GIGABYTE™

GSM Server

Installation and Configuration Guide

Rev. 1.1

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Documentation Classifications

In order to assist in the use of this product, GIGABYTE provides the following types of documentation:

- User Manual: detailed information & steps about the installation, configuration and use of this product (e.g. motherboard, server barebones), covering hardware and BIOS.
- User Guide: detailed information about the installation & use of an add-on hardware or software component (e.g. BMC firmware, rail-kit) compatible with this product.
- Quick Installation Guide: a short guide with visual diagrams that you can reference easily for installation purposes of this product (e.g. motherboard, server barebones).

Please see the support section of the online product page to check the current availability of these documents.

For More Information

For related product specifications, the latest firmware and software, and other information please visit our website at http://www.gigabyte.com

For GIGABYTE distributors and resellers, additional sales & marketing materials are available from our reseller portal: http://reseller.b2b.gigabyte.com

For further technical assistance, please contact your GIGABYTE representative or visit https://esupport.gigabyte.com/ to create a new support ticket

For any general sales or marketing enquiries, you may also message GIGABYTE server directly by email: server.grp@gigabyte.com

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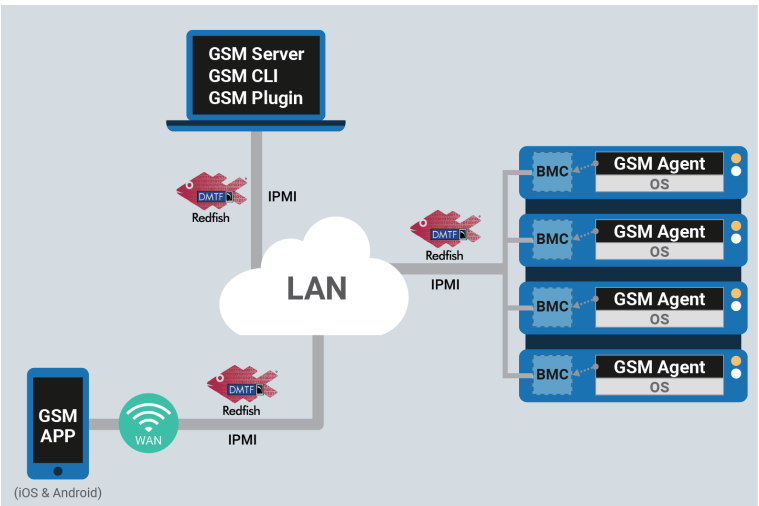
Chapter 1 GSM Server Overview

1-1 GSM (GIGABYTE Server Management) Software Package Overview



GSM (GIGABYTE Server Management) is GIGABYTE's proprietary multiple server remote management software platform. GSM is compatible with either IPMI or Redfish (RESTful API) connection interfaces, and comprises the following

GSM Server, a software program with an easy to use browser-based GUI to enable global remote monitoring and management of multiple GIGABYTE servers via each server node's BMC.

GSM CLI (GBT Utility), a command-line interface program to enable global remote monitoring and management of multiple GIGABYTE servers via each server node's BMC.

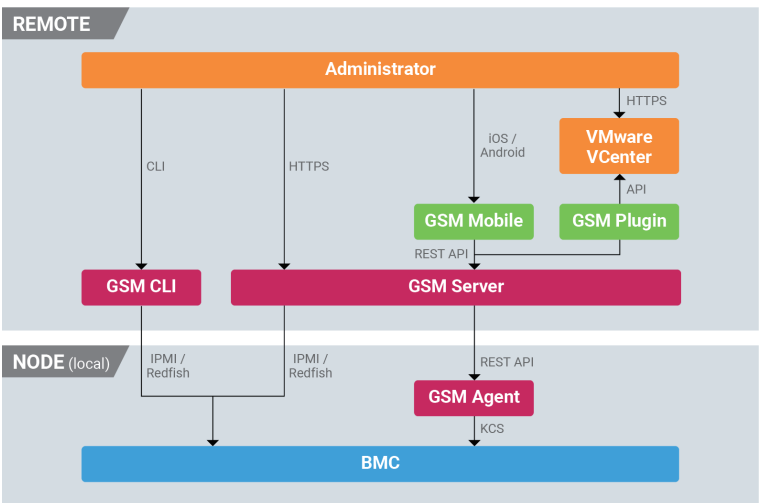
GSM Agent, a software program installed locally on each GIGABYTE server node that retrieves additional node information (CPU/Mem/HDD/PCI/…) from the OS and passes it to the BMC. This information can then be utilized by GSM Server or GSM CLI.

GSM Mobile, a remote server management mobile APP, available for both Android and iOS.

GSM Plugin, a plugin available for VMware's vCenter, allowing the user to perform remote

monitoring and management of GIGABYTE server nodes without having to switch to a separate software platform.

A logical diagram of these different software sub-programs can be seen below:



Each sub-program is available to download for free from each GIGABYTE server product page*.
*Depending on product compatibility, some programs may not be available. Please download GSM Mobile from the Google (Android) or iOS Store.

Chapter 2 GSM Server Installation

2-1 Using GSM Server

GSM (Gigabyte Server management) Server has a user-friendly Graphics User Interface (GUI) called the GSM Server GUI. It is designed to be easy to use. It has a low learning curve because it uses a standard Internet browser. You can expect to be up and running in less than five minutes. This chapter allows you to become familiar with the GSM Server GUI's various functions. Each function is described in detail.

2-2 Hardware Requirements

Before using GSM Server, please check your system for the following required configuration requirements:

- System Processor: 2 GHz and above
- System Memory: Minimum 4 GB RAM
- Free Disk Space: 1000 GB at least
- Node servers : 255 maximum

2-3 Software Requirements

2-3-1 Prerequisites for remote management server

Supported Browsers:

- Internet Explorer 9 or later
- Google Chrome 39.0.2171.65 m or later
- Mozilla Firefox 33.1.1

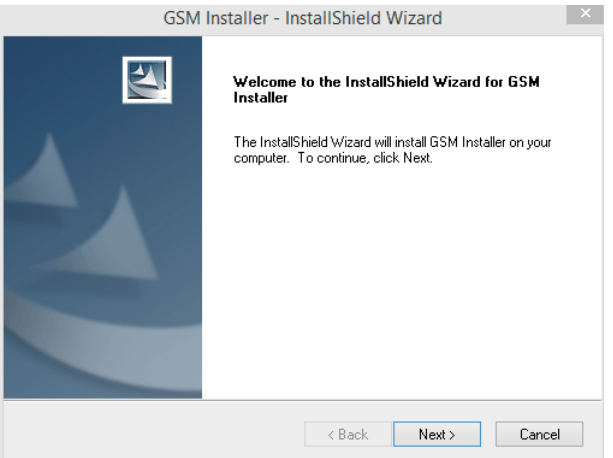
Operating System:

- Windows 2008 & 2012 R2
- Redhat/CentOS 6.3 or later

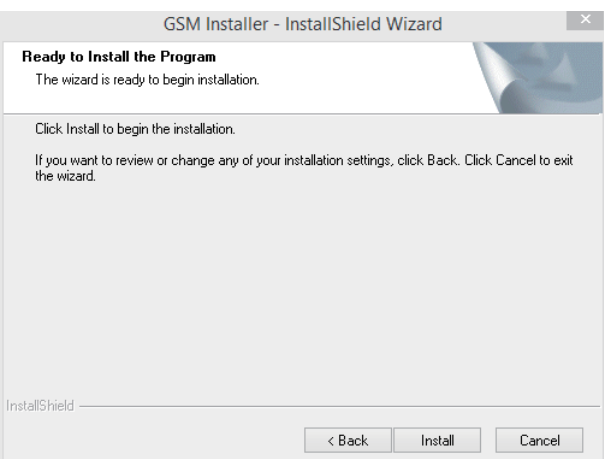
2-4 Installing GSM Server (Windows)

2-4-1 Installation Procedure

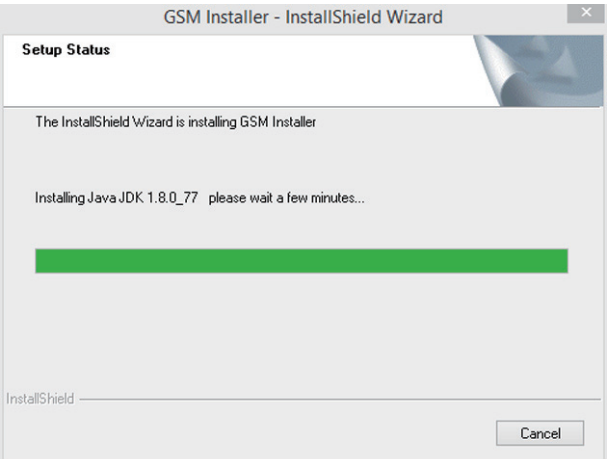
1. Unzip the file and run **GSM_Setup.exe**.
2. Then, a series of installation wizards appear.
3. Click **Next**.



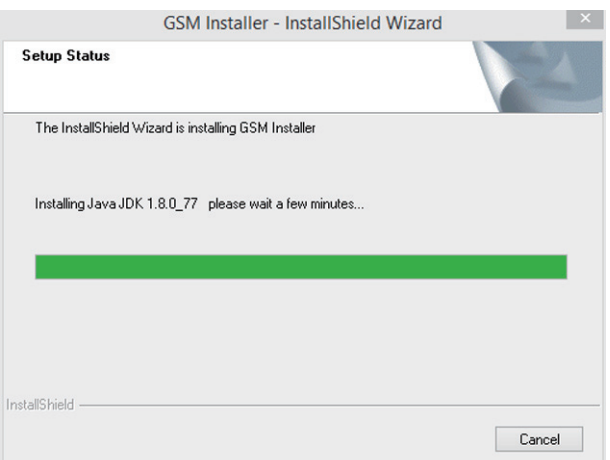
4. Click **Install** to start the installation.



5. Installing preparation files.

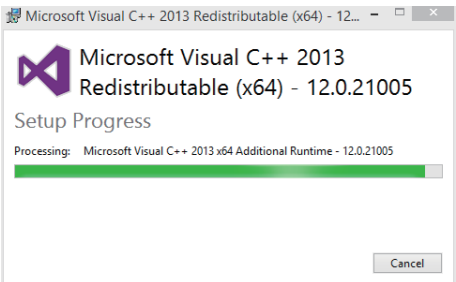


6. Installing Java JDK, this may take few mintues to complete installation.

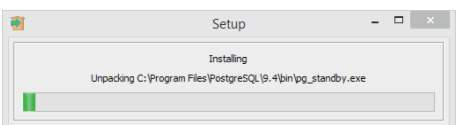


CAUTION! Please make sure you have enough space on your hard drive for the program.

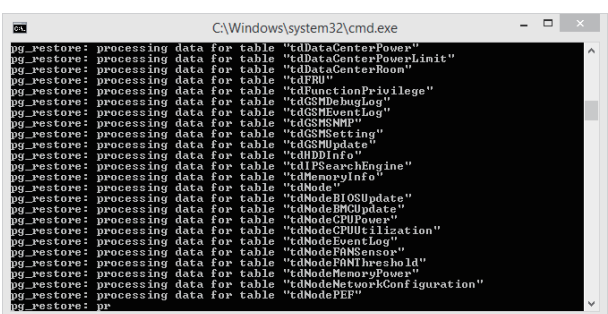
7. nstalling Visual C++.



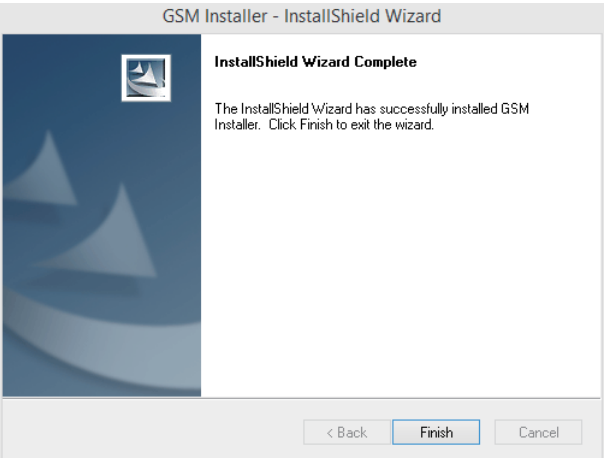
8. Installing PostgreSQ.



9. Setting Database of PostgreSQL.



10. Installation completed, click **Finish**.

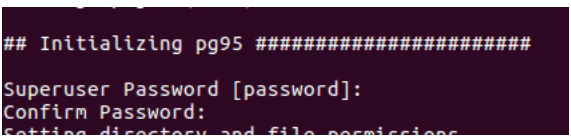


2-5 Installing GSM Server (Linux)

2-5-1 Installation/Uninstallation Steps for Ubuntu, Debian (Login as root)

1. Before installation, please check the packages sudo and ufw are already installed. Otherwise, GSM Server installation will fail.
   #apt-get install sudo ufw

2. Use deb package to install GSM Server.
   #dpkg -i gsm_x. x_all.deb
3. Installer will patch PostgreSQL which does not install yet and ask user to set password to PostgreSQL.



4. Make sure the package 'fontconfig' is already installed before starting GSM Server.
   Install the package: 'fontconfig'.
   #apt-get install fontconfig

5. Finish and start up the GSM Server web page.
   Connect to GSM Server: http://{your IP address}:8080/GSM

6. Uninstall GSM Server
   #dpkg –r gsm

NOTE!

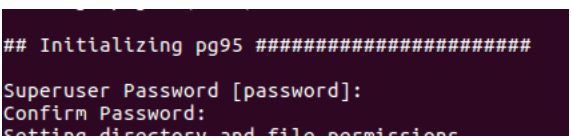
1. **Installation will detect PostgreSQL 9.5 and modify its configuration. Please backup PostgreSQL settings before you install GSM Server. However, if PostgreSQL 9.5 doesn't exist, do not install any PostgreSQL and skip this suggestion, please.**
2. **Installation will install and place Java and PostgreSQL sources for GSM Server to /opt. Do not modify and remove them. It's very important.**
3. **After finishing installation, installer adds firewall exception, such as 8080, 8443, 162, 69 and tftp, to public zone. If you do not use public zone as default, please add firewall exception manually.**

2-5-2 Installation/Uninstallation Steps for CentOS 7, RHEL, Fedora (Login as root)

1. Before installation, please check the packages sudo and firewalld are already installed. Otherwise, GSM Server installation will fail.
   #yum install sudo firewalld

2. Use RPM package to install GSM Server.
   # rpm -ivh gsm-x.x-1.x86_64.rpm

3. Installer will patch PostgreSQL which does not install yet and ask user to set password for PostgreSQL.



4. Make sure the package 'fontconfig' is already installed before starting GSM Server.
   Install the package: 'fontconfig'.
   #yum install fontconfig

5. Finish and start up the GSM Server web page
   Connect to GSM Server: http://{your IP address}:8080/GSM

6. Uninstall GSM Server
   #rpm –e gsm-x.x-1.x86_64

NOTE!

