EVIDEN

Quick Start Guide

Trademarks and Acknowledgements

We acknowledge the rights of the proprietors of the trademarks mentioned in this manual.

All brand names and software and hardware product names are subject to trademark and/or patent protection.

Quoting of brand and product names is for information purposes only and does not represent trademark and/or patent misuse.

Hardware

April 2025

Eviden
30 bis rue du Nid de Pie
49000 Angers
FRANCE

Table of Contents

Preface

In this guide you will find the first steps to perform before you can use your new BullSequana SA server.

See The Bull support web site for the most up-to-date product information, documentation, , firmware updates, software fixes and service offers:
[BullSequana SA servers — Bull On-line Support Portal](#)

Intended Readers

This guide is intended for customer technical expert or EVIDEN Maintenance team.

Chapter 1. Discovering the server

Your system has been factory-built and tested arriving with a BIOS and firmware ready to go.

1.1.1 USB key (part of the delivery)

A USB key is delivered with documentation, firmware and BIOS version.

1.1.2 Support Online (SOL) resources for BullSequana SA (Eviden support website)

Product documentation and downloads are available from Eviden website:

https://support.bull.com/ols/product/platforms/bullion/bullsequana-sa-servers/

More contents are available to the customer with support contract (login access is requested on this webserver).

If you don't have an account, you can sign up at :
https://support.bull.com/ols/join_form

1.2   Server identification

After unpacking your server and before racking it, save the following information:

- MAC Addresses
- XAN serial number
- Motherboard Serial number

The following chapters explain how to find and how to use them.

1.2.1   MAC addresses collection

Located on network adapters labels.

*Network Interfaces - Dual Sockets
(SA20, SA20 NVMe, SA20G, SA20G NVMe)*
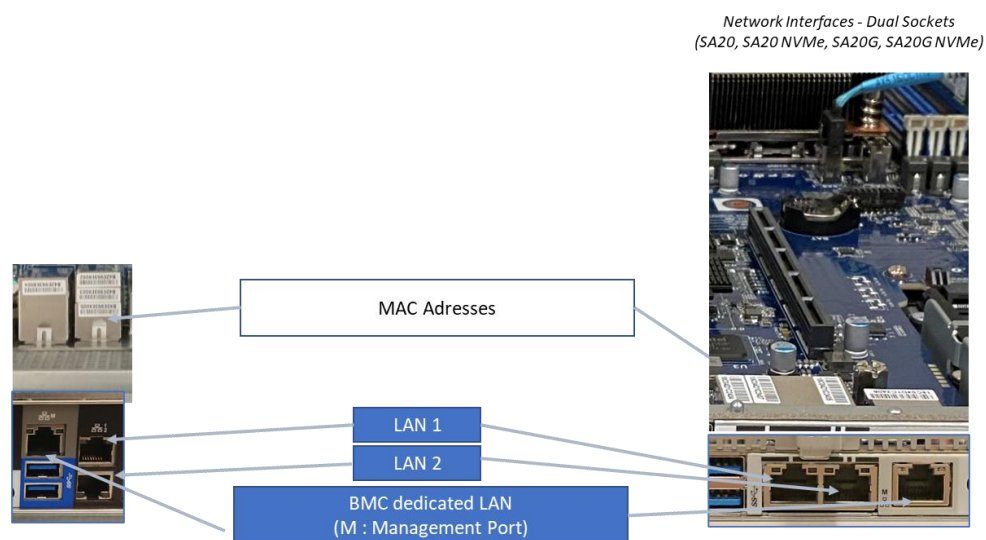
LAN1 : MAC

LAN2 : MAC LAN1+1

BMC via dedicated interface (M): MAC LAN1+2

BMC via shared interface (LAN1): MAC LAN1 +3

1.2.2　XAN serial number

The XAN is a unique number that identifies your server at Eviden, located on top of the server chassis. or on the front label drawer.

XAN serial number - front drawer

Label on chassis

XAN serial number - front drawer

Bull SAS | 78340 Les Clayes FRANCE

Product : BullSequana SA20G
Model : R282-Z93

S.N : XAN-GE2-

Dual Sockets

Single Socket

You will be asked for this number each time you query support Eviden.

1.2.3　Motherboard Serial Number

This number is used as the default password to log in to the BMC.

It can be found on the right side of the chassis.

DL8004221A0009

Unique BMC
Password LH4NA300470

Chapter 2. Starting the server

2.1 Server BMC setup

By default, network is configured in DHCP.mode.

Two cases for IP configurations:

- your network is providing DHCP service: contact your network administrator.
- you are using a static IP configuration in this case; you have to configure this IP address in the BIOS as specified in the following section.

Two cases to define ports used.

- BMC via dedicated interface (M)
- BMC via shared interface (LAN1)

2.1.1 BIOS Access – Static IP configuration

If you use DHCP go to .

2.1.1.1 Connect monitor & keyboard.

Before starting the server, you need to connect a VGA display and a keyboard.

The connectors are located on the back of the server."

