

GIGABYTE™

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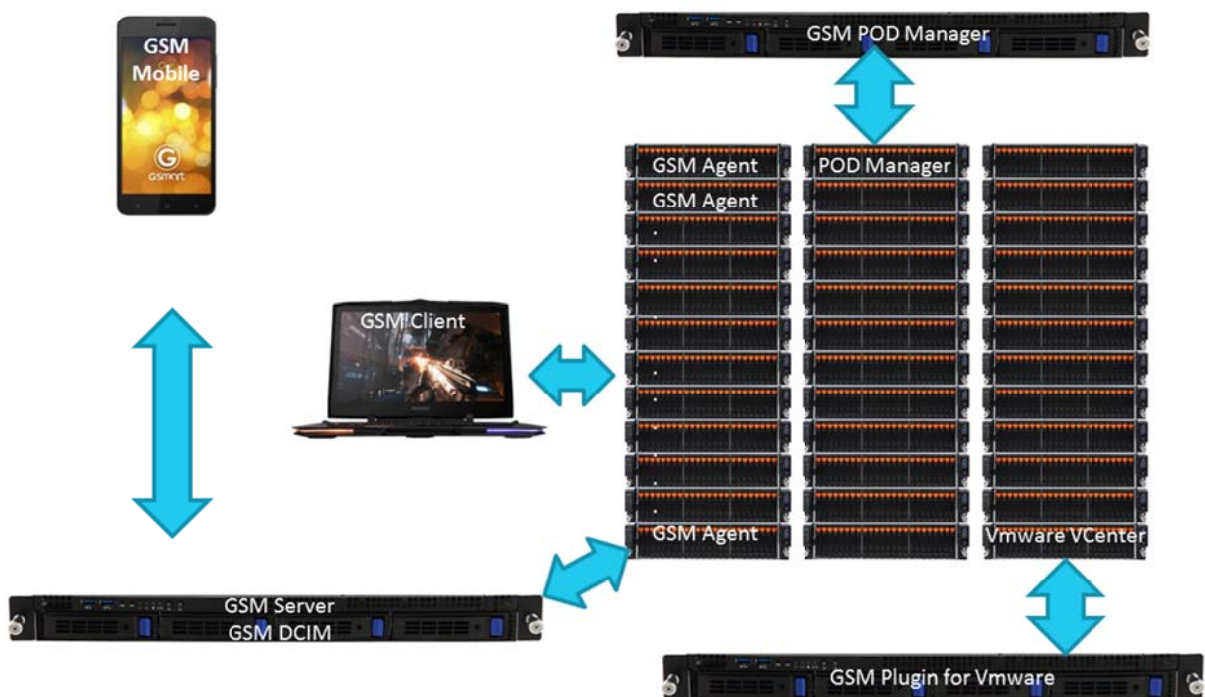
1 About GSM Agent

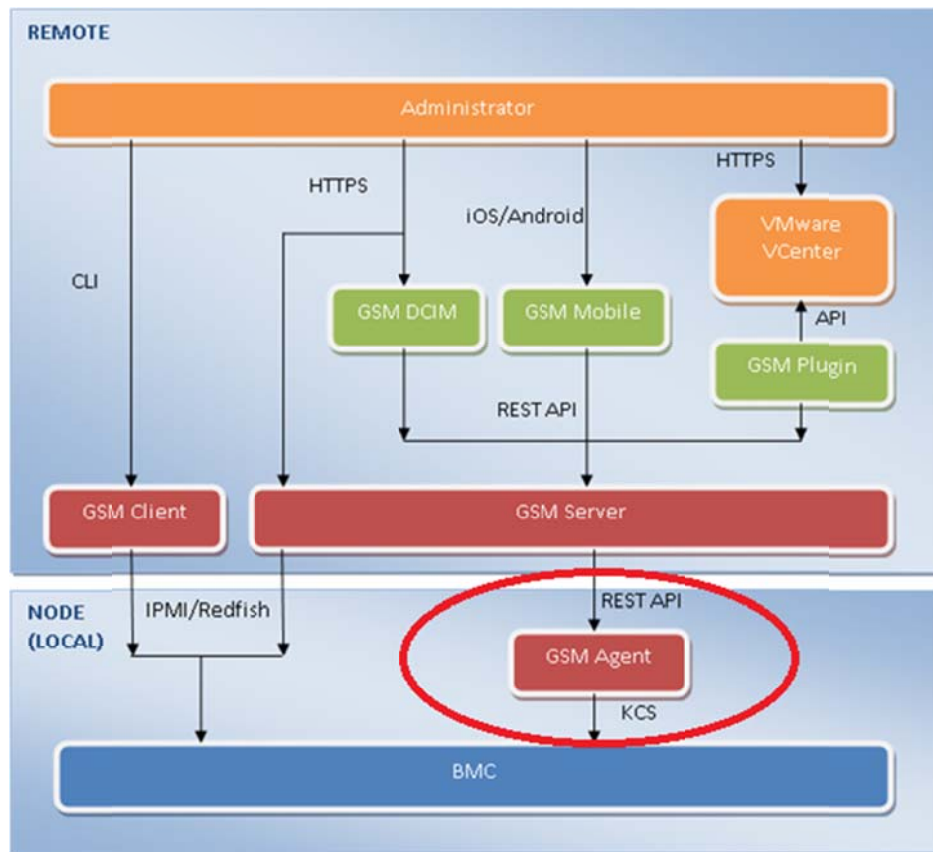
GSM Agent is part of the **GSM (GIGABYTE Server Management)** software suite. It is a software program to compliment and assist the remote monitoring and management of GIGABYTE servers.