1. **Installation will detect PostgreSQL 9.2 and modify its configuration. Please backup PostgreSQL settings before you install GSM Server. However, if PostgreSQL 9.2 doesn't exist, do not install any PostgreSQL and skip this suggestion, please.**
2. **Installation will install and place Java and PostgreSQL sources for GSM Server to /opt. Do not modify and remove them. It's very important.**
3. **After finishing installation, installer adds firewall exception, such as 8080, 8443, 162, 69 and tftp, to public zone. If you do not use public zone as default, please add firewall exception manually.**

2-5-3 Restore dbGSMv0XX.backup

1. Modify pg_hba.conf file

[Ubuntu]

vi /etc/postgresql/9.3/main/pg_hba.conf

[CentOS / Red Hat]

vi /var/lib/pgsql/9.3/data/pg_hba.conf

2. Edit

TYPE	DATABASE	USER	ADDRESS	METHOD
Local	all	all→postgres		peer→trust
host	all	all→postgres	127.0.0.1/32	indent→trust
host	all	all→postgres	::1/128	indent→trust

:wq to save edited file.

3. Start service

[Ubuntu]

service postgresql restart

[CentOS / Red Hat]

service postgresql-9.3 start

4. Create database

   createdb -U postgres dbGSM

5. Restore dbGSMv0XX.backup to database

   pg_restore -h 127.0.0.1 -p 5432 -U postgres -d dbGSM -v " dbGSMv0XX.backup"

2-5-4 pgadminIII Installation Procedure (Optional)

[CentOS]

1. Install pgadmin3
   yum install pgadmin3_93

2. Execute pgadmin3
   pgadmin3 &

3. File -> Add server

[Redhat]

1. Get wxBase
   curl -O
   http://yum.postgresql.org/9.2/redhat/rhel-6.5-x86_64/wxBase-2.8.12-1.el6.x86_64.rpm

2. Install wxBase
   rpm -ivh wxBase-2.8.12-1.el6.x86_64.rpm

3. Get wxGTK
   curl -O
   http://yum.postgresql.org/9.2/redhat/rhel-6.5-x86_64/wxGTK-2.8.12-1.el6.x86_64.rpm

4. Install wxGTK
   rpm -ivh wxGTK-2.8.12-1.el6.x86_64.rpm

5. Get PgAdmin3
   curl -O
   http://yum.postgresql.org/9.3/redhat/rhel-6.5-x86_64/pgadmin3_93-1.18.1-2.rhel6.x86_64.rpm

6. Install PgAdmin3
   rpm -ivh pgadmin3_93-1.18.1-2.rhel6.x86_64.rpm

7. Execute pgadmin3
   pgadmin3 &

8. File -> Add server

2-5-5 Login to GSM Server

1. Open a browser and enter the URL
   http://localhost:8080/GSM/

- **Before using the GSM Server Management Console, it is necessary to set the ports (8080, 8443, 69) of TCP & UDP to pass through the firewall, otherwise some functions may not be work functionally.**

2. Enter Database User Name
   postgres

- **This utility is supported CentOS 6.3 or later versions.**
- **PostgreSQL must be execute in root authority.**
- **In Fedora 19, you have to install package in the following:**

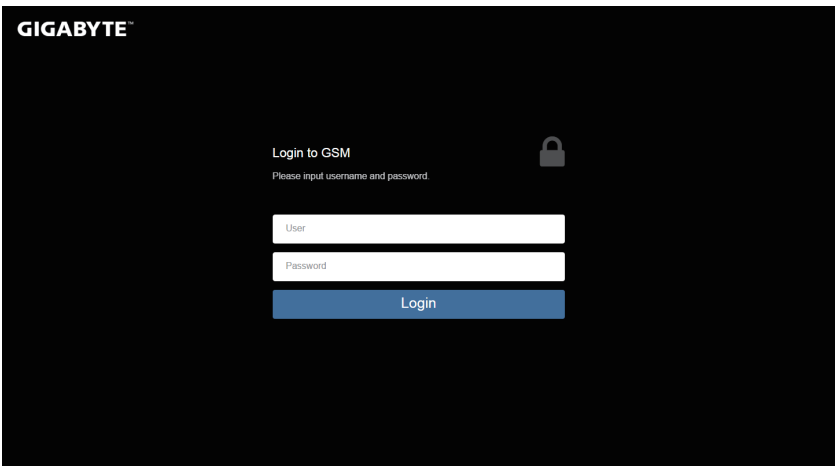
  Locate and edit your distributions .repo file, located:
  vi /etc/yum.repos.d/fedora.repo and /etc/yum.repos.d/fedora-updates.repo
  ([fedora] sections)

  Install PGDG RPM file:
  curl -O
  http://yum.postgresql.org/9.3/redhat/rhel-6-x86_64/pgdg-centos93-9.3-1.noarch.rpm

  Initialize:
  /usr/pgsql-9.3/postgresql93-setup initdb

Chapter 3 Using GSM Server

3-1 Overview



1. Open a web browser and type in your identified IP. The IP address can be found using your DHCP server.
2. Enter the following values:
   - Username: **admin**
   - Password: **password**

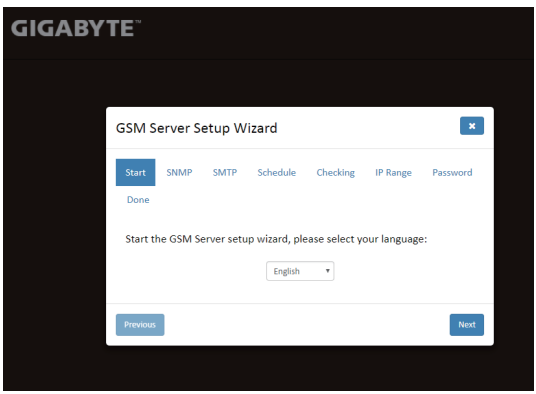
- **The default user name and password are in lower-case characters.**
- **When you log in using the root user name and password, you have full administrative powers. It is advised that once you log in, you change the root password.**

3-1-1 GSM Server Setup Wizard

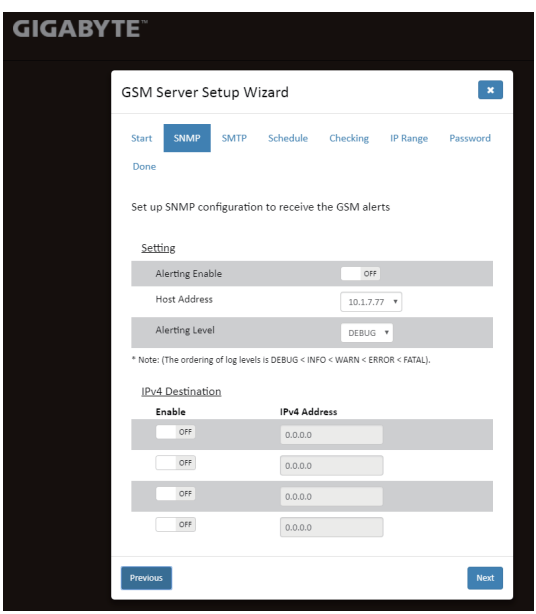
When you log into your GSM Server management console for the first time, you will be required to configure the basic settings via the setup wizard.

Setup Procedures:

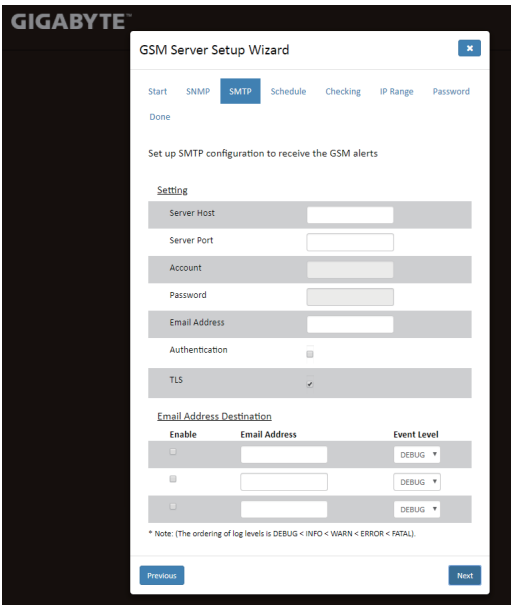
1. Select your preferred language and click **Next**.



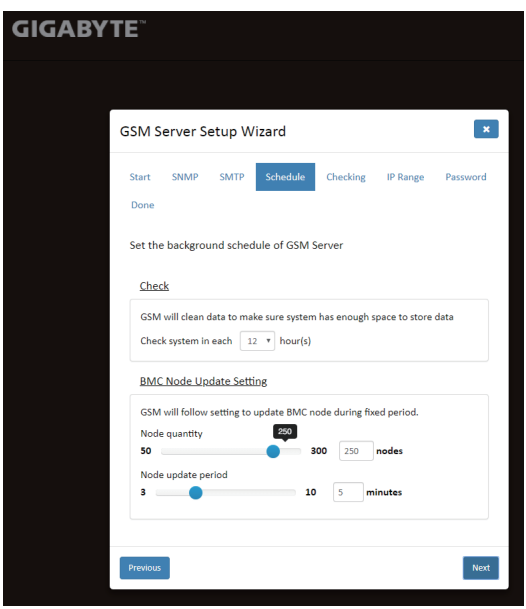
2. Configure the SNMP setting and click **Next**.



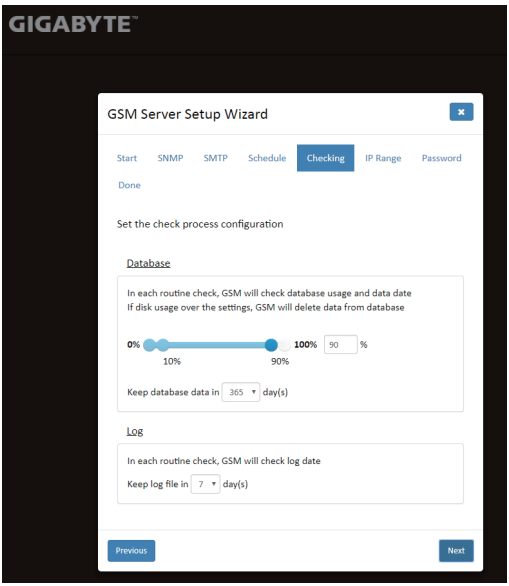
3. Configure the SMTP setting and click **Next**.



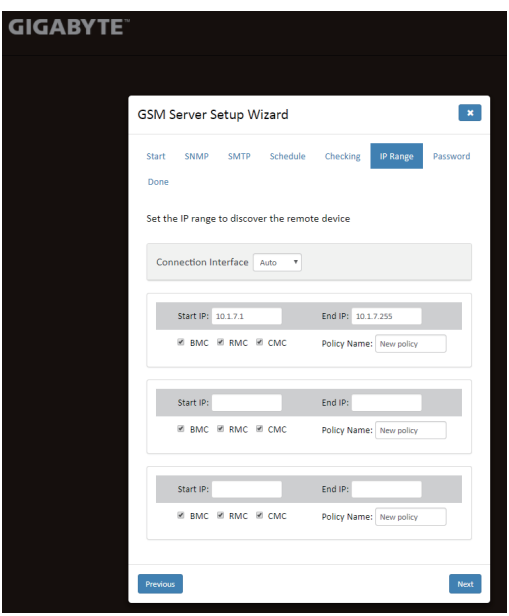
4. Set the Schedule and click **Next**.



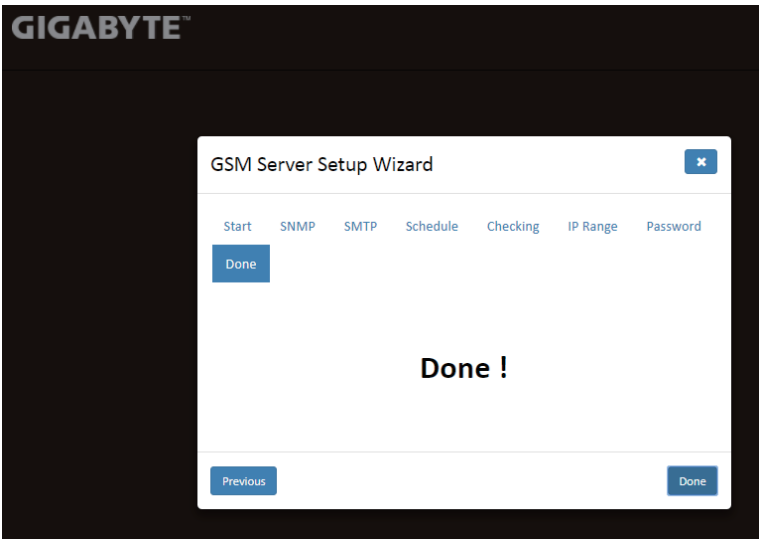
5. Set the check process and click **Next**.



