IPMI View

for MicroBlade™ Management User's Guide

Revision 2.10

The information in this USER'S MANUAL has been carefully reviewed and is believed to be accurate. The vendor assumes no responsibility for any inaccuracies that may be contained in this document, makes no commitment to update or to keep current the information in this manual, or to notify any person organization of the updates. Please Note: For the most up-to-date version of this manual, please see our web site at www.supermicro.com.

Super Micro Computer, Inc. ("Supermicro") reserves the right to make changes to the product described in this manual at any time and without notice. This product, including software, if any, and documentation may not, in whole or in part, be copied, photocopied, reproduced, translated or reduced to any medium or machine without prior written consent.

IN NO EVENT WILL SUPERMICRO BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, SPECULATIVE OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OR INABILITY TO USETHIS PRODUCT OR DOCUMENTATION, EVEN IF ADVISED OF THE POSSIBILITY OF SUCHDAMAGES. IN PARTICULAR, SUPERMICRO SHALL NOT HAVE LIABILITY FOR ANY HARDWARE,SOFTWARE, OR DATA STORED OR USED WITH THE PRODUCT, INCLUDING THE COSTS OFREPAIRING, REPLACING, INTEGRATING, INSTALLING OR RECOVERING SUCH HARDWARE,SOFTWARE, OR DATA.

Any disputes arising between manufacturer and customer shall be governed by the laws of Santa Clara County in the State of California, USA. The State of California, County of Santa Clara shall be the exclusive venue for the resolution of any such disputes. Super Micro's total liability for all claims will not exceed the price paid for the hardware product.

FCC Statement: This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instruction manual, may cause harmful interference with radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case you will be required to correct the interference at your own expense.

California Best Management Practices Regulations for Perchlorate Materials: This Perchlorate warning applies only to products containing CR (Manganese Dioxide) Lithium coin cells. Perchlorate Material-special handling may apply. See http://www.dtsc.ca.gov/hazardouswaste/perchlorate/ for further details.

Manual Revision 2.10

Release Date: December 22, 2014

Contents

1 Introduction

MicroBlade Management is a new feature in version 2.10 of IPMIView. IPMIView sends messages to the CMM (Chassis Management Module) and receives messages in return. Here, messages represent the commands encapsulated in the RMCP+ (Remote Management Control Protocol) packet of the IPMI standard.

IPMIView monitors and reports the status of a MicroBlade including node, power supply and gigabit switch status. IPMIView makes management easier by visualizing the MicroBlade as a GUI. It also supports remote KVM and user management.

Figure 1-1 MicroBlade

2 Login and Node Status

2.1 Login

In the IPMIView device list (Figure 1-2), the MicroBlade icon appears once the CMM is added. Double-click it, and the login screen displays.

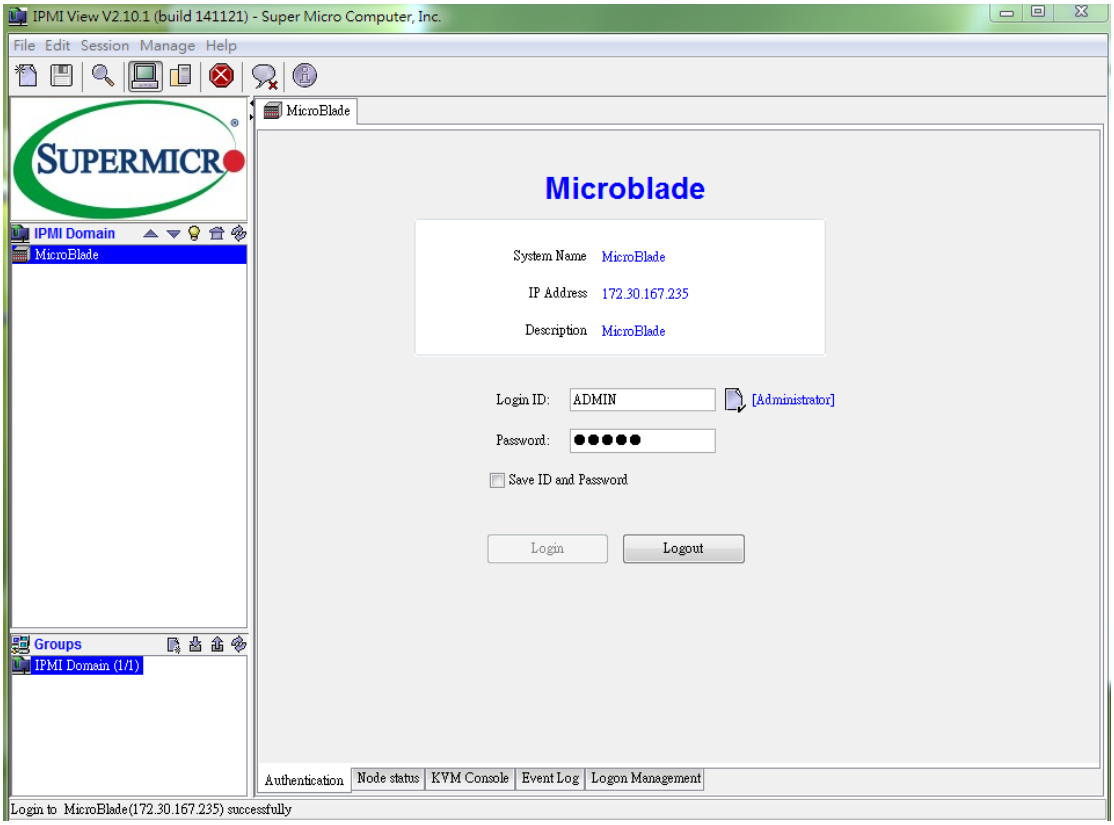


Figure 1-2 Login to SuperBlade

Type your username and password and then click **Login**. Note that **ADMIN** is both the username and password by default.

Once you log in, several tabs appear at the bottom of the page including Node Status, KVM Console, Event Log and Logon Management.

2.2 Node Status Tab

Click the **Node Status** tab to display the following page.