GSM Agent should be installed locally on each GIGABYTE server node. It collects node information (CPU / memory / HDD / PCIe devices) from the operating system and shares this information with the local BMC. This information can then be used and displayed by **GSM Server**, GSM's remote monitoring and management software platform.

GSM Agent can be used with both Linux & Windows operating systems.

GSM Scenario





2 Installation / Startup / Uninstallation

2.1 Installation

2.1.1 OS: Ubuntu

Before installation, please ensure packages `sudo` and `ufw` are already installed. Otherwise, GSM Agent installation will fail.

```
#apt-get install sudo ufw
#dpkg -i gsmagent_x.x_all.deb
```

2.1.2 OS: Fedora / RHEL / CentOS

Before installation, please ensure packages `sudo` and `ufw` are already installed. Otherwise, GSM Agent installation will fail.

```
# yum install sudo firewalld
# rpm -ivh GSM_agent-x.x-1.x86_64.rpm
```

2.1.3 OS: Windows Server

Execute GSM_Agent_x.x.exe

2.2 Startup

GSM Agent starts automatically when the system boots each time.

For Windows systems, the user needs to add port 8080 and 8443 to firewall exception.

For Ubuntu or Linux systems, if /dev/ipmi0 doesn't exist, the user should use the command "modprobe ipmi_devintf"

