GRAFENTHAL®
IT PRODUCTS • GERMANY

Handbuch

GRAFENTHAL
T1004 S2

GRAFENTHAL GmbH • von-Monschaw-Straße 3 • 47574 Goch • info@grafenthal.de • www.grafenthal.de
Copyright © 2016 GRAFENTHAL GmbH, Alle Rechte vorbehalten. GRAFENTHAL ist eine eingetragene Marke der GRAFENTHAL GmbH.

Dear users of GRAFENTHAL server:

Sincerely thank you for selection of GRAFENTHAL server !

This manual introduces the technical characteristics and the system installation and setup of the server, and helps you to particularly understand and expediently use this server. Please deliver the package of our product to the waste recycling station for recycling, in favor of pollution prevent and benefit the humankind.

Please contact GRAFENTHAL Gmbh, if you have any questions or advice about this manual.

GRAFENTHAL GmbH.

Februar 2016

GRAFENTHAL GmbH

Von Monschaw-Straße 3 47574 Goch - Germany

Tel. +49 (0) 28 23 4190 401

Fax: +49 (0) 28 23 4190 400

eMail: info@grafenthal.de

Web: www.grafenthal.de

Intel, Intel logo, Intel Inside, Intel Inside logo, Intel Centrino, Intel Centrino logo, Celeron, Intel Xeon, Intel SpeedStep, Itanium, and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

All the other trademarks or registered trademarks mentioned in this manual are possessed by their respective owners.

Copyright Introduction

Document version: V1.0 Date: 12th Juli 2016

Document Introduction: The 1st formal issuance.

Abstract

The manual introduces issues closely related to maintenance such as specification, hardware operation, software configuration, service terms, fault diagnosis etc. of the server.
Readers of this guide will be deemed to have abundant knowledge about the server product, and will not cause any personal injury or product damage during operation and maintenance, for sufficient trainings received by them.

Target Audience

This manual mainly adapts to the following personnel:

- Technical support engineers
- Product maintenance engineers

It is suggested that server maintenance operation shall be carried out by professional engineers with related server knowledge via referring to this manual.

Table of Content

Inhalt

1. Safety Introduction

⚠Warning: the following warnings show that there are potential dangers that may cause property loss, personal injury or death:

- The power supply equipment in the system may generate high voltage and dangerous electrical energy and thus cause personal injury. Please do not dismount the cover of the host or to dismount and replace any component in the system by yourself, unless otherwise informed by the distributor; only maintenance technicians trained by the distributor have the right to disassemble the cover of the host, dismount and replace the internal components.
- Please connect the equipment to appropriate power supply, and the power should be supplied by external power supply which is indicated on the rated input label. To prevent your equipment from damages caused by momentary spike or plunge of the voltage, please use relevant voltage stabilizing equipment or uninterruptible power supply equipment.
- If extended cables are needed, please use the three-core cables matched with correct earthed plug, and check the ratings of the extended cables to make sure that the sum of rated current of all products inserted into the extended cables do not exceed 80% of the limits of the rated currents of the extended cables.
- Please be sure to use the supplied power supply component, such as power lines, power socket (if supplied with the equipment) etc. For the safety of equipment and the user, do not replace randomly power cables or plugs.
- To prevent electric shock dangers caused by leakage in the system, please make sure that the power cables of the system and peripheral equipment are correctly connected to the earthed power socket. Please connect the three-core power line plug to the three- core AC power socket that is well earthed and easy to access, be sure to use the earthing pin of power lines and do not use the patch plug or the earthing pin unplugged with cables. In case of the earthing conductors not installed and it is uncertain whether there are appropriate earthing protections, please do not operate or use the equipment. Contact and consult with the electrician.
- To avoid short circuit of internal components and fire or electric shock hazards, please do not fill any object into the open pores of the system.
- Please place the system far away from the cooling plate and at the place with heat sources, and be sure not to block the air vents.
- Be sure not to scatter food or liquid in the system or on other components, and do not use the product in humid and dusty environment.
- The replacement of batteries with those of another model may cause explosion. When replacement of batteries is required, please consult first the manufacturer and choose batteries of the same or a similar model recommended by the manufacturer. Do not dismount, extrude and pink the batteries or make the external connection point short circuit, and do not expose them in the environment over 60°C. Never throw them into fire or water. Please do not try to open or repair the batteries, and be sure to reasonably deal with the flat batteries and do not put the fl at batteries, the circuit boards that may include the batteries and other components with other wastes. For relevant battery recovery, please contact the local waste recovery and treatment mechanism.

- Before installing equipment in the chassis, please install front and side supporting feet on the independent chassis; for cabinet connecting with other chassis, it shall install the front supporting foot first. If you fail to install correspondingly the supporting foot before installing equipment in the chassis, it may cause the cabinet to turn over in some cases, and thus may cause personal injury. Therefore, it is necessary to install supporting feet before installing equipment in the chassis. After installing the equipment and other components in the chassis, it can only pull out one component from the cabinet through its sliding component at one time. Pulling out several components at the same time may lead the cabinet to turn over and cause serious personal injury.
- Please do not move the chassis independently. Considering the height and weight of the chassis, at least two people are needed to complete its movement.
- Please do not carry out direct contact operation on power copper busbar when the cabinet is powered on, and it is prohibited to carry out direct short circuit of power copper busbar.
- The product is Grade A product, and in the living environment, it may cause radio interference. In such case, it may need the user to take feasible measures for the interference.

⚠ Note: In order to help you use the equipment, the following considerations can help avoid the occurrence of problems that may damage the components or cause data loss etc.

- In case of the following cases, please unplug the power line plug of products from the power socket and contact customer service department of the distributor:
- The power cables, extended cables or power plugs are damaged.
- The products get wet by water.
- The products have fallen off or been damaged.
- Objects fall into the products.
- When operating according to the operation instructions, the products cannot function normally.
- If the system becomes damp, please dispose according to the following steps:
- Switch off the power supplies of the system and the equipment, disconnect them with the power socket, wait for 10 to 20 minutes, and then open the cover of the host.
- Move the equipment to the ventilation place to dry the system at least for 24 hours and make sure that the system is fully dried.
- Close the cover of the host, re-connect the system to the power socket, and then start the equipment.
- In case of operation failure or abnormal situation, please contact the distributor and get technical support.
- Pay attention to the position of the system cables and power cables, wire them in places not to be stepped on or knocked down and ensure not to place other objectives on the cables.
- Before dismounting the cover of host or contacting the internal components, you shall cool down the equipment first; to avoid damaging the main-board, please power off

the system and wait for 5 seconds, and then dismount the components from the main-board or disconnect the connection of peripheral equipment of the system.

- If there are modulator-demodulator, telecommunication or local area network options in the equipment, please pay attention to the following matters:
- In case of thunder and lightning weather, please do not connect or use the modulator-demodulator. Otherwise, it may be subject to lightning strike.
- Never connect or use modulator-demodulator in moist environment.
- Never insert the modulator-demodulator or telephone cables to the socket of network interface controller (NIC).
- Before unpacking the product package, contacting or installing internal components
- or contacting un-insulated cables or jacks of the modulator-demodulator, please disconnect the modulator-demodulator cables.
- In order to prevent the electrostatic discharge from damaging the electronic components in the equipment, please pay attention to the following matters:
- You shall conduct off the static electricity on the body before dismounting or contacting any electronic component in the equipment. You can conduct off the static electricity on the body by contacting the metal earthing objects (such as the unpainted metal surface on the chassis) to prevent the static electricity on the body from conducting itself to the sensitive components.
- For electrostatic sensitive components not ready to be installed for application, please do not take them out from the antistatic package materials.
- During the work, please touch the earthing conductor or the unpainted metal surface on the cabinet regularly to conduct off the static electricity on the body that may damage the internal components.
- When dismounting the internal components with the approval of distributor, please pay attention to the following matters:
- Switch off the system power supply and disconnect the cables, including disconnecting any connection of the system. When disconnecting the cables, please grab the connector of cables and plug it out, and never pull the cables.
- Before dismounting the cover of cabinet or touching the internal components, the products need to be cooled down.
- Before dismounting and touching any electronic component in the equipment, you shall conduct off the static electricity on the body by touching the metal earthingobjectives.
- During the dismounting process, the operation shall not be too big, so as to prevent damage to the components or scratching of the arms.
- Carefully deal with the components and plug-in cards, and please never touch, the components or connection points on the plug-in cards. When taking the plug-in cards or components, you should grab the edges of the plug-in cards or components or their metal fixed supports.
- During the process of cabinet installation and application, please pay attention to the following matters:
- After the installation of cabinet is finished, please ensure that the supporting feet have been fixed to the rack and supported to the ground, and all weight of the rack have been fell onto the ground.
- It shall install into the cabinet according to the sequences from the bottom to the top,

and first install the heaviest component.

- When pulling out the components from the cabinet, it shall apply force slightly to ensure the cabinet to keep balance and stabilization.
- When pressing down the release latch of the sliding rail of components and sliding in or out, please be careful, as the sliding rail may hurt your figures.
- Never make the AC power branch circuit in the cabinet overload. The sum of cabinet load shall not exceed 80% of the ratings of branch circuits.
- Ensure that components in the cabinet have good ventilation.
- When repairing components in the cabinet, never step on any other components.

2. Product Specification Introduction

2.1 Introduction

Uncompromising server performance in desktop format up to 64 GB DDR4 ECC memory and die power of the latest Intel® Xeon® E3-1200 processor family allow v5 An Outstanding performance and efficiency. Only high-quality server components worry for reliable continuous operation of the systems. The Grafen Compact Server T1004 S2 is yourself Unrestricted Even for demanding server applications.Innovative NVMe SSD technology Grafenthal Where one with the T1004 series S2 first optional M.2 NVMe SSD. The unrivaled M.2 NVMe SSD technology speeds up the system for database applications and other applications are required in To those fast read / write values. In benchmark tests the T1004 S2 scored
Server with NVMe SSD option readings of 2.200MB / s and write performance of 939MB / s.

Intelligent Mobile Backup Option
With Integrated Intel® Server Chipset C236 Supports System ALREADY in standard RAID 0, 1, 5 and 10 to protect your data at up to 7 SATA HDD or SSD. The optional module BTD (Backup to Disk) Will pulled with one capacity of 2 TB Can Hot-swap function TAGLICH from the server for more than external storage of your sensitive data. More storage Exigences Meets Gräfen with optional hardware RAID controllers and SAS hard drives SSD Respectively.

remote management
Ideal for branch offices or remote sites. The Grafenthal Compact Server has ONE ASPEED AST 2400 remote management processor of the Fourth Generation and a separate IPMI GLAN interface. With these interface the system will easily administered remotely.

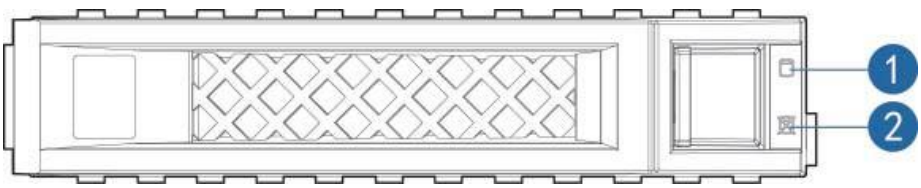
2.2 Features and Specification

Chassis type	SFF Tower / Desktop
Processor family	Intel® Xeon® E3-1200 v5 Series Processors
Motherboard chipset	Intel® C236
System Memory	4 x DDR4 DIMM slots, Dual Channel DDR4 max. 64 GB DDR4 2133/1866 ECC und U DIMM
HDD/SSD internal (installed /max.)	0 / 2 (3,5“ SATA / SAS*) 0 / 1 M.2 NVMe SSD
HDD/SSD Hot-Swap (installed /max.)	0 / 4 (2,5“ SATA / SAS*) plus 1 x Hot-Swap Backup to Disk Option * in case of using SAS Drives a controller is needed

RAID level	Intel® Software Raid 0, 1, 5 und 10 (Hardware Raid Controller possible)
LAN	2 x Gigabit Ethernet
Backup	optional per 2TB Hot-Swap Backup to Disk Modul
Dimensions	B 9,6 cm x H 33 cm x D 36,5 cm
Power	Single 300W Gold
Remote-Management	1 x RJ45 dedicated management Gigabit Ethernet ASPEED AST2400 IPMI
Warranty	3 Years Bring-In
Ports & interfaces	2 x RJ45 GIGABIT LAN Intel® i210 1 x RJ45 Dedicated IPMI LAN Port 6 x USB 3.0 (4 back / 2 front) 2 x USB 2.0 front 1x USB 3.0 onboard (bootfähig) 4 x PCI 3.0 Slots (1 PCI Slot shared with M.2 Port) 1 x VGA D-SUB 1 x Serial Port 2 x Audio Ports (Inaktiv, Audio Karte erforderlich)

3.1 Front Panel

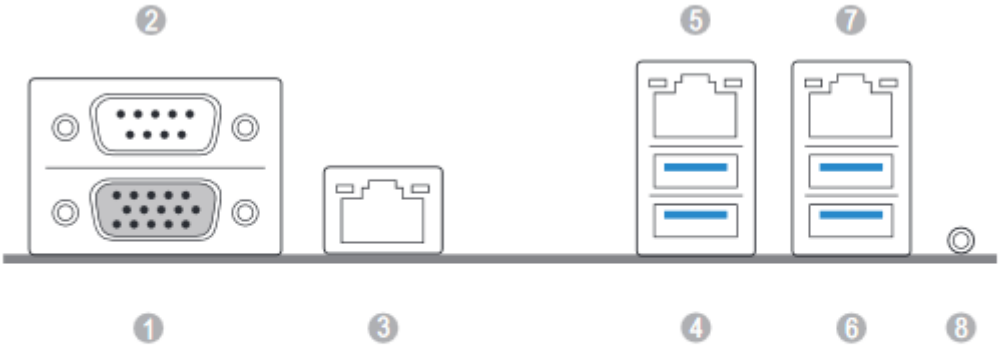
2.3.1 Indicators on Hard Disk Bracket



Module Name	Description
Hard disk activity status indicator	Flashing green: Hard disk is reading and writing
Hard disk fault alarming indicator	Constant red: Hard disk fault Constant blue: Hard disk positioning Constant blue: In coordination with RAID rebuilding

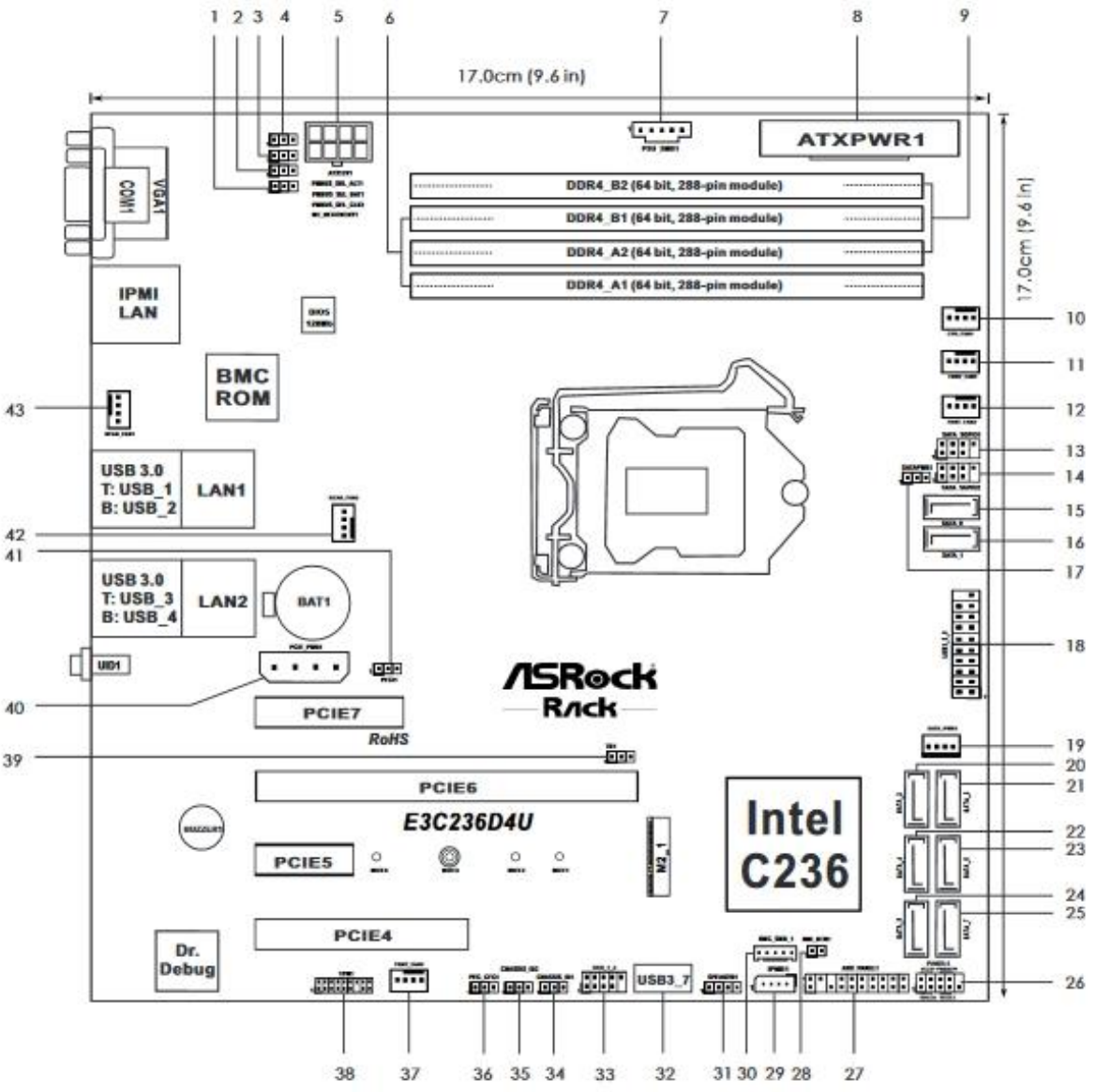
3.2 Rear Panel

1.6 I/O Panel



No.	Description	No.	Description
1	VGA Port (VGA1)	5	LAN RJ-45 Port (LAN1)**
2	Serial Port (COM1)	6	USB 3.0 Ports (USB3_3_4)
3	LAN RJ-45 Port (IPMI_LAN)*	7	LAN RJ-45 Port (LAN2)**
4	USB 3.0 Ports (USB3_1_2)	8	UID Switch (UID1)