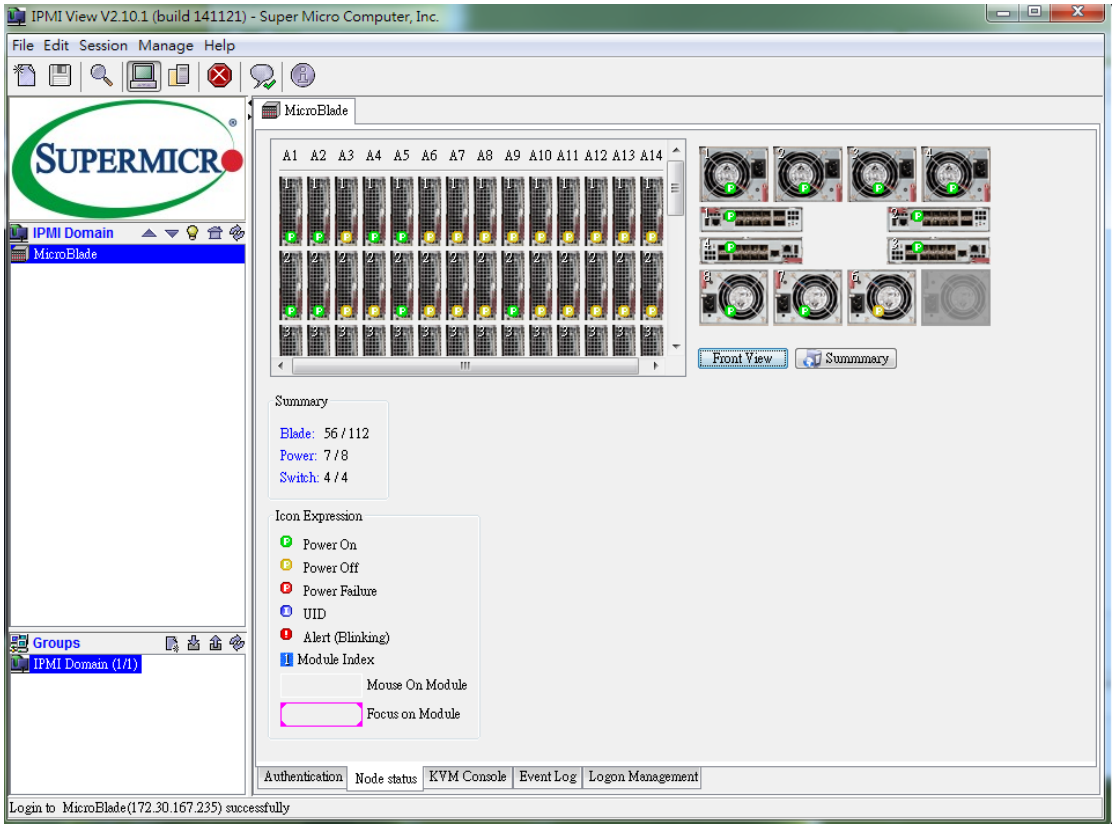


Figure 1-3, Node Status Tab

The upper section is the Node Status View. In this view, each component is monitored. Any changes that occur in the MicroBlade are shown here. For example, if blade 1 is removed, the blade 1 icon here is grayed out. If blade 10 is turned off, the power symbol of blade 10 turns amber. The Node Status View reflects the current status of a MicroBlade module. Node numbers may vary because of different blade servers. If you install different types of blades, the actual number of nodes is also shown here .

Each module picture in the upper side of the page can be clicked, and the status of each module is shown in the lower section of this page. The Summary section (Blade, Power and Switch) shows the information. Here you can get more information and send more commands to the blade module.

2.2.1 Node Status View

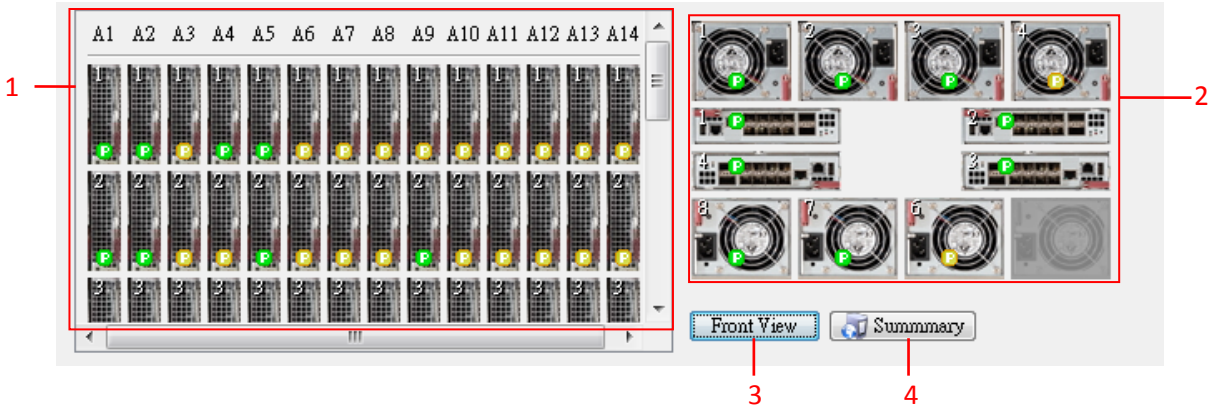


Figure 2-1, Upper Section of Node Status

The upper section of the the Node Status View provides a quick view of the MicroBlade status.

1. **Blade Front View**: Displays the front view of each blade and node.
2. **Blade Rear View**: Displays the rear view of the power supply and gigabit switch.

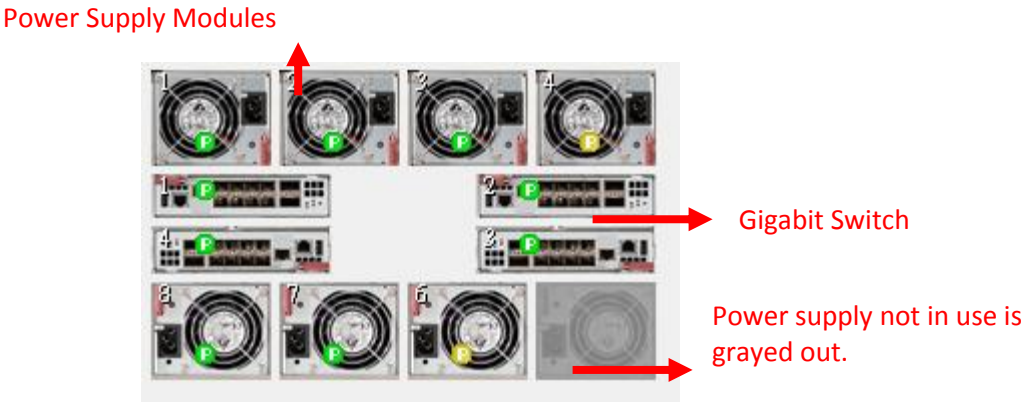


Figure 2-2 Blade Rear View

3. **Front View**: Click this button and an additional panel appears, which displays the whole node view without a scroll bar (see Figure 2-3). There will be a maximum of 128 nodes. If a blade is not installed, it is grayed out in this view.