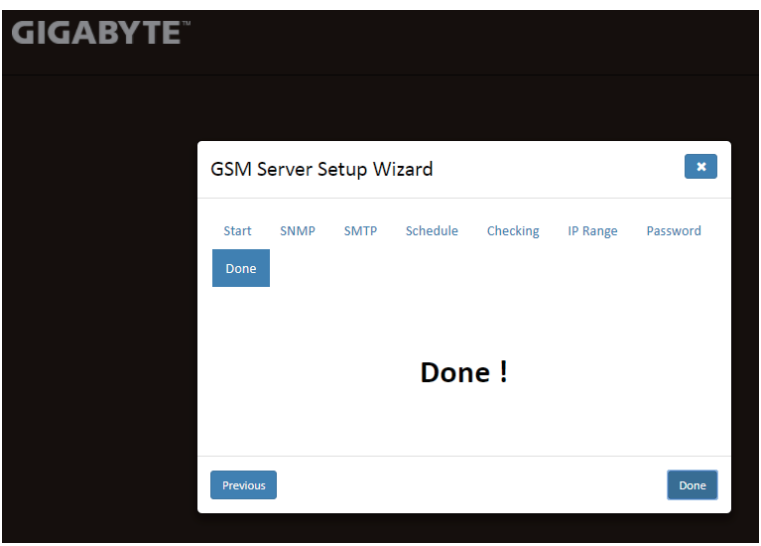
6. Configure the IP range and click **Next**.



7. Set the password for administrator and click **Next**.

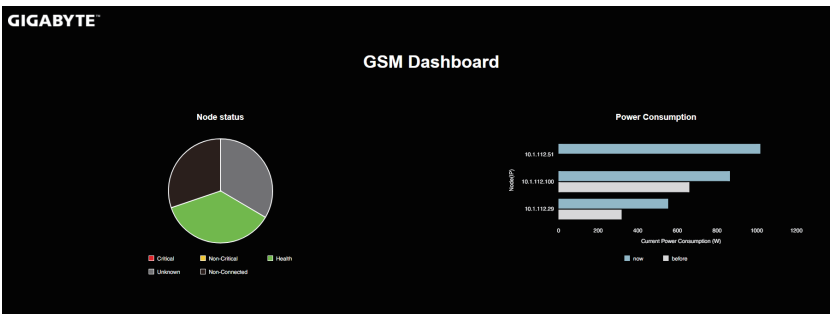


8. Setup completed, click **DONE** to close the wizard.



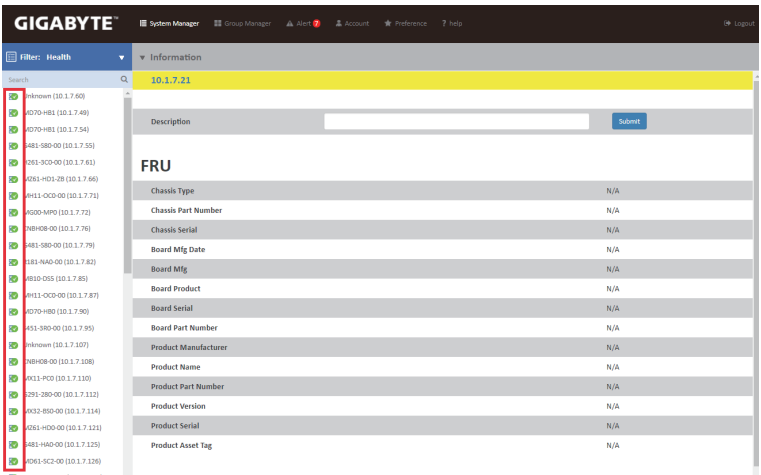
3-2 Enter GSM Server

After you successfully log into GSM Server, the Remote Management GUI appears. Click **Node Status image** for advanced configuration.



After you entering into your Management Console, the Management Console GUI appears.

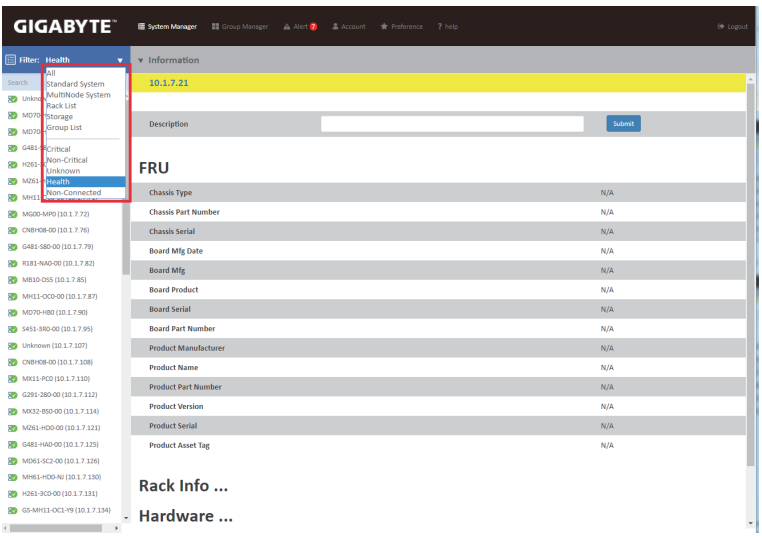
Management Console Information shows the general system health status of the current remote node. The node health status will appear on the left side in different colors, the definition of each color is described below:



Icon	Decription/Resulting Action
	Normal: All nodes and sensors are normal and there's no sensor that has any alert.
	Warning: There's at least one node/ sensor that has warning alert.
	Unknown: There's a non-critical alert or an alert classified as unknown status.
	Critical: There's at least one node/sensor that has a critical alert.
	Not Connected: This indicates the identified node is not connected.

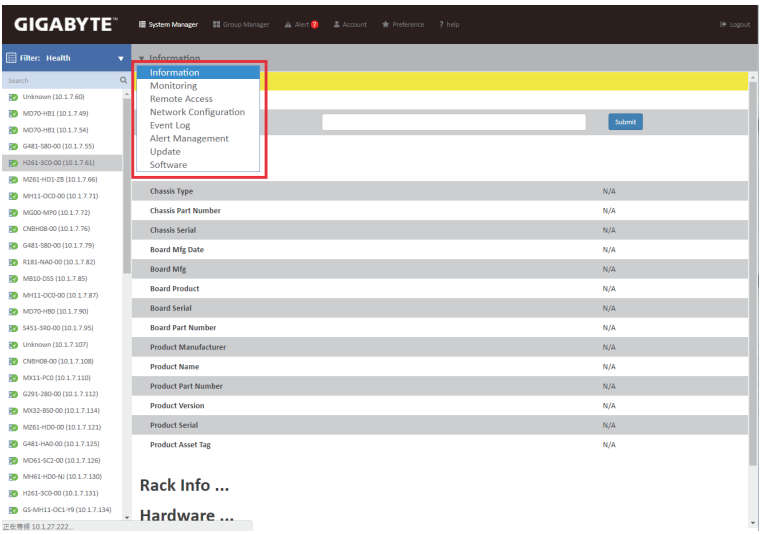
3-3 System Manager

System Manager lists all connected node systems. Click the drop-down list to filter and select specific node group.



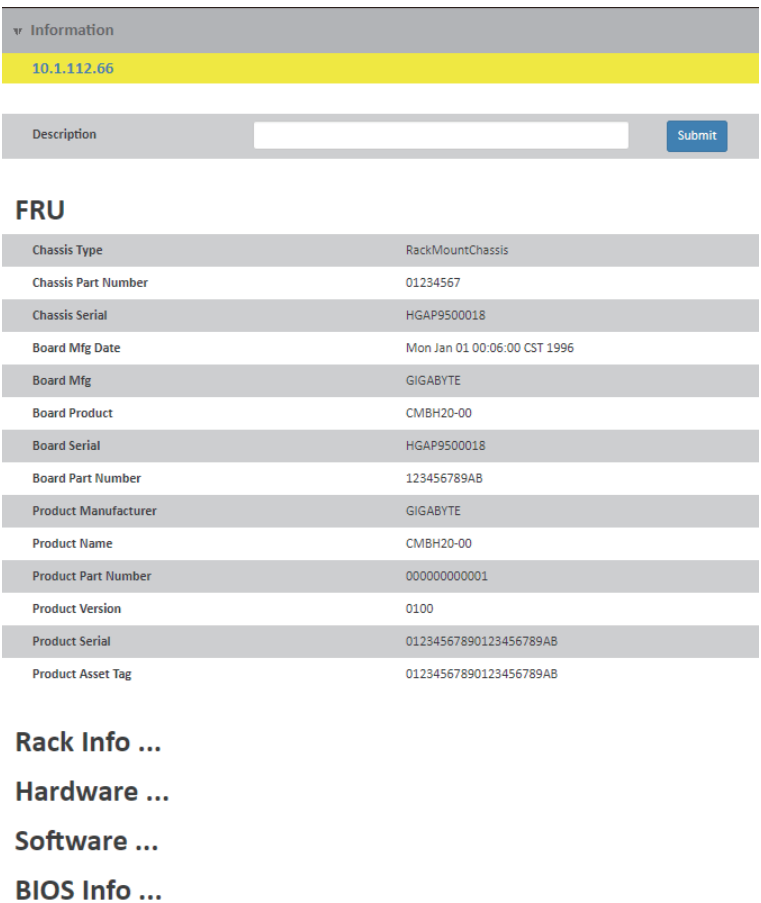
Parameter	Decription/Resulting Action
Standard System	Server Node connected via BMC function.
MultiNode System	System Node connected via CMC function.
Rack List	System Node connected via RMC function.
Storage	Lists JBOD System nodes information.
Group List	Lists the grouped system node information.
Critical	There's at least one sensor that has a critical alert.
Non-critical	There's at least one sensor that has a warning alert.
Unknown	There's at least one sensor that has a unknown alert.
Health	All sensors are normal and there's no sensor that has any alert.
Non-Connected	There's non system node is connected.

And the click the drop-down list for advanced configuration.



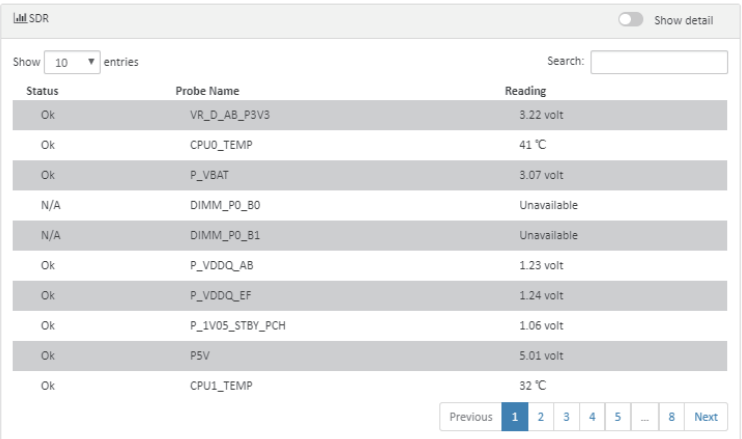
3-3-1 Information

The **Information** is a display page for basic system health information, such as FRU information, Rack Information, Hardware Information, Software Information, and BIOS Information. Items on this window are non-configurable.



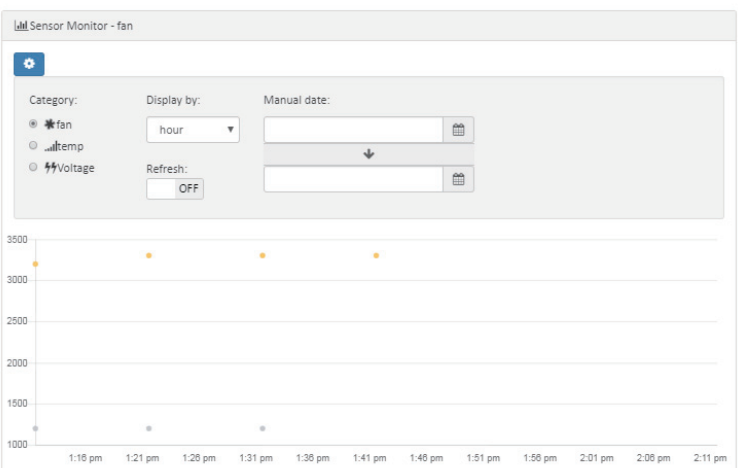
3-3-2 Monitoring

Monitoring displays a real-time record of the node system fan and voltage information. Click **View** to check SDR of specified device.



Sensor Monitoring

Click to monitor specified sensor and timeframe.



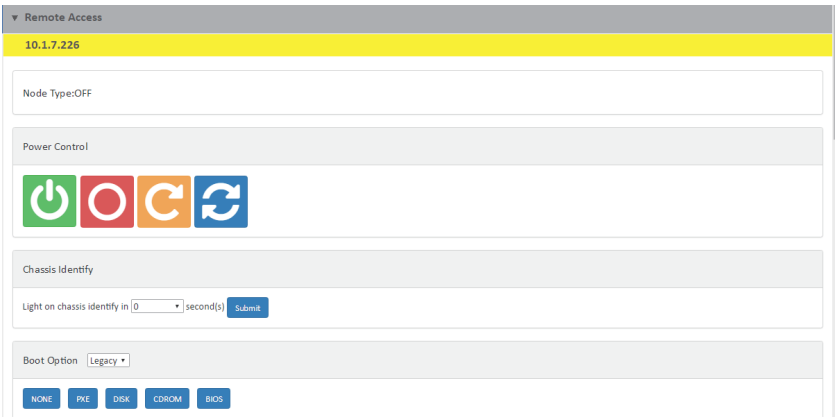
3-3-3 Remote Access

Remote Access provides the following remote functions:

- Power Control Configuration
- Chassis Identify
- Boot Option
- Launch iKVM
- Reboot BMC
- Restore BIOS default settings
- BIOS Setup information
- Mount/Unmount Virtual Media
- Network Time Protocol Configuration
- BMC Account Configuration
- BMC Agent Account Configuration
- BMC Backup/Restore Configure

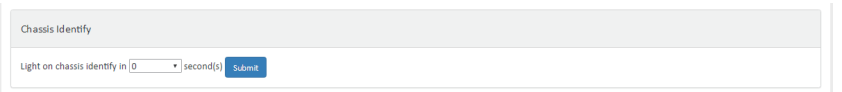
Power Control

User can power on/off/cycle/and hard reset the remote host system in **Power Control**.

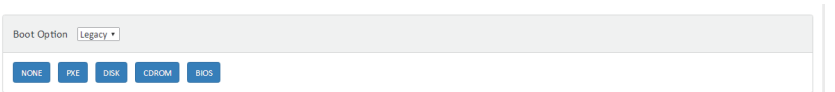


Icon	Decription/Resulting Action
	Power on system.
	Power off system.
	Power cycle system.
	Hard reset system.