SA10	SA20

2.1.1.2   Start the server.

The server when you see the screen press the <DEL> key to inter BIOS.
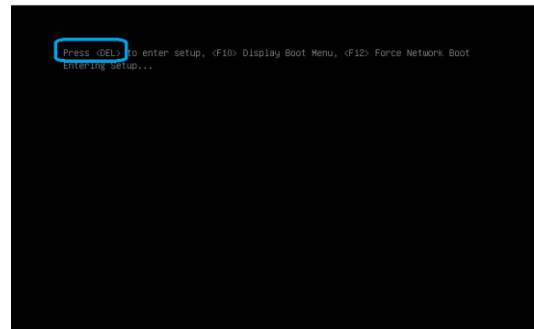
In the BIOS menu select:

Server Mgmt

BMC network configuration

Then enter Your IP address, Subnet, Router,... then select Save & Exit

2.1.2   Powering the system

The server is started by pressing power button ① on the front panel.

Front Panel
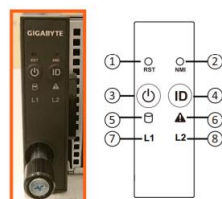
In the User Guide located on the USB stick ("documentation" directory), you will find in the section "Front Panel LEDs and Button" the meaning of the different LEDs.

2.2   Connect and setup the BMC

For the first BMC login, open a browser and go to: *https://IP_Adress_of_the-server* then open a session using default user "admin"

The password is located on the right chassis side (cf *Motherboard Serial Number*)

For example
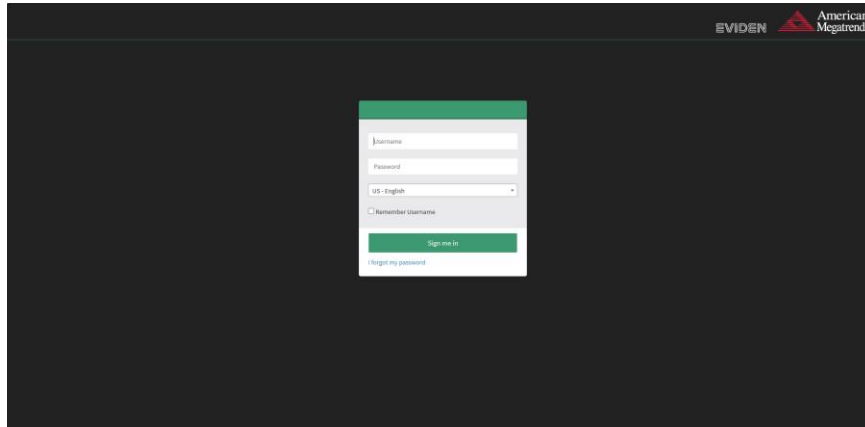
Then change the default password,

Go to menu "Settings", "User Management", select "admin" account, change, and save the new "admin" user password.
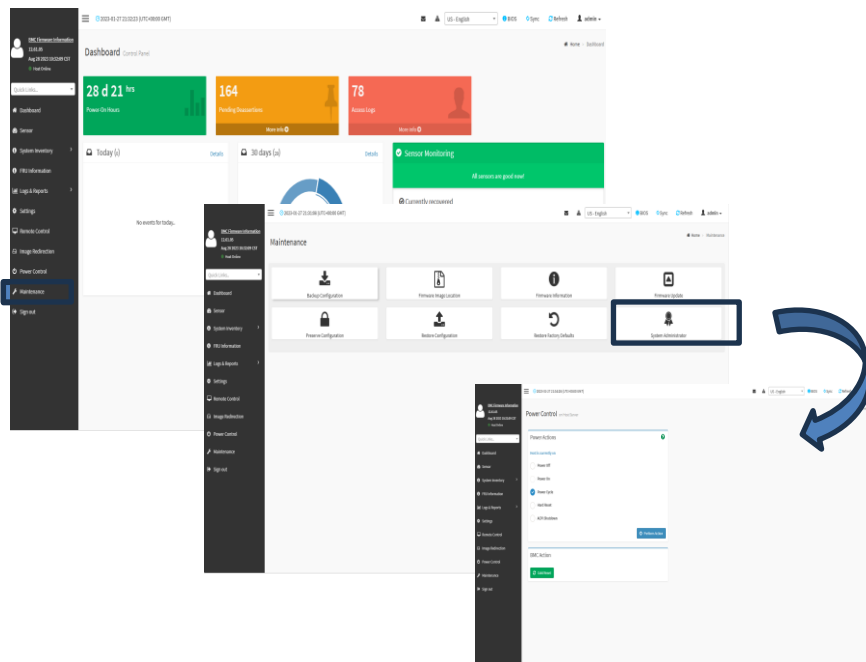
2.2.1   How to access BIOS menu from the BMC

To access the BIOS, you must restart your server. Follow these steps:

1. Navigate to the BMC dashboard.
2. Select the "Power Control" menu.
3. In the subsequent screen, choose "Power Cycle."
4. Click on "Perform Action."