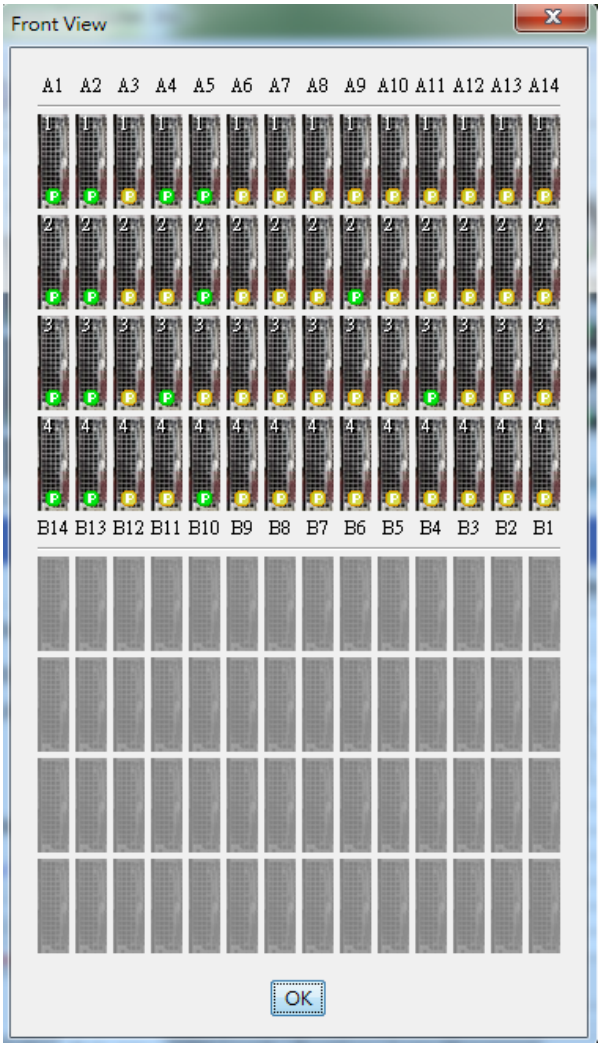


Figure 2-3

4. **Summary** : Click this button and two information sections appear . The “Summary” section shows the number of blades, power supplies and switches. The “Icon Expression” section illustrates the meaning of each icon. Each icon has a status symbol to show the current status. Each MicroBlade Module may have different symbols.

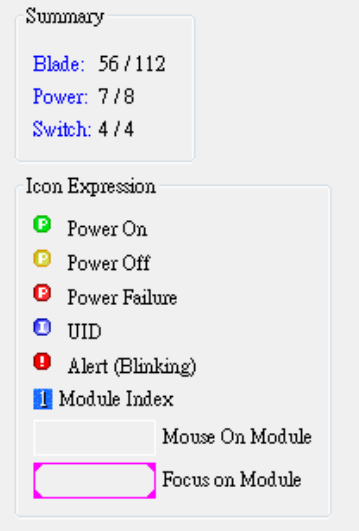


Figure 2-4 Summary and Icon Expression

2.3 Node UI

Click on one of the node modules. The Node UI is shown at the bottom.

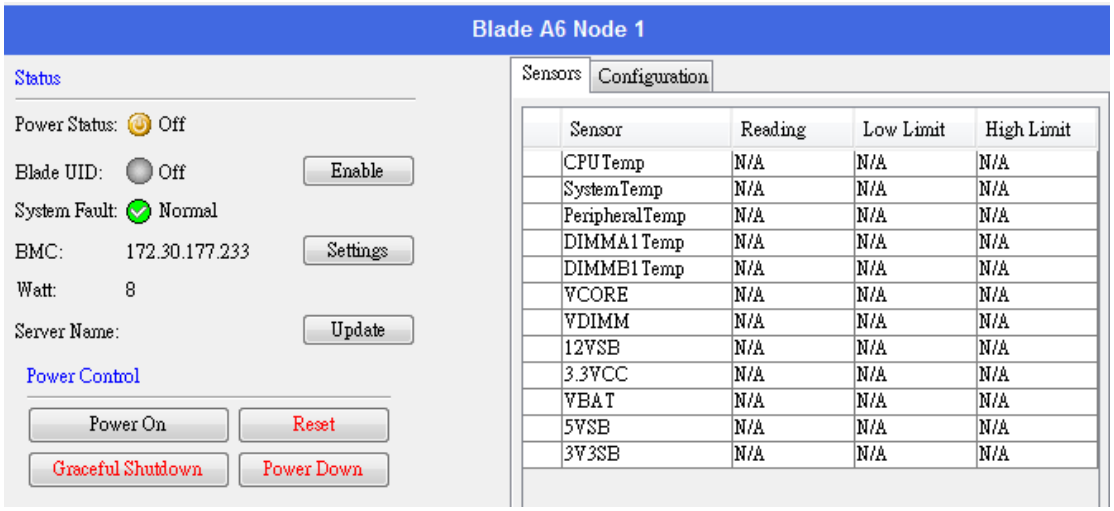


Figure 2-5, Node UI

2.3.1 Status

- **Power Status**: This shows the current power status. Types of status include power on, power off and power failure.
- **Blade UID**: This shows the status of the UID LED. Click the **Enable** button to enable or disable the UID. Once the UID is enabled, the UID LED on blade panel will flash. Please note that the UID represents the whole blade. For example, if you enable UID on Node 1, it will affect the other 4 nodes on the same blade.
- **System Fault**: This shows the system fault status.
- **BMC**: This shows the BMC status. If BMC is installed, it will show the BMC IP address. Click the **Settings** button to update the BMC configuration including DHCP, IP, sub net Mask and Gateway. See Figure 2-6. If BMC is not installed, a message "not installed" is shown next to the BMC field.

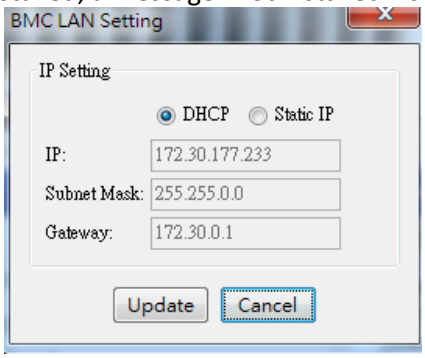


Figure 2-6 Update BMC IP

- **Watt**: The estimated power consumption of this blade. This is a static value from the BIOS.
- **Server Name**: Users can see server name here. After clicking "Update" button, a simple dialog will

appear to help users to update server name.