3.3 Mainboard Layout

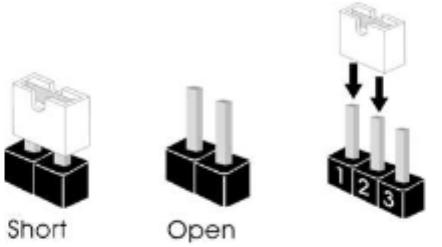


	Description
1	ME Recovery Jumper (ME_RECOVERY1)
2	PMBUS Mode Jumper (PMBUS_SEL_CLK1)
3	PMBUS Mode Jumper (PMBUS_SEL_DAT1)
4	PMBUS Mode Jumper (PMBUS_SEL_ALT1)
5	ATX 12V Power Connector (ATX12V1)
6	2 x 288-pin DDR4 DIMM Slots (DDR4_A1, DDR4_B1, White)
7	PSU SMBus (PSU_SMB1)
8	ATX Power Connector (ATXPWR1)
9	2 x 288-pin DDR4 DIMM Slots (DDR4_A2, DDR4_B2, Blue)
10	CPU Fan Connector (CPU_FAN1)
11	Front Fan Connector (FRNT_FAN1)
12	Front Fan Connector (FRNT_FAN2)
13	SATA SGPIO Connector (SATA_SGPIO1)
14	SATA SGPIO Connector (SATA_SGPIO2)
15	SATA3 DOM Connector (SATA_0), Red
16	SATA3 Connector (SATA_1)
17	SATA DOM Power Jumper (SATAPWR1)
18	USB 3.0 Header (USB3_5_6)
19	SATA DOM Power Header (SATA_PWR1)
20	SATA3 Connector (SATA_2)
21	SATA3 Connector (SATA_3)
22	SATA3 Connector (SATA _4)
23	SATA3 Connector (SATA_5)
24	SATA3 Connector (SATA_6)
25	SATA3 Connector (SATA_7)
26	System Panel Header (PANEL1)
27	Auxiliary Panel Header (AUX_PANEL1)
28	Non Maskable Interrupt Button (NMI_BTN1)
29	Intelligent Platform Management Bus Header (IPMB1)
30	BMC SMBus Header (BMC_SMB1)
31	Speaker Header (SPEAKER1)
32	Vertical Type A USB 3.0 (USB3_7)
33	USB 2.0 Header (USB_1_2)
34	Chassis ID1 Jumper (CHASSIS_ID1)
35	Chassis ID2 Jumper (CHASSIS_ID2)
36	PCI Express Graphics Configuration Jumper (PEG_CFG1)
37	Front Fan Connector (FRNT_FAN3)
38	TPM Header (TPM1)
39	Thermal Sensor Header (TR1)
40	PCIe Power Connector (PCIE_PWR1)
41	CPU PECI Mode Jumper (PECI1)
42	Rear Fan Connector (REAR_FAN2)
43	Rear Fan Connector (REAR_FAN1)

3.4 Mainboard Jumper Introduction

2.7 Jumper Setup

The illustration shows how jumpers are setup. When the jumper cap is placed on the pins, the jumper is "Short". If no jumper cap is placed on the pins, the jumper is "Open". The illustration shows a 3-pin jumper whose pin1 and pin2 are "Short" when a jumper cap is placed on these 2 pins.



ME Recovery Jumper (3-pin ME_RECOVERY1) (see p.7 or p.10, No. 1)	1_2 Normal Mode (Default)	2_3 ME Recovery Mode
CPU PECI Mode Jumper (3-pin PECI1) (see p.7, No. 41 or p.10, No. 39)	1_2 CPU PECI connect to PCH	2_3 CPU PECI connect to BMC (Default)
PMBUS Mode Jumper (3-pin PMBUS_SEL_ALT1) (see p.7 or p.10, No. 4) (3-pin PMBUS_SEL_DAT1) (see p.7 or p.10, No. 3) (3-pin PMBUS_SEL_CLK1) (see p.7 or p.10, No. 2)	1_2 PMBus connected to BMC (Default)	2_3 PMBus connected to PCH

3. BIOS Configuration

This chapter introduces BIOS function setup and mainboard jumper of the server. All operations described in this section are only limited to operators or administrators with system maintenance qualification.

BIOS is a basic input and output system. The system parameter and the hard drive parameter can be adjusted through special set program. BIOS has great influence on the system start and running so that setting parameters improperly may arose the conflict among the hardware resource, or fall down the system run performance. Hence understanding the BIOS setup is significant to the configuration of your server. If no especial requirement, you are suggested to use the default value and not alter the parameters optionally.

Note:

1. Before the server BIOS setup is altered, please record the corresponding original setup. Hence when there are operating problems in the system due to the option altered, the setup can revert.
2. Ordinarily the factory default system value is the optimized setup. Don't try to alter the parameters before you understand their denotations.
3. The common setup is introduced in detail in this paper. The less referred options in the application procedure are simply explained or not.
4. The content of the BIOS is diverse based on the different configurations of the products; hence the detailed introduction is elided.

3.5 System BIOS Configuration Methods

Power on the server, system starts to boot, when the following content appears below the distributor logo on the screen:

"Press <DEL> to SETUP or <TAB> to POST or <F12> to PXE Boot.", press [DEL] button, when "Entering Setup..." appears on bottom right on the screen, it will enter system BIOS configuration later, and you could select options using arrow buttons on BIOS main menu to enter sub-menu.

Note: Options in grey are not available. Options with symbol " ▶ ", have a sub-menu.

3.6 Chapter 3 UEFI Setup Utility

3.6.1 Introduction

This section explains how to use the UEFI
SETUP UTILITY to confi gure your system. The UEFI chip on the motherboard stores the UEFI SETUP UTILITY. You may run the UEFI SETUP UTILITY when you start up the computer. Please press <F2> or <Del> during the Power-On-Self-Test (POST) to enter the UEFI SETUP UTILITY otherwise, POST will continue with its test routines. If you wish to enter the UEFI SETUP UTILITY after POST, restart the system by pressing <Ctrl> + <Alt> + <Delete>, or by pressing the reset button on the system chassis. You may also restart by turning the system off and then back on.

3.6.2 UEFI Menu Bar

The top of the screen has a menu bar with the following selections:

Item	Description
Main	To set up the system time/date information
Advanced	To set up the advanced UEFI features
Boot	To set up the default system device to locate and load the Operating System
Security	To set up the security features
Event Logs	For event log confi guration
Server Mgmt	To manage the server
Exit	To exit the current screen or the UEFI SETUP UTILITY

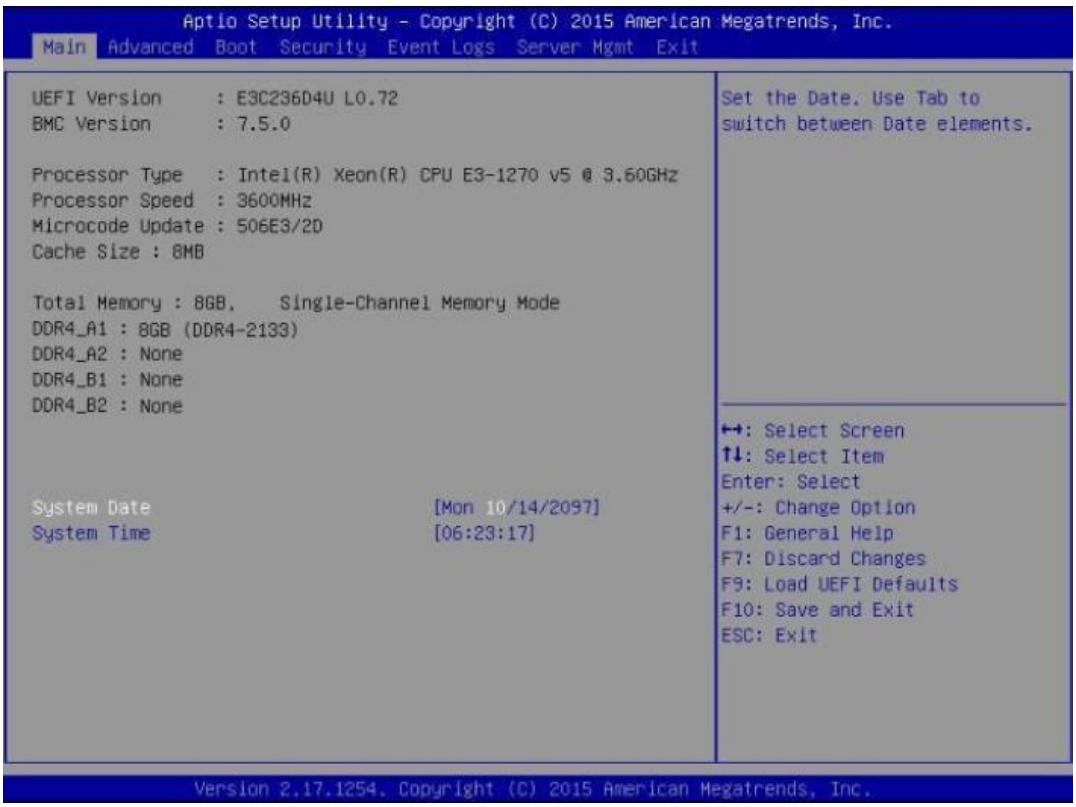
Use < > key or < > key to choose among the selections on the menu bar, and then press <Enter> to get into the sub screen.

3.6.3 Navigation Keys

Navigation Key(s)	Function Description
← / →	Moves cursor left or right to select Screens
↑ / ↓	Moves cursor up or down to select items
+ / -	To change option for the selected items
<Tab>	Switch to next function
<Enter>	To bring up the selected screen
<PGUP>	Go to the previous page
<PGDN>	Go to the next page
<HOME>	Go to the top of the screen
<END>	Go to the bottom of the screen
<F1>	To display the General Help Screen
<F7>	Discard changes and exit the UEFI SETUP UTILITY
<F9>	Load optimal default values for all the settings
<F10>	Save changes and exit the UEFI SETUP UTILITY
<F12>	Print screen
<ESC>	Jump to the Exit Screen or exit the current screen

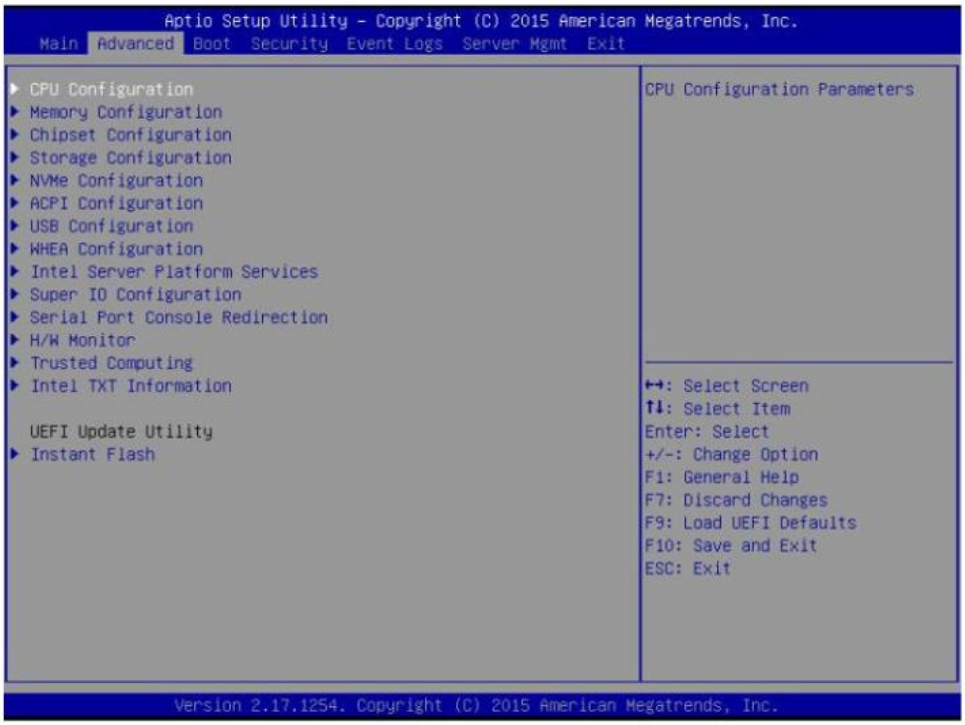
3.7 Main Screen

Once you enter the UEFI SETUP UTILITY, the Main screen will appear and display the system overview. The Main screen provides system overview information and allows you to set the system time and date.

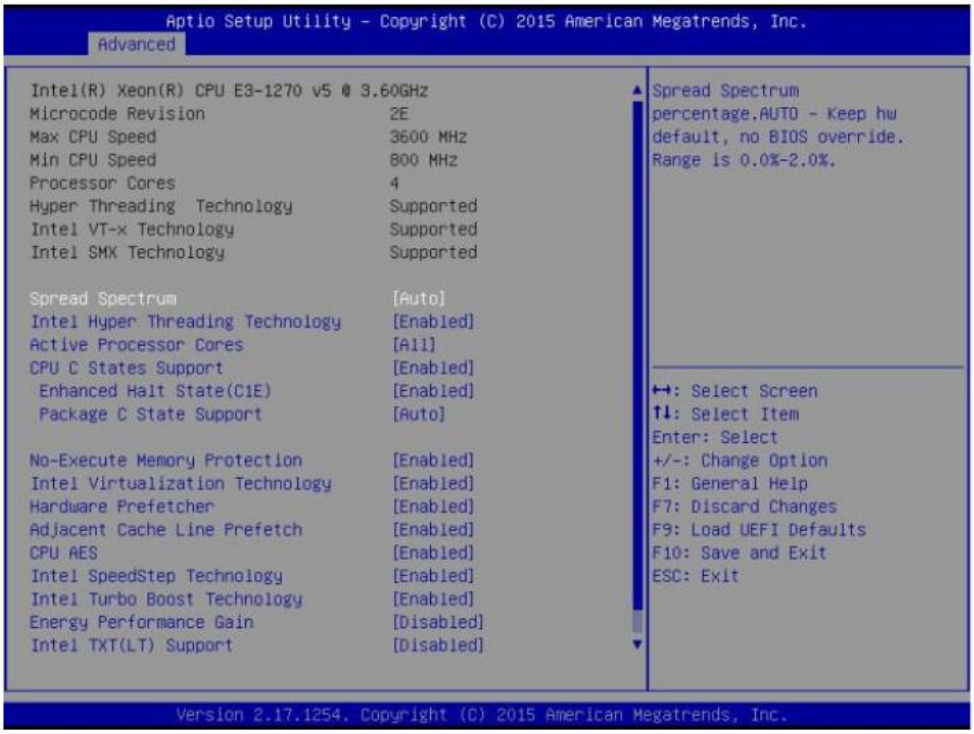


3.8 Advanced Screen

In this section, you may set the configurations for the following items: CPU Configuration, Memory Configuration, Chipset Configuration, Storage Configuration, NVMe Configuration, ACPI Configuration, USB Configuration, WHEA Configuration, Intel Server Platform Services, Super IO Configuration, Serial Port Console Redirection, H/W Monitor, Trusted Computing, Intel TXT Information and Instant Flash.