This will restart your server.
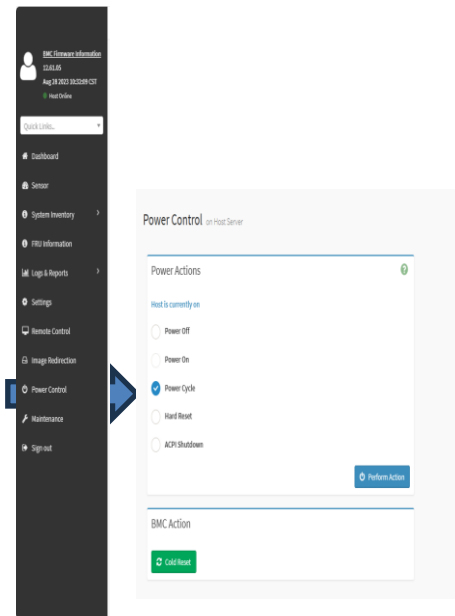
While the server is rebooting, navigate to the BMC dashboard and select the "Power Control" menu. Then, launch the "H5Viewer" to open a remote window on your server. When you see the screen, press the <DEL> key to enter the BIOS
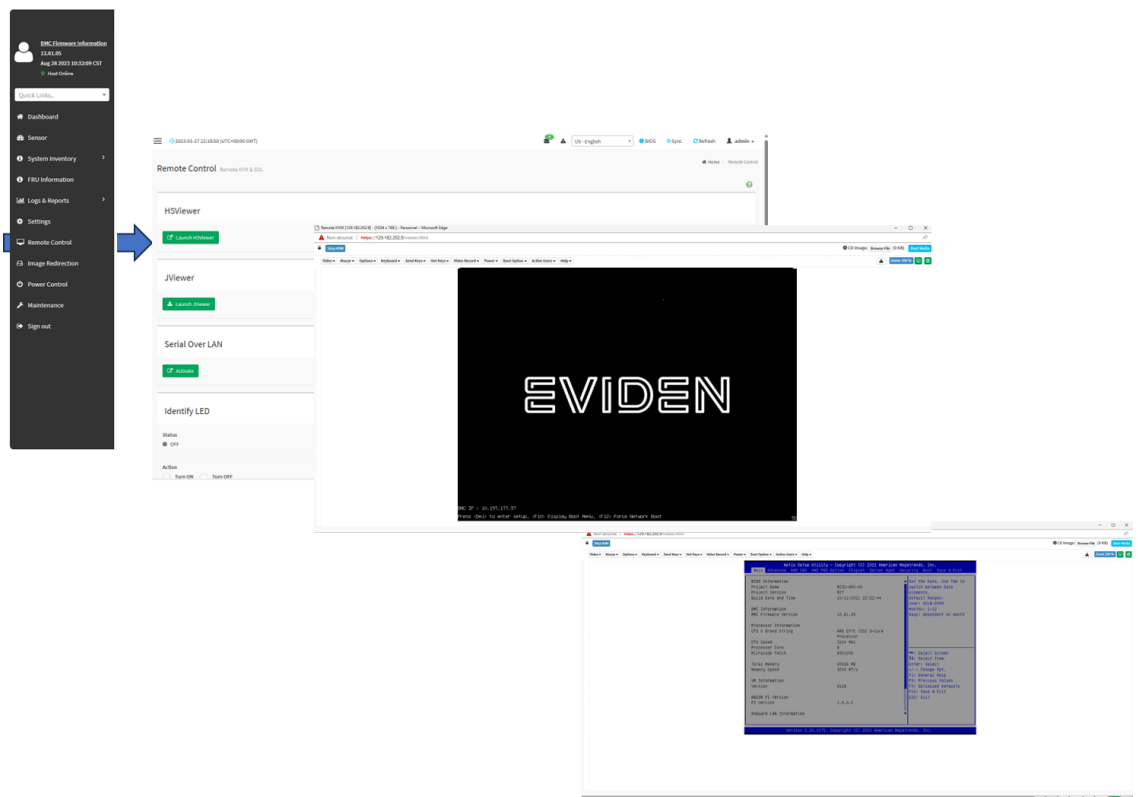
2.3 Check HW inventory and components status

In most cases, servers are configured with boot drives in RAID1, although this may vary depending on your order specifications.

Other drives connected to the MegaRAID adapter are configured in JBOD (Just a Bunch Of Disks) mode. Administrator shall finalize MegaRAID configuration on-site.