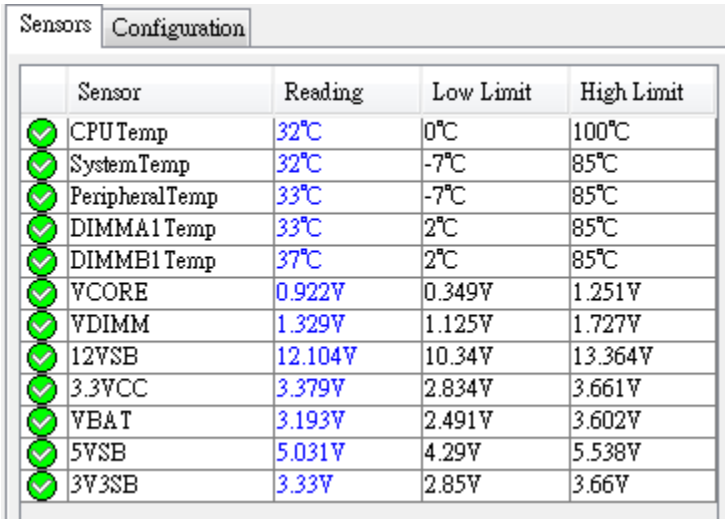
2.3.2 Power Control

Figure 2-7 Power Control

- **Power On**: Powers on the blade.
- **Reset**: Rests the blade.
- **Graceful Shutdown**: Gracefully shuts down the blade.
- **Power Down**: Powers down the blade.

2.3.3 Sensors

The Sensors section shows information on the CPU and the temperature and voltages of the selected blade. The type of information include status, sensor name, reading, low limit and high limit. If the sensor status is normal, the value in the Reading column will be displayed in blue, and an OK symbol ( ) appears before the sensor. If the sensor status is critical, the value in the Reading column will be displayed in red and a failure symbol ( ) appears before the sensor. If the sensor is not in use, "N/A" appears in the Reading column and no status symbol appears before the sensor.

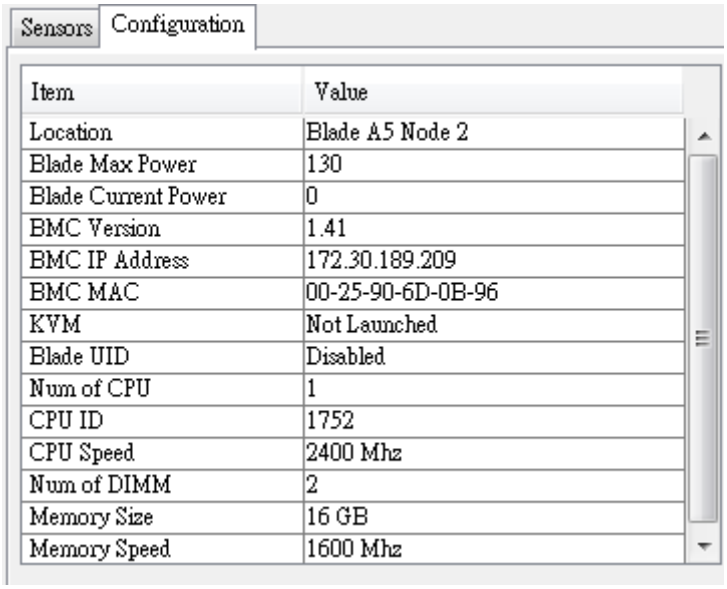


Sensor	Reading	Low Limit	High Limit
CPU Temp	32℃	0℃	100℃
System Temp	32℃	-7℃	85℃
Peripheral Temp	33℃	-7℃	85℃
DIMMA1 Temp	33℃	2℃	85℃
DIMMB1 Temp	37℃	2℃	85℃
VCORE	0.922V	0.349V	1.251V
VDIMM	1.329V	1.125V	1.727V
12VSB	12.104V	10.34V	13.364V
3.3VCC	3.379V	2.834V	3.661V
VBAT	3.193V	2.491V	3.602V
5VSB	5.031V	4.29V	5.538V
3V3SB	3.33V	2.85V	3.66V

Figure 2-8, Blade Sensor Table

2.3.4 Configuration

The Configuration section shows Blade, BMC and CPU information. You can view the details in the table below.



Item	Value
Location	Blade A5 Node 2
Blade Max Power	130
Blade Current Power	0
BMC Version	1.41
BMC IP Address	172.30.189.209
BMC MAC	00-25-90-6D-0B-96
KVM	Not Launched
Blade UID	Disabled
Num of CPU	1
CPU ID	1752
CPU Speed	2400 Mhz
Num of DIMM	2
Memory Size	16 GB
Memory Speed	1600 Mhz

Figure 2-9, Blade Configuration Table

2.4 Power Supply UI

Click on a a power supply module. The Power Supply screen (Figure 2-10) appears at the bottom.

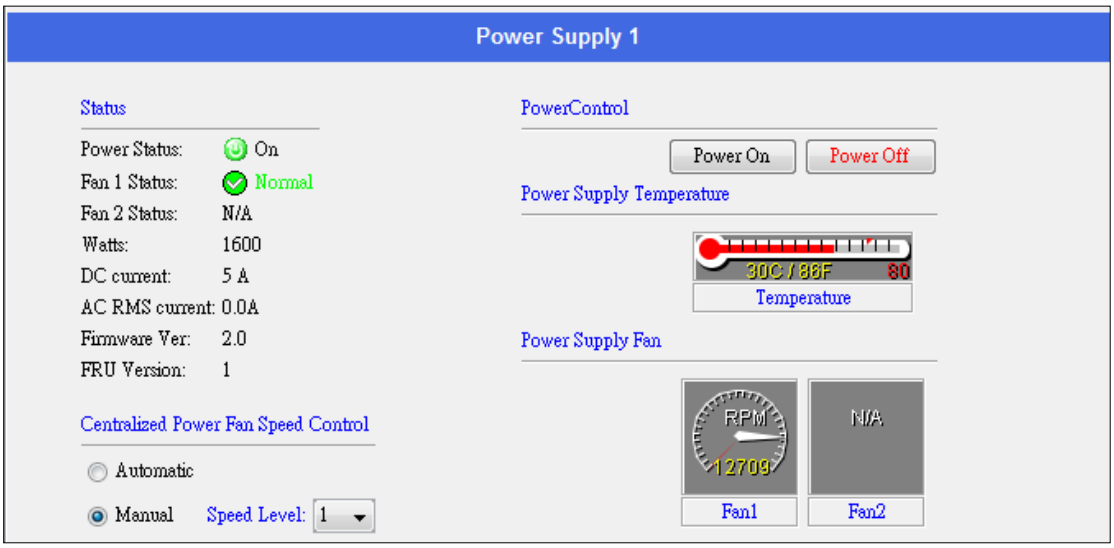


Figure 2-10 Power Supply UI

2.4.1 Status

- **Power Status**: This shows the current power status: either power on, power off or power failure.
- **Fan 1 Status**: This shows the current power supply fan 1 as normal or abnormal.
- **Fan 2 Status**: This shows the current power supply fan 2 as normal or abnormal.
- **Watts**: This shows the total wattage provided by this power supply.
- **DC current**: This shows the current DC current (only 1400W power supplies support this status).
- **AC RMS current**: This shows the current AC RMS current (only 1400W power supplies support this status).
- **Firmware Ver**: This shows the firmware version in the power supply.
- **FRU Version**: This shows the FRU version in the power supply.