3.9 CPU Configuration



Spread Spectrum
Use this to enable and disable Spread Spectrum.
Intel Hyper Threading Technology
Intel Hyper Threading Technology allows multiple threads to run on each core, so that the overall performance on threaded software is improved.
Active Processor Cores
Select the number of cores to enable in each processor package.
CPU C States Support
Enable CPU C States Support for power saving. It is recommended to keep C3, C6 and C7 all enabled for better power saving.
Enhanced Halt State (C1E)
Enable Enhanced Halt State (C1E) for lower power consumption.
Package C State Support
Enable CPU, PCIe, Memory, Graphics C State Support for power saving.
No-Execute Memory Protection
Processors with No-Execution Memory Protection Technology may prevent certain classes of malicious buffer overflow attacks.
Intel Virtualization Technology
Intel Virtualization Technolog y allows a platform to run multiple operating systems and applications in independent partitions, so that one computer system can function as multiple virtual systems.
Hardware Prefetcher
Automatically prefetch data and code for the processor. Enable for better performance.
Adjacent Cache Line Prefetch
Automatically prefetch the subsequent cache line while retrieving the currently requested cache line. Enable for better performance.
CPU AES
Use this to enable or disable CPU Advanced Encryption Standard instructions.
Intel SpeedStep Technology
Intel SpeedStep technology is Intel's new power saving technology. Processors can switch between multiple frequencies and voltage points to enable power saving. The default value is [Enabled]. Configuration options: [Enabled] and [Disabled]. This item will be hidden if the current CPU does not support Intel SpeedStep technology.
Intel Turbo Boost Technology
Use this item to enable or disable Intel Turbo Boost Mode Technology. Turbo Boost Mode allows processor cores to run faster than marked frequency in specific conditions. The default value is [Enabled].
Energy Performance Gain
Use this item to configure Energy Performance Gain.
Intel TXT(LT) Support
Use this to enable or disable Intel Trusted Execution Technology.
CPU Thermal Throttling
Enable CPU internal thermal control mechanisms to keep the CPU from overheating.

3.10 Chipset Configuration

Primary Graphics Adapter
If PCI Express graphics card is installed on the motherboard, you may use this option to select PCI Express or Onboard as the primary graphics adapter.

Onboard VGA
Use this to enable or disable the Onboard VGA function.
The default value is [Auto].

V T- d
Intel Virtualization Technology for Directed I/O helps your virtual machine monitor better utilize hardware by improving application compatibility and reliability, and providing additional levels of manageability, security, isolation, and I/O performance.

PCIE 6 Link Speed
This allows you to select PCIE 6 Link Speed. The default value is [Auto].

PCIE 4 Link Speed
This allows you to select PCIE 4 Link Speed. The default value is [Auto].

PCI-E ASPM Support
This option enables or disables the ASPM support for all CPU downstream devices.

PCH PCI-E ASPM Support
This option enables or disables the ASPM support for all PCH downstream devices.

DMI ASPM Support
This option enables/disables the control of ASPM on CPU side of the DMI Link.

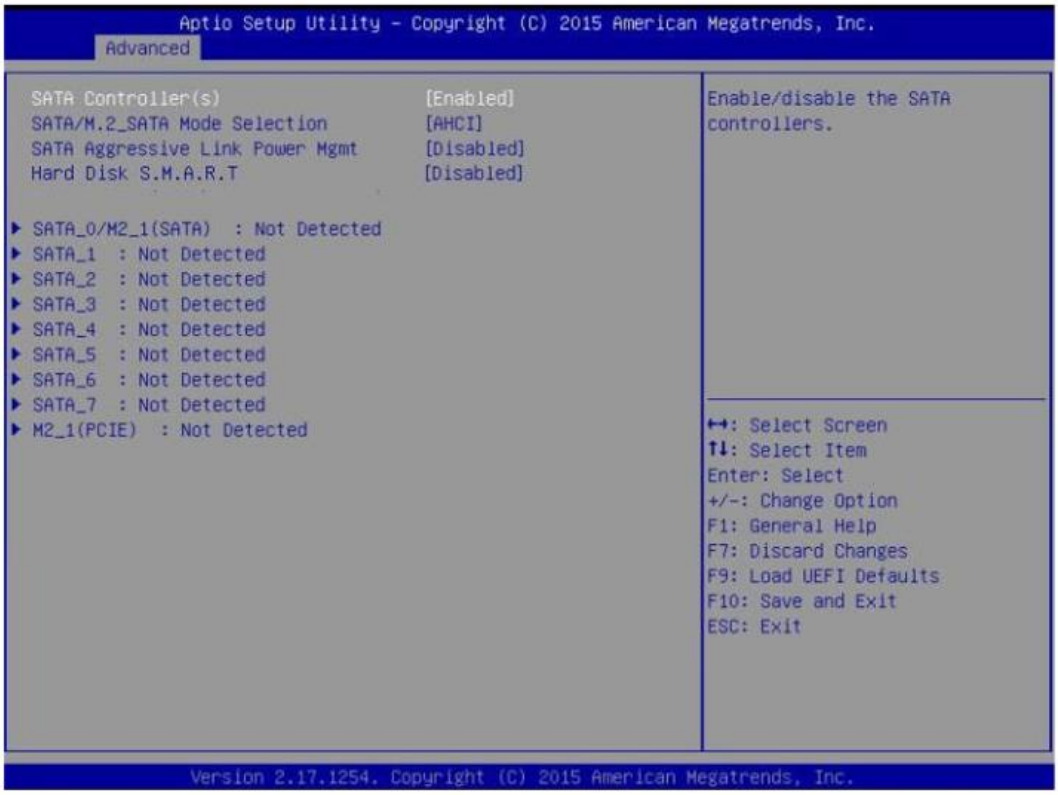
PCH DMI ASPM Support
This option enables/disables the ASPM support for all PCH DMI devices.

Onboard LAN1
This tem allows you to enable or disable the Onboard LAN 1 feature.

Onboard LAN2
This allows you to enable or disable the Onboard LAN 2 feature.

Restore on AC/Power Loss
This allows you to set the power state after an unexpected AC/power loss. If [Power Off] is selected, the AC/power remains off when the power recovers. If [Power On] is selected, the AC/power resumes and the system starts to boot up when the power recovers. If [Last State] is selected, it will recover to the state before AC/power loss.

3.11 Storage Configuration



SATA Controller(s)

Use this item to enable or disable SATA Controllers.

SATA/M.2_SATA Mode Selection

Identify the SATA/M.2_SATA port is connected to Solid State Drive or Hard Disk Drive. Press <Ctrl+I> to enter RAID ROM during UEFI POST process.

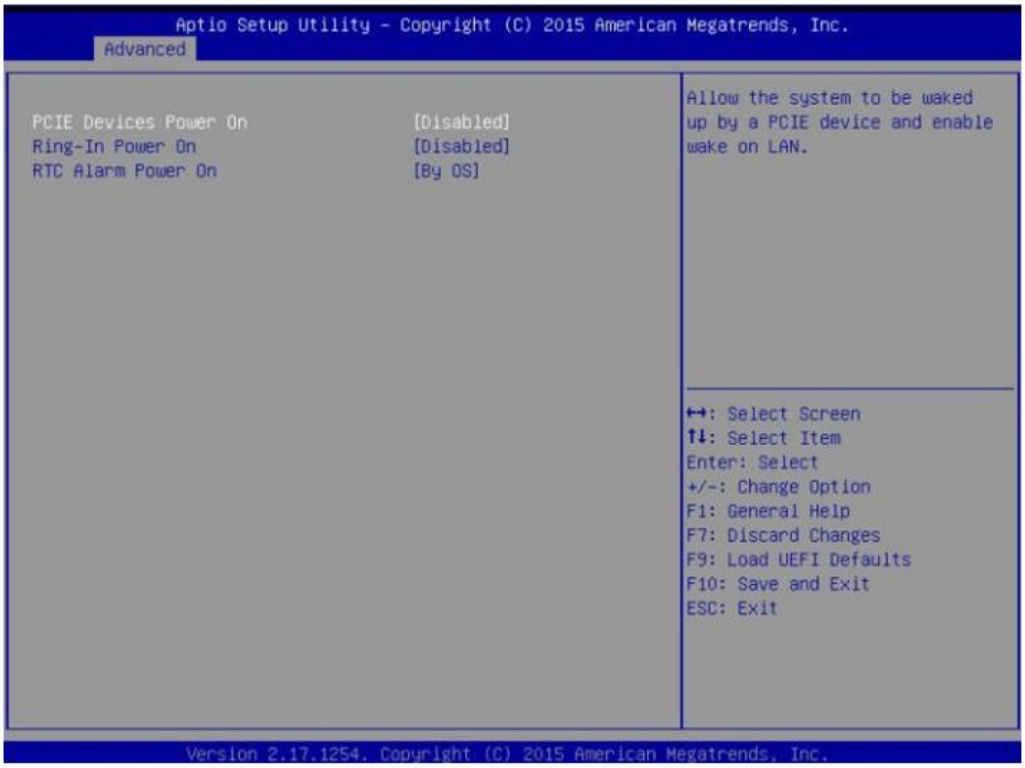
SATA Aggressive Link Power Mgmt

Use this item to enable or disable SALP.

Hard Disk S.M.A.R.T.

Use this item to enable or disable the S.M.A.R.T. (Self-Monitoring, Analysis, and Reporting Technology) feature. Configuration options: [Disabled] and [Enabled].

3.12 ACPI Configuration



PCIE Devices Power On

Use this item to enable or disable PCIE devices to turn on the system from the power-soft-off mode.

Ring-In Power On

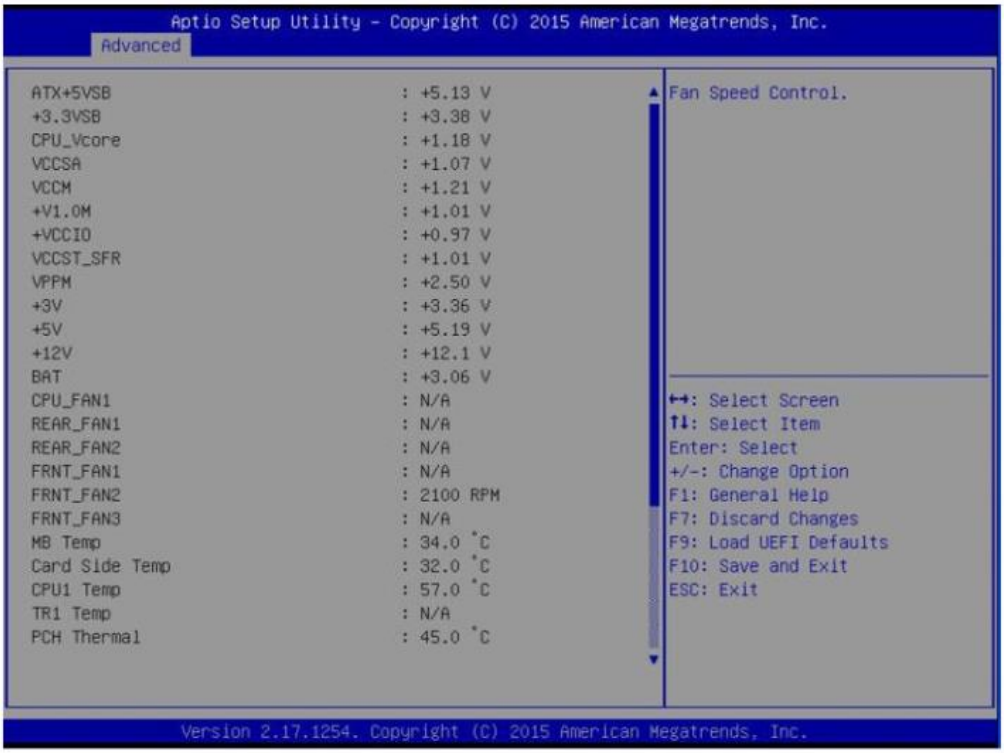
Use this item to enable or disable Ring-In signals to turn on the system from the power-soft-off mode.

RTC Alarm Power On

Use this item to enable or disable RTC (Real Time Clock) to power on the system.

3.13 H/W Monitor

In this section, it allows you to monitor the status of the hardware on your system, including the parameters of the CPU temperature, motherboard temperature, CPU fan speed, chassis fan speed, and the critical voltage.



CPU_ FAN1

This allows you to set the CPU fan1's speed. The default value is [Smart Fan].

REAR_FAN1

This allows you to set the rear fan 1's speed. The default value is [Smart Fan].

REAR_FAN2

This allows you to set the rear fan 2's speed. The default value is [Smart Fan].

FRNT_ FAN1

This allows you to set the front fan 1's speed. The default value is [Smart Fan].

FRNT_ FAN2

This allows you to set the front fan 2's speed. The default value is [Smart Fan].

FRNT_ FAN3

This allows you to set the front fan 3's speed. The default value is [Smart Fan].

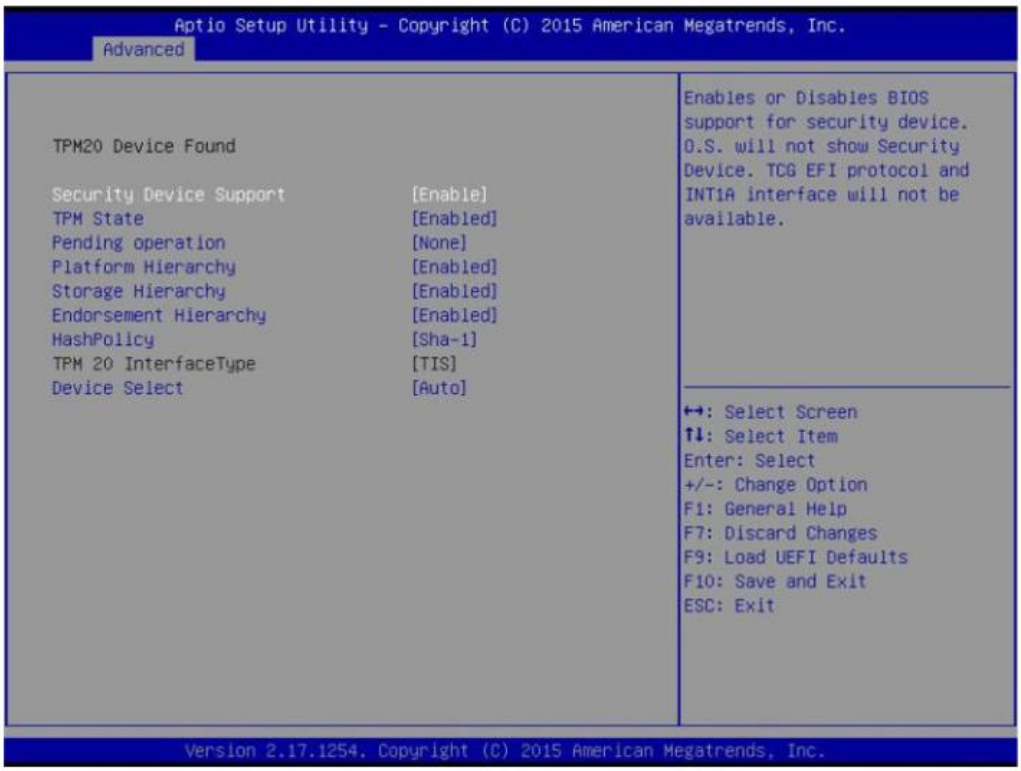
Smart Fan Control

(For E3C236D4U only)

This allows you to set the Smart fan's level speed.

Smart Fan Duty Control
Smart Fan Duty x (x means 1 to 11 stage)
This allows you to set duty cycle for each stage.
Smart Fan Temp Control
Smart Fan Temp x (x means 1 to 11 stage)
This allows you to set temperature for each stage.
Watch Dog Timer
This allows you to enable or disable the Watch Dog Timer. The default value is [Disabled].

3.14 Trusted Computing



Security Device Support
Use this item to enable or disable BIOS support for security device. O.S. will not show Security Device. TCG EFI protocol and INT1A interface will not be available.
TPM State
Use this item to enable or disable Security Device.
NOTE: Your computer will reboot during restart in order to change State of the Device.
Pending Operation
Schedule an Operation for the Security Device.
NOTE: Your computer will reboot during restart in order to change State of the Device.

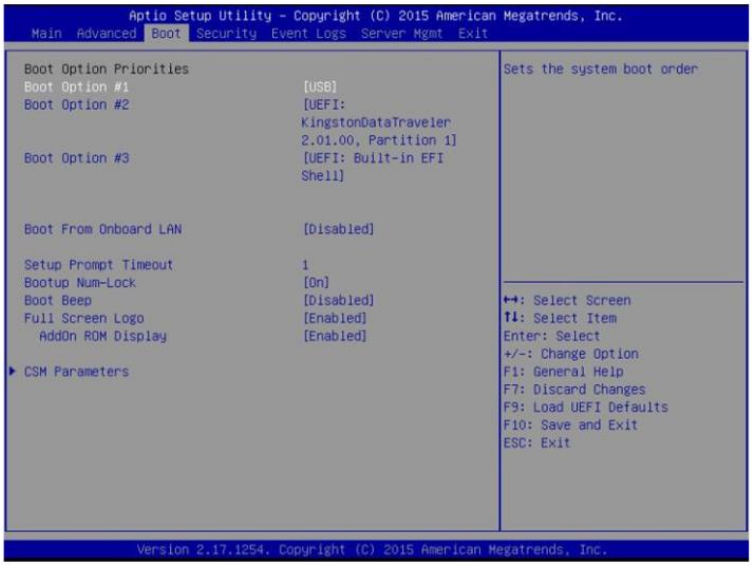
Platform Hierarchy
Use this item to enable or disable Platform Hierarchy.
Storage Hierarchy
Use this item to enable or disable Storage Hierarchy.
Endorsement Hierarchy
Use this item to enable or disable Endorsement Hierarchy.
Hash Policy
Select the Hash policy to use. SHA-2 is most secure but might not be supported by all Operating Systems.
Device Select
Use this item to select the TPM device to be supported.

