BullSequana Edge

Release Note TS 015.02

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Preface

This document gives information about all changes from the previous version.

It also gives information about restrictions, known problems and the associated workarounds.

Finally, it lists the objects delivered in the Technical State and the features of the resources provided on the Resource and Documentation DVD.

Chapter 1. Overview

1.1.   Operating systems

The following versions are supported for BullSequana Edge servers.

1.1.1.   Red Hat

- RHEL 7.6

1.1.2.   VMware ESXi

- ESXi 6.5u2 and higher

For certification details check:

https://www.vmware.com/resources/compatibility/detail.php?deviceCategory=server&productid=48883

1.1.3.   Windows

- Windows Server 2019

1.2. New features and changes

1.2.1. BIOS_SKD080

- Fix for Automatic failover booting feature
- Reference Code version RC 06.D51
- Fixes for Windows Server 2019 certification for Secure Boot and memory options (one DIMM set per channel, unused channels set disabled)

1.2.2. OMF_MIPCS

- Adding network routes feature
- Log collect feature

1.3. Resolved issues

- **Connection to the BMC in Zeroconf mode**

  Connection to the Baseboard Management Controller (BMC) in Zeroconf mode using the BMC port is now possible.

- **BIOS firmware version file**

  The BIOS version file is now correctly generated after a firmware update.

- **BMC reboot on a powered off host**

  Rebooting the BMC on a powered off host does not automatically restart the host anymore.

- **Automatic boot to PXE interfaces**

  The automatic boot runs correctly, without requiring human intervention anymore.

- **Visibility of the host serial number in the BIOS**

  The host serial number is now visible in the BIOS when it is accessed via a guest Operating System (OS).

Chapter 2. Known restrictions and issues

2.1. Platform restrictions and issues

2.1.1. Server Hardware Console (SHC) user accounts

Restriction

It is not yet possible to create user accounts with different access rights. All user accounts have the same rights.

2.1.2. Intrusion detection

Issue

False intrusion detections may appear in the **Intrusion Detection** page of the SHC and in the SEL: an intrusion is detected although no actual intrusion has happened.

2.1.3. Date and time setting

Issue

If the date and time have been set manually, they are lost after a reboot or update of the BMC and must be set again.

Workaround

To avoid having to set the date and time again after each reboot or update of the BMC, set them using a NTP server.

See	BullSequana Edge Server Hardware Console Reference Guide, 86 A1 05FS for more information

2.1.4. Baseboard Management Controller (BMC) firmware update

Issue

During the update of the BMC firmware via the SHC or MISM, a message indicating the failure to upload the file is displayed.

Workaround

Check the version of the BMC firmware after the update:

- If the version is correct, the update is successful and the message can be ignored.
- If the version is incorrect, relaunch the update.

2.1.5. Cold or Warm Reboot

Restriction

The **Cold reboot** or **Warm reboot** buttons in the **Server power operations** page of the SHC do not function correctly in this release. After using one of them, the system does not restart: the status displayed is Running but the KVM windows remains black.

Workaround

If one of the reboot button was used, perform a Power Off followed by a Power On to go back to normal behavior.

To reboot the system, perform a Power Off followed by a Power On instead of using the reboot buttons.

2.2. Software restrictions and issues

Installing VMware ESXi using a PXE server

Issue

During the installation of VMware ESXi with a PXE server, the sequence hangs just after loading the `vmkusb` VMware driver.

Workaround

Disable USB support in the BIOS before the OS installation and enable it again once the installation is done.

Chapter 3. Recommendations

3.1. Updating to Technical State (TS) 15.02 from an older TS

To update a server running a TS preceding TS 14.01 to TS 15.02, perform the following steps:

1. Update the BMC firmware individually to the version delivered in TS 14.01 using MISM or the SHC.

2. Perform a global upgrade to TS 15.02 using MISM.

3.2. Updating to Technical State (TS) 14.01

To update a server to TS 14.01 using a version of MISM preceding 2.1.1, perform the following steps:

1. Update the BMC firmware individually using MISM or the SHC.

2. Perform a global upgrade using MISM.

3.3. Updating the BIOS or CPLD firmware

The system must be switched to idle or off before updating the BIOS or CPLD firmware.

3.4. Baseboard Management Controller (BMC) connection

To ensure a stable connection to the BMC, it is strongly recommended to follow the following guidelines:

- To establish BMC connection for the first time, it is strongly recommended to use the RJ45 port 0 at the back of the server.

- For the following connections to the BMC, it is strongly recommended to use the RJ45 port 1 at the back of the server.

- Once the IP addresses are correctly configured in the **BMC network settings** page of the SHC, deselect the **Enable Link Local Addressing** option.

See BullSequana Edge Description Guide, 86 A1 65FR for more information on the server ports

3.5. Baseboard Management Controller (BMC) default user account

Check that another BMC user account has been created before deleting the BMC default user account (admin). Otherwise future connections to the BMC will be impossible.