2.4.2 Centralized Power Fan Speed Control

The centralized power fan speed controls all power supplies and fans in a MicroBlade.

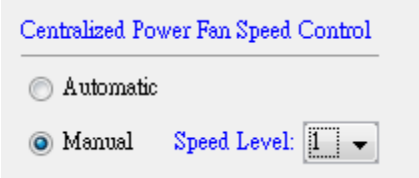


Figure 2-11 Centralized Power Fan Speed Control

- **Automatic:** Fan speed is automatically controlled by default. When the fan speed is automatically controlled, the CMM will monitor the system loading and optimize all fan speeds. When the system is in automatic mode, you cannot change the fan speed level.
- **Manual:** You can alter the speed of the power supply fans by using the drop-down list to select the speed level. The speed level ranges from 1 to 10. After changing the fan speed, you should see the fan rpm change on the right panel. Please note that this function applies to all fans in the system. You cannot control specific fans.

2.4.3 Power Control

Unlike fan speed control, all power control function items control individual power supplies.

Figure 2-12 Power Control

- **Power On**: Powers on the selected power supply.
- **Power Off**: Powers off the selected power supply.

2.4.4 Power Supply Temperature and Power Supply Fan

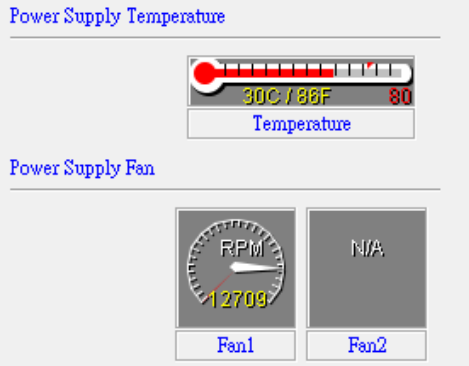


Figure 2-13 Power Supply Temperature and Power Supply Fan

- **Power Supply Temperature:** The thermometer displays the current temperature in both Celsius and Fahrenheit.
- **Power Supply Fan:** The fan speed diagram displays the current fan speed in RPMs. Note when the current power supply power is off, another power supply will support the fan. Sometimes there is only one fan for the selected power supply. The diagram displays “N/A” to show that one of the fans does not exist.

2.5 Gigabit Switch UI

Click one of gigabit switch modules. The gigabit switch UI (Figure 2-14) shows up at the bottom.

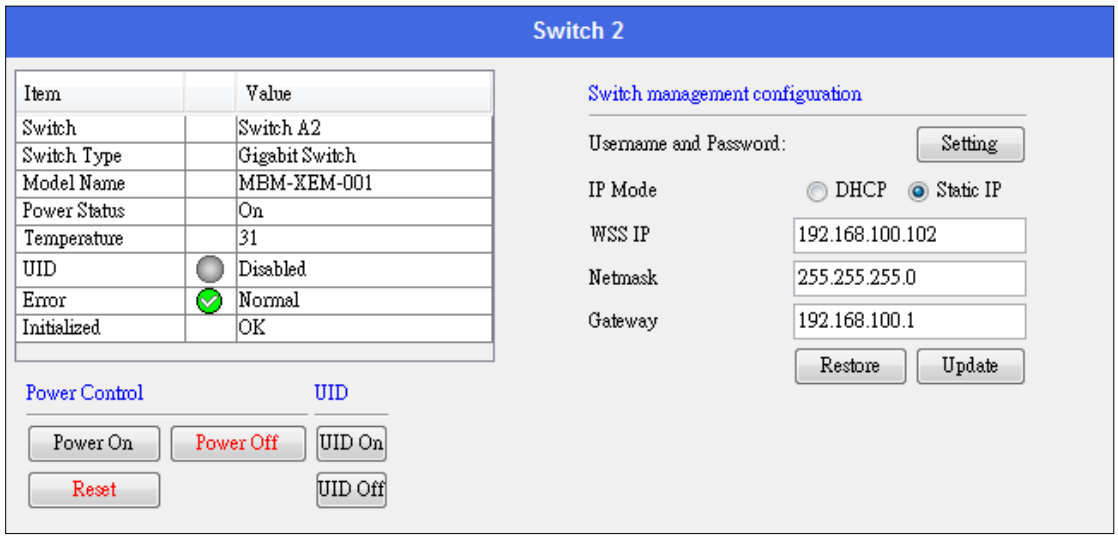


Figure 2-14 Gigabit Switch UI

2.5.1 Status Table

The Status Table is in the top left section and displays information on this gigabit switch.

- **Switch Type:** Shows the type of switch.
- **Model Name:** Shows the model name.
- **Power Status**: Shows the current gigabit switch power status, either power on or power off.
- **Temperature**: Shows the current temperature of this switch.
- **UID**: Shows the gigabit switch UID LED status.
- **Error LED**: Indicates that the gigabit switch has received an error.
- **Initialized**: Indicates that the gigabit switch has been initialized.

2.5.2 Power Control and UID Control

The control panel is in the bottom section and allows you to turn the switch power and UID on or off.

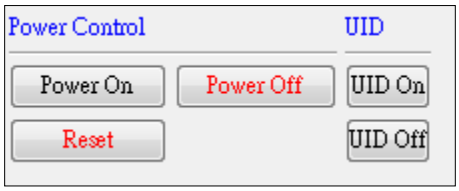


Figure 2-15 Power Control of Gigabit Switch

- **Power On**: Click to power on the gigabit switch.
- **Power Off**: Click to power off the gigabit switch.
- **Reset**: Click to reset the gigabit switch.
- **UID on**: Click to enable the UID LED.
- **UID off**: Click to disable the UID LED.