3.15 Instant Flash

Instant Flash is a UEFI flash utility embedded in Flash ROM. This convenient UEFI update tool allows you to update system UEFI without entering operating systems first like MS-DOS or Windows®. Just save the new UEFI file to your USB flash drive, floppy disk or hard drive and launch this tool, then you can update your UEFI only in a few clicks without preparing an additional floppy diskette or other complicated flash utility. Please be noted that the USB flash drive or hard drive must use FAT32/16/12 file system. If you execute Instant Flash utility, the utility will show the UEFI files and their respective information. Select the proper UEFI file to update your UEFI, and reboot your system after the UEFI update process is completed.

3.16 Boot Screen

In this section, it will display the available devices on your system for you to configure the boot settings and the boot priority.



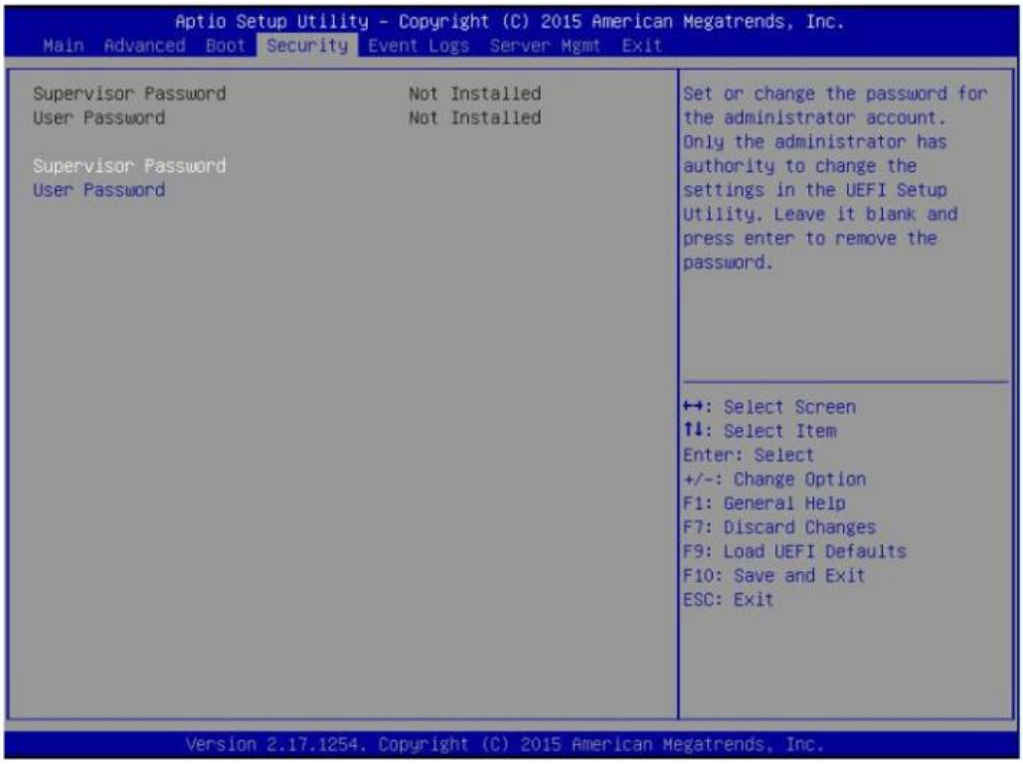
Boot Option #1
Use this item to set the system boot order.
Boot Option #2
Use this item to set the system boot order.
Boot Option #3
Use this item to set the system boot order.
Boot From Onboard LAN
Use this item to enable or disable the Boot From Onboard LAN feature.
Setup Prompt Timeout
This shows the number of seconds to wait for setup activation key. 65535(0XFFFF) means indefinite waiting.
Bootup Num-Lock
If this item is set to [On], it will automatically activate the Numeric Lock function after boot-up.
Boot Beep
Select whether the Boot Beep should be turned on or off when the system boots up. Please note that a buzzer is needed.
Full Screen Logo
Use this item to enable or disable OEM Logo. The default value is [Enabled].
AddOn ROM Display
Use this option to adjust AddOn ROM Display. If you enable the option “Full Screen Logo” but you want to see the AddOn ROM information when the system boots, please select [Enabled]. Configuration options: [Enabled] and [Disabled]. The default value is [Enabled].

3.17 Securety

In this section, you may set or change the supervisor/user password for the system. For the user password, you may also clear it.

Supervisor Password
Set or change the password for the administrator account. Only the administrator has authority to change the settings in the UEFI Setup Utility. Leave it blank and press enter to remove the password.

User Password
Set or change the password for the user account. Users are unable to change the settings in the UEFI Setup Utility. Leave it blank and press enter to remove the password.



3.18 Event Logs

Change Smbios Event Log Settings

This allows you to configure the Smbios Event Log Settings.

When entering the item, you will see the followings:

Smbios Event Log

Use this item to enable or disable all features of the SMBIOS Event Logging during system boot.

Erase Event Log

The options include [No], [Yes, Next reset] and [Yes, Every reset]. If Yes is selected, all logged events will be erased.

When Log is Full

Use this item to choose options for reactions to a full Smbios Event Log. The options include [Do Nothing] and [Erase Immediately].

MECI (Multiple Event Count Increment)

Use this item to enter the increment value for the multiple event counter. The valid range is from 1 to 255.

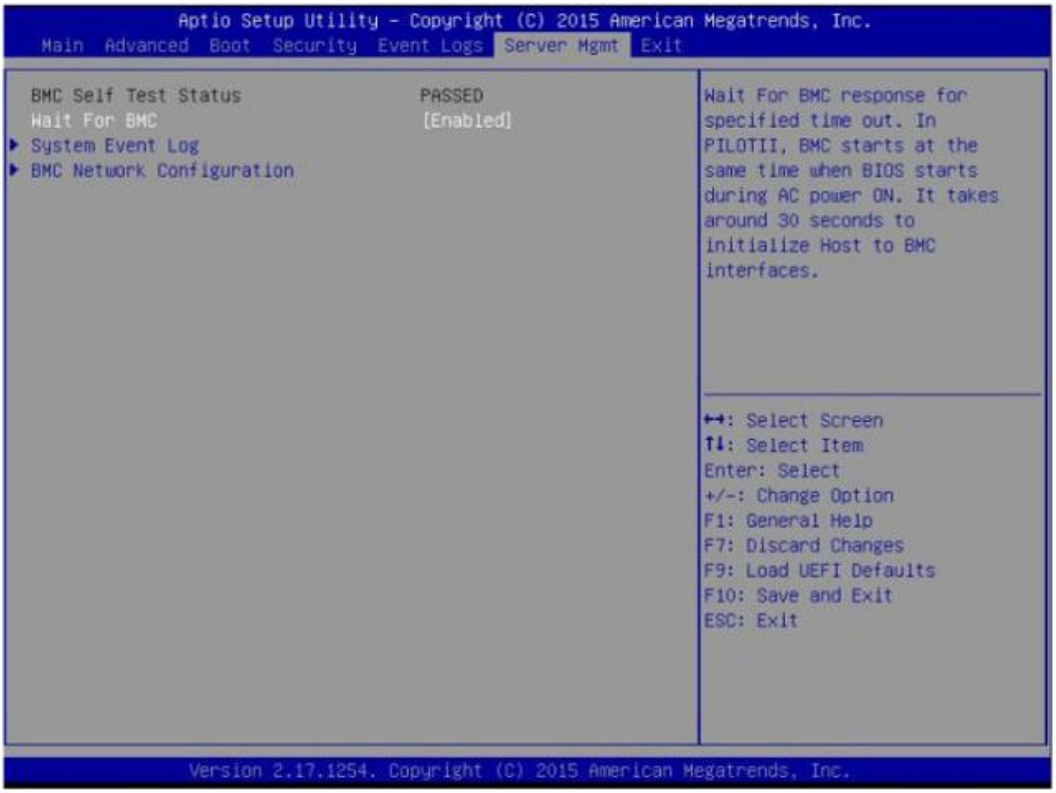
METW (Multiple Event Time Window)

Use this item to specify the number of minutes which must pass between duplicate log entries which utilize a multiple-event counter. The value ranges from 0 to 99 minutes.

View Smbios Event Log

Press <Enter> to view the Smbios Event Log records.

3.19 BMC



Wait For BMC

Wait For BMC response for specified time out. In PILOTII, BMC starts at the same time when BIOS starts during AC power ON. It takes around 30 seconds to initialize Host to BMC interfaces

3.20 System Event Log

SEL Components

Change this to enable or disable all features of System Event Logging during boot.

Erase SEL

Use this to choose options for erasing SEL.

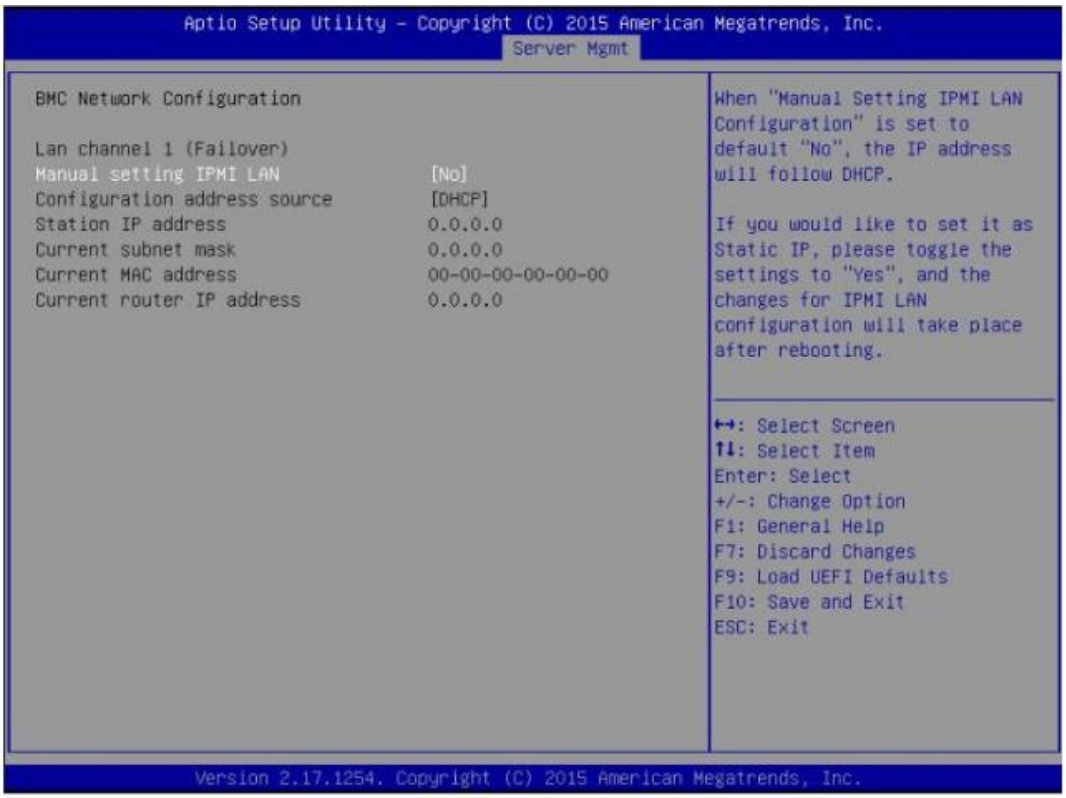
When SEL is Full

Use this to choose options for reactions to a full SEL.

Log EFI Status Codes

Use this item to disable the logging of EFI Status Codes or log only error code or only progress or both.

3.21 BMC Network Configuration



Lan Channel (Failover)

Manual setting IPMI LAN

If [No] is selected, the IP address is assigned by DHCP. If you prefer using a static IP address, toggle to [Yes], and the changes take effect after the system reboots. The default value is [No].

Configuration Address Source

Select to configure BMC network parameters statically or dynamically(by BIOS or BMC). Configuration options: [Static] and [DHCP].

Static: Manually enter the IP Address, Subnet Mask and Gateway Address in the BIOS for BMC LAN channel configuration.

DHCP: IP address, Subnet Mask and Gateway Address are automatically assigned by the network's DHCP server.

When [DHCP] or [Static] is selected, do NOT modify the BMC network settings on the IPMI web page.

The default login information for the IPMI web interface is:

Username: admin

Password: admin

3.22 Exit Screen

Save Changes and Exit

When you select this option, the following message “Save configuration changes and exit setup?” will pop-out. Press <F10> key or select [Yes] to save the changes and exit the UEFI SETUP UTILITY.

Discard Changes and Exit

When you select this option, the following message “Discard changes and exit setup?” will pop-out. Press <ESC> key or select [Yes] to exit the UEFI SETUP UTILITY without saving any changes.

Discard Changes

When you select this option, the following message “Discard changes?” will pop-out. Press <F7> key or select [Yes] to discard all changes.

Load UEFI Defaults

Load UEFI default values for all the setup questions. F9 key can be used for this operation.

3.23 RAID Configurations Precautions

- Please use two new drives if you are creating a RAID 0 (striping) array for performance. It is recommended to use two SATA drives of the same size. If you use two drives of different sizes, the smaller capacity hard disk will be the base storage size for each drive. For example, if one hard disk has an 80GB storage capacity and the other hard disk has 60GB, the maximum storage capacity for the 80GB-drive becomes 60GB, and the total storage capacity for this RAID 0 set is 120GB.

2. You may use two new drives, or use an existing drive and a new drive to create a RAID 1 (mirroring) array for data protection (the new drive must be of the same size or larger than the existing drive). If you use two drives of different sizes, the smaller capacity hard disk will be the base storage size. For example, if one hard disk has an 80GB storage capacity and the other hard disk has 60GB, the maximum storage capacity for the RAID 1 set is 60GB.

3. Please verify the status of your hard disks before you set up your new RAID array.

WARNING!!
Please backup your data first before you create RAID functions. In the process you create RAID, the system will ask if you want to "Clear Disk Data" or not. It is recommended to select "Yes", and then your future data building will operate under a clean environment.

3.24 Installing Windows® OS With RAID Functions

If you want to install Windows® OS on your SATA HDDs with RAID functions, please follow the procedures below.

STEP 1: Set up UEFI.

A. Enter UEFI SETUP UTILITY Advanced screen Storage Configuration.

B. Set "SATA Mode Selection" to [RAID].

STEP 2: Set RAID configuration.

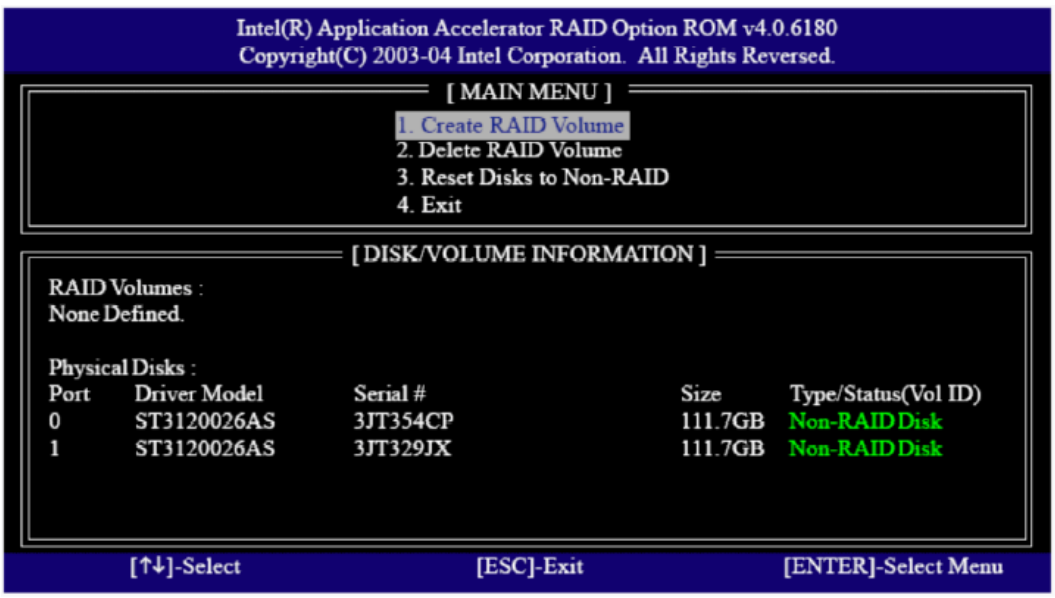
Please refer to p.8 -11 of this document for instructions on how to set RAID configuration.