2.3.1 Hardware Inventory from the BMC GUI.

Connect to the BMC using the username "admin" and verify the presence of the PCI RAID card by following these steps: System Inventory => PCI Inventory = Add In Card
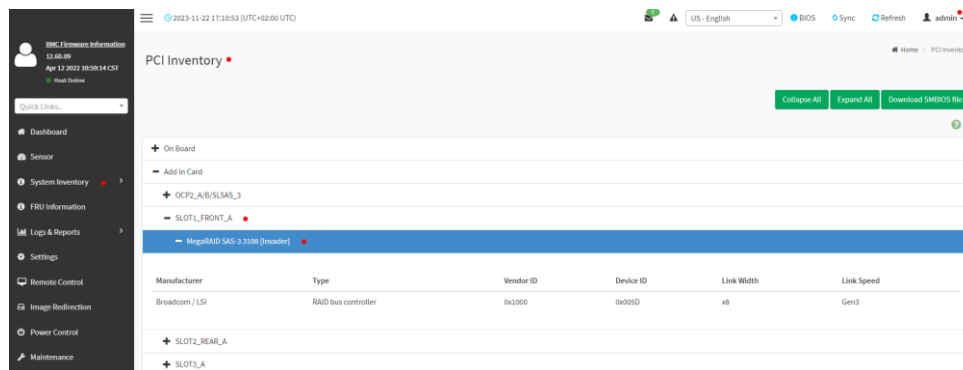
Drives behind the MegaRaid PCI card are not directly visible here. Use the BIOS Setup (see next section).

2.3.2 Hardware Inventory from BIOS menu.

During the server Power On, select <DEL> to enter in the BIOS menu *see how to access BIOS menu from the BMC*.

At the home page you have main information on your server

2.3.2.1   RAID components

Navigate to Advanced => AVAGO MegaRAID model > Configuration Utility

```
                    Aptio Setup Utility - Copyright (C) 2021 American Megatrends, Inc.
          Main  Advanced  AMD CBS  AMD PBS Option  Chipset  Server Mgmt  Security  Boot  Save & Exit

        ▶ SATA Configuration                                          │ Manage RAID Controller
        ▶ UEFI POST LOGO Configuration                                │ Configurations.
                                                                      │
        ▶ Tls Auth Configuration                                      │
        ▶ AMD Mem Configuration Status                                │
        ▶ iSCSI Configuration                                         │
        ▶ AVAGO MegaRAID <AVAGO MegaRAID SAS 9361-8i> Configuration   │
          Utility - 03.25.05.14                                       │
        ▶ Intel(R) I350 Gigabit Network Connection - D8:5E:D3:1F:46:A2│
        ▶ VLAN Configuration (MAC:D85ED31F46A2)                       │
        ▶ MAC:D85ED31F46A2-IPv4 Network Configuration                 │
        ▶ MAC:D85ED31F46A2-IPv6 Network Configuration                 │
        ▶ Intel(R) I350 Gigabit Network Connection - D8:5E:D3:1F:46:A3│
        ▶ VLAN Configuration (MAC:D85ED31F46A3)                       │ ↔: Select Screen
        ▶ MAC:D85ED31F46A3-IPv4 Network Configuration                 │ ↑↓: Select Item
        ▶ MAC:D85ED31F46A3-IPv6 Network Configuration                 │ Enter: Select
        ▶ Mellanox Network Adapter - 10:70:FD:E1:FD:12                │ +/-: Change Opt.
        ▶ VLAN Configuration (MAC:1070FDE1FD12)                        │ F1: General Help
        ▶ MAC:1070FDE1FD12-IPv4 Network Configuration                 │ F3: Previous Values
        ▶ MAC:1070FDE1FD12-IPv6 Network Configuration                 │ F9: Optimized Defaults
        ▶ Mellanox Network Adapter - 10:70:FD:E1:FD:13                │ F10: Save & Exit
        ▶ VLAN Configuration (MAC:1070FDE1FD13)                       │ ESC: Exit
        ▶ MAC:1070FDE1FD13-IPv4 Network Configuration                 │
```

Look in PROPERTIES and verify that:

