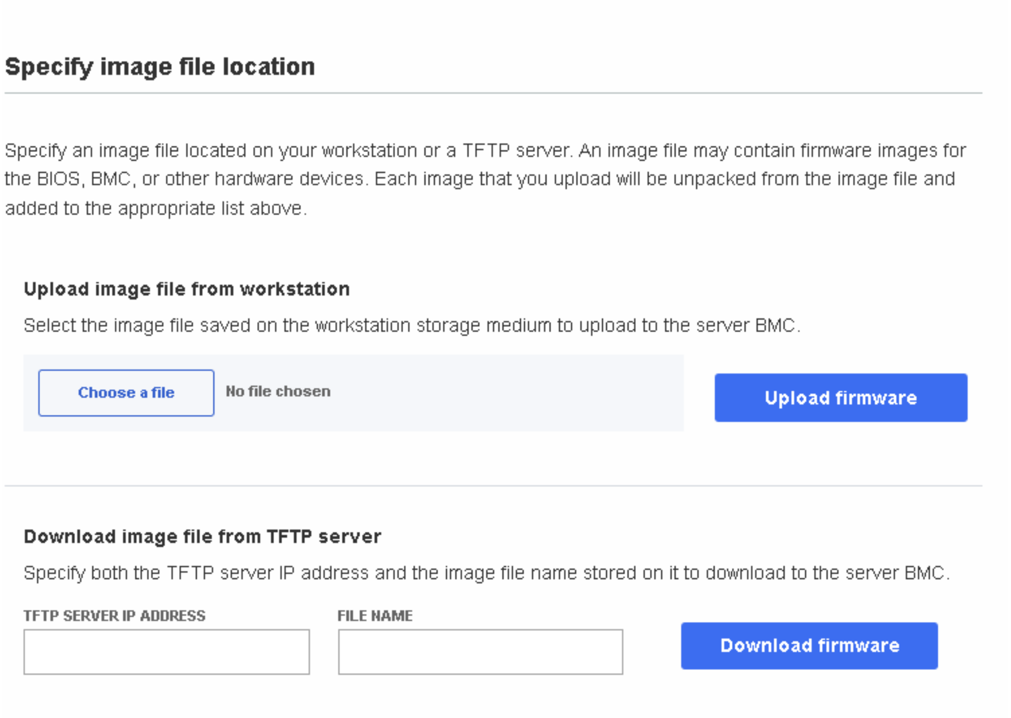
Immediate shutdown: Removes power from the server without waiting for software to stop

Server Power Restore Policy

○ **Always On** (Perform a complete power on process)
● **Always Off** (Remain powered off)
○ **Restore** (Restore power to last requested state recorded before the BMC was reset)

   2. Click **Orderly shutdown.**

2. **Upgrade the firmware**
   1. From the **Server configuration** tab, click **Firmware**. The **Firmware** page opens.
   2. Specify the new firmware file location.
      a. Either click **Upload firmware** to upload an image file from a workstation.
      b. Or click **Download firmware** to download an image file from a TFTP server.



Specify image file location

Specify an image file located on your workstation or a TFTP server. An image file may contain firmware images for the BIOS, BMC, or other hardware devices. Each image that you upload will be unpacked from the image file and added to the appropriate list above.