2.5.3 Switch Management Configuration

You can modify WebSuperSmart, which holds the parameters of the gigabit switch web engine. WebSuperSmart is a web interface used to management gigabit switches. For details, please refer to the gigabit switch manual.

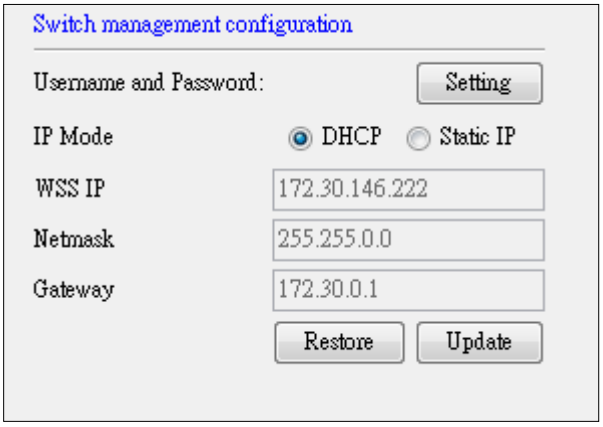


Figure 2-16 Switch Management Configuration

- **Password**: Password of the WebSuperSmart engine.
- **IP Mode**: IP mode is either DHCP or static IP.
- **WSS IP**: IP of the WebSuperSmart web engine.
- **Netmask**: Netmask of the gigabit switch.
- **Gateway**: Gateway of the gigabit switch.
- **Restore:** Immediately reloads the settings from the gigabit switch.
- **Update:** Applies changes to a gigabit switch.

2.5.4 Resetting Password

1. Click **Setting** and a dialog box (Figure 2-17) shows up.

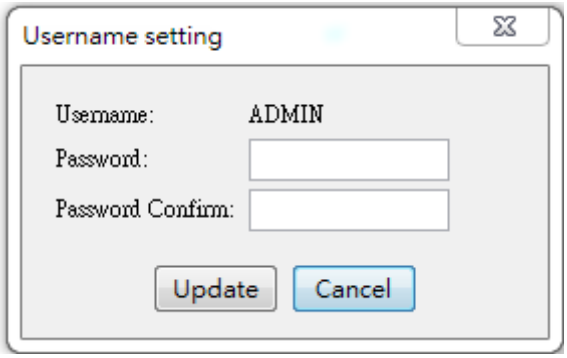


Figure 2-17 Username and Password Reset

2. Type and confirm your new password, and then click **Update** to apply the changes.

3 KVM Console

KVM Console provides a remote desktop for use, which allows you remotely change the blade's UI.

3.1.1 iKVM Viewer

1. To launch the console, click the **Launch KVM Console** button (Figure 3-1).

Figure 3-1

2. On the toolbar click **Switch KVM**.

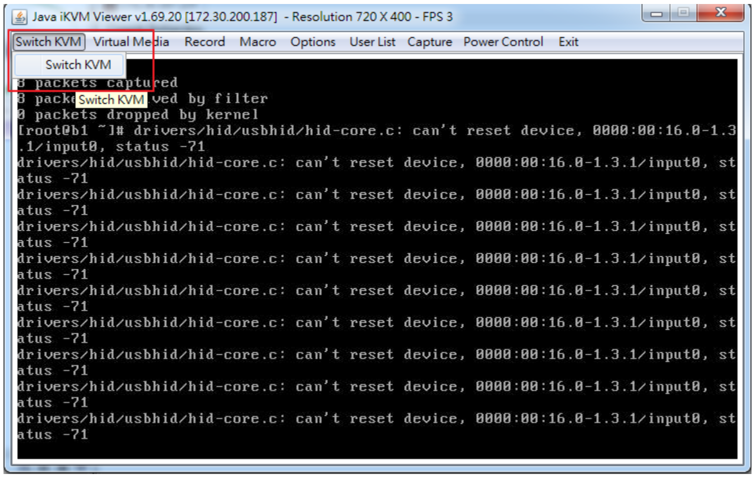


Figure 3-2

3. A panel pops up to allow users to switch to other nodes.

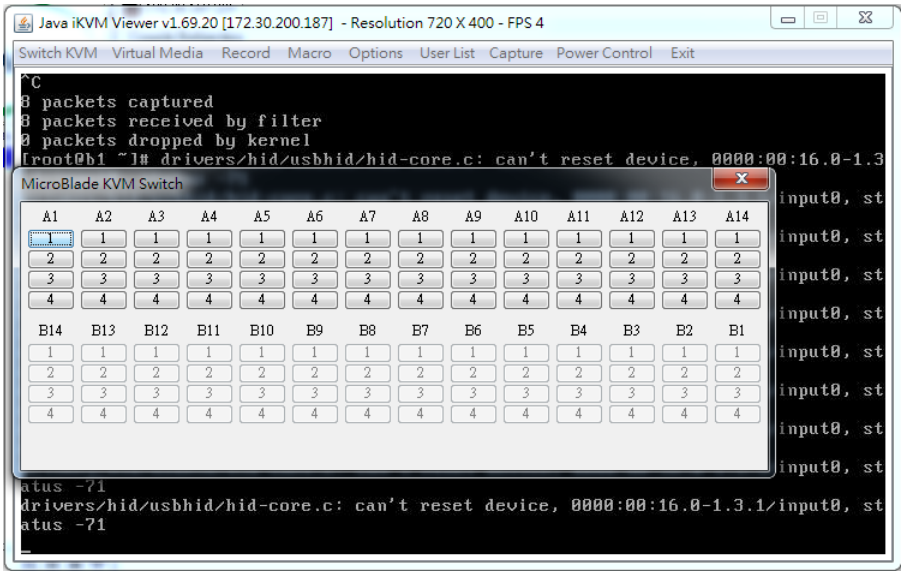


Figure 3-3

The grayed-out buttons represent unavailable nodes. Available nodes can be selected whether they are powered on or off. To control the power of the nodes, click **Power Control** on the tool bar.