- **Drives** to see the available disks behind the PCI card
- **Drive Groups** to see the number of configured Raid Group
- **Virtual Drives** to see the number of volumes configured and available.

```
                    Aptio Setup Utility - Copyright (C) 2021 American Megatrends, Inc.
          Advanced

        ▶ Main Menu                                        │ Number of drives connected
        ▶ Help                                             │ to this controller.
                                                           │
          PROPERTIES                                       │
          Status                      [Optimal]            │
          Current Personality         [RAID]               │
          Backplane                   1                    │
          BBU                         [No]                 │
          Enclosure                   0                    │
          Drives                      8                    │
          Drive Groups                2                    │
          Virtual Drives              2                    │
        ▶ View Server Profile                              │
                                                           │
          ACTIONS                                          │ ↔: Select Screen
        ▶ Configure                                        │ ↑↓: Select Item
        ▶ Set Factory Defaults                             │ Enter: Select
        ▶ Update Firmware                                  │ +/-: Change Opt.
          Silence Alarm                                    │ F1: General Help
                                                           │ F3: Previous Values
          BACKGROUND OPERATIONS                            │ F9: Optimized Defaults
          Virtual Drive Operations in   None               │ F10: Save & Exit
          Progress                                         │ ESC: Exit
          Drive Operations in Progress  None               │

                    Version 2.20.1275. Copyright (C) 2021 American Megatrends, Inc.        B4
```
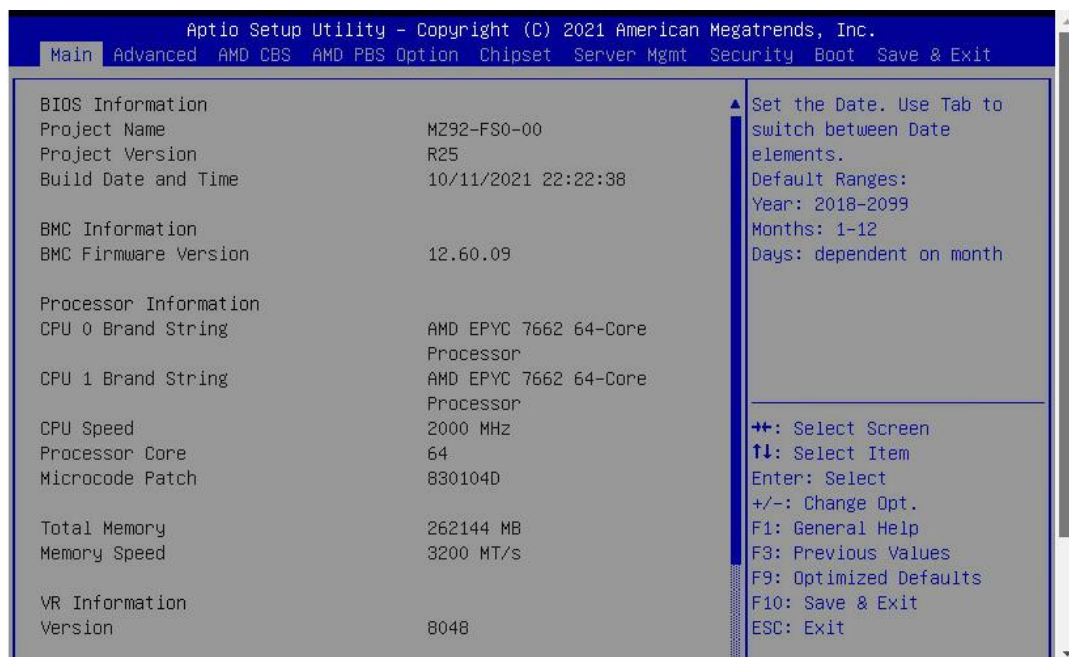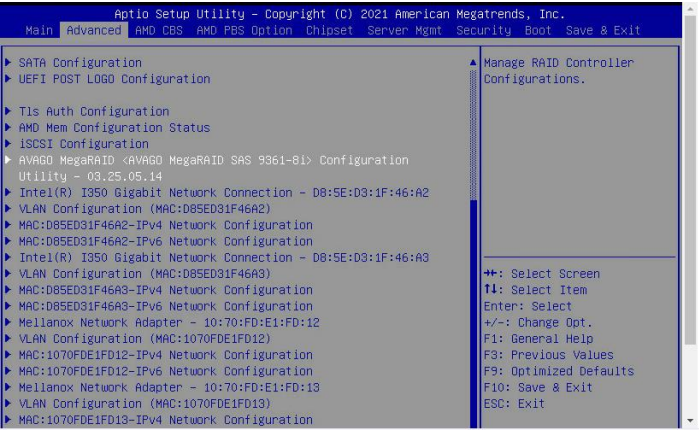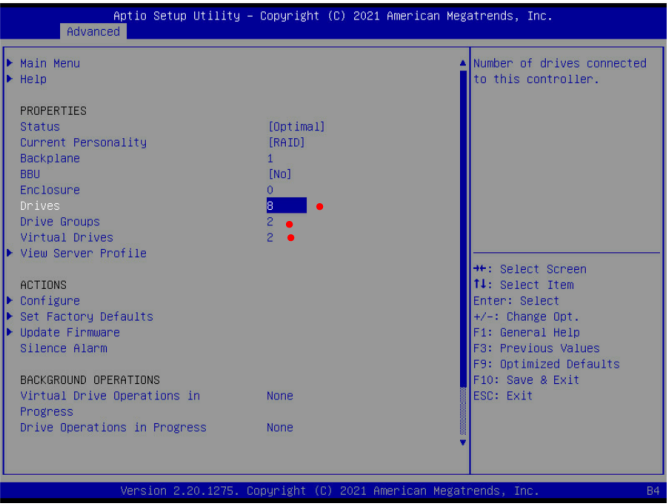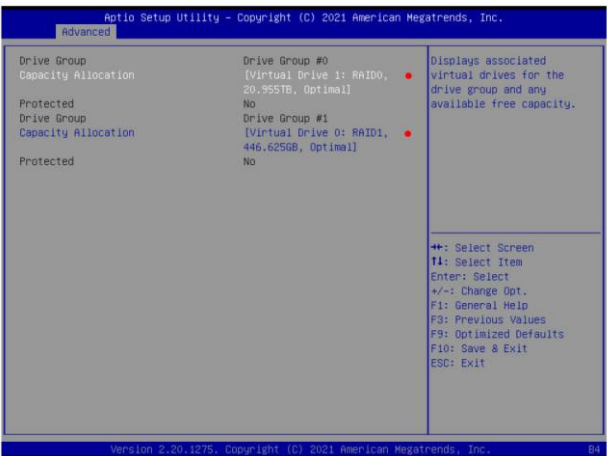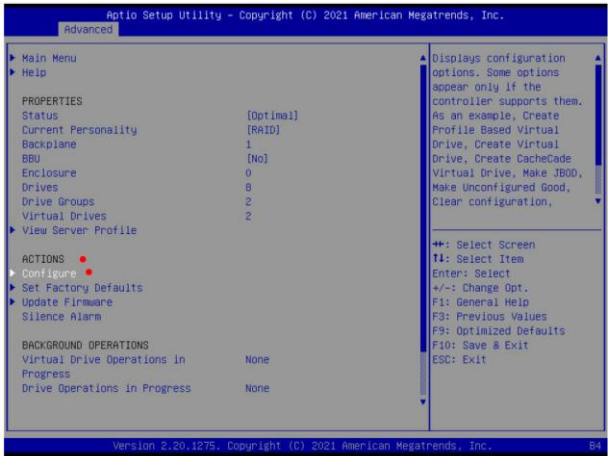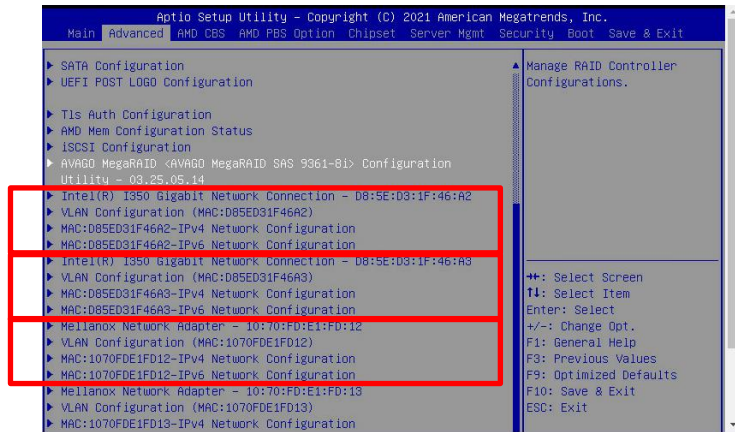
In ACTIONS, you're able to verify the RAID types, Status and capacity:

```
            Aptio Setup Utility - Copyright (C) 2021 American Megatrends, Inc.
      Advanced

    ▶ Main Menu                        │ Displays configuration
    ▶ Help                             │ options. Some options
                                       │ appear only if the