STEP 3: Install Windows® OS on your system

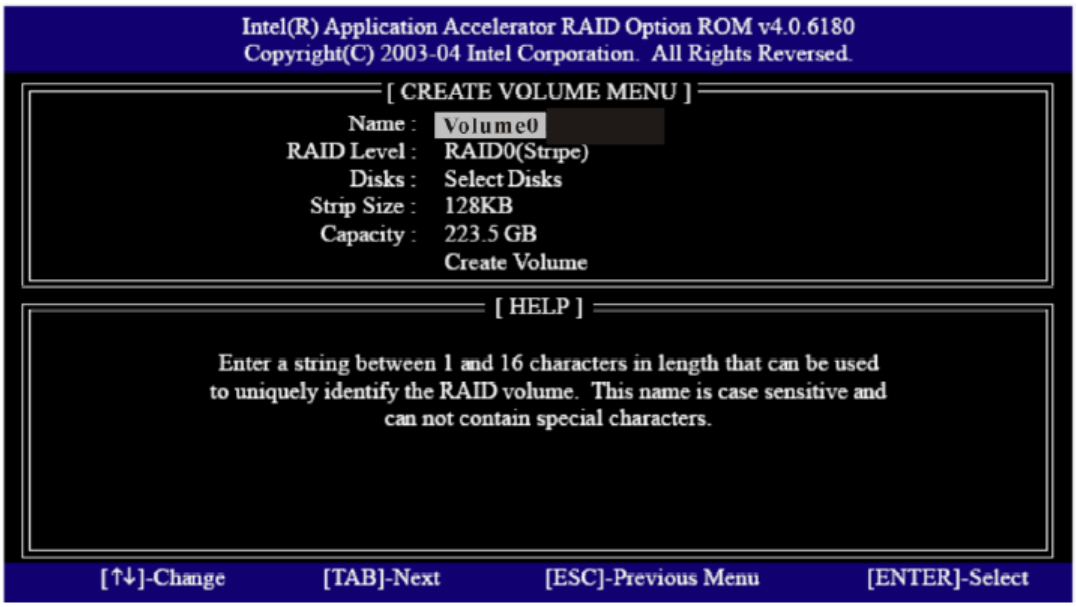
3.25 Configuring a RAID array Using Intel RAID BIOS

Reboot your computer. Wait until you see the RAID software prompting you to press <Ctrl+I>.

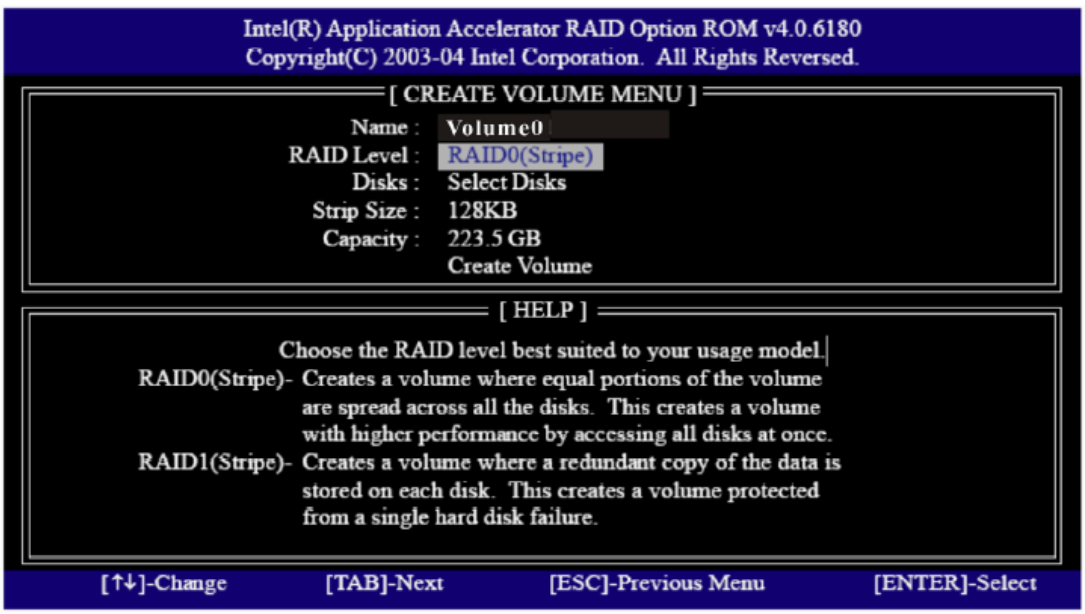
Press <Ctrl+I>. Then, the Intel RAID Utility - Create RAID Volume window appears.

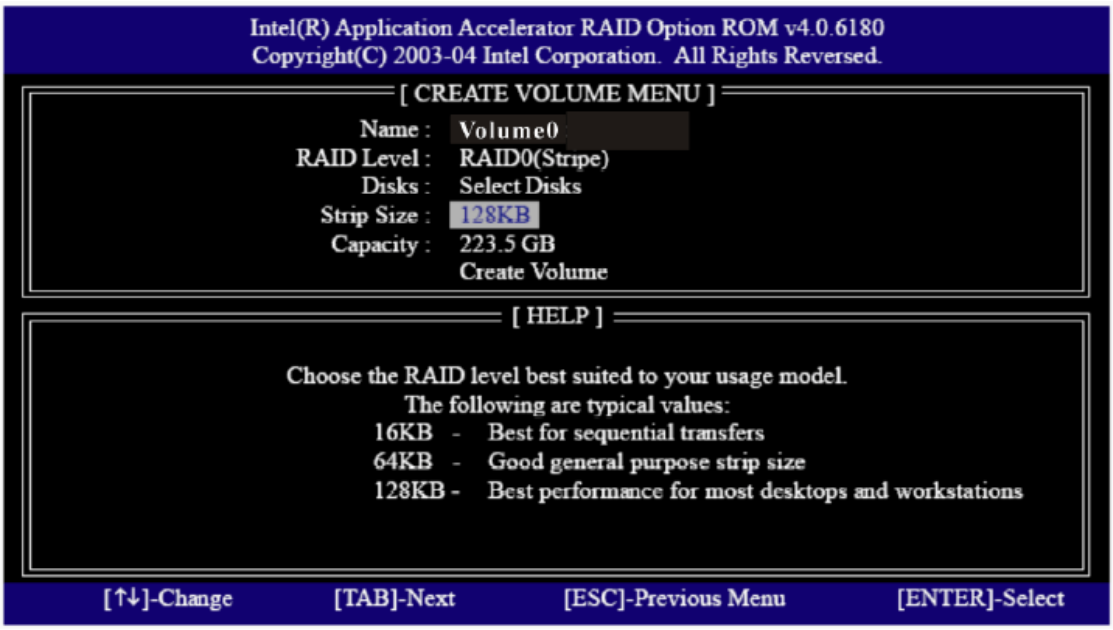


In the Create Volume Menu, under Name item, please key-in a unique name with 1-16 letters for your RAID volume then press <Enter>.



Use the up or down arrow keys to select your desired RAID Level. You may select RAID 0 (Stripe), RAID 1 (Mirror), RAID 5 or RAID 10 for your RAID level. Press <Enter>, and then you can select Strip Size.

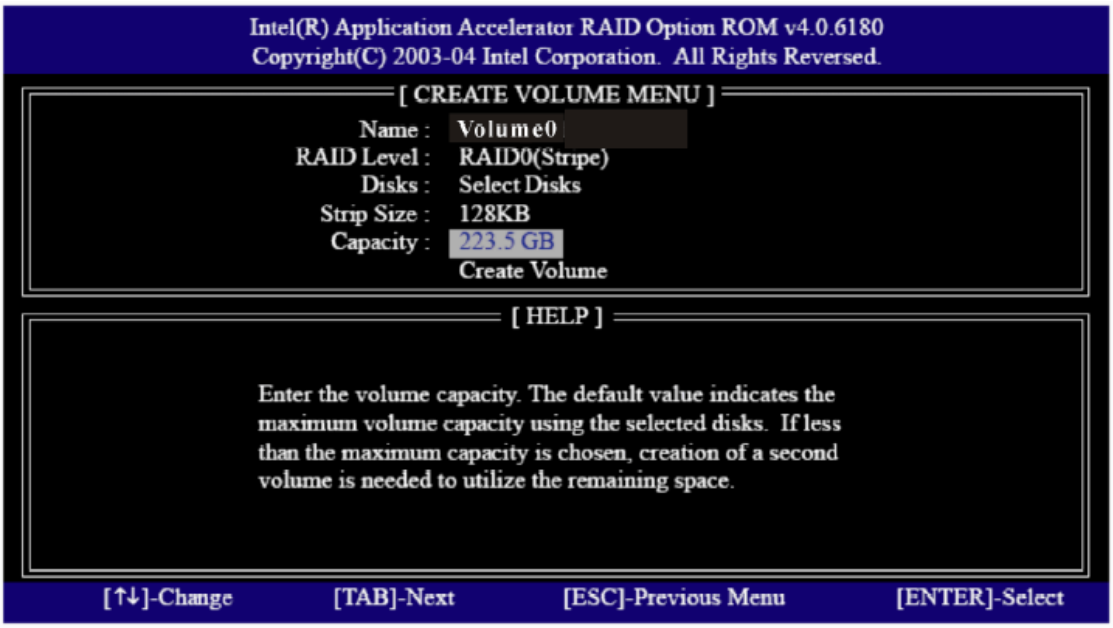




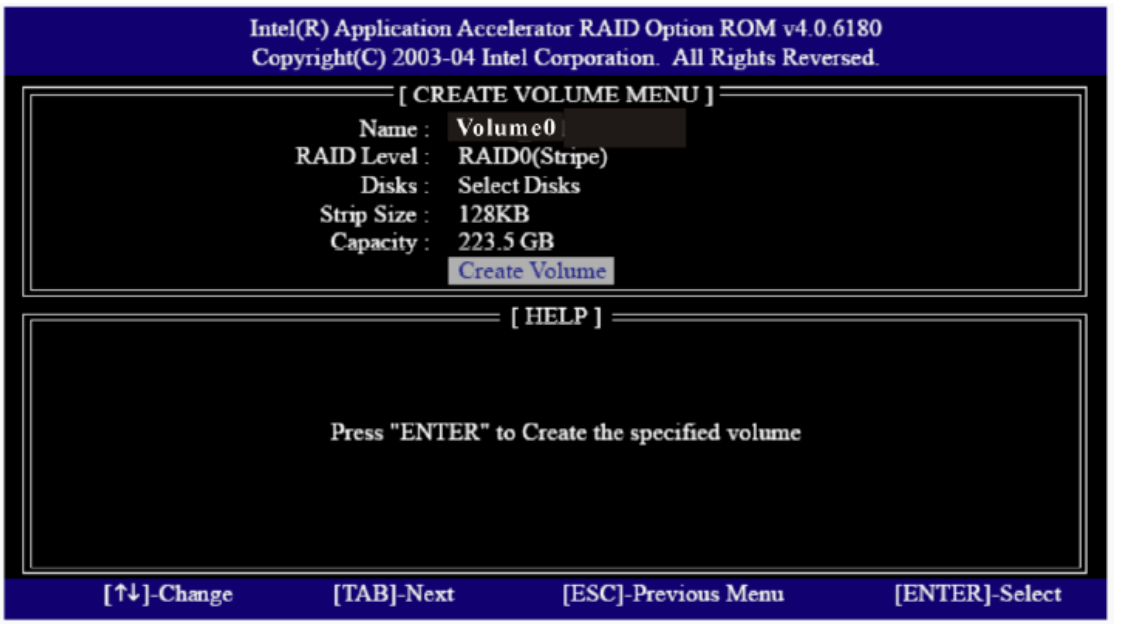
If you selected RAID 0 (Stripe), use the up or down keys to select the stripe size for your RAID 0 array then press <Enter>. The available values range from 8 KB to 128 KB. The default selection is 128 KB. The strip value should be chosen based on the planned drive usage.

- 8/16 KB - low disk usage
- 64 KB - typical disk usage
- 128 KB - performance disk usage
-

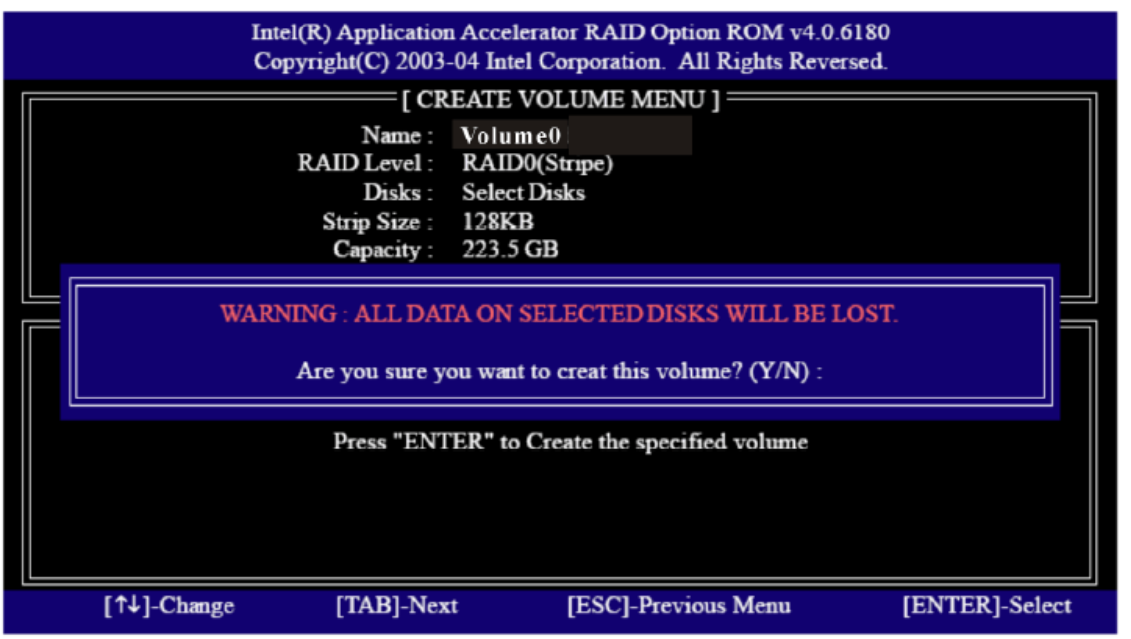
After you set disk block size, press <Enter> to set disk Capacity.


Intel(R) Application Accelerator RAID Option ROM v4.0.6180
Copyright(C) 2003-04 Intel Corporation. All Rights Reversed.
[CREATE VOLUME MENU]
Name : Volume0
RAID Level : RAID0(Stripe)
Disks : Select Disks
Strip Size : 128KB
Capacity : 223.5 GB
Create Volume
[HELP]
Enter the volume capacity. The default value indicates the maximum volume capacity using the selected disks. If less than the maximum capacity is chosen, creation of a second volume is needed to utilize the remaining space.
[↑↓]-Change
[TAB]-Next
[ESC]-Previous Menu
[ENTER]-Select

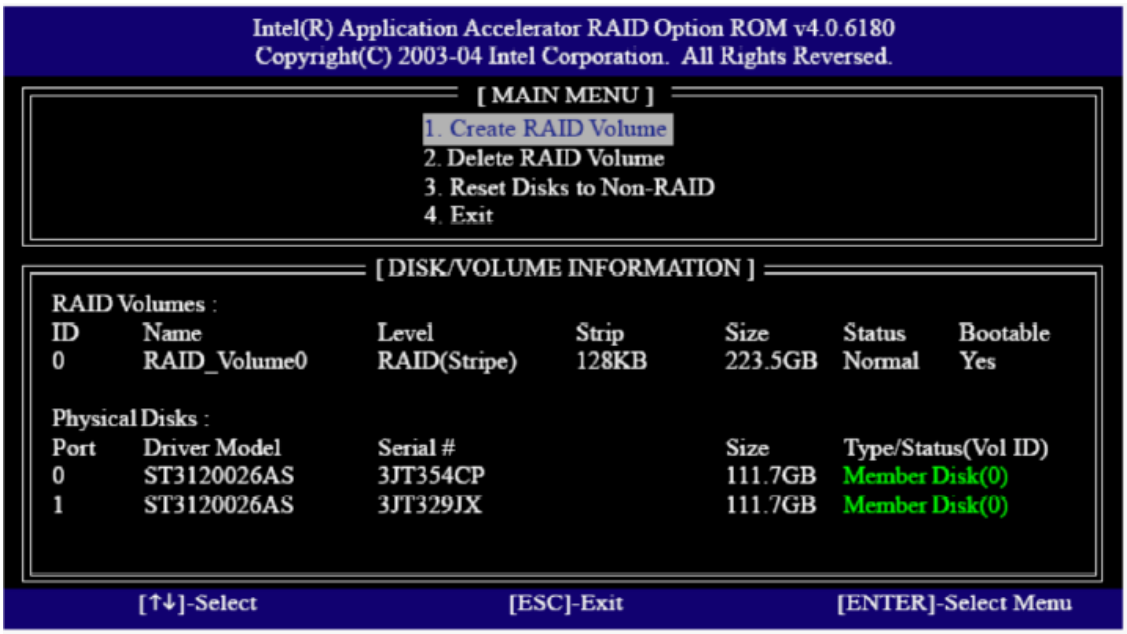
After setting up Capacity, please press <Enter>.



Press <Enter> under the Create Volume item. The utility prompts a confirmation message as below.