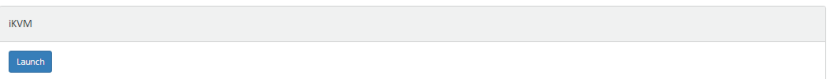
Chassis Identify



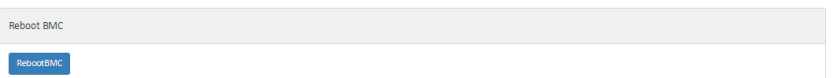
Boot Option



iKVM

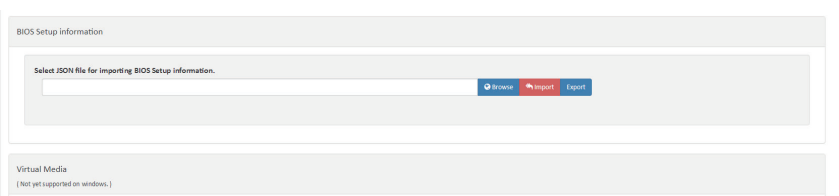


Reboot BMC



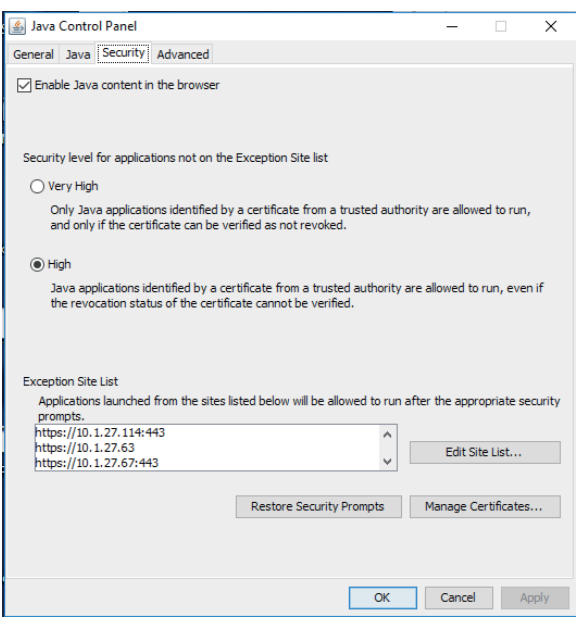
Restore BIOS default settings

BIOS Setup information



Parameter	Decription/Resulting Action
Chassis Identify	Define the chassis lighting time. When you finish the configuration, click **Submit**.
Boot Option	Select boot option by clicking specified device tab.
iKVM	Click **Launch** to launch the redirection console and manage the server remotely. Please ensure that you have latest version of JAVA tool to active the Java KVM console. **NOTE!** Before using the KVM console, you need to set the Java security settings first. Then set the IP address of the remote system in the Exception Site List area.
Reboot BMC	Click **RebootBMC** to restart BMC.
Restore BIOS default settings	Click **Browse** and select the file on your local system and click **Restore** to restore BIOS default setting.
BIOS Setup Information	Click **Export** to retrieve the BIOS information Click **Browse** to select the file. Click **Import** to load the BIOS information into GSM Sever.

JAVA Security Settings

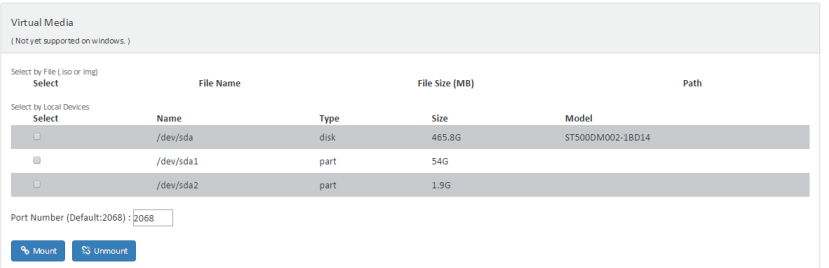


Virtual Media

The User can mount an ISO Image via Virtual Media function page.

Follow the instructions below to mount or unmount an ISO image.

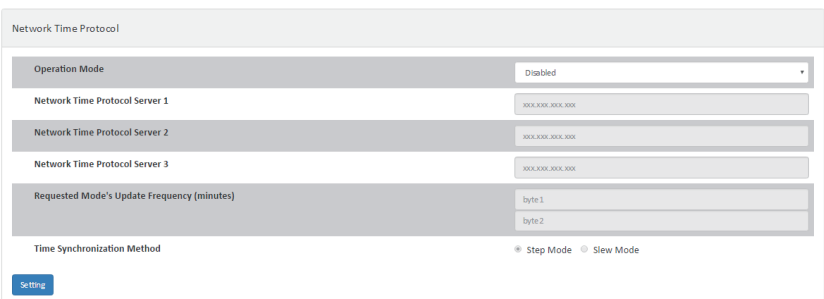
1. To mount an ISO image, select the ISO image and click **Mount**.
2. To unmount an ISO image, select the ISO image and click **Unmount**.



NOTE! Virtual Media does not support Windows operating system.

Network Time Protocol

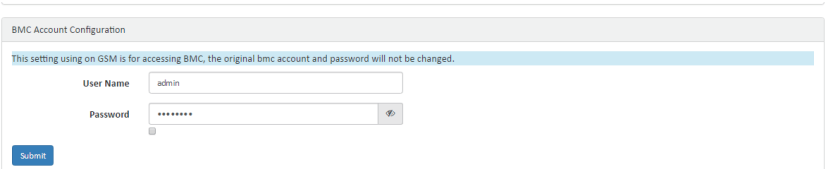
Network Time Protocol provides Network configuration. User can view and modify the network settings on this screen. Select the Operation Mode from the drop-down list.



Parameter	Decription/Resulting Action
Dedicate Mode	Request an immediate clock synchronization with the NTP server; the request will be sent when you click the Sync Time Now button.
Daemon Mode	Runs NTP daemon which sends a NTP request at approximately 5 minute intervals. Multiple NTP servers may be specified to provide redundancy.

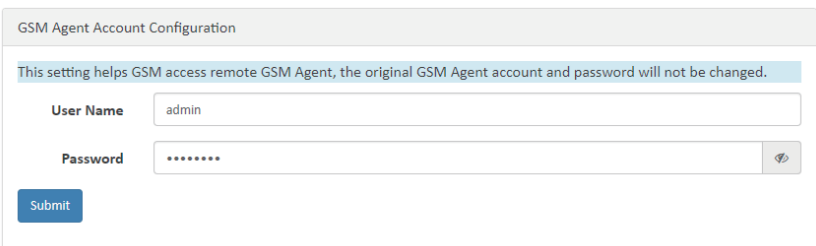
BMC Account Configuration

User can configure the adminstrator ID and password in this section. After finishing configuration, click **Sumit**.



GSM Agent Account Configuration

User can set the User Name and password to connect to the GSM Agent account. Click **Submit** when setting is complete.



BMC Back/Restore Configure

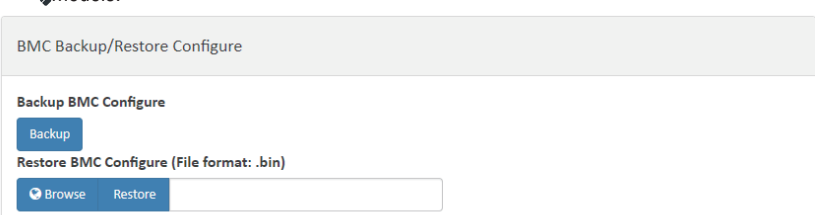
The BMC Back/Restore Configure allows users to backup and restore functions for the configured settings.

Click **Backup** to backup configured settings.

Click **Browse** and select the file on your local system.

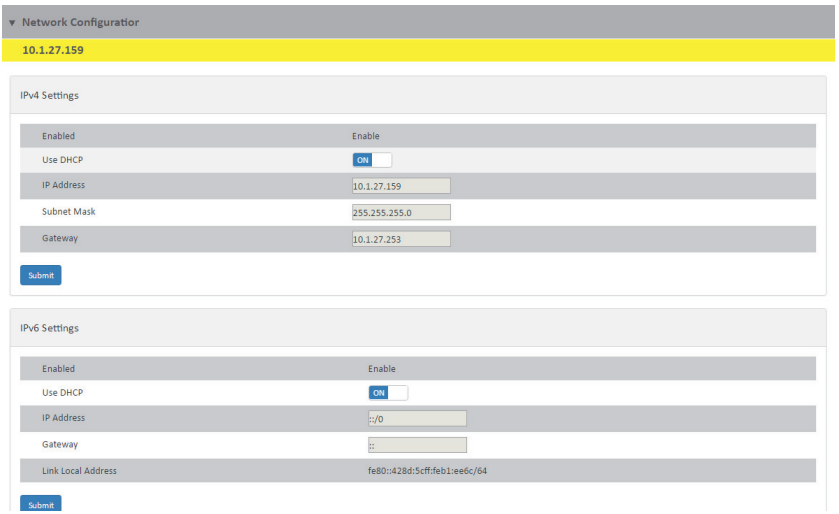
Then click **Restore** to restore configured settings.

NOTE! BMC Back/Restore Configure funcion is only available on selected models.



3-3-4 Network Configuraiton

This page provides Group IPv4 and IPv6 DHCP configuration.



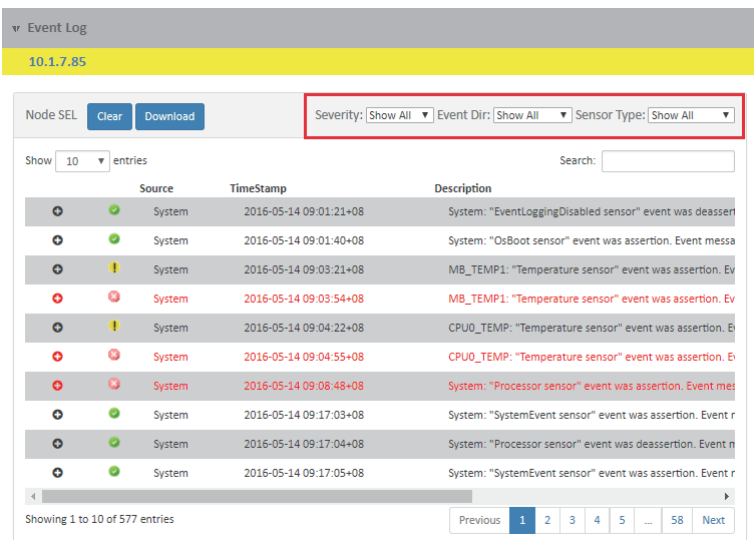
Parameter	Decription/Resulting Action
IPv4 setting IPv6 Setting	
Use DHCP	Click on tab to enable or disable this function
IP Address	Identify the IP address.
Subnet Mask	Configure the Subnet Mask address.
Gateway	Define the Gateway address

When you finish the configuration, clkick **Submit** to save your configuration.

3-3-5 Event Log

Event Log displays the connected Node system event log information.
Click **Clear** to clear current system event log.
Click **Download** to download current system event log.

NOTE!
Users can configure Severity, Event Dir & Sensor Type by selecting the drop-down bar.



3-3-6 Alert Management

Alert Management contains two categories: **SNMP Trap Setting** and **Platform Events Filters (PEF)**. Each catergory will be described in the following section.

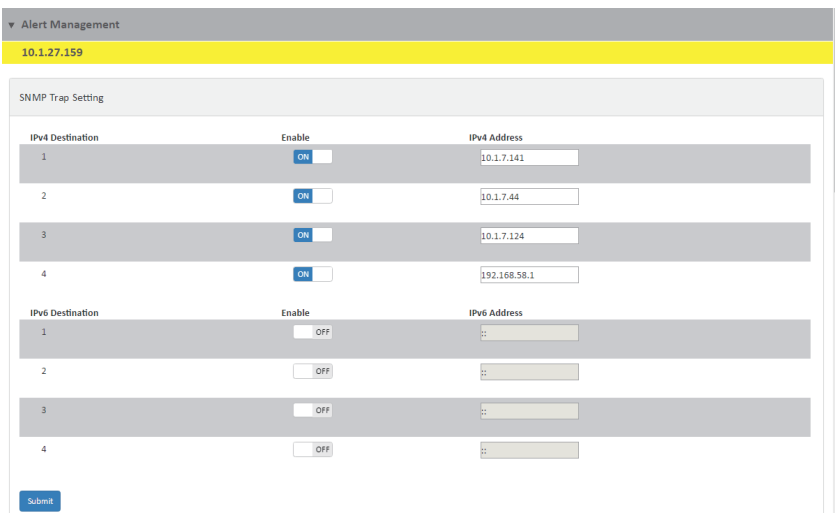
SNMP Trap Setting

In the Trap Settings, user can set the IPv4 and IPv6 Destination List.

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

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

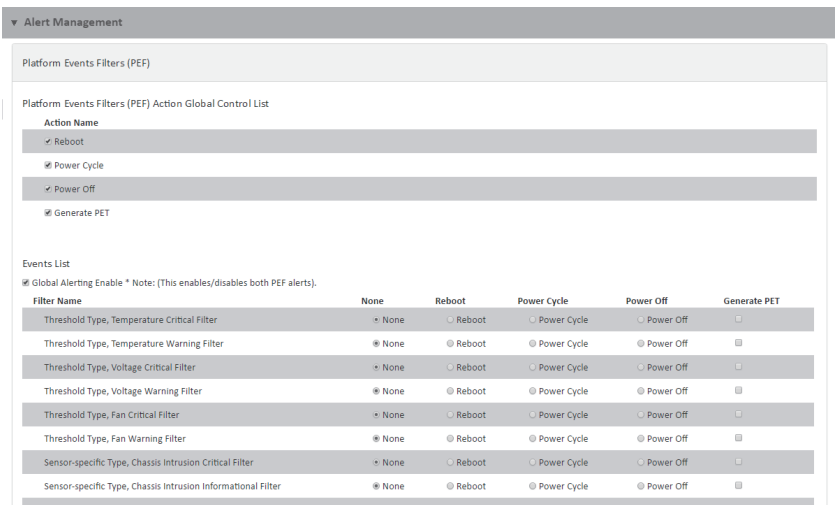
When you finish the configuration, click **Submit** to save configuration.