      PROPERTIES                       │ controller supports them.
      Status            [Optimal]      │ As an example, Create
      Current Personality [RAID]       │ Profile Based Virtual
      Backplane         1              │ Drive, Create Virtual
      BBU               [No]           │ Drive, Create CacheCade
      Enclosure         0              │ Virtual Drive, Make JBOD,
      Drives            8              │ Make Unconfigured Good,
      Drive Groups      2              │ Clear configuration,
      Virtual Drives    2              │
    ▶ View Server Profile              │
                                       │
      ACTIONS                          │ ↔: Select Screen
    ▶ Configure                        │ ↑↓: Select Item
    ▶ Set Factory Defaults             │ Enter: Select
    ▶ Update Firmware                  │ +/-: Change Opt.
      Silence Alarm                    │ F1: General Help
                                       │ F3: Previous Values
      BACKGROUND OPERATIONS            │ F9: Optimized Defaults
      Virtual Drive Operations in None │ F10: Save & Exit
      Progress                         │ ESC: Exit
      Drive Operations in Progress None│

        Version 2.20.1275. Copyright (C) 2021 American Megatrends, Inc.    B4
```

```
            Aptio Setup Utility - Copyright (C) 2021 American Megatrends, Inc.
      Advanced

      Drive Group                      │ Displays associated
      Capacity Allocation  [Virtual Drive 1: RAID0,  │ virtual drives for the
                            20.955TB, Optimal]        │ drive group and any
                                       │ available free capacity.
      Protected            No          │
      Drive Group          Drive Group #1  │
      Capacity Allocation  [Virtual Drive 0: RAID1,  │
                            446.625GB, Optimal]       │
      Protected            No          │
                                       │
                                       │
                                       │
                                       │ ↔: Select Screen
                                       │ ↑↓: Select Item
                                       │ Enter: Select
                                       │ +/-: Change Opt.
                                       │ F1: General Help
                                       │ F3: Previous Values
                                       │ F9: Optimized Defaults
                                       │ F10: Save & Exit
                                       │ ESC: Exit

        Version 2.20.1275. Copyright (C) 2021 American Megatrends, Inc.    B4
```
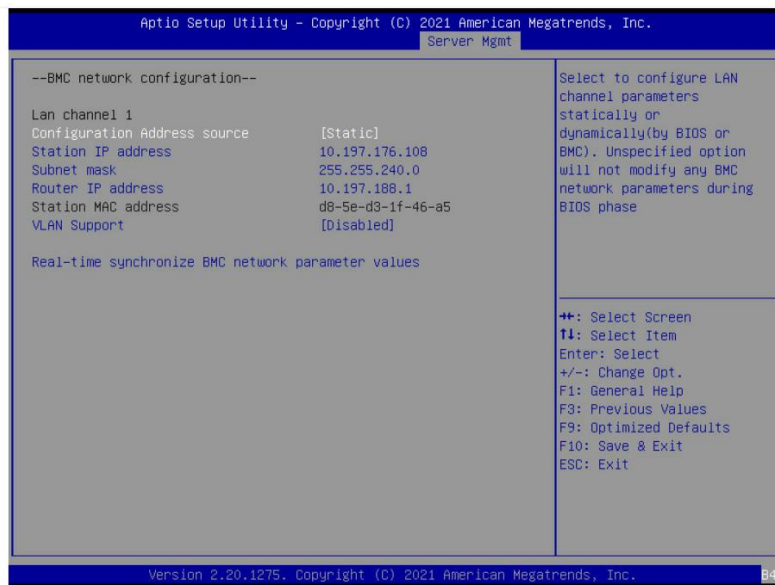
2.3.2.2　Network