2.3 Uninstallation

2.3.1 OS: Ubuntu

```
# dpkg -r gsmagent
```

2.3.2 OS: Fedora / RHEL /CentOS

```
# rpm -e GSM_agent-x.x-1.x86_64
```

2.3.3 OS: Windows Server

System > Control Panel > GSM Agent Installer

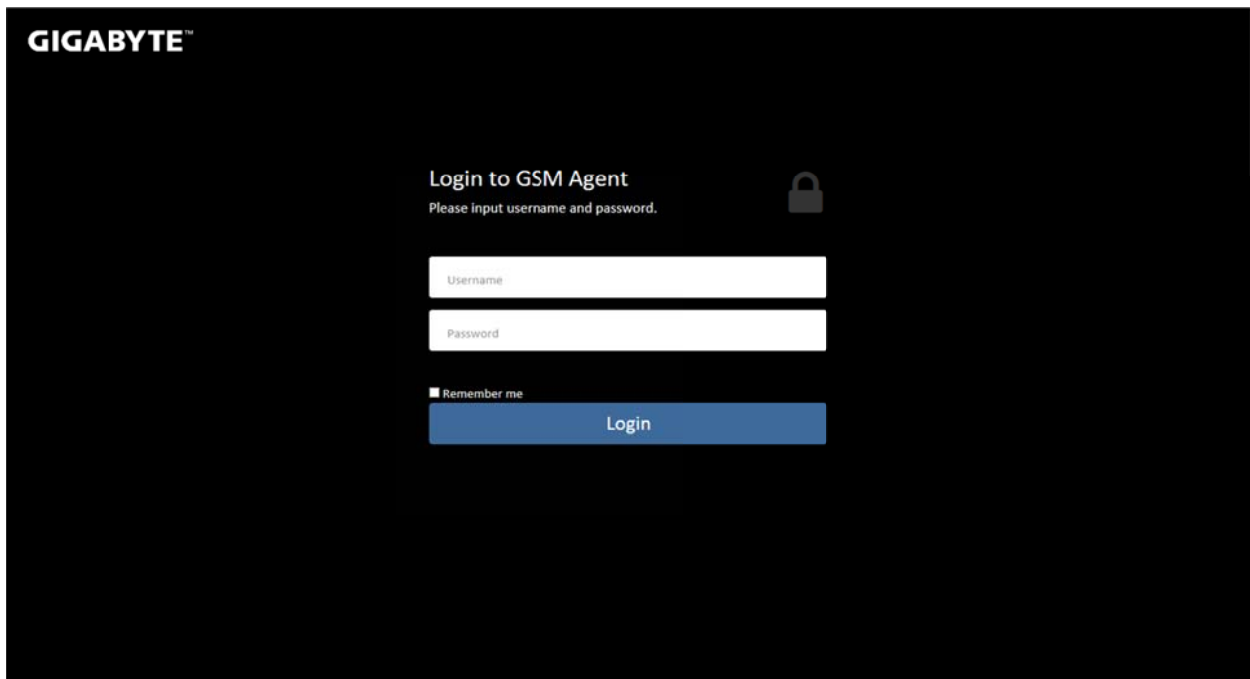
3 Using GSM Agent

3.1 Logging in

Connect using http://localhost:8080/GSM_Agent/

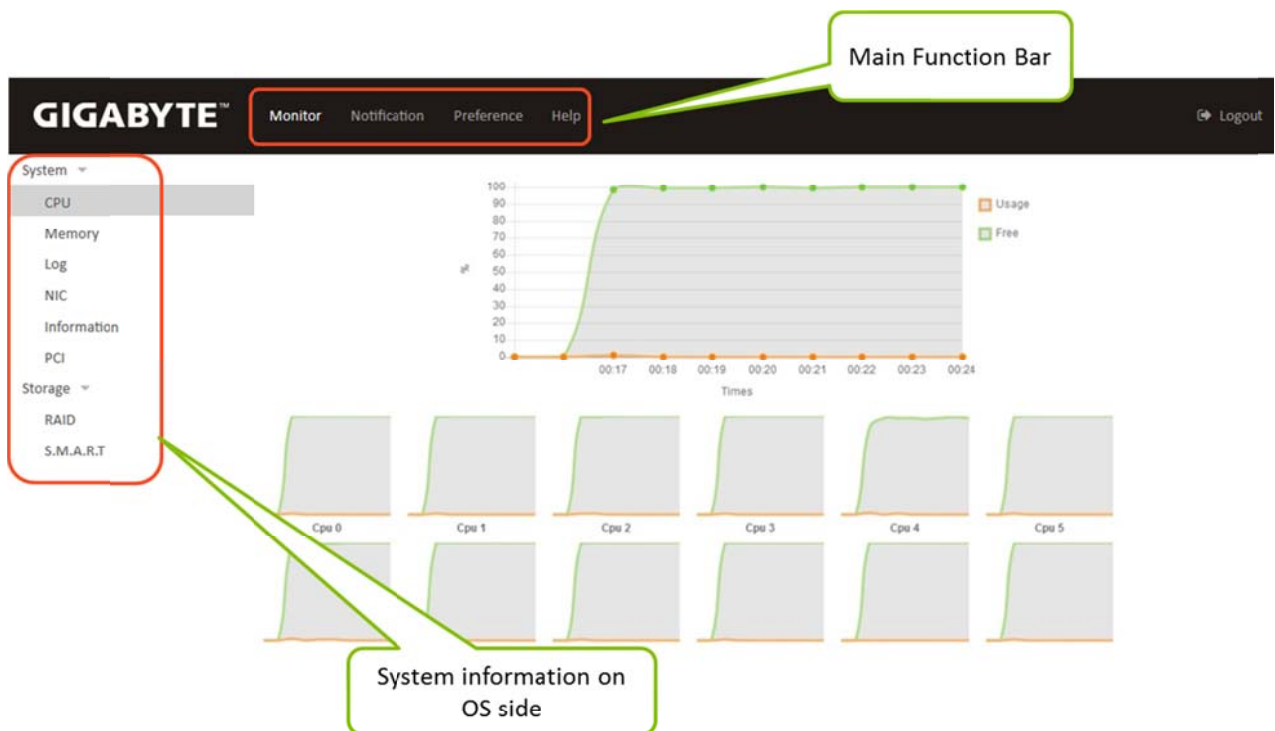
Default username: admin

Default password: password



The image shows the login interface for GIGABYTE's GSM Agent. The background is black. In the top left corner, the GIGABYTE logo is displayed in white. The main heading is "Login to GSM Agent" in white, followed by the instruction "Please input username and password." in a smaller white font. To the right of the text is a grey padlock icon. Below the text are two white input fields: the first is labeled "Username" and the second is labeled "Password". Under the "Password" field is a checkbox labeled "Remember me". At the bottom of the form is a blue button with the word "Login" in white text.