Upload image file from workstation

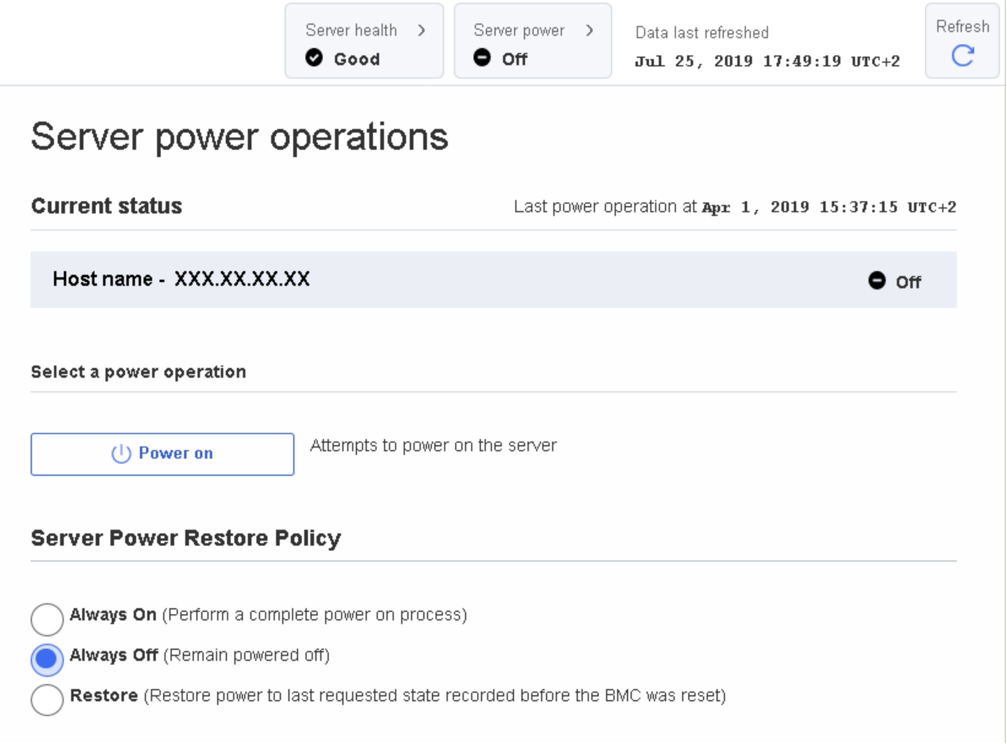
Select the image file saved on the workstation storage medium to upload to the server BMC.

Download image file from TFTP server

Specify both the TFTP server IP address and the image file name stored on it to download to the server BMC.

3. Power on the server

1. From the **Server control** tab, click **Server power operations**. The **Server power operations** page opens.



Server power operations

Current status Last power operation at Apr 1, 2019 15:37:15 UTC+2

Host name - XXX.XX.XX.XX ● Off

Select a power operation

Attempts to power on the server

Server Power Restore Policy

○ **Always On** (Perform a complete power on process)
● **Always Off** (Remain powered off)
○ **Restore** (Restore power to last requested state recorded before the BMC was reset)

2. Click **Power on**.
3. The new firmware is now active.

4.3. Configuring date and time settings

Prerequisites

A laptop computer with the Chrome or Firefox browser installed

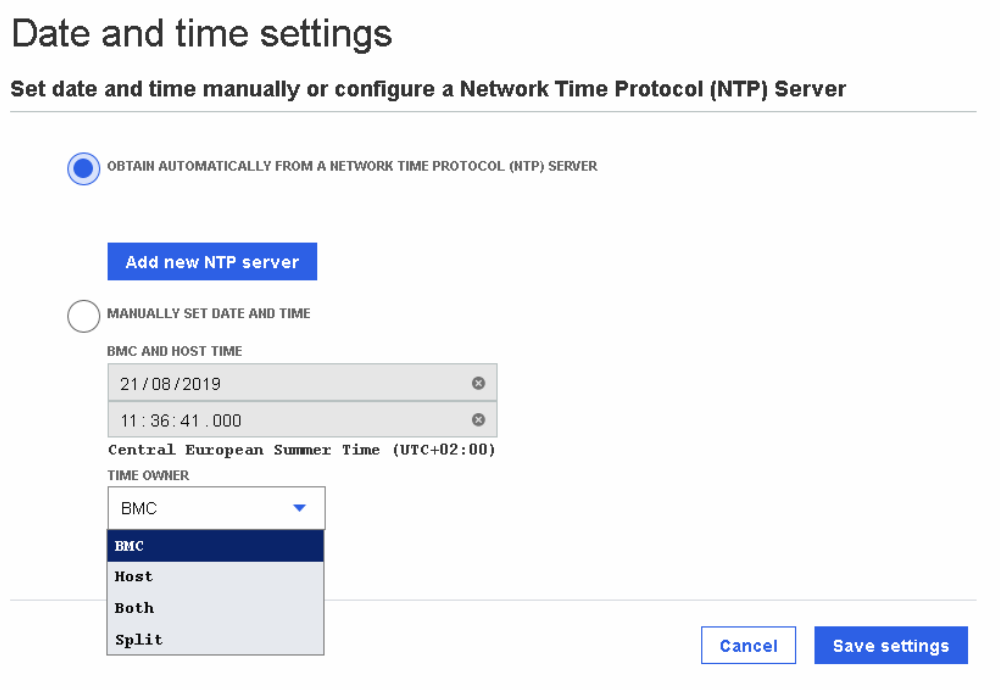
The laptop is connected to the BullSequana Edge BMC port