3.6.   Physical mobile networks

It is strongly recommended to connect only one physical mobile network (miniPCIe).

3.7.   Machine Intelligence System Management (MISM)

3.7.1.   Installing/Updating MISM

To update MISM from a version preceding 2.0.2, perform the following steps:

1.   Backup the playbooks created by the user.

2.   Uninstall any previous versions.

3.   Install the new version.

3.7.2.   Installing/Updating to MISM 2.1.1

To install/update to version 2.1.1, perform the following steps:

1.   From the install directory, go to the Dockerfiles directory.

```
$ cd Dockerfiles
```

2.   Edit the `zabbix.env` file.

```
$ cat zabbix.env
```

3.   Change the `POSTRGES_USER=zabbix` line to `POSTRGES_USER=mism`.

4.   Install version 2.1.1.

3.7.3.   Updating firmware from the Technical State (TS) with MISM

The TechnicalState.iso file must be mounted using one of the following methods:

• from the /mnt root directory before starting containers

• from a /mnt sub-directory. The path to the file must be changed

If the TechnicalState.iso file is mounted after starting the containers, the containers must be restarted.

3.7.4.   Host discovery in the monitoring console (Zabbix)

Once the discovery of a host is complete, disable the Discovery Action. This will prevent irrelevant severe problems to be listed and modifications can now be applied to the host.

Chapter 4. Information

4.1. Flashing the BIOS firmware

Use the following procedure when reflashing the BIOS firmware with the same version is not possible through conventional means.

1. Extract the BIOS firmware file using the following command:

```
$ tar -xvzf BIOS_SKD080.XX.XX.XXX.tar.gz
```

2. Copy the `image-bios` file to the /tmp directory of the BMC.

3. Flash the BIOS firmware using the following command:

```
$ update_bios.sh /tmp/image-bios
```

4.2. Disk electrical hazard safety label

The disk electrical hazard safety labels are incorrectly described in the BullSequana Edge Installation Guide , 86 A1 67FR 08.

These labels do not apply to the disks but to the Power Supply Unit (PSU) located underneath the disks. This will be corrected with the following information in the next revision of the guide.

Localization

The labels are inside the server: on the disk tray, underneath the disks.

Electrical hazard safety label
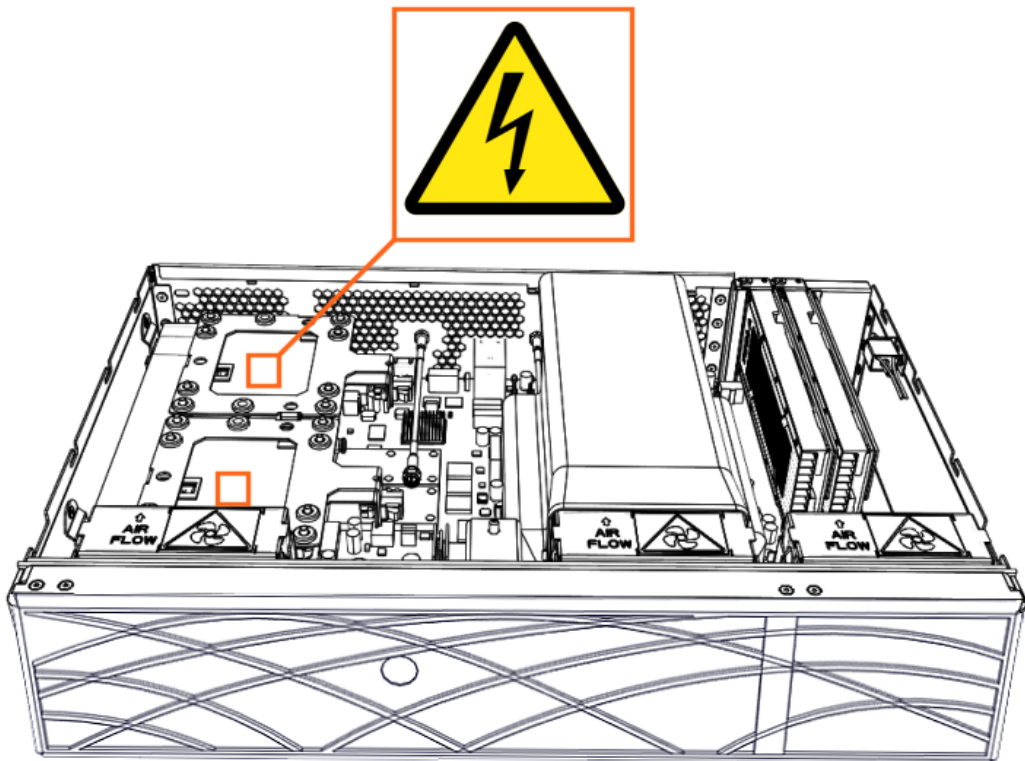
Chapter 5. Delivery content

5.1. Delivered items

- Documentation and firmware are delivered on the Resource and Documentation DVD

- Machine Intelligence System Management (MISM) is delivered on the Bull support website: http://support.bull.com

5.2. Documentation

Note New versions are in highlighted in grey.