Platform Events Filters (PEF)

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

You can also choose to generate and send an alert when a platform event occurs. When you finish configuration, click **Submit**.



3-3-7 Updates

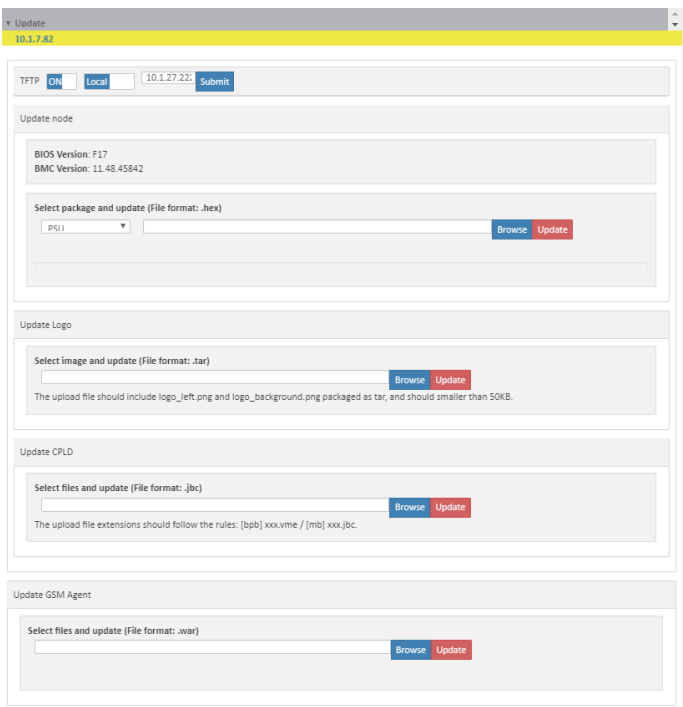
The user can configure the TFTP server and update node last log, PSU/BMC/BIOS firmware, logo, CPLD and GSM Agent in this page.

To Configure the TFTP, follow the instruction below:

1. Select **ON** and define **Local** or **Remote**.
2. Enter the identified IP address and click Submit to complete the configuration.

To update specific items, follow the instructions below:

1. Select package from the drop-down list.
2. Select the file on your local system using **Browse**.
3. Click **Update** to update to the new version of firmware.



NOTE! To make sure the Update function works properly, please ensure the GSM Server and the BMC network connections are in the same domain before processing the Update function.

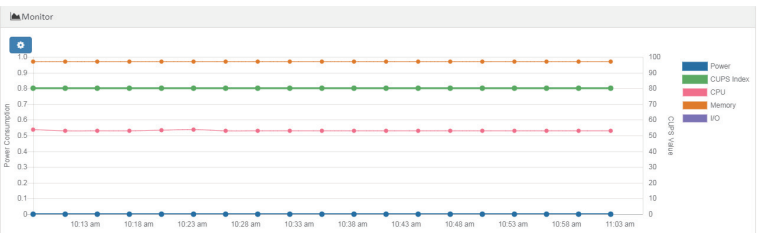
3-3-8 Power Consumption

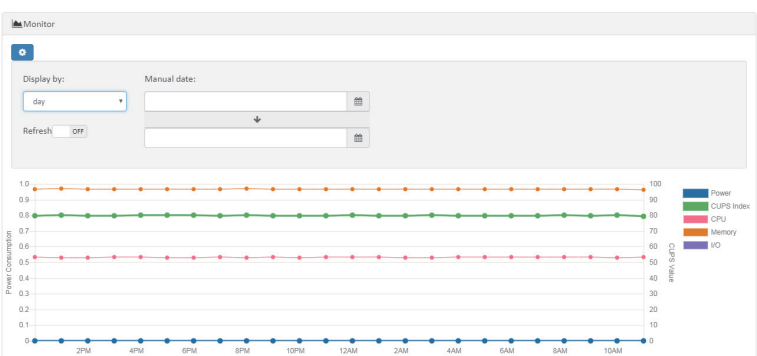
This screen displays information on the system power consumption. The information includes Current Power Consumption, Power Consumption Configuration and Power Consumption Monitoring.

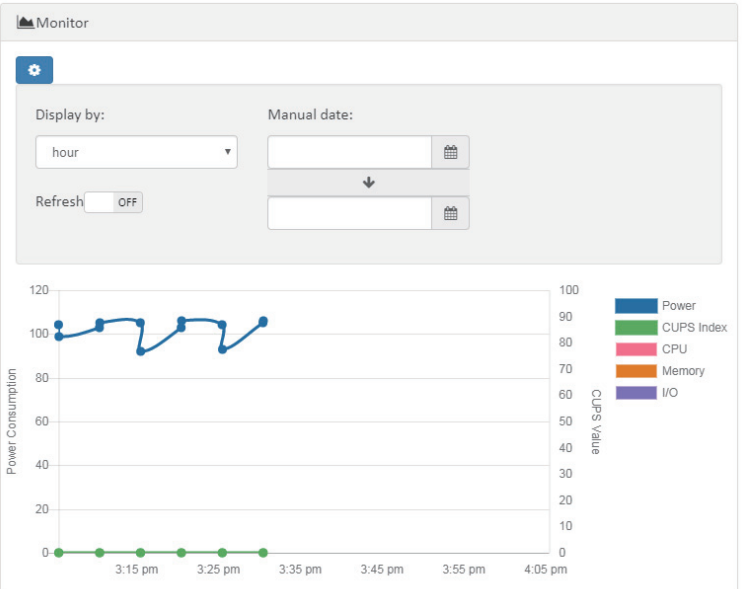
To configure power limit, set Power Limit Management Activated to **ON** and input the value in the respective column. Click **Submit** to save the configuration.

Monitor

Click to activate advanced configuration. When activating this function, the user can monitor power consumption and the CUPS value in different time periods.

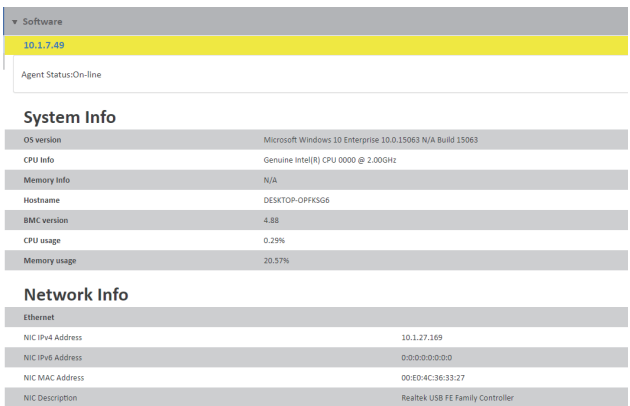


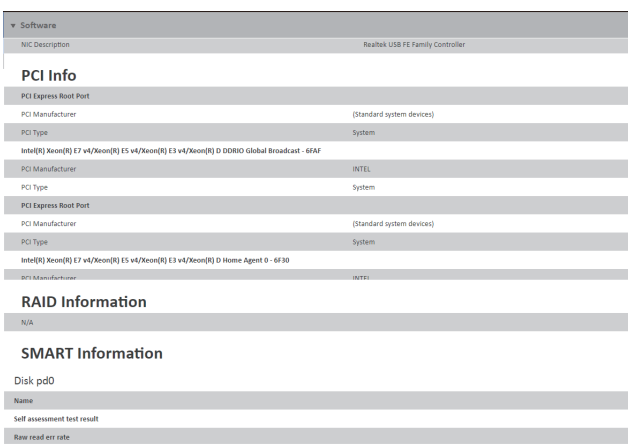



Monitor
Display by:
hour
Manual date:
Refresh
OFF
Power Consumption
CUPS Value
120
100
80
60
40
20
0
100
90
80
70
60
50
40
30
20
10
0
3:15 pm
3:25 pm
3:35 pm
3:45 pm
3:55 pm
4:05 pm
Power
CUPS Index
CPU
Memory
I/O

3-3-9 GSM Agent

Use the GSM Agent to view the related software information. Software information includes System Info, Network Info, PCI Info, RAID Information and SMART Information. Please install GSM Agent separately on each server / node for which you wish to monitor this related information. Please see "GSM Agent User Manual" for more information.



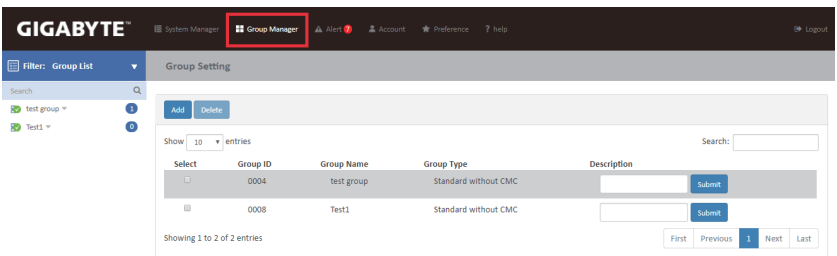


NOTE!

1. **To connect the GSM Agent remotely, enter http://<GSM Agent IP>:8080/GSM_Agent in the browser window.**

3-4 Group Manager

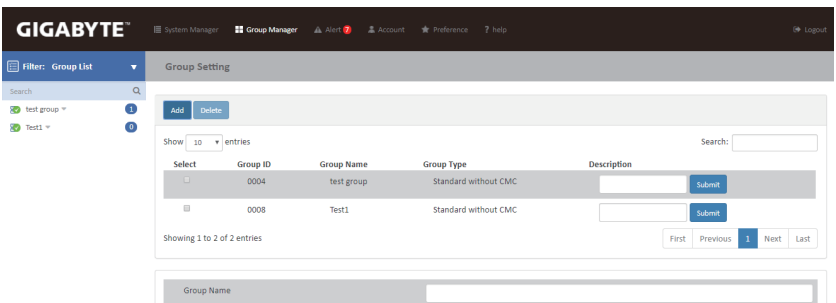
Group Manager provides the function of Create group, Edit group, Delete group, and Search function of current remote grouped client systems. Click **Group Manager**



Parameter	Description/Resulting Action
Select	Check **Select** box to configure connected nodes in the same group.
Group ID	Displays the connected group ID information.
Group Name	Displays the group name. Click on selected **Group Name** to view the Group dashboard information and Group remote management functions.
Group Type	Displays the group type information.

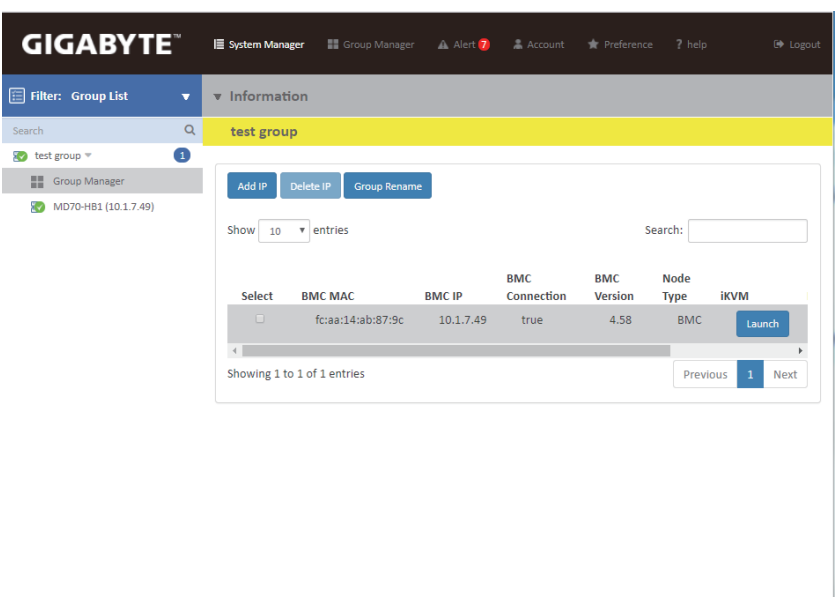
Create a Group

1. Click **Add**.
2. Define the new group name in the respective column.
3. Select Group type from the drop-down list.
4. When you have finished configuration, click **Submit**.



Group Manager

Group Manager provides Add IP, Delete IP, and rename a specified group of nodes.



3-4-1 Information

Configure IPV4 and IPv6 to DHCP mode.
To add a new BMC node to a group, follow the steps as below:

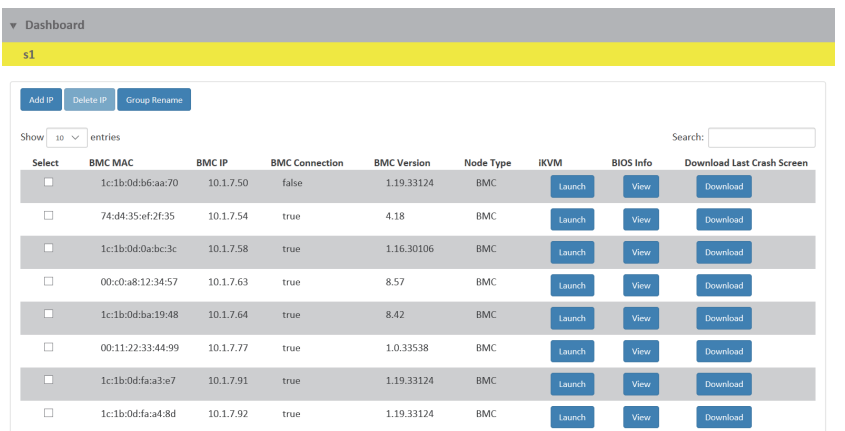
1. Click **Add IP** and select the BMC node you want to add in a group.
2. When you have finished configuration, click **Submit**.