The server BMC has an IP address allocated

The laptop computer is connected to the LAN

Procedure

1. From the **Server configuration** tab, click **Date and time settings**. The **Date and time settings** page opens.



Date and time settings

Set date and time manually or configure a Network Time Protocol (NTP) Server

● OBTAIN AUTOMATICALLY FROM A NETWORK TIME PROTOCOL (NTP) SERVER

○ MANUALLY SET DATE AND TIME

BMC AND HOST TIME

21 / 08 / 2019

11 : 36 : 41 . 000

Central European Summer Time (UTC+02:00)

TIME OWNER

BMC

2. Use the options to set the data and time either automatically via a NTP server or manually.
3. Select the time owner according to the system requirements.

Time owner	Description
BMC	Configure the date and time for the BMC
Host	Configure the date and time for the host
Both	Configure the date and time for both the BMC and the host
Split	Configure the BMC date and time settings separately from the host

4. Click **Save settings.**

Chapter 5. Managing users

5.1. Viewing user details

Prerequisites

A laptop computer with the Chrome or Firefox browser installed

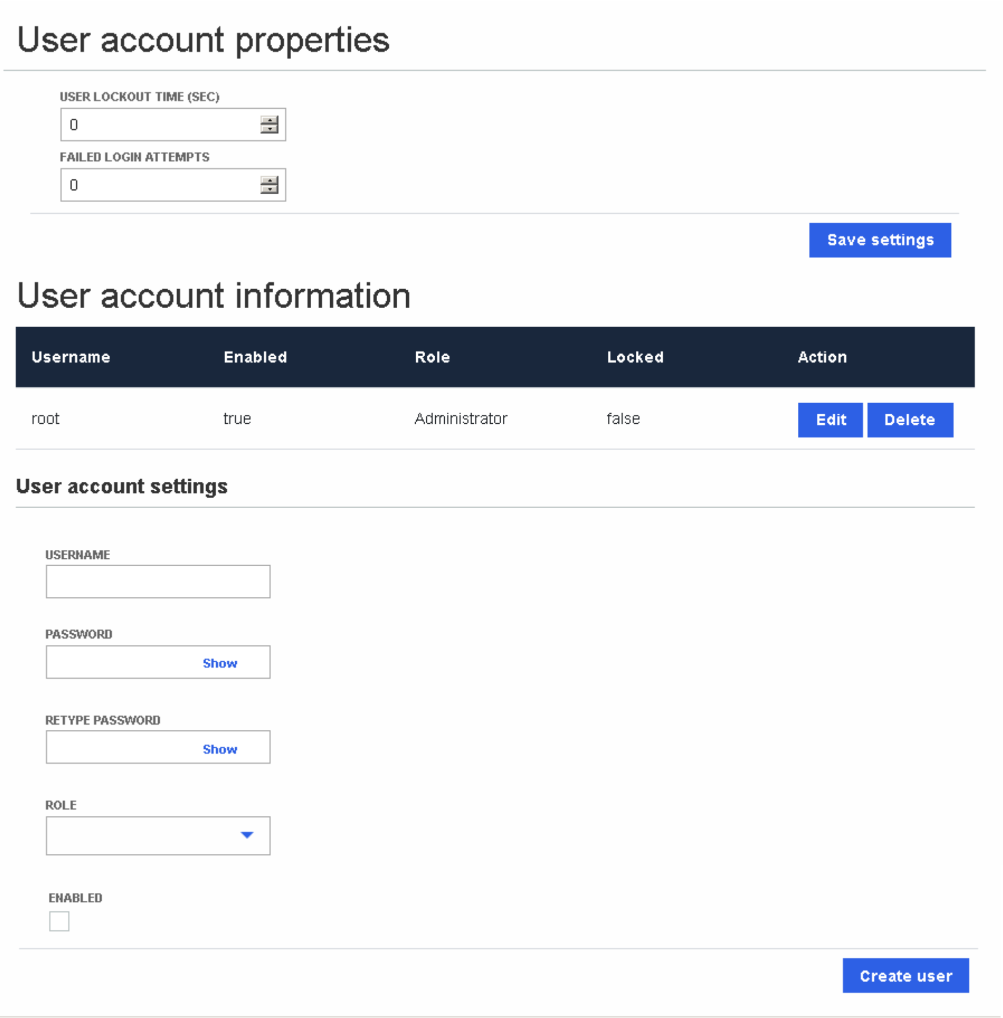
The laptop is connected to the BullSequana Edge BMC port