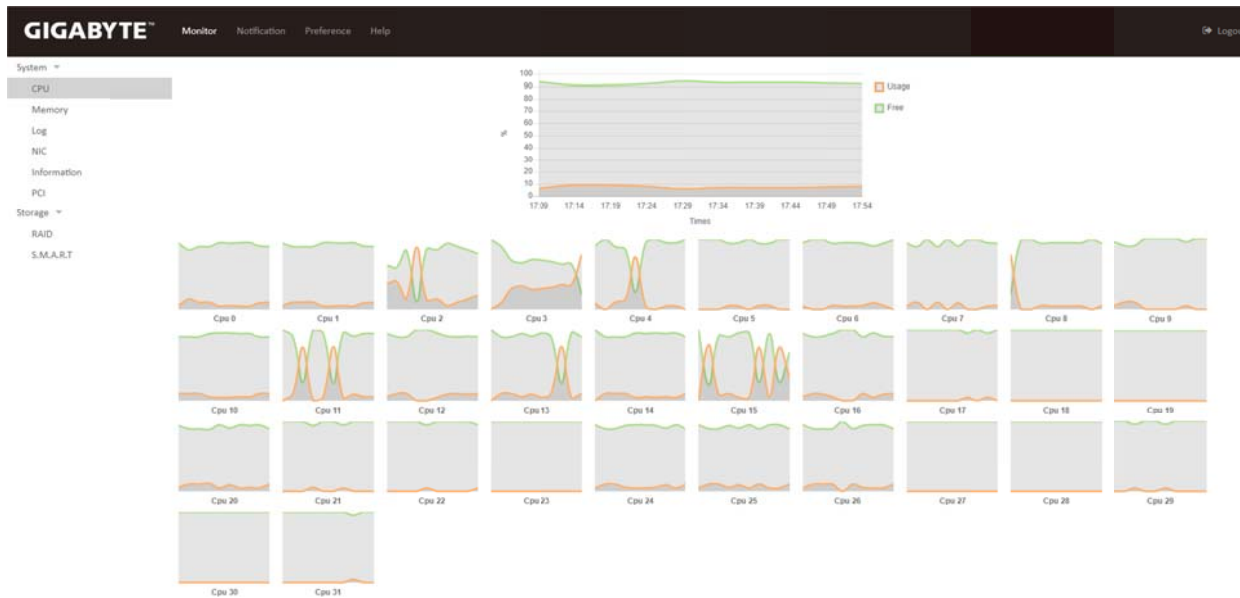
3.2 Main Dashboard



3.3 Monitor Functions

3.3.1 System: CPU

Displays idle / usage information about CPUs or cores



CPU Information			
CPU	User	System	Idle
Total	0.21509266	0.010804889	99.77385
0	0.313607964	0.00804117	99.67835
1	0.30558908	0.0	99.69441
2	0.5627462	0.05627462	99.37294
3	0.24929435	0.008041818	99.74267
4	0.016083635	0.0	99.98392
5	0.31406024	0.032211307	99.65373
6	0.032166856	0.024527392	99.9417
7	0.30551135	0.024119634	99.670364
8	0.31355524	0.0	99.68645
9	0.008040524	0.008040524	99.98392
10	0.3055399	0.0	99.69446
11	0.28945887	0.008040524	99.7025
12	0.5467117	0.008039878	99.44525
13	0.3054908	0.008039231	99.68647
14	0.2974994	0.0	99.7025
15	0.9968647	0.032156926	98.97098
16	0.28945887	0.0	99.71054
17	0.008040524	0.0	99.99196
18	0.0	0.0	100.0

3.3.2 System: Memory

Displays usage status of memory, virtual memory and huge pages



3.3.3 System: Log

GSM Agent records events from the system and BMC on this page

The screenshot displays the GIGABYTE System Monitor interface with the 'Log' tab selected. It shows a table of system events with columns for Priority, Date, Time, and Information. The table contains 10 entries, mostly related to systemd-timesyncd timeouts and cron jobs. A search bar is located at the top right, and pagination controls at the bottom indicate 'Showing 1 to 10 of 20 entries'.