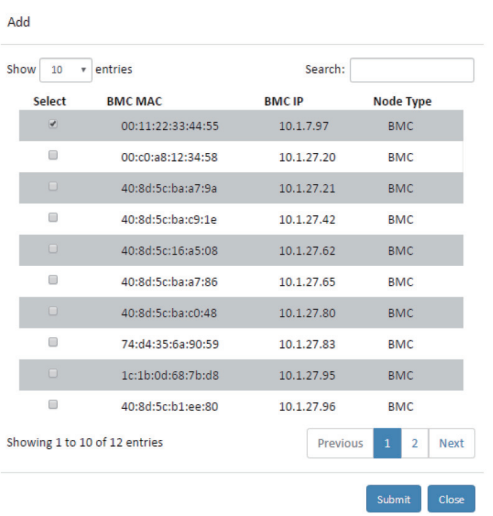
To delete an existing BMC node, follow the steps as below:

1. Click **Delete IP** and select the BMC node you want to delete from a group.

To rename the group, follow the steps as below:

1. Click **Group Rename** and enter the new name for the group.
2. Click **Submit** to apply changes.



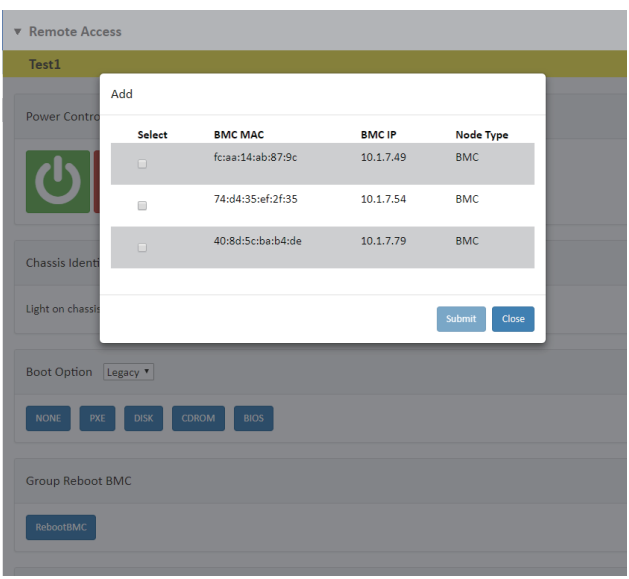


3-4-2 Remote Access

Remote Access provides the following remote functions for managing grouped nodes:

- Power Control Configuration
- Chassis Identify
- Boot Option
- Launch iKVM
- Reboot BMC
- Restore BIOS default settings
- BIOS Setup information
- Mount/Unmount Virtual Media
- Network Time Protocol Configuration
- BMC Account Configuration
- BMC Agent Account Configuration
- BMC Backup/Restore Configure

Please refer section 2-2-1-3 Remote Access for advanced configuration.



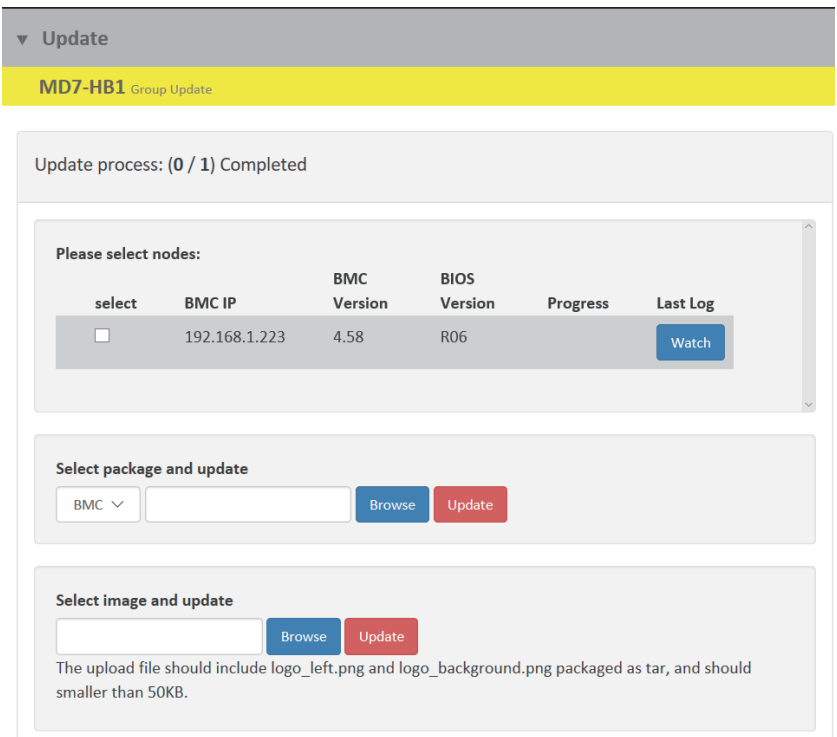
NOTE!

1. **Specify the node system from the group list and click Submit to complete the configuration.**

3-4-3 Updates

Users can configure the TFTP server and update node last log, PSU/BMC/BIOS firmware, logo, and CPLD in this page. Follow the steps below to update group firmware remotely.

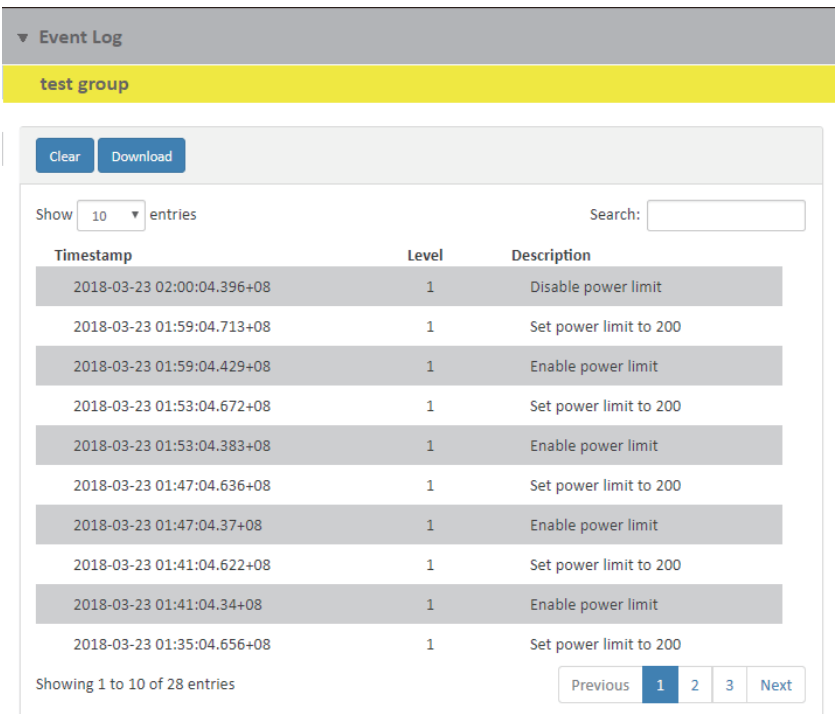
1. Select the BMC node you want to update firmware.
2. Then select the package type by using **Browse**.
3. Click Update to update the firmware.
4. To update image file, select the package type by using **Browse**.
5. Click Update to update the image file.



3-4-4 Event Log

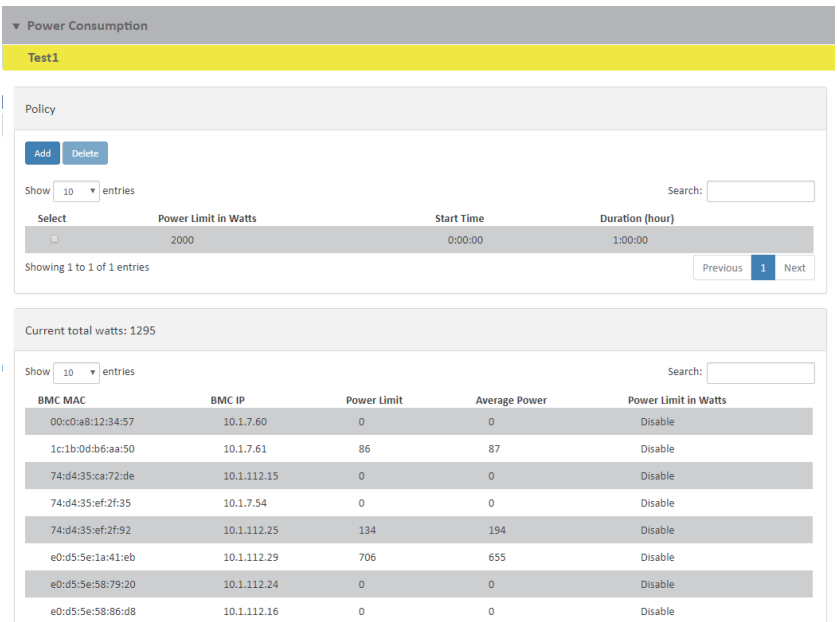
Event Log records an event when a sensor is in an abnormal state. When the log matches a pre-defined alert, the system will send out a notification automatically if it is pre-configured.

1. Click **Clear** to clear all history log information.
2. Click **Download** to download current system event log.



3-4-5 Power Consumption Monitor

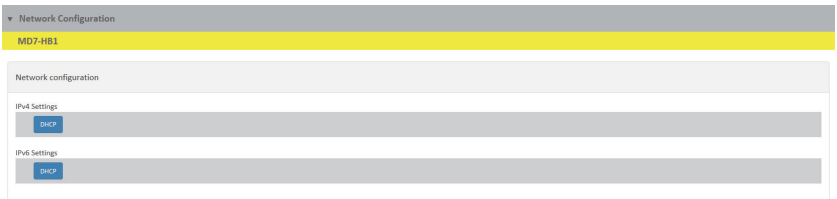
Power Consumption Monitor displays a Group's power usage status for each system and the average usage status of a Group. This function also allows users to configure the power policies for the system.



Parameter	Description/Resulting Action
Policy	Click **Add** to add the execution time of Power limit. The start time is the initial time, and Duration (hour) is to set the duration. You can check the setting item and click Delete to cancel the setting of Power Limit.
Current total watts	Displays the power limit of each System and its average value.

3-4-6 Network Configuration

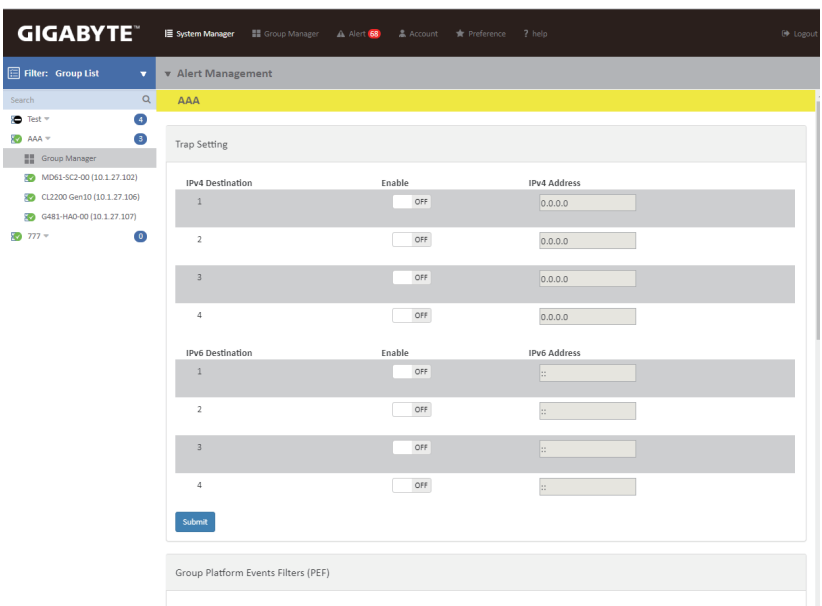
Network Confguration provides Group IPv4 and IPv6 DHCP configuration.



3-4-7 Alert Management

Please refer section 4-3-6 Alert Managment for advanced configuration.

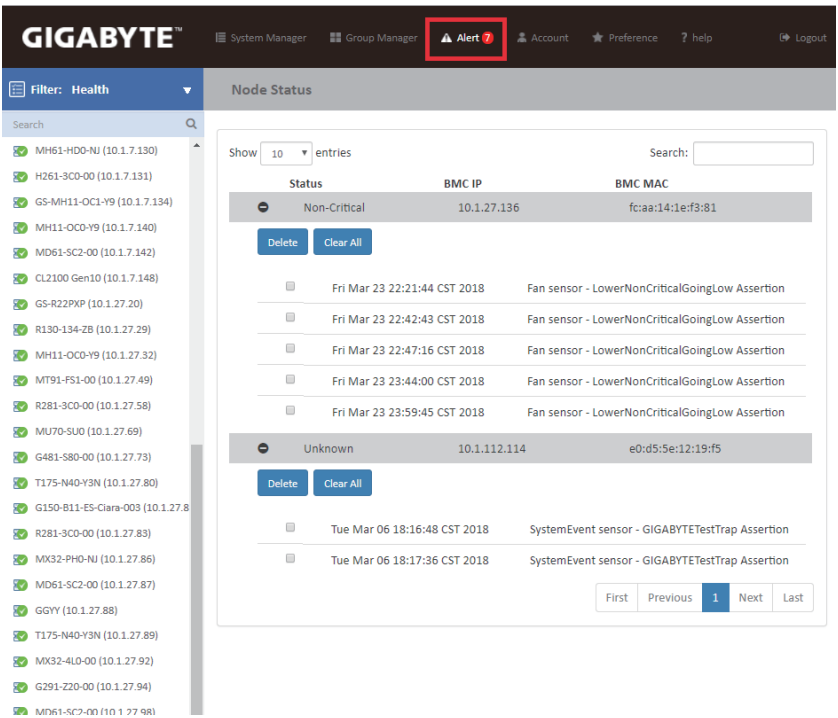
NOTE! Only all system nodes in a group can be configurable.



3-5 Alert

Alert page shows you data related to the sensor's health, such as sensor reading.

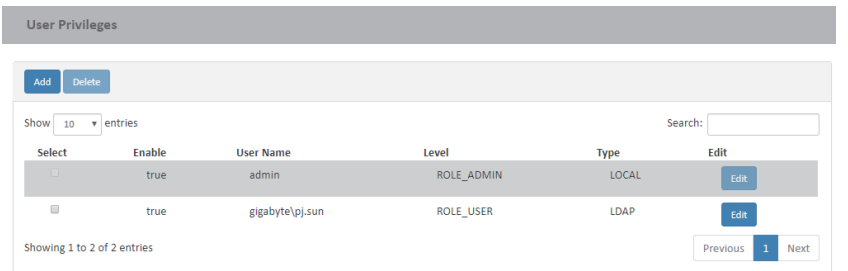
NOTE! The number beside the Alert header represents the number of Alert events that have occurred.