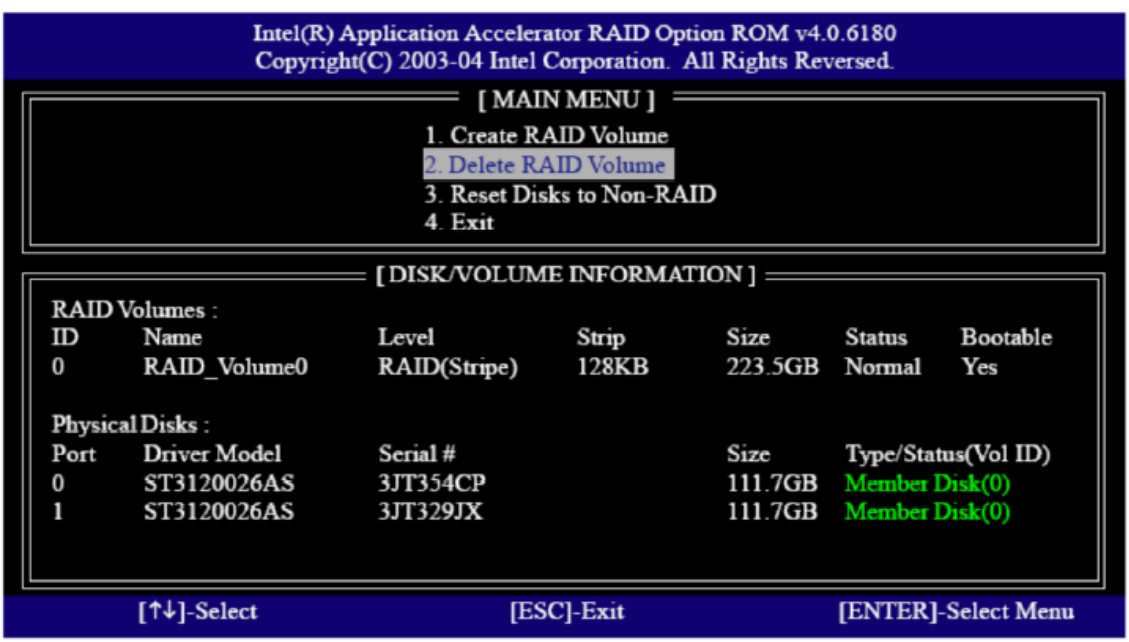
Press <Y> to complete the setup of RAID.



After the completion, you will see the detailed information about the RAID that you set up.

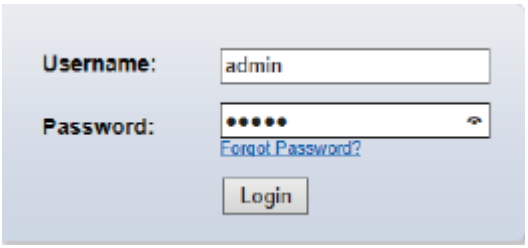
Please note that you are only allowed to create one RAID partition at a time under BIOS RAID environment. If you want to create an extra RAID partition, please use the RAID utility under Windows environment to configure RAID functions after you install OS.

If you want to delete a RAID volume, please select the option Delete RAID Volume, press <Enter>, and then follow the instructions on the screen.



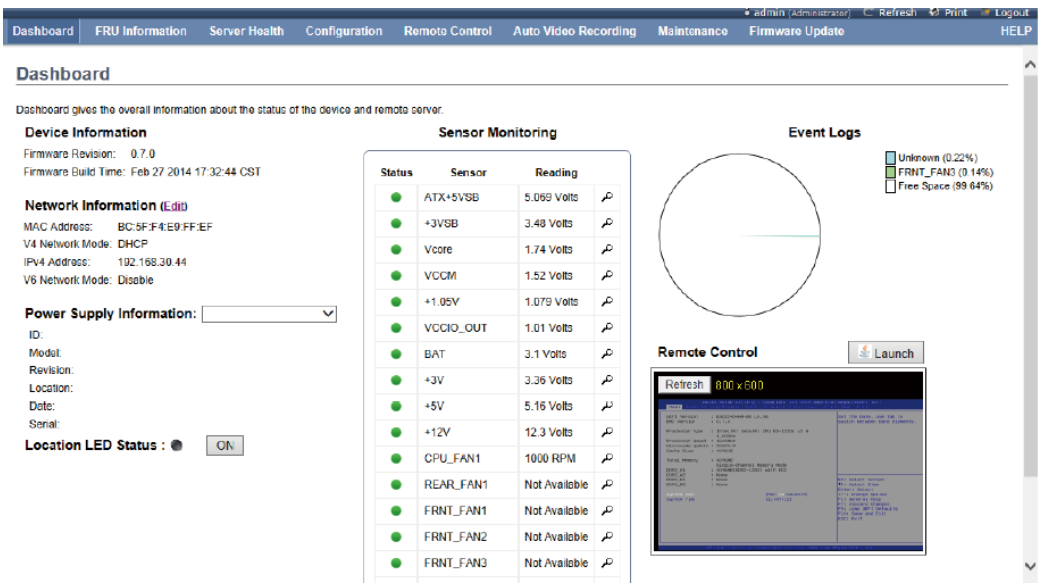
4 IPMI Configuration

4.1 Login



The default username and password are both “admin”. It is recommended to change the username and password after your first login.

4.2 Dashboard



The dashboard displays overall information about the status of the device.

Device Information
Displays the Firmware Revision and Firmware Build Time (Date and Time).

Network Information
Shows network settings for the device. Click on the link Edit to view the Network Settings Page.

Remote Control

Start remote redirection of the host by launching the console from this page. Clicking on the 'Launch' button of the 'Remote Control' will cause the jviewer.jnlp file to be downloaded. Once the file is downloaded and launched, a Java redirection window will be displayed.

Remote Console Preview Box

It will show the console preview of the remote server by using a java application. Click on the 'Refresh' button to reload the console preview.

Sensor Monitoring

It lists all available sensors on the device, with information such as status, name, reading, and status icon, as well as a link to that sensor's page.

There are 3 possible states for a Sensor:

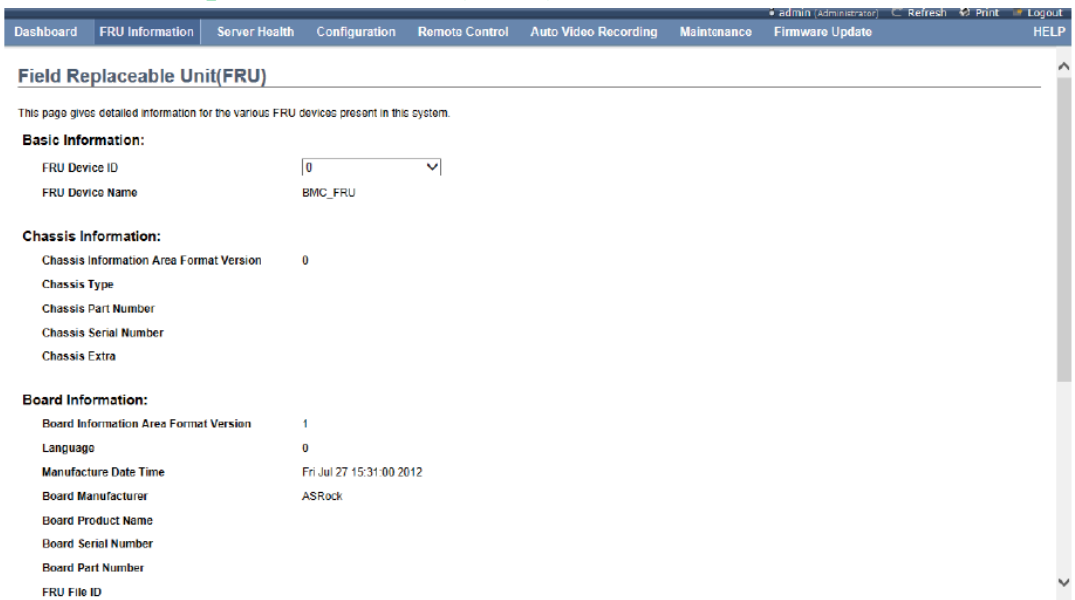
- Green dot denotes a Normal state.
- Yellow exclamation mark denotes a Warning state.
- Red x denotes a Critical state.

The magnifying glass allows access to the Sensor details page for that sensor.

Event Logs

A graphical representation of all events incurred by the various sensors and %occupied/available space in logs. If you click on the color-coded rectangle in the Legend for the chart, you can view a list of those specific events only.

4.3 Field Replaceable Unit (FRU)



This page displays the BMC FRU file information. On selecting a particular FRU Device ID its corresponding FRU information will be displayed.

Basic Information

It displays the FRU device ID and device name for the selected FRU device ID.

Chassis Information

It displays the following Chassis information fields.

- Area Format Version
- Chassis Type
- Chassis Part Number
- Chassis Serial Number
- Chassis Extra

Board Information

It displays the following Board information fields.

- Area Format Version
- Language
- Manufacture Date Time
- Board Manufacturer Board Product Name
- Board Serial Number
- Board Part Number
- FRU File ID
- Board Extra

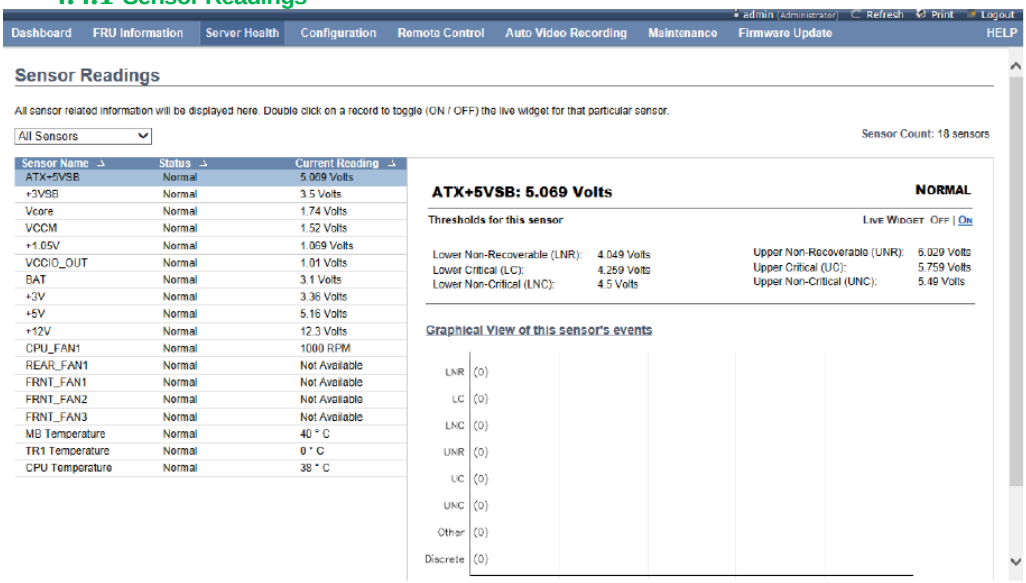
Product Information

It displays the following Product information fields.

- Area Format Version
- Language
- Manufacturer Name
- Product Name
- Product Part Number
- Product Version
- Product Serial Number
- Asset Tag
- FRU File ID
- Product Extra

4.4 Server Health

4.4.1 Sensor Readings



A list of sensor readings will be displayed here. Click on a record to show more information about that particular sensor, including thresholds and a graphical representation of all associated events. Double click on a record to toggle (ON / OFF) the live widget for that particular sensor. You can filter the list to view particular sensors only using the drop-down listbox.

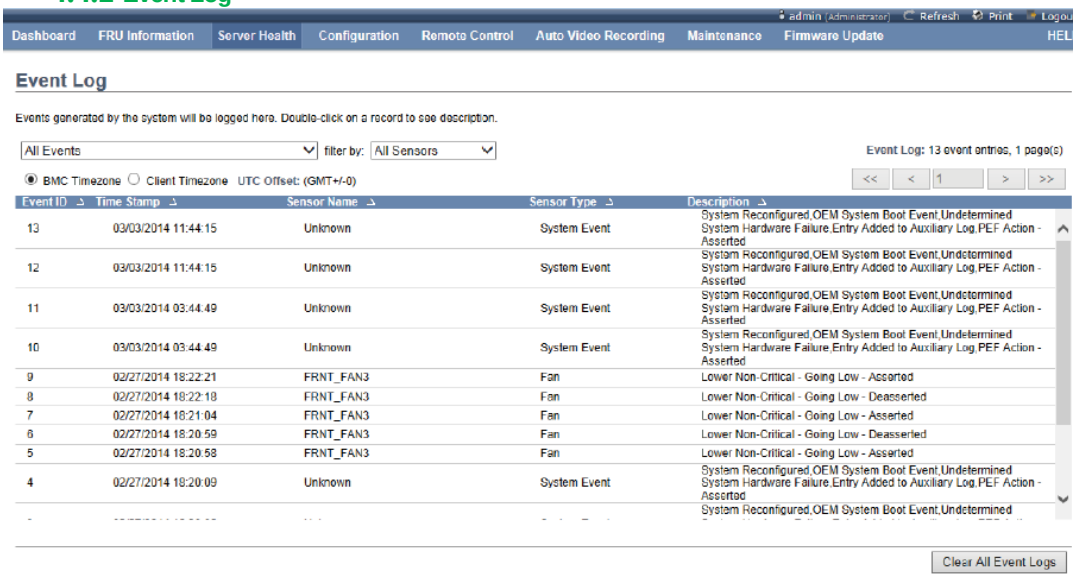
Live Widget

Turn On or Off the live widget for this sensor. This widget gives a dynamic representation of the readings for the sensor.

View this Event Log

Click this button to go the event log page for the viewed sensor.

4.4.2 Event Log



This page displays the list of events incurred by different sensors on this device. Double click on a record to see the details of that entry. You can also sort the list of entries by clicking on any of the column headers. You can use the sensor type or sensor name filter options to view those specific events logged in the device.

BMC Timezone

Check this option to display the event log entries logged with the BMC Timezone value.

Client Timezone

Check this option to display the event log entries logged with the Client (user's) Timezone value.

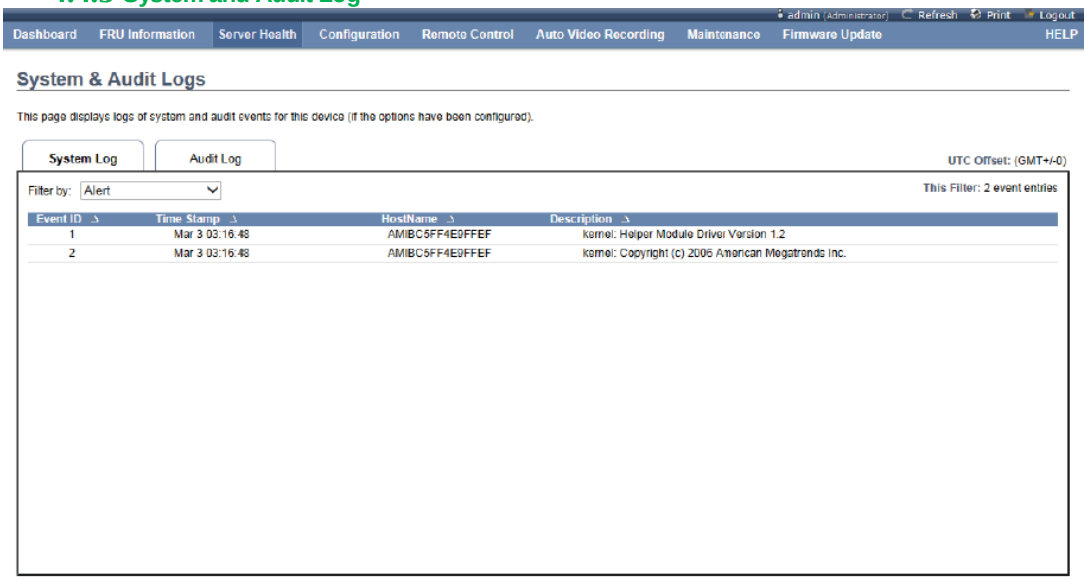
UTC Offset

Displays the current UTC Offset value based on which event Time Stamps will be updated. Navigational arrows can be used to selectively access different pages of the Event Log.

Clear All Event Logs

Clear All Event Logs option will delete all existing records for all sensors.

4.4.3 System and Audit Log

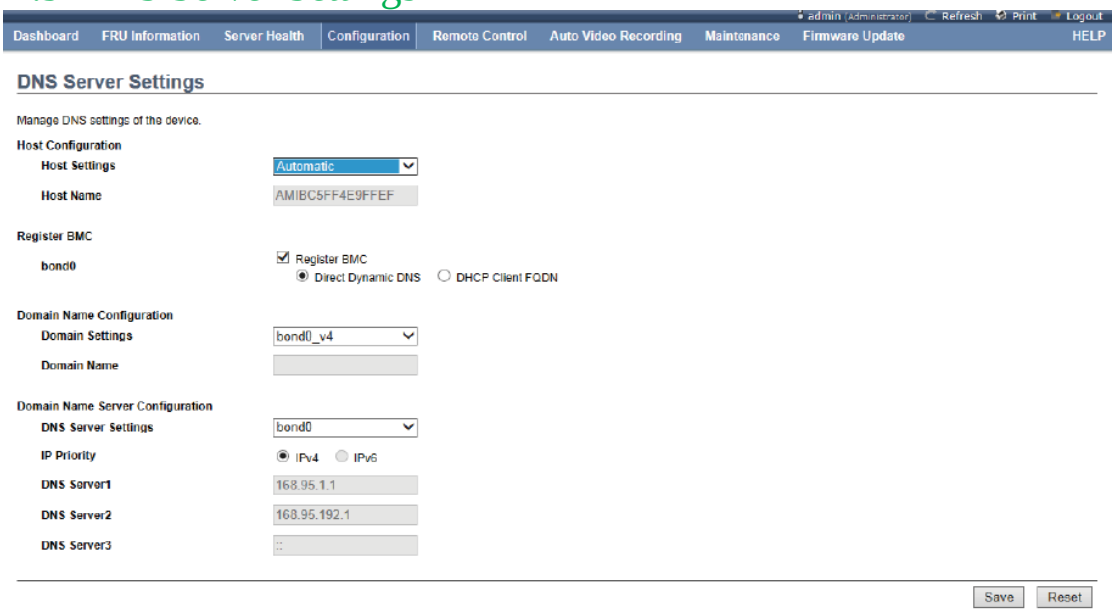


If configured, these logs will display all the system and audit events that occurred on this device

System Log

Click the System Log tab to view all system events. Entries can be filtered based on their classification levels.