Priority	Date	Time	Information
6	02/11/2016	17:55:07	gbt-MD61-SC1-00 systemd-timesyncd[813]: Timed out waiting for reply from 91.189.89.199:123 (ntp.ubuntu.com).
6	02/11/2016	17:55:01	gbt-MD61-SC1-00 CRON[11605]: (root) CMD (command -v debian-sa1 > /dev/null && debian-sa1 1 1)
6	02/11/2016	17:54:57	gbt-MD61-SC1-00 systemd-timesyncd[813]: Timed out waiting for reply from 91.189.94.4:123 (ntp.ubuntu.com).
6	02/11/2016	17:54:47	gbt-MD61-SC1-00 systemd-timesyncd[813]: Timed out waiting for reply from 91.189.91.157:123 (ntp.ubuntu.com).
6	02/11/2016	17:54:36	gbt-MD61-SC1-00 systemd-timesyncd[813]: Timed out waiting for reply from 91.189.89.198:123 (ntp.ubuntu.com).
6	02/11/2016	17:45:01	gbt-MD61-SC1-00 CRON[11518]: (root) CMD (command -v debian-sa1 > /dev/null && debian-sa1 1 1)
6	02/11/2016	17:39:01	gbt-MD61-SC1-00 CRON[11443]: (root) CMD ([-x /usr/lib/php/sessionclean] && /usr/lib/php/sessionclean)
6	02/11/2016	17:35:01	gbt-MD61-SC1-00 CRON[11402]: (root) CMD (command -v debian-sa1 > /dev/null && debian-sa1 1 1)
6	02/11/2016	17:25:01	gbt-MD61-SC1-00 CRON[11315]: (root) CMD (command -v debian-sa1 > /dev/null && debian-sa1 1 1)
6	02/11/2016	17:20:18	gbt-MD61-SC1-00 systemd-timesyncd[813]: Timed out waiting for reply from 91.189.91.157:123 (ntp.ubuntu.com).

3.3.4 System: NIC

This page displays information about the system's network configuration including IP address, MAC address and interface name.

NIC Information

eth2 ▾

IPv4	10.1.7.56
IPv6	fe80:0:0:0:76d4:35ff:fe8c:3be9
MAC	74:D4:35:8C:3B:E9
Description	eth2

3.3.5 System: Information

This page displays system information about the OS, CPU, Memory, Hostname, BMC Version and BMC IP.

Information

OS version	Ubuntu 16.04
CPU information	Intel(R) Xeon(R) CPU E5-2630L v3 @ 1.80GHz
Memory information	Samsung DDR4 2133 MHz
Hostname	gigabyte-B85M-DS3H-A
BMC version	4.55
BMC IP	10.1.27.162

3.3.6 System: PCI

This page displays information about PCIe devices installed in the system

PCI Information

Description	Manufacturer	Type
Xeon E7 v3/Xeon E5 v3/Core i7 Hot Plug	Intel Corporation	System peripheral
Xeon E7 v3/Xeon E5 v3/Core i7 Integrated Memory Controller 0 Target Address, Thermal & RAS Registers	Intel Corporation	System peripheral
Xeon E7 v3/Xeon E5 v3/Core i7 Power Control Unit	Intel Corporation	System peripheral
Xeon E7 v3/Xeon E5 v3/Core i7 System Address Decoder & Broadcast Registers	Intel Corporation	System peripheral
Xeon E7 v3/Xeon E5 v3/Core i7 DDRIO (VMSE) 2 & 3	Intel Corporation	System peripheral
Xeon E7 v3/Xeon E5 v3/Core i7 Unicast Registers	Intel Corporation	System peripheral

3.3.7 Storage: RAID

This page lists RAID health data from logical and physical layers. It includes two RAID types, hardware and software.