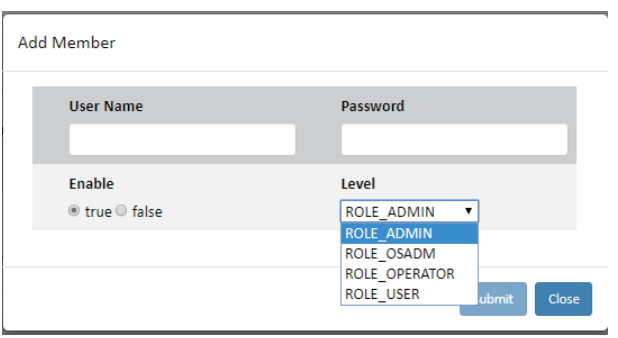


3-6 Account

This page provides the function to create a specific user account. Follow the steps below to create a new accont.

1. Click **Add** and define the **User Name** and **Password**.
2. Define **Enable** function.
3. Select Privileges **Level**.
4. When you finish the configuration, click **Submit**.





Privilege Level	
ROLE_ADMIN	All BMC commands are allowed, including configuration commands. An Administrator can even execute configuration commands that would disable the channel that the Administrator is communicating over.
ROLE_OSADM	Only allow to execute remote console and virtual media commands for OS level by default
ROLE_OPERATORS	All BMC commands are allowed, except for configuration commands that can change the behavior of the out-of-band interfaces. For example, Operator privilege does not allow the capability to disable individual channels, or change user access privileges.
ROLE_USER	This may be considered the lowest privilege level.

LDAP

LDAP configuration page.

When you finish the configuration, click **Submit**.

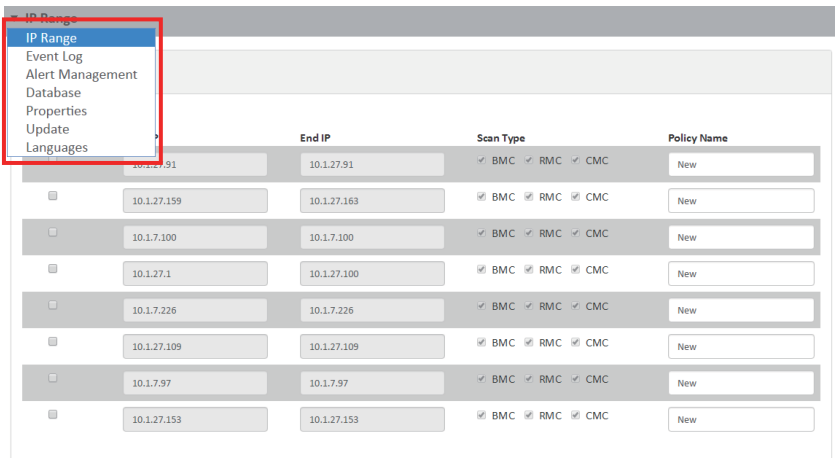
NOTE!

When configuring the LDAP Server, you need to set the LDAP Host and Port in advance.

- **LDAP Host: LDAP Serve IP address.**
- **LDAP Port: 389.**

3-7 Preference

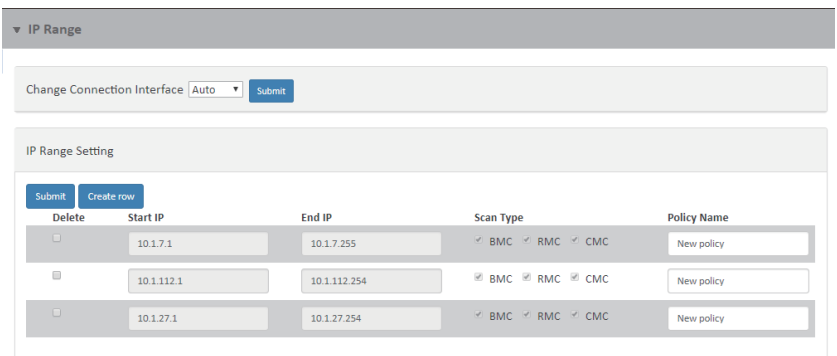
Preference displays the database usage and IP range configuration for remote node or group system.



3-7-1 IP Range

User can specify the IP range that is scanned during a normal discovery run. Follow the steps outlined below to configure IP discover.

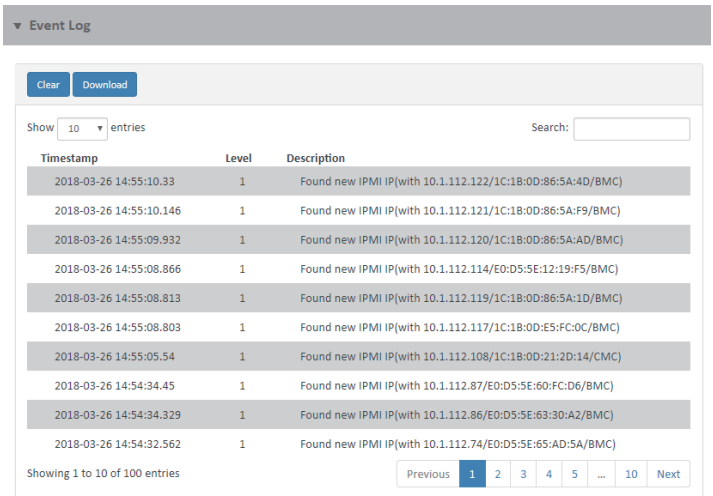
1. Select Connection Interface to search BMC Server.
2. Click **Create row** to specify the IP range in the respective columns.
3. Enter Start IP and End IP in the respective columns.
4. Select **Scan Type** and define the **Policy Name**.
5. When you finish the configuration, click **Submit** to save your configuration.



Scan Type	Description
BMC	Baseboard management controller, which gives a user or administrator the ability to control a remote system and the ability to perform a variety of functions. With BMC, data is only transmitted within the local area network.
CMC	Chassis Management Controller, which provides functionality for managing multiple server nodes within a single chassis, or multiple chassis. CMC is a higher level of control and monitoring of one or multiple chassis.
RMC	Rack Management Controller. Similar with BMC, CMC provides LAN-based system console access as well as remote system management functions. RMC provides out-of-the-band functions and giving you complete access to your server from any location via a web browser.

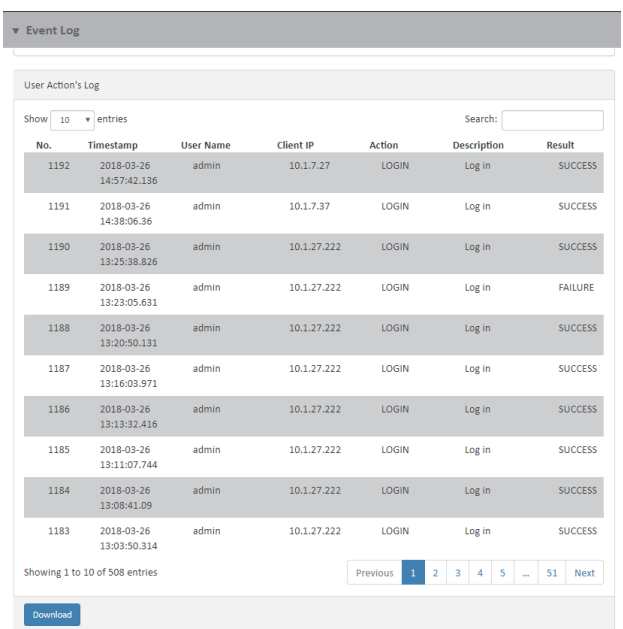
3-7-2 Event Log

Event Log displays event log information for all nodes/systems within the defined IP range.



User Action's Log Event Log

Displays the action event log of users.

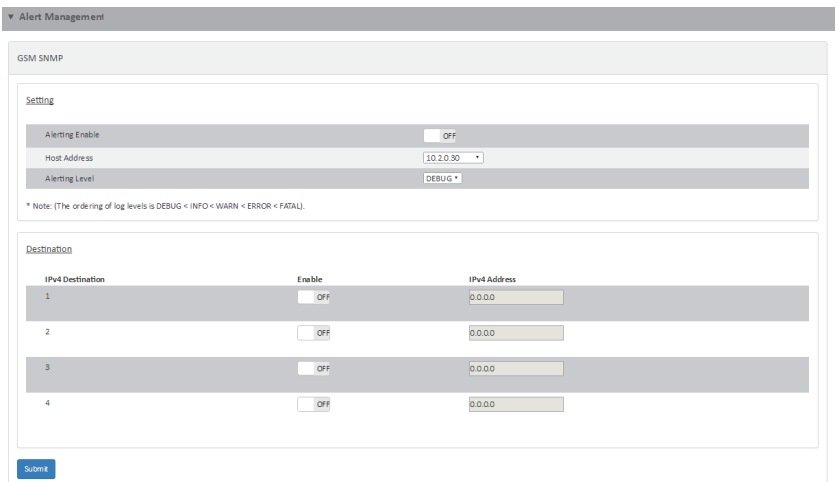


3-7-3 Alert Management

Alert Management enables the following configuration: **GSM SNMP Setting** and **IPv4 Destination** configuration, **SMTP Server** configuration,and **Send Mail** configuration for all nodes/systems within the defined IP range.

GSM SNMP

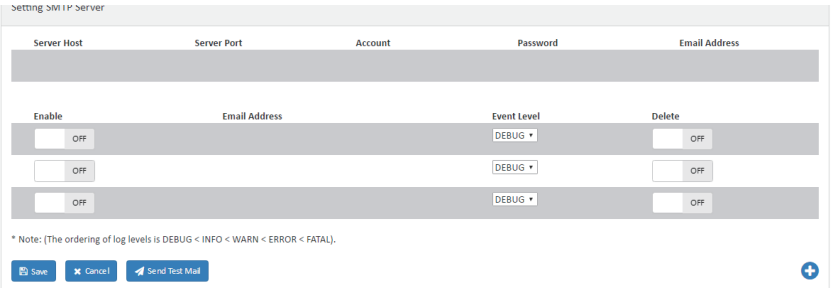
GSM SNMP trap configuration includes SNMP setting and SNMP destination configuration.



Parameter	Description/Resulting Action
Alerting Enable	Determine whether the trap is sent by connected node.
Host address	Displays the host address information.
Alerting Level	Determine the alerting level from the drop-down list. Please refer to Section **3-1 Event Log** for description of alerting level.

Destination

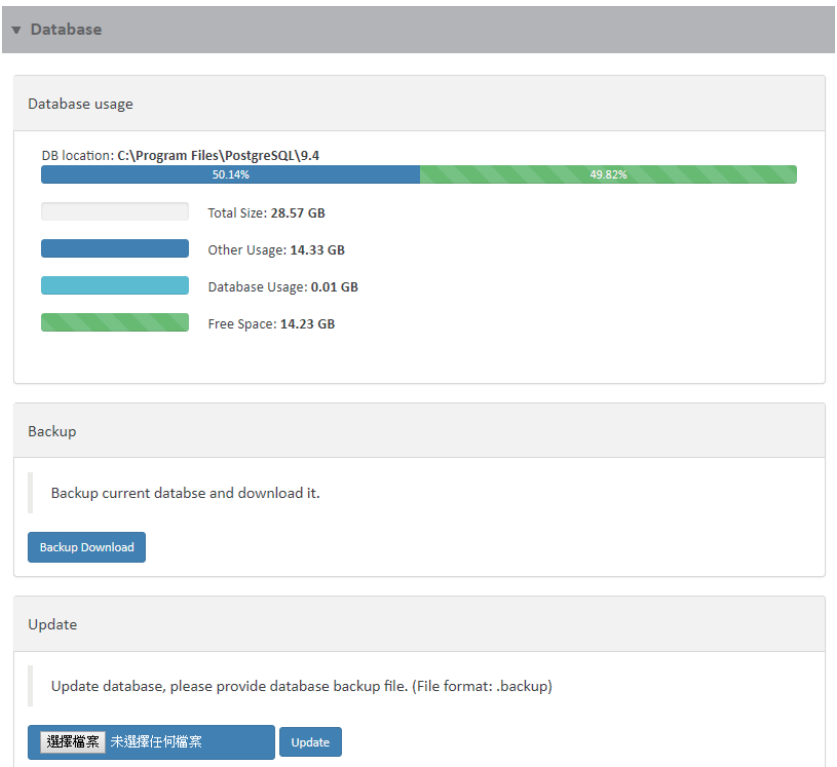
GSM SNMP Destination configuration for all nodes/systems within the defined IP range.



Parameter	Description/Resulting Action
Destination	
IPv4 Destination	User can configure 4 IPv4 Destination.
Enable	Select ON to configure IPv4 address
IPv4 Address	Enter specified IP address. When you finish the configuration, click **Submit** to save your configuration.

3-7-4 Database

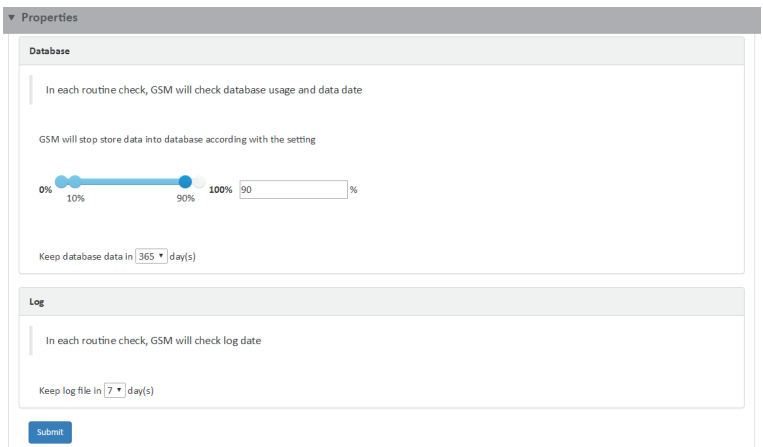
Database shows DB location information, provides a backup function, and enanles firmware update for all nodes/systems within the defined IP range.