The server BMC has an IP address allocated

The laptop computer is connected to the LAN

Procedure

1. From the **Users** tab, click **Manage user accounts**. The **User account** page opens.



User account properties

USER LOCKOUT TIME (SEC): 0

FAILED LOGIN ATTEMPTS: 0

User account information

Username	Enabled	Role	Locked	Action
root	true	Administrator	false	Edit Delete

User account settings

2. Select a user to view account settings.

5.2. Creating a new user account

Prerequisites

A laptop computer with the Chrome or Firefox browser installed

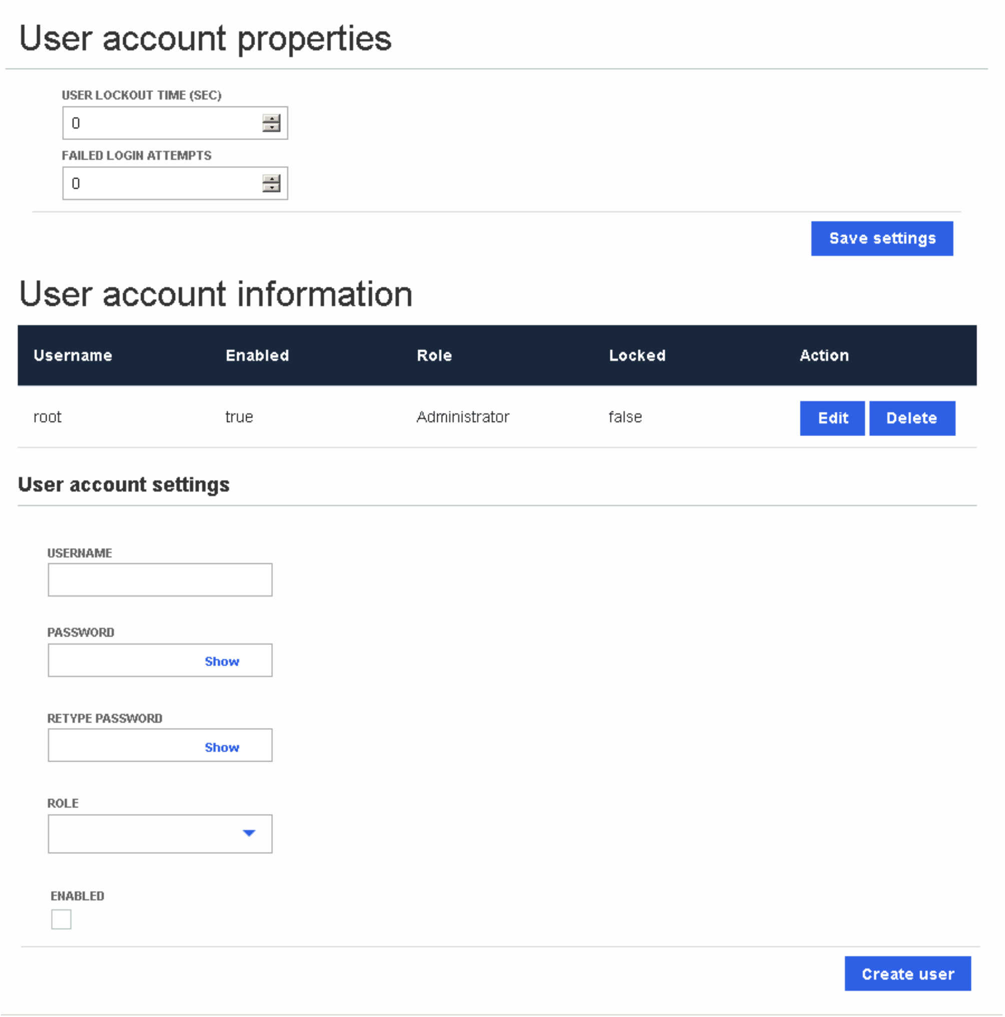
The laptop is connected to the BullSequana Edge BMC port