From the "Advanced" menu, you can find 4 dedicated submenus for each Network adapter:

2.3.2.3　BMC network

Navigate to Server Mgmt => BMC network configuration. This interface can be used to specify static IP configuration.
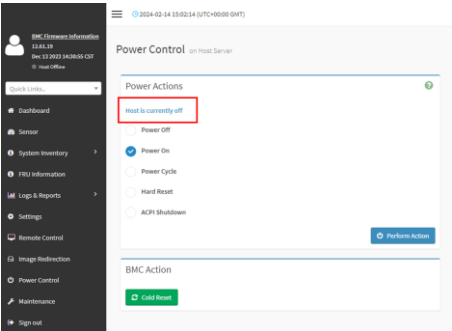
Chapter 3. Deploying the system

3.1   Preparing OS deployment
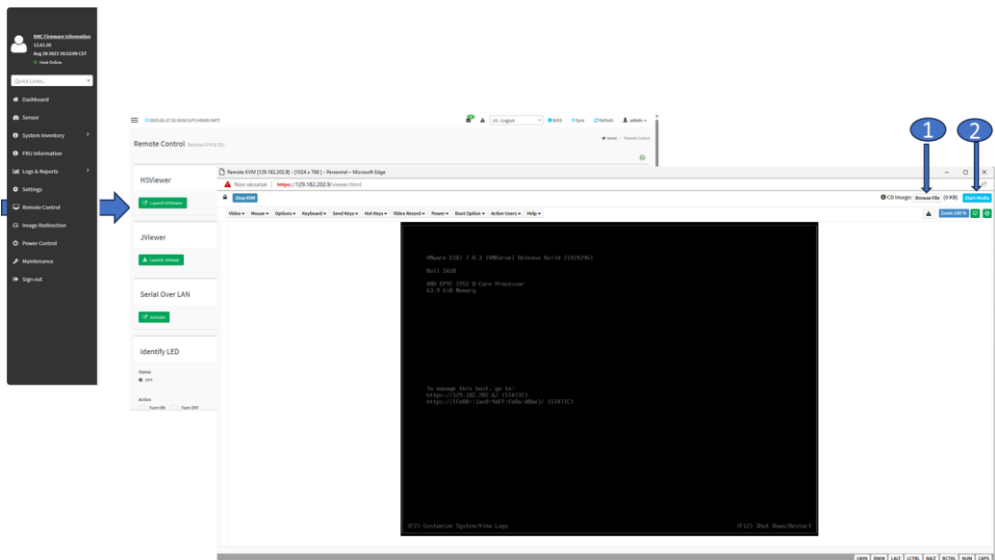
3.1.1   Server Power on

Check the status of your host, if off please Power On

### 3.1.2   Operating System installation options

3.1.2.1   By using a Virtual Media

From the remote windows select an image to load then click start to install your operating system

3.1.2.2   By using a Pre-boot eXecution Environment (PXE)

Change the BIOS boot list to enable PXE booting. Then, restart the server and connect to the BMC using the admin account. Navigate to the "Remote Control" submenu and open a remote window.