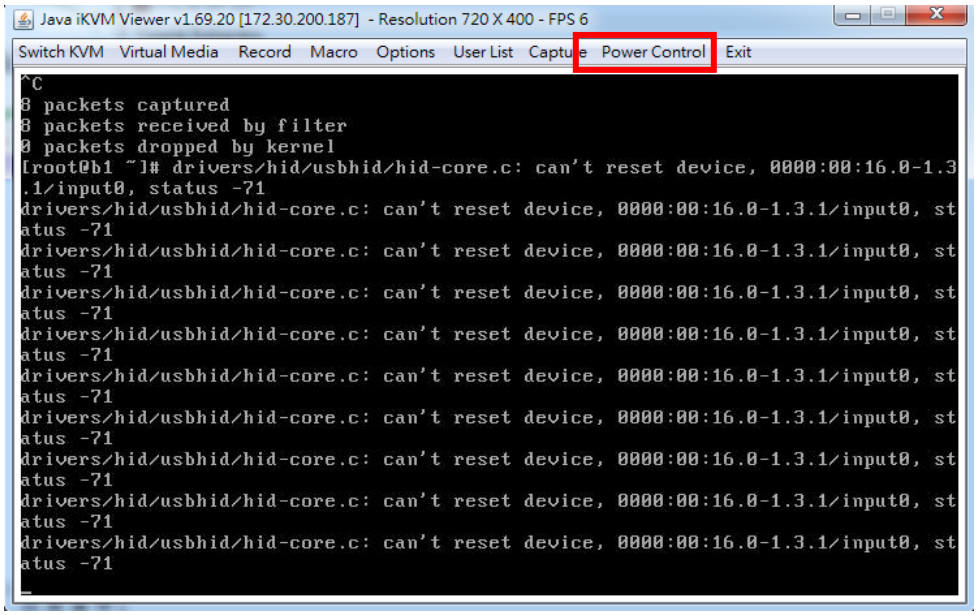
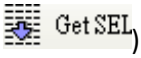


Figure 3-4

4 Event Log

MicroBlade logs the event in standard IPMI format. Click the Event Log tab to view the event log (Figure 4-1). The SEL information categories include Total Entries, SEL Version, Free Space, Recent Entry Added and Recent Entry Erased. In the Parameter for getting SEL section, select the parameters to get SEL. **All** is selected by default to get all SEL logs. You can also set the desired time range for retrieving SEL logs. Click the **GET SEL** button (

) on the top tool bar to start loading SEL.

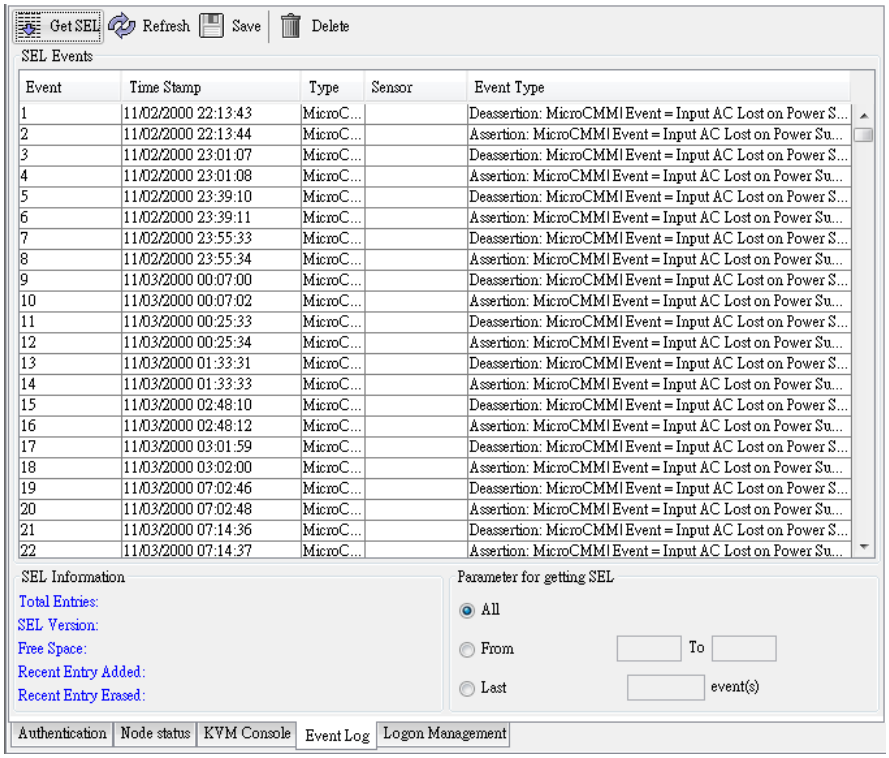
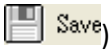
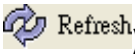


Figure 4-1 Event Log

The SEL Events table shows the event information including the Event, Time Stamp, Type, Sensor and Event Type. The number of event entries listed can be up to 512. If SEL is full, click the **Save** (

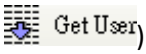
) button to save it as a file for backup. Click the **Delete** button (

) to delete all SEL events.

Note: The Refresh (

) button is only used to refresh the SEL information. To reload SEL, please click the **GET SEL** button.

5 Logon Management

Click the **Logon Management** tab at the bottom to access the management account information (Figure 5-1). You can creat up to 63 user accounts. Click the **Get User** () button to retrieve the current user list.

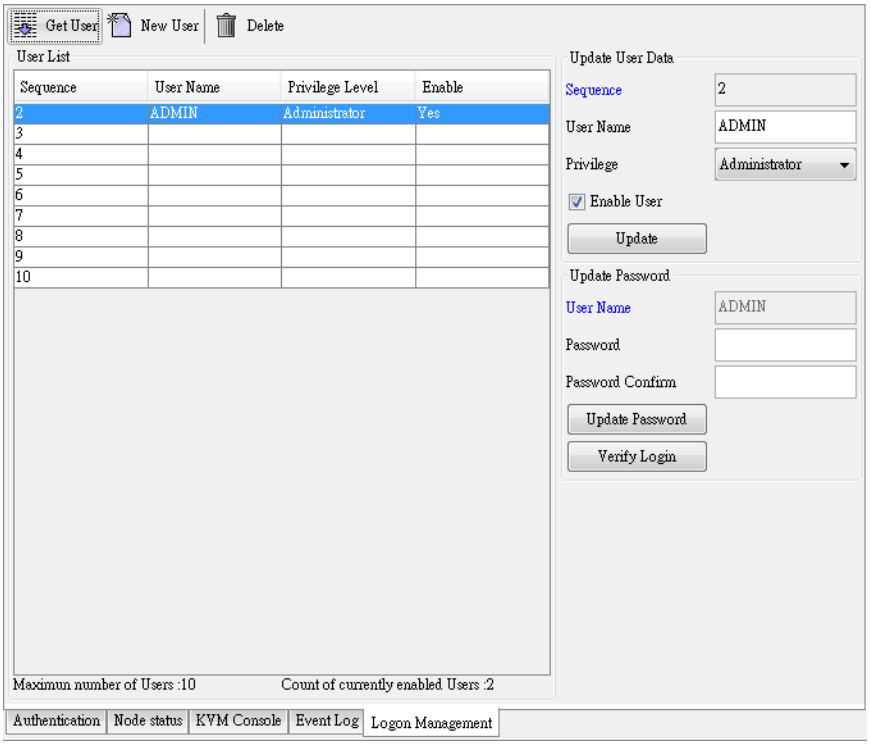


Figure 5-1 Logon Management Tab

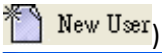
5.1 User Privileges

Different types of users have different privileges. In the Update User Data section, use the drop-down list to select the privilege level:

- **Administrator**: accesses all functions and adjusts management settings.
- **Operator**: accesses all functions without the logon management function.
- **User**: accesses partial functions. Unavailable functions will be hidden or disabled.
- **CallBack**: accesses less functions than User level.