Name	Description	Version
BullSequana Edge Customer Documentation Portfolio	Complete documentation dedicated to the customer	05
BullSequana Edge Field Documentation Portfolio	Complete documentation dedicated to the field	05

5.3. Platform firmware

Note New versions are in highlighted in grey.

Name	Description	Version
BIOS_SKD080	BIOS firmware	80.18.01 build 001
CPLD_MIPCS	Flash image for the CPLD component	4.2.0.0
OMF_MIPCS	Server Hardware Console (SHC) firmware	31.00 build 0382
VR_PCH_CPU0_MIPCS	Configuration file for processor voltage regulator on the motherboard	1.0.0
VR_PVCCIN_CPU0_MIPCS	Configuration file for processor voltage regulator on the motherboard	1.0.0
VR_PVCCIO_CPU0_MIPCS	Configuration file for processor voltage regulator on the motherboard	1.0.0
VR_PVDDQ_AB_CPU0_MIPCS	Configuration file for memory voltage regulator on the motherboard	1.0.0
VR_PVDDQ_DE_CPU0_MIPCS	Configuration file for memory voltage regulator on the motherboard	1.0.0

5.4. Administration Tools

Note New versions are in highlighted in grey.

Name	Description	Version
MISM	A web application used for hardware maintenance	2.1.1

Chapter 6. History of previous versions

6.1. TS 14.01 (May 2020)

New features and changes

BIOS_SKD080

- Generate signed BIOS image
- Reference Code version RC 06.D34
- Updated Intel Xeon Skylake-D processor microcode to version 02000065
- Updated the Management Engine (ME) SPS firmware to version SPS_ SoC-X_04.00.04.112
- Detect chassis intrusion in standby, during boot and in runtime and take actions based on BMC settings

MISM

- New Zabbix template for BullSequana Edge Host
- New Zabbix template for BullSequana Edge Map
- BullSequana Edge Zabbix Icons
- Added two missing sensors as items and their associated graph in Zabbix
  - Power psu-iout (Amperes)
  - Total power (Watts)
- Prerequisites helping script with NO warranty

OMF_MIPCS

- IPMI Out Of Band support
- Signed firmware support for BIOS, BMC and CPLD firmware

Resolved issues

- **Sensor display in Idle or Off state**

  Sensor display values are now correctly implemented for systems in Idle or Off state.

- **Date and hour settings in the Server Hardware Console (SHC)**

  Manually setting the date and hour is now possible from the SHC.

- **Powering the server off**

  Powering off the server using the Power button is now possible.

- **Encrypted passwords**

  Password encryption in the controlling console (Ansible Tower) is now fully implemented and no longer hinders job launches.

6.2. TS 06.02 (December 2019)

New features and changes

BIOS_SKD080

- Print BMC and CPLD Version in BIOS log
- Chassis intrusion detection (Note: if chassis is open, the system will not boot)

OMF_MIPCS

New user 'admin' has been created

After the update of the BMC firmware to the version provided in this TS, it is necessary to run the following commands in ssh so that the new user information is taken into account:

1. Export the BMC credentials using the following command:

```
export bmc=<user>:<pwd>@<BMC IP>
```

2. Perform the reset to default factory settings of the BMC using the following command:

```
curl -b cjar -k -H 'Content-Type: application/json' -X POST -d '{"data":[]}'
https://${bmc}/xyz/openbmc_project/software/action/Reset
```

MISM

- Full installation through install.sh and start/stop.sh scripts
- Zabbix monitoring

Resolved issues

- **KVM interface in the Server Hardware Console (SHC)**

  Using the Refresh button no longer makes the Keyboard Video Mouse page unavailable.

- **Wireless connection configuration**

  Configuring LTE or WiFi for BMC is now possible through the SHC.

- **BMC WiFi connection**

  The user is now warned that the entered password is incorrect and the connection unsuccessful.

- **BMC WiFi connection after a BMC reboot**

  Connection to the BMC WiFi is now automatically restored after rebooting the BMC.

6.3. TS 05.01 (September 2019)

New features and changes

BIOS_SKD080

- New Bakerville Code Drop 14
- Support for sending memory module and PCIe errors to the Server Hardware Console (SHC)
- Update to SMBIOS Type 0/1 Information
- Send processor microcode version information to the SHC
- Send processor SKU number, PCH information, processor signature and number of enabled cores to the SHC

OMF_MIPCS

Identification of failing components including physical position

MISM

- MIPM renames as MISM
- start/stop/uninstall/remove_user_data scripts
- add_playbooks separate script to allow light delivery after first install

Resolved issues

Server Hardware Console (SHC) user accounts

Creating a new user account in the SHC web interface is now possible.

6.4. TS 04.01 (June 2019)

First delivery

Bull Cedoc
357 avenue Patton
BP 20845
49008 Angers Cedex 01
FRANCE