You can also restart the server and during the boot session press the< F12> key to force Network boot.
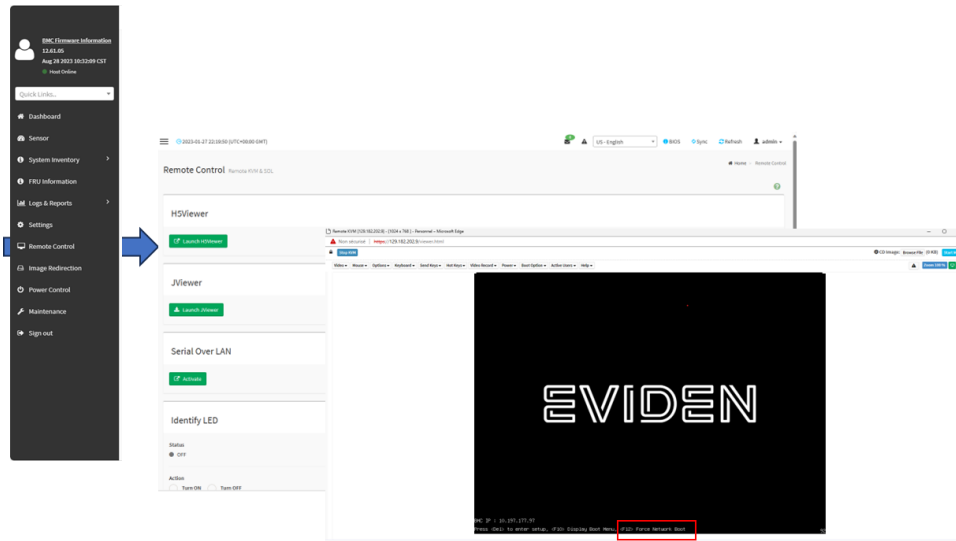

Verify that PXE support is Enable for the desired network card:
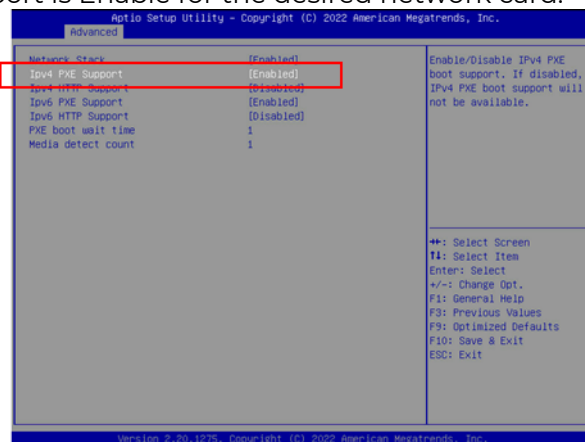
3.1.2.3   By using a bootable USB drive

Plug a bootable USB flash drive into any of the USB ports of the server. You may need to adjust the BIOS boot list to enable booting from the USB drive. Afterward, restart the server and connect to the BMC using the admin account. Then, navigate to the "Remote Control" submenu and open a remote window.
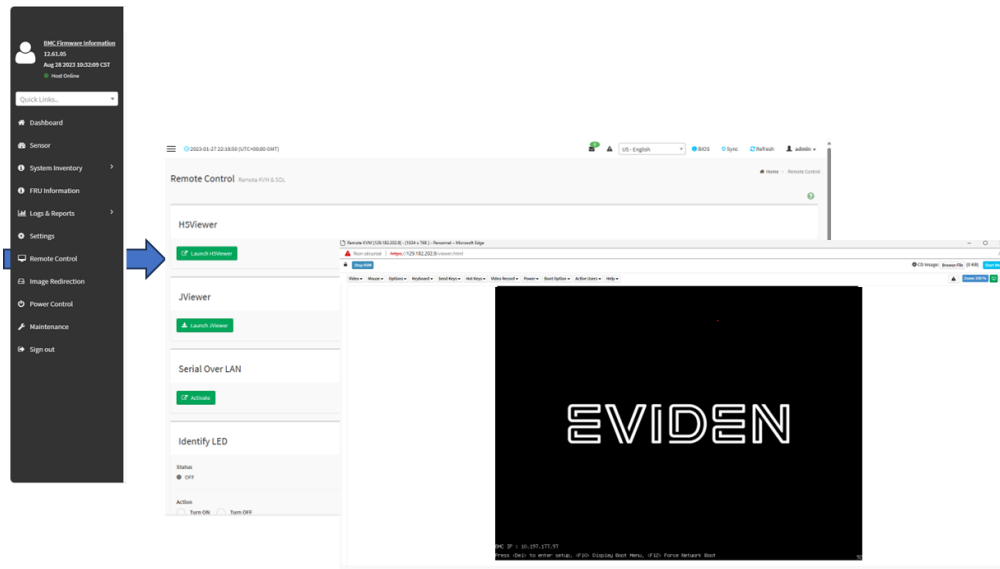
3.2   Microsoft Windows Server 2022 preload

If you ordered Microsoft Windows Server 2022 preloaded, you must activate it.

For more details, please download the document titled '86A172FT Preloaded Windows User Guide' from SOL.

Chapter 4. Platform management tools

The GSM software suite is an optional and free tool designed for the centralized management of multiple BullSequana SA servers. It can be downloaded from the SOL website. This suite comprises three main components:

1. GSM Server: A browser-based GUI software program that provides easy-to-use remote monitoring and management capabilities for multiple BullSequana SA servers. It interfaces with the BMC of each server node.

2. GSM Agent: This software program is installed locally on BullSequana SA server node, tasked with retrieving supplementary node information such as CPU, memory, hard disk drive, PCI components, etc., directly from the operating system (OS). Subsequently, this data is available from GSM agent Web UI, and it can be pulled by GSM Server

3. GSM CLI: A command-line interface program that facilitates global remote monitoring and management of multiple BullSequana SA servers. It operates via the BMC of each server node.