4.5 DNS Server Settings



This page is used to configure the Host name and Domain Name Server configuration of the device.

Host configuration

Host Settings

Choose either Automatic or Manual settings.

Host Name

It displays the hostname of the device if Auto is selected. If the Host setting is chosen as Manual, then specify the hostname of the device.

Register BMC

Choose the BMC's network port to register with the DNS settings. Check the option 'Register BMC' to register with the DNS settings. Choose the option 'Direct Dynamic DNS' to register with direct dynamic DNS or choose 'DHCP Client FQDN' to register through a DHCP server.

Domain Name Configuration

Domain Settings

It lists the options for the domain interface as Manual, v4 or v6 for multi LAN channels.

Domain Name

It displays the domain name of the device if Auto is selected. If the Domain setting is chosen as Manual, then specify the domain name of the device.

Domain Name Server Configuration

DNS Server Settings

It lists the options for the DNS interface, Manual and available LAN interfaces.

IP Priority

If the IP Priority is IPv4, it will have 2 IPv4 DNS servers and 1 IPv6 DNS server. If the IP Priority is IPv6, it will have 2 IPv6 DNS servers and 1 IPv4 DNS server.

NOTE: This is not applicable for Manual configuration.

DNS Server 1, 2 & 3

Specify the DNS (Domain Name System) server address to be configured for the BMC.

- An IPv4 Address is made of 4 numbers separated by dots as in "xxx.xxx.xxx.xxx".
- Each number ranges from 0 to 255.
- The first number must not be 0.

DNS Server Address will support the following:

- IPv4 Address format.
- IPv6 Address format.

Save

Click ‘Save’ to save any changes made. You will be logged out of current UI session and will need to log back in.

Reset

Reset the modified changes

4.6 System Event Log

This page is used to configure the System Event log information.

Current Event Log Policy

It will display the configured Event Log Policy. Linear Event Log Policy

Check this option to enable the Linear System Event Log Policy for the Event Log.

Circular Event Log Policy

Check this option to enable the Circular System Event Log Policy for the Event Log.

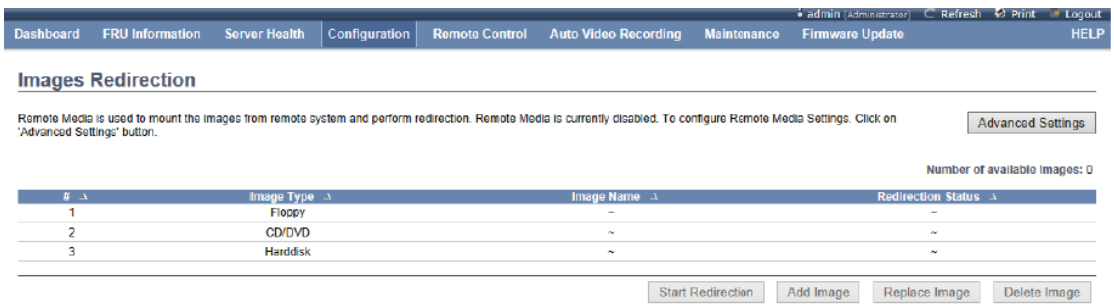
Save

Click ‘Save’ to save the configured settings.

Reset

Click ‘Reset’ to reset the modified changes.

4.7 Images Redirection



The displayed table shows configured images on BMC. You can add or replace the images from here to the remote media. Only one image can be configured for each image type. To configure the image, You need to enable Remote Media support using ‘Advanced Settings’. To add or replace an image, you must have Administrator Privileges.

NOTE: Free slots are denoted by “~”.

Start/Stop Redirection

Select a configured slot and click ‘Start Redirection’ to start the remote media redirection. It is a toggle button, if the image is successfully redirected, then click the ‘Stop Redirection’ button to stop the remote media redirection.

Add Image
Select a free slot and click 'Add Image' to configure a new image to the device. Alternatively, double click on a free slot to add an image.

Replace Image
Select a configured slot and click 'Replace Image' to replace the existing image. Alternatively, double click on the configured slot.

Delete Image
Select the desired image to be deleted and click 'Delete Image'.

4.8 Network Settings

This page is used to configure the network settings for available LAN channels.

LAN Interface
Select the LAN interface to be configured.

LAN Settings
Check this option to enable LAN support for the selected interface.

MAC Address
This field displays the MAC address of the selected interface (read only).

IPv4 Configuration
It lists the IPv4 configuration settings.

Obtain an IP address automatically
Enable 'Use DHCP' to dynamically configure the IPv4 address using
Dynamic Host Configuration Protocol (DHCP).

IPv4 Address, Subnet Mask, Default Gateway
If DHCP is disabled, specify a static IPv4 address, Subnet Mask and 21 Default Gateway to be configured for the selected interface.

- An IP Address consists of 4 sets of numbers separated by dots as in "xxx.xxx.xxx.xxx".
- Each set ranges from 0 to 255.
- The first Number must not be 0.

IPv6 Configuration
It lists the IPv6 configuration settings.

IPv6 Settings
Check this option to enable IPv6 support for the selected interface.

Obtain an IP address automatically

Enable 'Use DHCP' to dynamically configure the IPv4 address using Dynamic Host Configuration Protocol (DHCP).

IPv6 Address

Specify a static IPv6 address to be configured for the selected interface.

Subnet Prefix length

Specify the subnet prefix length for the IPv6 settings.

- Value ranges from 0 to 128.

Default Gateway

Specify the v6 default gateway for IPv6 settings.

VLAN Configuration

It lists the VLAN configuration settings.

VLAN Settings

Check this option to enable VLAN support for the selected interface.

VLAN ID

Specify the Identification for VLAN configurations.

- Value ranges from 2 to 4094.

NOTE: VLAN ID cannot be changed without resetting the VLAN configuration.
VLAN ID 0, 1, 4095 are reserved VLAN ID's.

VLAN Priority

Specify the priority for VLAN configurations.

- Value ranges from 1 to 7.

NOTE: 7 is the highest priority for VLAN.

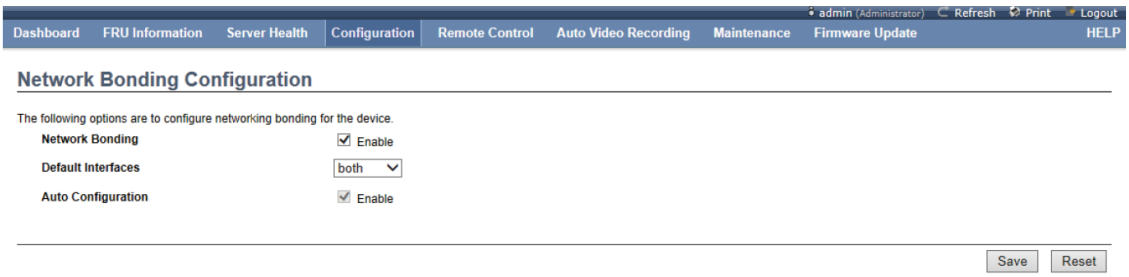
Save

Click 'Save' to save any changes made. You will be prompted to log out of the current UI session and log back in at the new IP address.

Reset

Click 'Reset' to reset the modified changes.

4.9 Network Bonding Configuration



This page is used to configure the network bonding configuration for network interfaces.

NOTE: A minimum of 2 network interfaces are required to enable Network bonding for the device.

Network Bonding
Check this option to enable network bonding for network interfaces.

NOTE: If VLAN is enabled for slave interfaces, then Bonding cannot be enabled. VLAN can be disabled under Configuration -> Network -> VLAN.

Default Interfaces
Choose any one of the bonding interfaces for configuring active slave(s).

Auto Configuration
Enable this option to configure the interfaces in service configuration automatically.

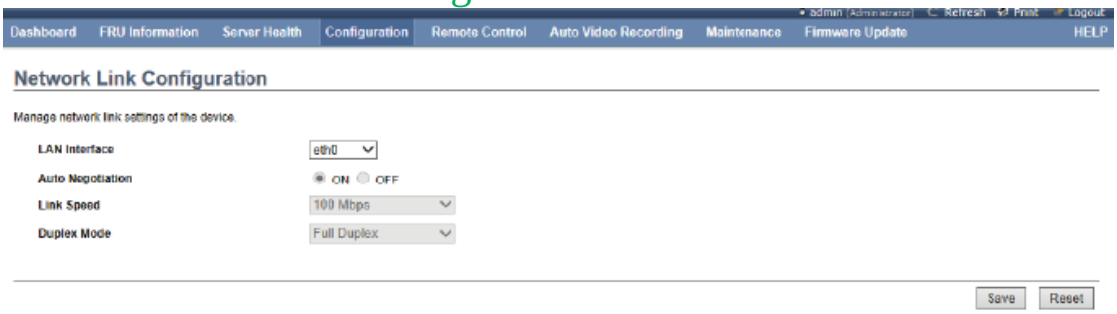
NOTE: If Auto configuration is disabled, then interfaces in services can be configured via IPMI command. If Auto configuration is enabled, then all the services will be restarted automatically.

Save
Click “Save” to save the current changes.

NOTE: Disabling bonding will disable the Bonding-VLAN configuration

Reset
Click “Reset” to reset the modified changes.

4.10 Network Link Configuration



This page is used to configure the network link configuration for available network interfaces.

LAN Interface

Select the required network interface from the list to which the Link speed and duplex mode is to be configured.

Auto Negotiation

This option is enabled to allow the device to perform automatic configuration to achieve the best possible mode of operation (speed and duplex) over a link.

Link Speed

Link speed will list all the supported capabilities of the network interface. It can be 10/100/1000 Mbps.

Duplex Mode

Select any one of the following Duplex Modes.

- Half Duplex
- Full Duplex

Save

Click 'Save' to save the settings.

Reset

Click 'Reset' to reset the modified changes.

4.11 NTP Settings

This page displays the device's current Date & Time Settings. It can be used to configure either Date & Time or NTP (Network Time Protocol) server settings for the device.

Date
Specify the current Date for the device.

Time
Specify the current Time for the device.

NOTE: As a year 2038 problem exists, the acceptable date range is from 01-01-2005 to 01-18-2038.

NTP Server
Specify the NTP Server for the device. Check the 'Automatically synchronize' option to configure the NTP Server. The NTP Server will support the following:

- IP Address (Both IPv4 and IPv6 format).
- FQDN (Fully qualified domain name) format.

UTC Offset
UTC Offset list contains the UTC offset values for the NTP server, which can be used to display the exact local time.

NOTE: Use the correct UTC offset after adjusting for DST.

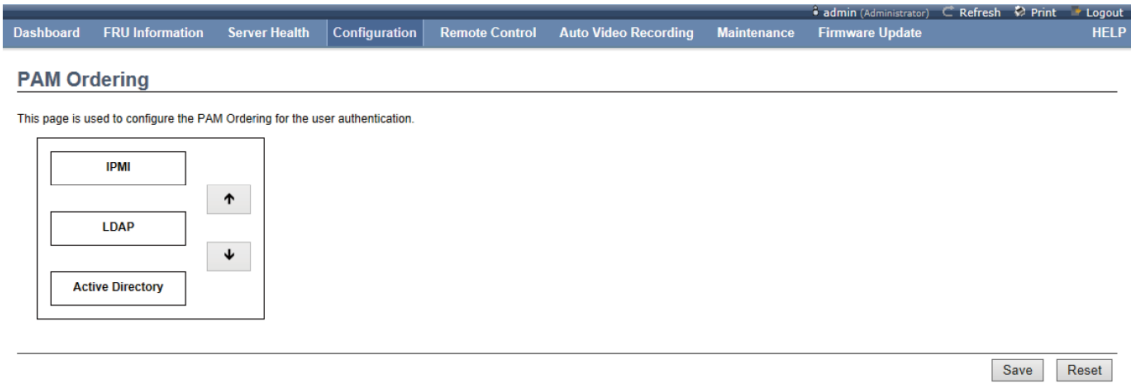
Automatically synchronize
Check this option to automatically synchronize Date and Time with the NTP Server.

Refresh
Click 'Refresh' to reload the current date & time settings.

Save
Click 'Save' to save any changes made.

Reset
Click 'Reset' to reset the modified changes

4.12 PAM Ordering



This page is used to configure the PAM order for user authentication into the BMC.

PAM Module
It shows the list of available PAM modules supported in BMC.

Move Up
Click on the required PAM module, it will be selected. Click on the 'Move Up' option to move the selected PAM module one step before the existing PAM module.

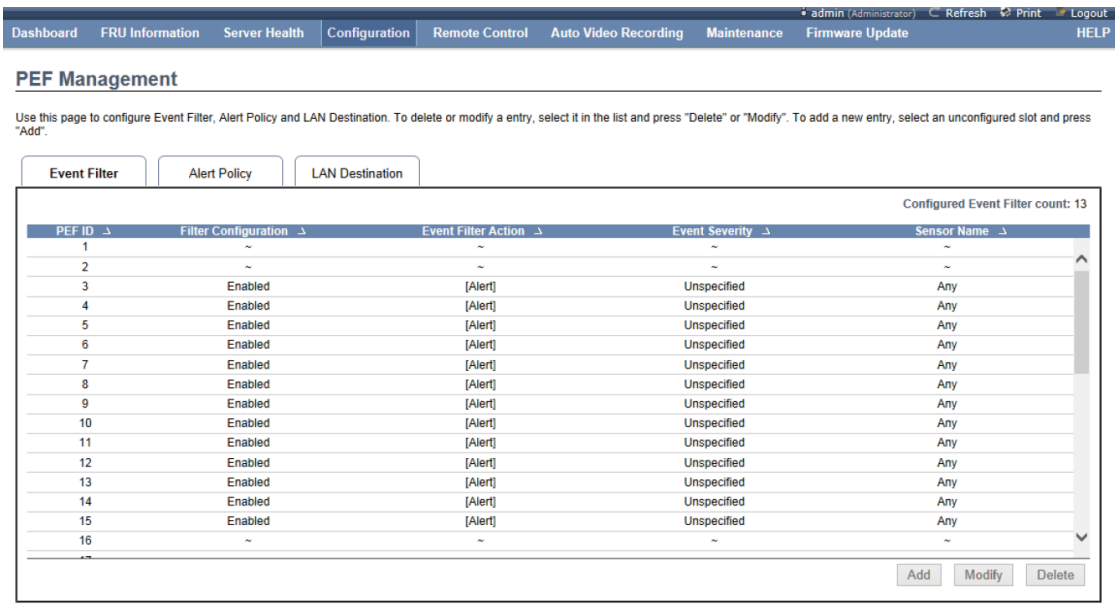
Move Down
Click on the required PAM module, it will be selected. Click on the 'Move Down' option to move the selected PAM module one step after the existing PAM module.

Save
Click 'Save' to save any changes made.

NOTE: Whenever the configuration is modified, the web server will be restarted automatically. The logged session will be logged out.

Reset
Click 'Reset' to reset the modified changes.

4.13 PEF Management



This page is used to configure the Event Filter, Alert Policy and LAN Destination. To view the page, the user must at least be an Operator. To modify or add a PEF, the user must be an Administrator.

NOTE: Free slots are denoted by '~' in all columns for the slot. For more information, refer the Platform Event Filtering (PEF) section in IPMI Specification.

Event Filter

Click the Event Filter tab to show configured Event filters and available slots. You can modify or add new event filter entries here. A maximum of 40 slots are available and include the default of 15 event filter configurations.

Alert Policy

Click the Alert policy tab to show configured Alert policies and available slots. You can modify or add new alert policy entries here. A maximum of 60 slots are available.

LAN Destination

Click the LAN Destination tab to show configured LAN destinations and available slots. You can modify or add new LAN destination entries here. A maximum of 15 slots are available. 30

Send Test Alert

Select a configured slot in the LAN Destination tab and click 'Send Test Alert' to send a sample alert to the configured destination.