The server BMC has an IP address allocated

The laptop computer is connected to the LAN

Procedure

1. From the **Users** tab, click **Manage user accounts**. The **User account information** page opens.



User account properties

USER LOCKOUT TIME (SEC): 0

FAILED LOGIN ATTEMPTS: 0

User account information

Username	Enabled	Role	Locked	Action
root	true	Administrator	false	Edit Delete

User account settings

USERNAME

PASSWORD

RETYPE PASSWORD

ROLE

ENABLED ☐

User account properties	
User Lockout Time (Sec)	Period before the user is locked out. The minimum setting is 30 seconds
Failed Login Attempts	The number of failed login attempts allowed. The maximum possible is 10

2. Add the User name and the password.

Note The password must be at least eight characters long and be a mixture of upper case letters and lower case letters. The password must be different from the user name and not be the word 'password'.

---

3. Click **Create User**.
4. Enter the username, password and role for the new user account.
5. Click **ENABLED**.
6. Click **Save**.

5.3. Editing a user account

Prerequisites

A laptop computer with the Chrome or Firefox browser installed

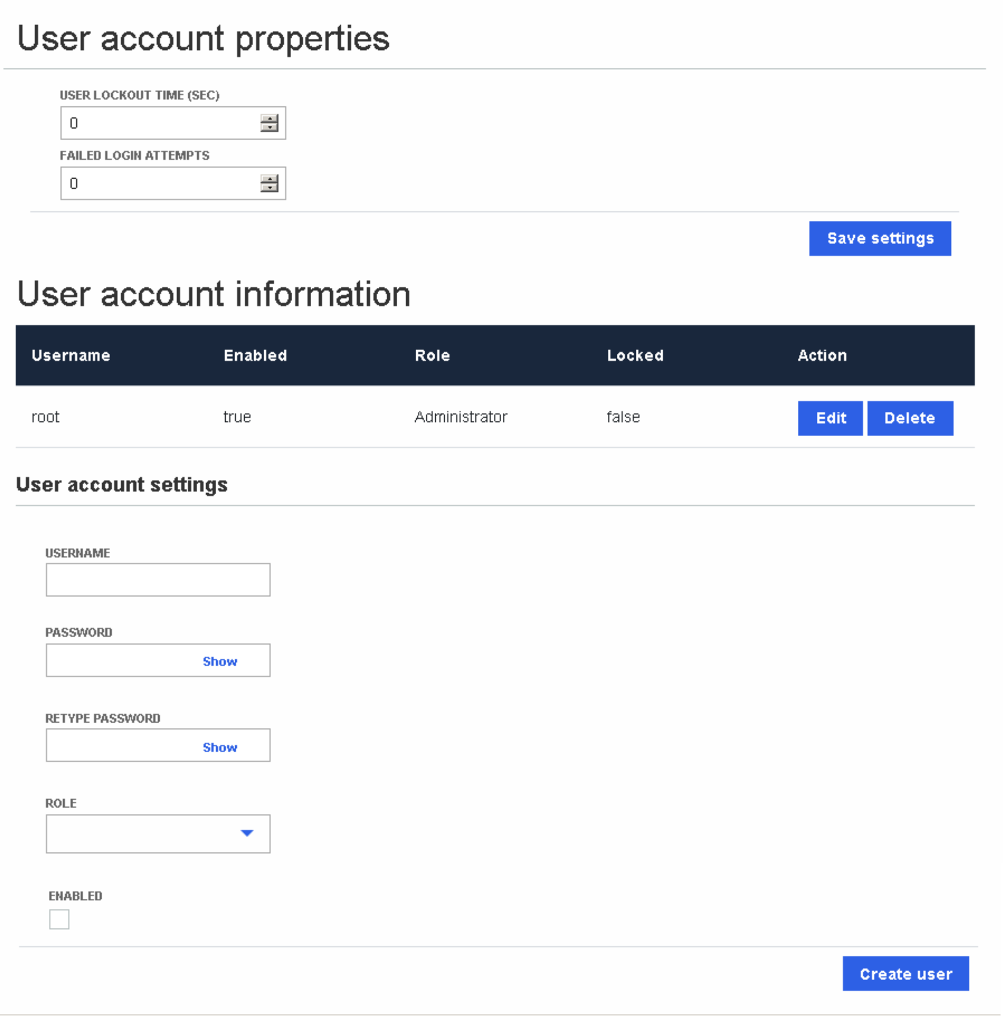
The laptop is connected to the BullSequana Edge BMC port