If you wish to temporarily deny any user's attempt to log in the system, clear the **Enable User** checkbox. To grant privlileges again, select this option.

5.2 Adding a New User

1. Click the **New User** button (

) to create a new user.

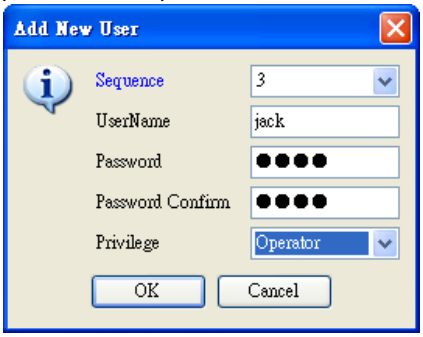


Figure 5-2 Add New User

2. In the dialog box (Figure 5-2), use the drop-down list to set the sequential number for the added user. Set the username, password and privilege level and then click OK.
3. The added user appears in the User List (Figure 5-3).

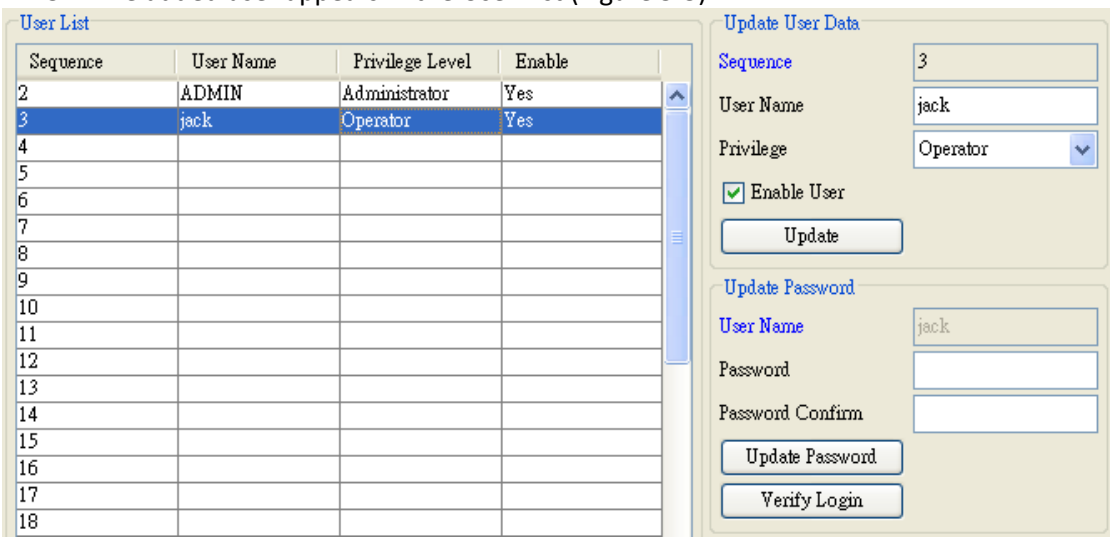
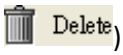


Figure 5-3

5.3 Deleting a User

To delete a user with administrator privileges, select the desired user in the User List and click the **Delete** button (

).

5.4 Updaing User Data

To update user data, select a user in the User List (Figure 5-1). The user data will be shown in the right panel.

1. In the Update User Data section, update the username and privilege level.
2. Click the the Enable User checkbox to enable or leave this checkbox blank to disable.
3. In the Update Password area, type and confirm your new password, and then click **Update Password**.
4. Click **Verify Login** to check if the password update is successful. The dialog box appears.

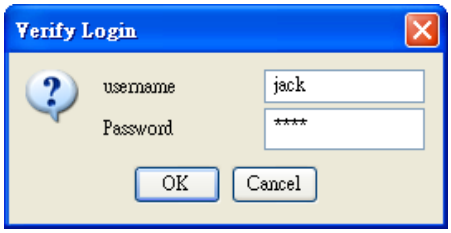


Figure 5-4

5. Type the username and password you want to verify then click **OK**. If both username and password are verified, a message "Login successfully" appears.

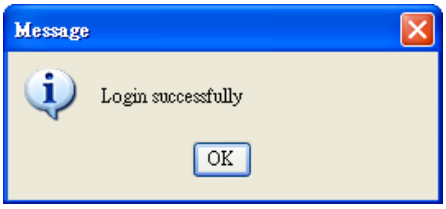


Figure 5-5

If the verification fails, a message "Login failed" appears.

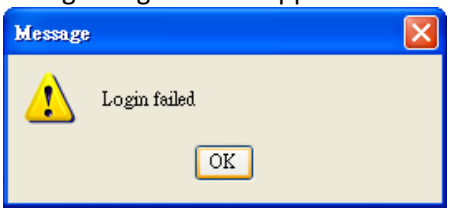


Figure 5-6

Contacting Supermicro

Headquarters

Address:	Super Micro Computer, Inc. 980 Rock Ave. San Jose, CA 95131 U.S.A.
Tel:	+1 (408) 503-8000
Fax:	+1 (408) 503-8008
Email:	marketing@supermicro.com (General Information) support@supermicro.com (Technical Support)
Website:	www.supermicro.com

Europe

Address:	Super Micro Computer B.V. Het Sterrenbeeld 28, 5215 ML 's-Hertogenbosch, The Netherlands
Tel:	+31 (0) 73-6400390
Fax:	+31 (0) 73-6416525
Email:	sales@supermicro.nl (General Information) support@supermicro.nl (Technical Support) rma@supermicro.nl (Customer Support)
Website:	www.supermicro.com.nl

Asia-Pacific

Address:	Super Micro Computer, Inc. 3F, No. 150, Jian 1st Rd. Zhonghe Dist., New Taipei City 235 Taiwan (R.O.C)
Tel:	+886-(2) 8226-3990
Fax:	+886-(2) 8226-3992
Email:	support@supermicro.com.tw
Website:	www.supermicro.com.tw