Software RAID array info:

Level: RAID level

Array Size: RAID array size

State: Health state

Number of Disks: Number of devices

Spare Disks: Number of spare devices

Chunk Size: Component disks

Software RAID

md127 ▾

Level	0
Array Size	480.11GB
State	clean
Number of Disks	2
Spare Disks	0
Chunk Size	512K

Disks

Show 10 ▾ entries

Search:

Slot Number	State
0	active sync
1	active sync

Showing 1 to 2 of 2 entries

Previous 1 Next

Hardware RAID array info:

Level: RAID level

Array Size: RAID array size

State: Health state

Number of Disks: Number of devices

Spare Disks: Number of spare devices

Chunk Size: Component disks

Hardware RAID

md0 ▾

Level	1
Array Size	223.062 GB
State	Optimal
Number of Disks	2
Spare Disks	0
Chunk Size	256 KB

Disks

Show 10 ▾ entries

Search:

Slot Number	State
1	Online, Spun Up
3	Online, Spun Up

Showing 1 to 2 of 2 entries

Previous 1 Next

3.3.8 Storage: S.M.A.R.T.

The S.M.A.R.T. page lists the current health state of each disk

S.M.A.R.T Information

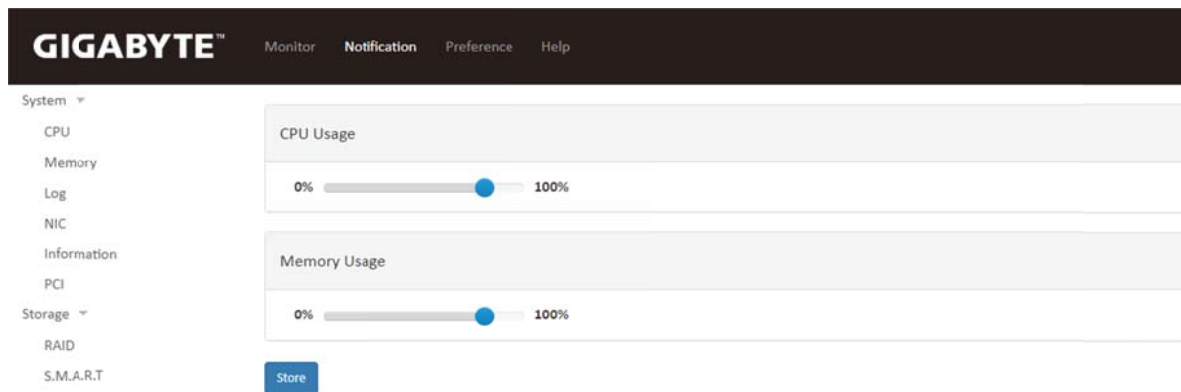
sdd ▼

Self Assessment Test Result	PASSED
Raw Read Error Rate	0.0
Spin Up Time	0.0
Start Stop Count	0.0
Reallocated Sector Count	0.0
Seek Error Rate	0.0
Power On Hours	295.0
Spin Retry Count	0.0
Calibration Retry Count	0.0
Power Cycle Count	257.0
Runtime Bad Block	0.0
End To End Error	0.0

3.4 Notification Function

Notification allows you to set upper limit for CPU and memory usage.

When the system is running and the CPU or memory usage reaches or exceeds the set limit, GSM Agent will send an alert to the user.



3.5 Preference Functions

3.5.1 Language

Select the language setting for GSM Agent

 Language

Language ▼

3.5.2 Scan Period

Select the scan period setting for retrieval of system information

Scan Period

3 ▼ Minutes

3.5.3 Log Amount

Set the default number of entries for the **Monitor: System: Log** page

Log Amount

20 ▼

3.5.4 SMTP

Configure SMTP information to send an email when the system is abnormal.

SMTP

Server Host	Server Port	Account	Password	Email Address
192.168.0.1	222	admin	*****	gsm_agent@gigabyte.com

Enable	Email Address	Event Level	Delete
☒	agent_user@gigabyte.com	1 ▼	☐

3.5.5 SNMP

Configure SNMP trap IP to receive events when the system is abnormal

SNMP

Server Host

Enable	IP Address	Event Level	Delete
☒	192.168.0.2	1	☐

3.5.6 LDAP

Configure LDAP server for LDAP authentication

LDAP

LDAP Host	Port

3.5.7 Change Password

Change GSM Agent login password

Change Password

Username

Old Password	New Password	Confirm Password

3.5.8 Update

Update GSM Agent software version (.war file)

Update

Current Version:GIGABYTE GSM Agent Server v0.8

選擇檔案 未選擇任何檔案 Update

3.6 Help

Provides basic visual help guidance for each function within GSM Agent (similar to the contents of this user guide)