The server BMC has an IP address allocated

The laptop computer is connected to the LAN

Procedure

1. From the **Users** tab, click **Manage user accounts**. The **User account information** page opens.



User account properties

USER LOCKOUT TIME (SEC): 0

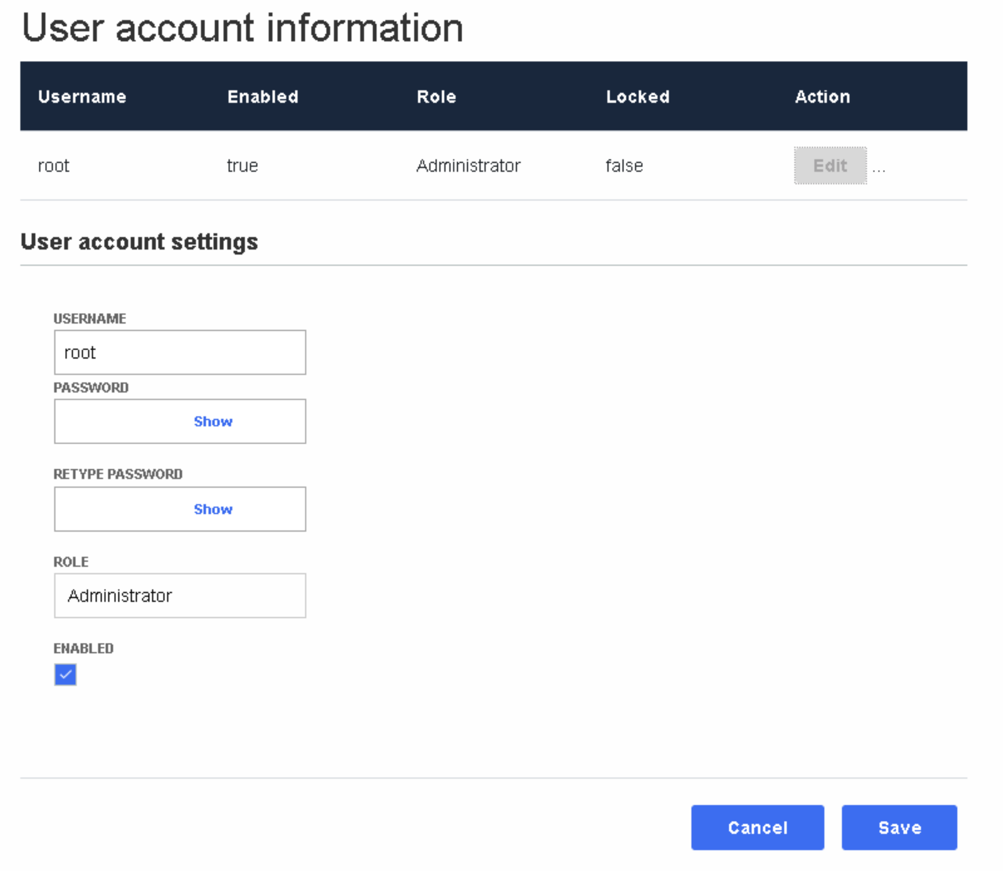
FAILED LOGIN ATTEMPTS: 0

User account information

Username	Enabled	Role	Locked	Action
root	true	Administrator	false	Edit Delete

User account settings

2. Click **Edit** to edit existing account settings.



User account information

Username	Enabled	Role	Locked	Action
root	true	Administrator	false	Edit ...