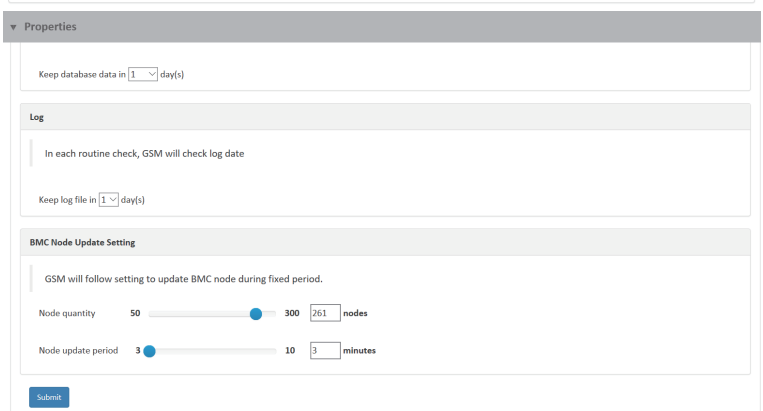


3-7-5 Properties

Properties enables GSM TFTP server configuration for all nodes/systems within the defined IP range. Follow steps outlined below to configure TFTP server.

1. Define **Database** useage.
2. Define checking time. In each routine check, GSM will check log date
3. When you finish the configuration, click **Submit**.





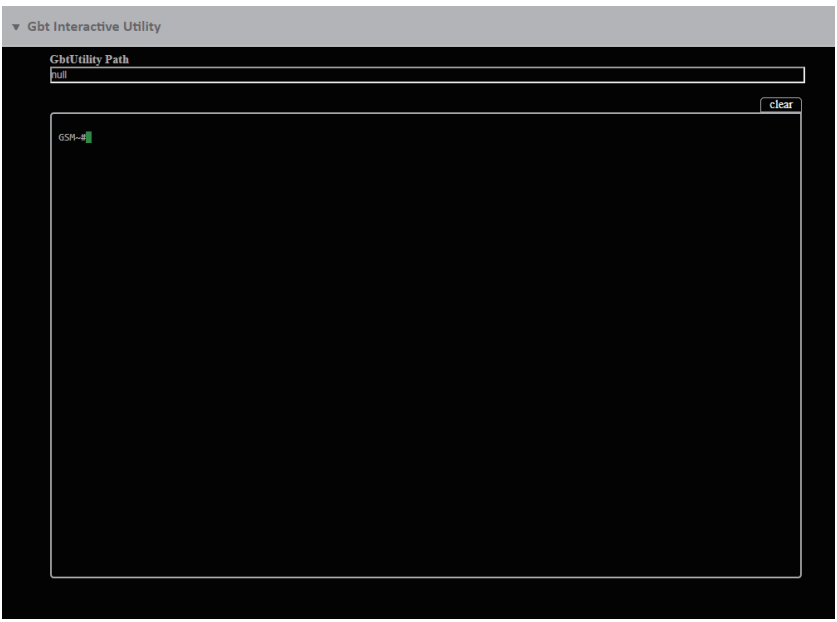
BMC Node Update Setting

Configuration of interval and number of nodes.

Parameter	Description
Node quantity	Search number of nodes.

3-7-6 GSM CLI (Command Line Interface)-GIGABYTE Interactive Utility

User can use Gbt Interactive Utility to set the path of GbtUtility.jar. Then, execute related command.

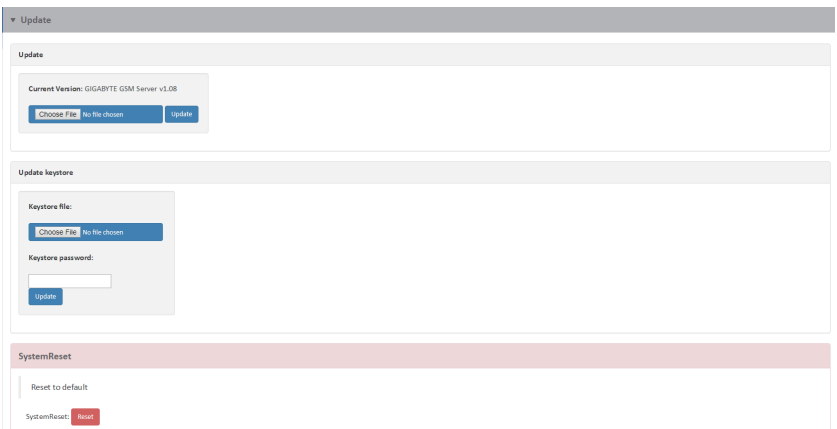


3-7-7 Update

User can update GSM firmware and reset the system to default settings for all nodes/ systems within the defined IP range from this page.

To update, select the file on your local system using Browse.

1. Click **Update** to update to the new version of firmware.
2. To update Keystore, click **Choose File** and enter keystore password, then click **Update.**
3. To reset system to the factory default, click **Reset**.



3-7-8 Language

User can select the preference language in this page.

3-8 Help

Help page provides general information including License information, Hardware requirements, Software requirements and Operating System requirements.

User Menu Descriptior

Current Version: GIGABYTE GSM Server v1.03

Menu

System Manager
Lead you to node list page description.

Group Manager
Lead you to group list page description.

Alert
Lead you how to read alert information.

Account
Lead you how to set personal values.

Preference
Lead you to node status page description.

[Hardware requirements]

- System Processor: 2 GHZ and above
- System Memory: Minimum 4 GB RAM
- Free Disk Space: 1000 GB at least
- Node Servers : 255 maximum

[Software requirements]

Browser:
- Internet Explorer 9 or later
- Google Chrome 39.0.2171.65 m or later
- Mozilla Firefox 33.1.1

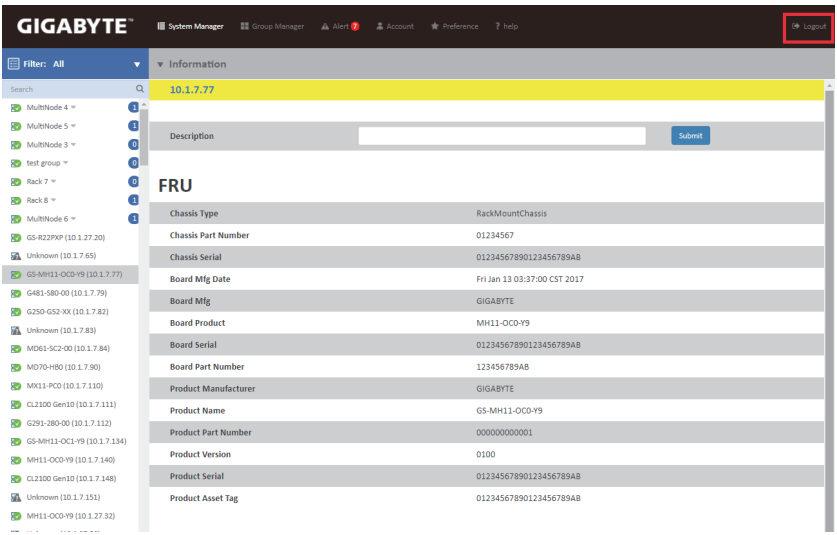
Operating System:
- Windows 2008 & 2012 R2
- Redhat/CentOS 6.3 or later

License Detailed List

Apache Tomcat	Apache License 2.0
Ini4j	Apache License 2.0
Log4j	Apache License 2.0
Spring	Apache License 2.0
TFTP	Apache License 2.0
VXIPMI	GPL License
JFreeChart	LGPL license
Bootstrap	MIT License
Flot	MIT License
JQuery	MIT License
PostgreSQL	PostgreSQL License

3-9 Logout

Click Logout to logout of the system.



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Chapter 5 Appendix

5-1 Event Log List

SNMP ID	Event Level	Event Function	Event Description
D06F00	FATAL	DB	Database connnection failed.
D06F01	ERROR	DB	Database connnection denied.
D16F00	ERROR	Network Configuration	Get IPv4 configuration failed
D16F01	ERROR	Network Configuration	Set IPv4 configuration failed
D16F02	ERROR	Network Configuration	Get IPv6 configuration failed
D16F03	ERROR	Network Configuration	Set IPv6 configuration failed
D26F00	ERROR	Chassis Control	Power control failed
D26F01	ERROR	Chassis Control	Set chassis identify failed
D26F02	ERROR	Chassis Control	Get chassis status failed
D36F00	ERROR	Power Limit	Get power limit failed
D36F01	ERROR	Power Limit	Power limit configuration failed
D36F02	ERROR	Power Limit	Power limit configuration failed
D46F00	ERROR	Platform Event	Platform event log failed
D46F01	ERROR	Platform Event	Set platform event failed
D56F00	ERROR	Trap Destination	Get IPv4 destination failed
D56F01	ERROR	Trap Destination	Set IPv4 destination failed
D56F02	ERROR	Trap Destination	Get IPv4 activate status failed
D56F03	ERROR	Trap Destination	Set IPv4 activate status failed
D56F04	ERROR	Trap Destination	Get IPv6 destination failed
D56F05	ERROR	Trap Destination	Set IPv6 destination failed
D56F06	ERROR	Trap Destination	Get IPv6 activate status failed
D56F07	ERROR	Trap Destination	Set IPv6 activate status failed
D36F03	WARN	Group Power Limit	Policy already exist
D36F04	INFO	Group Power Limit	Add new policy
D36F05	INFO	Group Power Limit	Delete policy
D36F06	INFO	Group Power Limit	Group XXX: enable power limit
D36F07	INFO	Group Power Limit	Group XXX: reduce power limit to XXX
D36F08	INFO	Group Power Limit	Group XXX: disable power limit
D66F00	WARN	User Management	User account: XXX already exist
D66F01	INFO	User Management	Add new user account: XXX
D66F02	INFO	User Management	Delete user account: XXX
D76F00	INFO	System Reset	System reset success
D76F01	ERROR	System Reset	System reset failed, please wait a few minutes
D86F00	INFO	Group Setting	Create group
D86F01	INFO	Group Setting	Delete group
D86F02	INFO	Group Setting	Add group member
D86F03	INFO	Group Setting	Delete group member
D86F04	INFO	Group Setting	Rename group

D96F00	INFO	Background(GSM) : IP Discover	Found new OpenRack1.0 RMC IP(with ip)
D96F01	INFO	Background(GSM) : IP Discover	Found new IPMI IP(with ip/mac/type)
D96F02	INFO	Background(GSM) : Node Status	Add node(with mac information)
D96F03	INFO	Background(GSM) : Node Status	Start monitor after a random time has expired
D96F04	INFO	Background(GSM) : Node Status	Delete node(with mac information)
D96F05	INFO	Background(GSM) : Monitor high frequency	Add node(with mac information)
D96F06	INFO	Background(GSM) : Monitor high frequency	Start monitor after a random time has expired
D96F07	INFO	Background(GSM) : Monitor high frequency	Delete node(with mac information)
D96F08	INFO	Background(GSM) : System info high frequency	Add node(with mac information)
D96F09	INFO	Background(GSM) : System info high frequency	Start monitor after a random time has expired
D96F0A	INFO	Background(GSM) : System info high frequency	Delete node(with mac information)
D96F0B	INFO	Background(GSM) : System info low frequency	Add node(with mac information)
D96F0C	INFO	Background(GSM) : System info low frequency	Start monitor after a random time has expired
D96F0D	INFO	Background(GSM) : System info low frequency	Delete node(with mac information)
D96F0E	INFO	Background(GSM) : Power reading	Add node(with mac information)
D96F0F	INFO	Background(GSM) : Power reading	Start monitor after a random time has expired
D96F10	INFO	Background(GSM) : Power reading	Delete node(with mac information)
DA6F00	WARN	Background(Each node) : Node Status	Node disconnect, terminate all service process
DA6F01	WARN	Background(Each node) : Node Status	IPMI damage retry count
DA6F02	ERROR	Background(Each node) : Node Status	IPMI damage, terminate all service process except node status itself

DA6F03	INFO	Background(Each node) : Node Status	Node has been terminated
DA6F04	ERROR	Background(Each node) : Monitor high frequency	Send command exception(Could be raw command fail or sql command fail)
DA6F05	INFO	Background(Each node) : Monitor high frequency	Node has been terminated
DA6F06	ERROR	Background(Each node) : System info high frequency	Exception information(get free port fail)
DA6F07	WARN	Background(Each node) : System info high frequency	Node management status is true/ false
DA6F08	INFO	Background(Each node) : System info high frequency	Node has been terminated
DA6F09	ERROR	Background(Each node) : System info low frequency	Get FRU fail
DA6F0A	ERROR	Background(Each node) : System info low frequency	Get SDR fail
DA6F0B	ERROR	Background(Each node) : System info low frequency	Get 3 Net MAC fail
DA6F0C	ERROR	Background(Each node) : System info low frequency	Get SMBIOS info fail
DA6F0D	INFO	Background(Each node) : System info low frequency	Node has been terminated
DA6F09	ERROR	Background(Each node) : System info low frequency	Get FRU fail
DA6F0A	ERROR	Background(Each node) : System info low frequency	Get SDR fail
DA6F0B	ERROR	Background(Each node) : System info low frequency	Get 3 Net MAC fail
DA6F0C	ERROR	Background(Each node) : System info low frequency	Get SMBIOS info fail

DA6F0D	INFO	Background(Each node) : System info low frequency	Node has been terminated
DC6F03	ERROR	Node BMC Update	No compatible image, end process
DC6F04	ERROR	Node BMC Update	Cannot connect to TFTP server, end process
DC6F05	ERROR	Node BMC Update	Update BMC fail:[message]
DD6F00	INFO	Node BIOS Update	Start update BIOS
DD6F01	INFO	Node BIOS Update	Update BIOS success
DD6F02	WARN	Node BIOS Update	Node is busy, end process
DD6F03	ERROR	Node BIOS Update	No compatible image, end process
DD6F04	ERROR	Node BIOS Update	Cannot connect to TFTP server, end process
DD6F05	ERROR	Node BIOS Update	Update BIOS fail:[message]
DE6F00	INFO	Get Node SEL	Getting node SEL
DE6F01	INFO	Get Node SEL	Get node SEL complete
DE6F02	WARN	Get Node SEL	Cannot find SEL record
DE6F03	INFO	Clear Node SEL	Clearing node SEL
DE6F04	INFO	Clear Node SEL	Clear node SEL complete
DE6F05	INFO	Dump Node SEL	Starting to dump node SEL file
DE6F06	INFO	Dump Node SEL	Dump node SEL complete