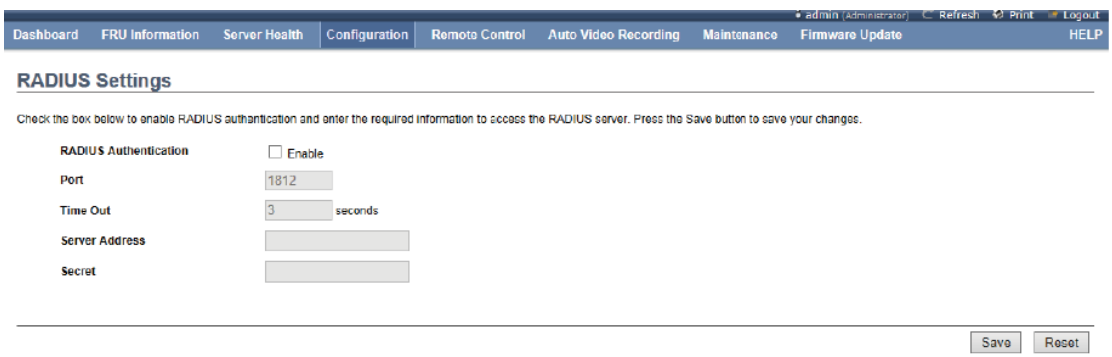
NOTE: Test alerts can be sent only with SMTP configurations set to enabled. SMTP suppport can be enabled under Configuration->SMTP.

Add
Select a free slot and click 'Add' to add a new entry to the device. Alternatively, double click on a free slot.

Modify
Select a configured slot and click 'Modify' to modify that entry. Alternatively, double click on the configured slot.

Delete
Select the desired configured slot to be deleted and click 'Delete'.

4.14 RADIUS Settings



To enable/disable RADIUS, check or uncheck the "RADIUS Authentication" Enable checkbox respectively.

NOTE: Generic FreeRADIUS alone is supported.

RADIUS Authentication
Check the option 'Enable' to enable RADIUS authentication.

Port
Specify the RADIUS Port.

- The default Port is 1812.
- Port value ranges from 1 to 65535.

Time Out

Specify the Time out value.

- The default Time out value is 3 seconds.
- Time out value ranges from 3 to 300.

Server Address

Enter the 'IP address' of the RADIUS server

- An IP Address is made of 4 numbers separated by dots as in "xxx.xxx.xxx.xxx".
- Each Number ranges from 0 to 255.
- The first Number must not be 0

The server address will support the following:

- IPv4 Address format.
- IPv6 Address format.

Secret

Enter the 'Authentication Secret' for RADIUS server

- Secret must be at least 4 characters long.
- Space is not allowed.

NOTE: This field will not allow more than 31 characters.

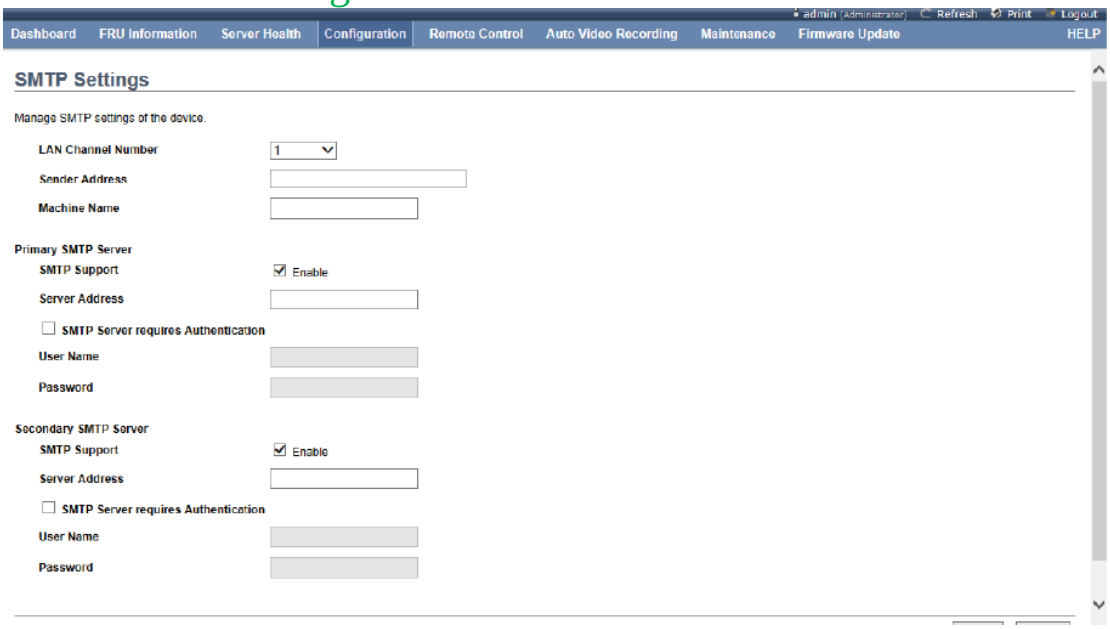
Save

Click 'Save' to save the settings.

Reset

Click 'Reset' to reset the modified changes.

4.15 SMTP Settings



This page is used to configure the SMTP settings.

LAN Channel Number
Select the LAN channel to which the SMTP information needs to be configured.

Sender Address
Enter the 'Sender Address' valid on the SMTP Server.

Machine Name
Enter the 'Machine Name' of the SMTP Server.

- Machine Name is a string of maximum 15 alpha-numeric characters.
- Space, special characters are not allowed.

Primary SMTP Server
It lists the Primary SMTP Server configuration.

SMTP Support
Check this option to enable SMTP support for the BMC.

Server Address

Enter the 'IP address' of the SMTP Server. It is a mandatory field.

- An IP Address is made of 4 numbers separated by dots as in "xxx.xxx.xxx.xxx".

- Each Number ranges from 0 to 255.
- The first Number must not be 0.

The server address will support the following:

- IPv4 Address format.
- IPv6 Address format.

SMTP Server requires Authentication

Check the option 'Enable' to enable SMTP Authentication.

Note: SMTP Server Authentication Types supported are:

- CRAM-MD5
- LOGIN
- PLAIN

If the SMTP server does not support any one of the above authentication types, the user will get an error message stating, "Authentication type is not supported by SMTP Server"

Username

Enter the username to access SMTP Accounts.

- The User Name can be 4 to 64 alpha-numeric characters.
- It must start with an alphabet.
- Special characters ',' (comma), ':' (colon), ';' (semicolon), ' ' (space) and '\' (backslash) are not allowed.

Password

Enter the password for the SMTP User Account.

- Passwords must be at least 4 characters long.
- Space is not allowed.

NOTE: This field will not allow more than 64 characters.

Secondary SMTP Server

It lists the Secondary SMTP Server configuration. It is an optional field. If the Primary SMTP server is not working, then it tries the Secondary SMTP Server configuration.

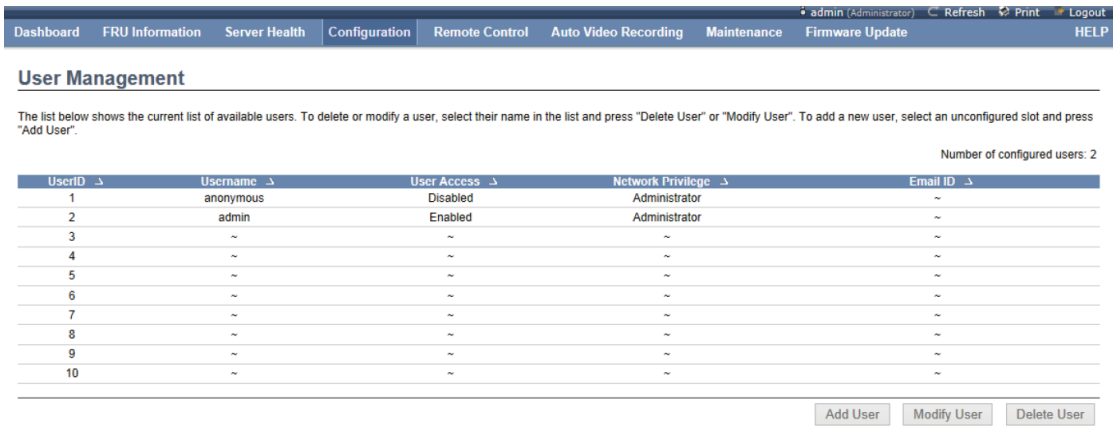
Save

Click 'Save' to save the new SMTP server configuration.

Reset

Click 'Reset' to reset the modified changes

4.16 User Management



The displayed table shows any configured Users and available slots. You can modify or add new users from here. A maximum of 10 slots are available, including the default admin and anonymous. It is advised that the anonymous user's privilege and password should be modified as a security measure. To view the page, you must have Operator privileges. To modify or add a user, You must have Administrator privileges.

NOTE: Free slots are denoted by "~" in all columns for the slot.

Add User

Select a free slot and click 'Add User' to add a new user to the device.
Alternatively, double click on a free slot to add a user.

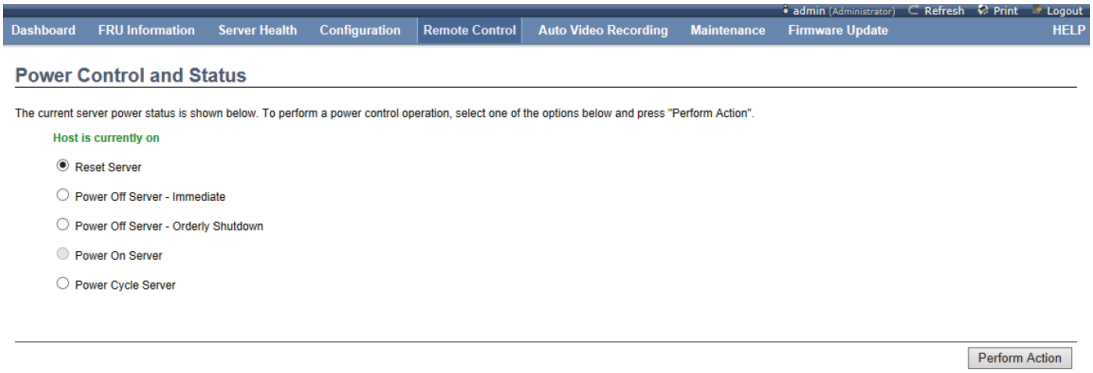
Modify User

Select a configured slot and click 'Modify User' to modify that user.
Alternatively, double click on the configured slot.

Delete User

Select the desired user to be deleted and click 'Delete User

4.17 Power Control and Status



This page helps you to view or perform any host power cycle operations.

Reset Server
Select this option to reboot the system without powering off (warm boot).

Power Off Server - Immediate
Select this option to immediately power off the server.

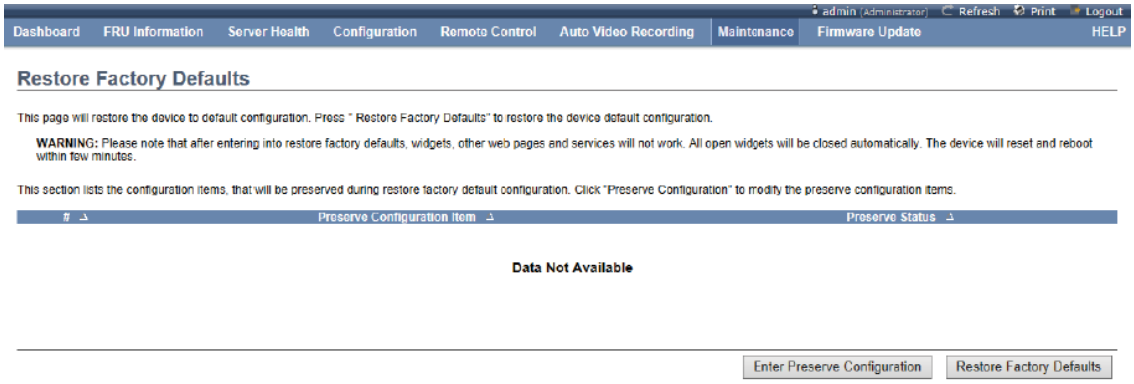
Power Off Server - Orderly Shutdown
Select this option to initiate operating system shutdown prior to the shutdown.

Power On Server
Select this option to power on the server.

Power Cycle Server
Select this option to first power off, and then reboot the system (cold boot).

Perform Action
Click ‘Perform Action’ to perform the selected option.

4.18 Restore Factory Defaults

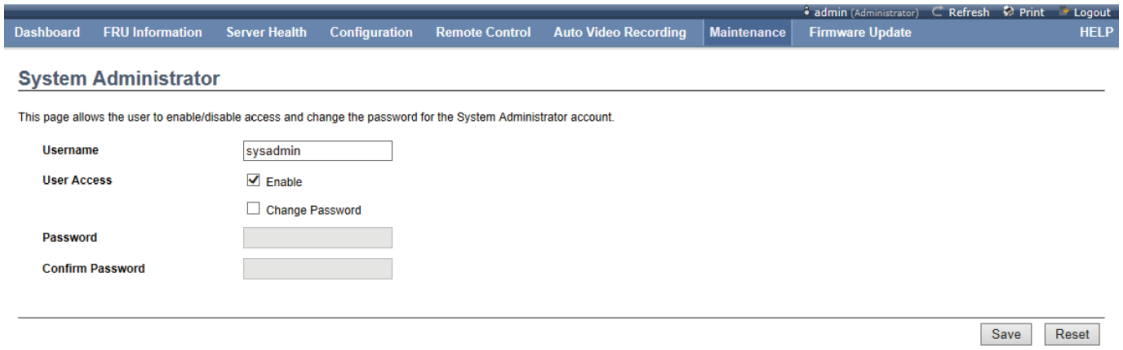


This page helps to restore the factory defaults of the device. Please note that after entering restore factory widgets, other web pages and services will not work. All open widgets will be closed automatically. The device will reset and reboot within a few minutes.

Preserve Configuration
Click this to redirect to Preserve configuration page, which is used to preserve the particular configurations not to be overwritten by the default configuration.

Restore Factory Defaults
Click this to restore the firmware with default configurations.

4.19 System Administrator



This page is used to configure the System Administrator configurations.

Username
Username of the System Administrator is displayed (read only).

User Access
Check this option to enable user access for the system administrator.

Change Password
To change the user's password, check the 'Change Password' option. This will enable the password fields.

Password, Confirm Password
Enter and confirm the new password here.

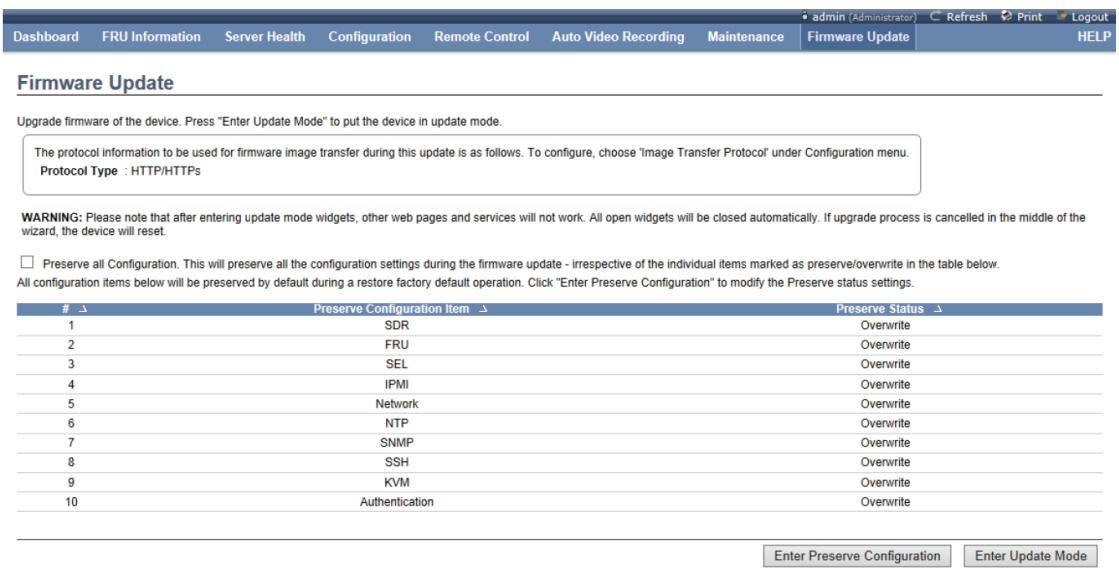
- Passwords must be at least 8 characters long.
- Space is not allowed.

NOTE: This field will not allow more than 64 characters.

Save
Click 'Save' to save the new configuration for the system administrator.

Reset
Click 'Reset' to reset the modified changes

4.20 Firmware Update



This wizard takes you through the process of firmware upgrades. A reset of the box will automatically follow whether the upgrade is completed or cancelled. An option to Preserve configuration will be presented. Enable the option, if you wish to preserve configured settings through the upgrade.

Enter Preserve Configuration
Click this to redirect to the Preserve configuration page, which is used to preserve the particular configurations not to be overwritten by the default configuration.

Enter Update Mode
Click 'Enter Update Mode' to upgrade the current device firmware.

4.21 Image Transfer Protocol

Protocol Type
Protocol type to transfer the firmware image into the BMC.

Server Address
The Server IP address of the firmware image is stored.

- An IP Address is made of 4 numbers separated by dots as in "xxx.xxx.xxx.xxx".
- Each number ranges from 0 to 255.
- The first number must not be 0.

Source Path
Full Source path with filename of where the firmware image is stored.

Retry Count
Number of time(s) to be retried when transfer failure occurs. Retry count ranges from 0 to 255.

Save
Click 'Save' to save the configured settings.

Reset
Click 'Reset' to reset the modified changes