User account settings

USERNAME
root

PASSWORD

RETYPE PASSWORD

ROLE
Administrator

ENABLED
☑

3. Make the changes required. Click **Save**.

5.4. Deleting a user account

Prerequisites

A laptop computer with the Chrome or Firefox browser installed

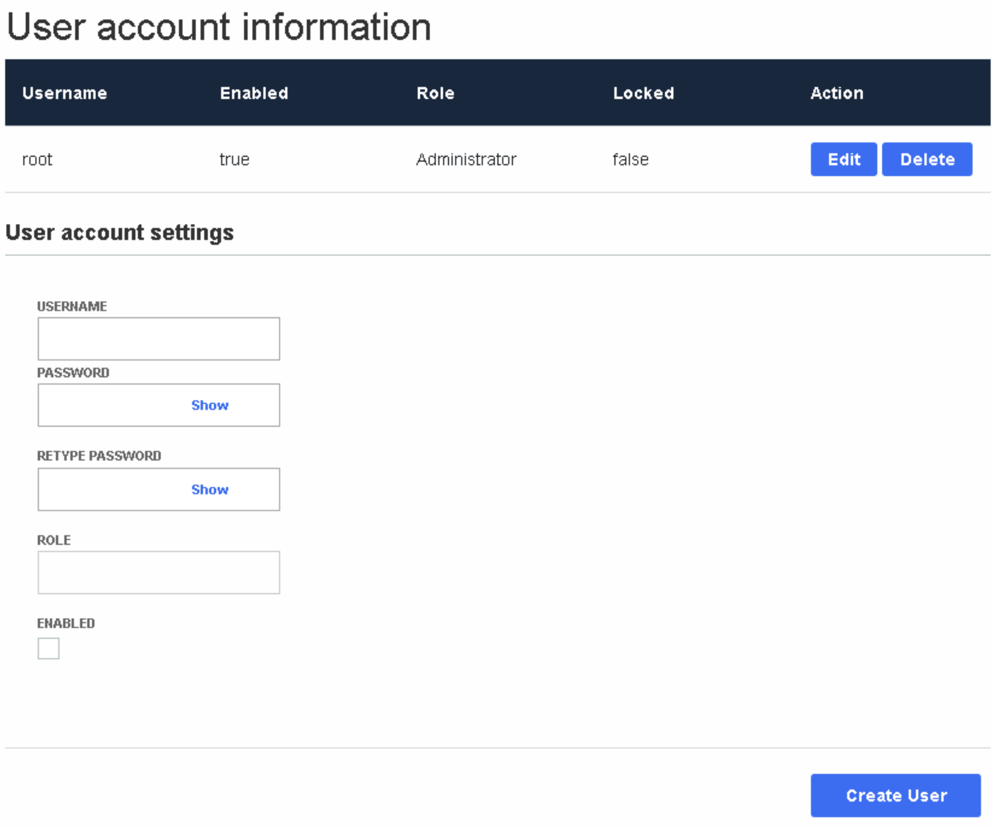
The laptop is connected to the BullSequana Edge BMC port

The server BMC has an IP address allocated

The laptop computer is connected to the LAN

Procedure

1. From the **Users** tab, click **Manage user accounts**. The **User account information** page opens.



User account information

Username	Enabled	Role	Locked	Action
root	true	Administrator	false	Edit Delete

User account settings

USERNAME

PASSWORD

RETYPE PASSWORD

ROLE

ENABLED

☐

2. Select the user account to be deleted. Click **Delete**.
3. Click **Save**.

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