SUPERMICRO®

AOC-SIM1U Add-on Card

RoHS SUPER● SIM1U
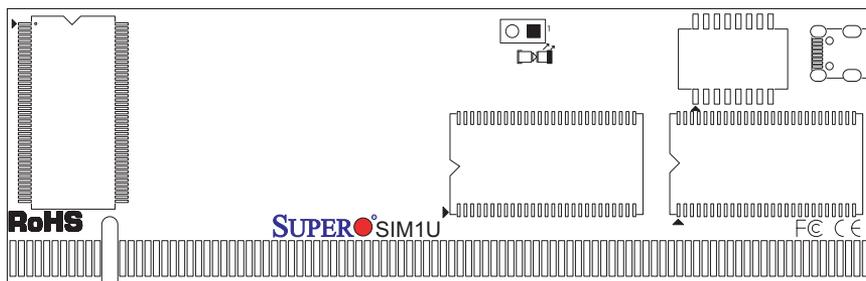
User's Manual

Revison 1.1d

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Manual Revison 1.1d

Release Date: May 13, 2009

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Preface

About this Manual

This user's guide is written for system integrators, PC technicians and knowledgeable PC users who intend to integrate Supermicro's unique IPMI 2.0 Management Utility with support of KVM-over-LAN into their systems. It provides detailed information for the application and use of the AOC-SIM1U/SIM1U+ that supports remote access for system monitoring, diagnosis and management. With the most advanced technologies built-in, the AOC-SIM1U/SIM1U+ offers a complete, efficient, and cost-effective remote server management.

NOTE: KVM-over-LAN is only for the AOC-SIM1U+ only.

Overview

The AOC-SIM1U/SIM1U+ is a highly efficient, highly compatible and easy-to-use IPMI card that allows the user to take advantage of the BMC, a baseboard management controller installed on a server motherboard and the IPMIView, an IPMI-compliant management application software loaded in a PC, to provide serial links between the main processor and other system components, allowing for network interfacing via remote access. With an independent Raritan KIRA100 processor built-in, the AOC-SIM1U/SIM1U+ provides the user with a solution to ease the complex and expensive systems, allowing an administrator to access, monitor, diagnose and manage network interfacing anywhere, anytime.

IPMI Version 2.0

The AOC-SIM1U/SIM1U+ supports the functionality of IPMI Version 2.0. The key features include the following:

- Supports IPMI 2.0
- Supports serial over LAN
- Supports KVM over LAN
- Supports LAN alerting-SNMP trap
- Supports an event log
- Offers OS (Operating System) independency Operating Systems Supported

Remote Hardware Health Monitoring

The AOC-SIM1U/SIM1U+ provides remote hardware health monitoring via IPMI. Key features include the following:

- Temperature monitoring
- Fan speed monitoring
- Voltage monitoring
- Power status monitoring
- Chassis intrusion monitoring
- Remote power control to power-on, power-off or reboot a system
- Remote access to text-based, graphic-based system information, including BIOS configurations and OS operation information (KVM)
- Remote management of utility/software applications

Network Management Security

The AOC-SIM1U/SIM1U+ provides network management security via remote access/ console redirection. Key features include:

- User authentication enhancement
- Encryption support enhancement, allowing for password configuration security to protect sensitive data transferring via Serial over LAN
- Supports the following Management tools: IPMIView, CLI (Command Line Interface)
- Supports RMCP and protocols

Product Features

The AOC-SIM1U/SIM1U+ series (IPMI 2.0 with a dedicated LAN) features the following:

- Slim size (4.6" W x 1.3" H) (116.84 mm W x 25.41 mm H)
- Supports IPMI over LAN
- Supports 1U and above
- Supports dedicated LAN

NOTE: For motherboards with the Intel NIC 82573 chip, you must use a dedicated LAN if you have to use KVM-over LAN.

Shipping List

If your shipping package came with missing or damaged parts, please see the Returning Merchandise for Service section of this manual. Please refer to the following checklist when contacting us:

- AOC-SIM1U/SIM1U+ add-on card
- **Bracket:** One bracket (SKT-0240L, including the AOC-USB2RJ45 Add-On Card, the CBL-0165L Cable, Full and Low Profile I/O Brackets.) The SKT-0240L is included in the SIM1U+ shipping package only.
- **CDR-SIMIPMI:** One installation CD-ROM disc
- White Box with Correct barcode label (showing *AOC-SIM1U/SIM1U+*).

An Important Note to Users

All images and layouts shown in this user's guide are based upon the latest PCB Revision available at the time of publishing. The card you have received may or may not look exactly the same as the graphics shown in this manual.

Returning Merchandise for Service

A receipt or copy of your invoice marked with the date of purchase is required before any warranty service will be rendered. You can obtain service by calling your vendor for a Returned Merchandise Authorization (RMA) number. When returning to the manufacturer, the RMA number should be prominently displayed on the outside of the shipping carton, and mailed prepaid or hand-carried. Shipping and handling charges will be applied for all orders that must be mailed when service is complete.

For faster service, RMA authorizations may be requested online at

http://www.supermicro.com/support/rma/

Whenever possible, repack the add-on card in the original Supermicro box, using the original packaging materials. If these are no longer available, be sure to pack the add-on card in an anti-static bag and inside the box. Make sure that there is enough packaging material surrounding the add-on card so that it does not become damaged during shipping.

This warranty only covers normal consumer use and does not cover damages incurred in shipping or from failure due to the alteration, misuse, abuse or improper maintenance of products.

During the warranty period, contact your distributor first for any product problems.

Contacting SuperMicro

Headquarters

Address:	Super Micro Computer, Inc.
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	San Jose, CA 95131 U.S.A.
Tel:	+1 (408) 503-8000
Fax:	+1 (408) 503-8008
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	support@supermicro.com (Technical Support)
Web Site:	www.supermicro.com

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	's-Hertogenbosch, The Netherlands
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Email:	sales@supermicro.nl (General Information)
	support@supermicro.nl (Technical Support)
	rma@supermicro.nl (Customer Support)

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Asia-Pacific

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Web Site:	www.supermicro.com.tw
Technical Support:	
Email:	support@supermicro.com.tw
Tel:	+886-2-8228-1366, ext. 132 or 139

Chapter 1
Safety Guidelines

To avoid personal injury and property damage, carefully follow all the safety steps listed below when accessing your system or handling the components.

1-1   ESD Safety Guidelines

Electric Static Discharge (ESD) can damage electronic components. To prevent damage to your system, it is important to handle it very carefully. The following measures are generally sufficient to protect your equipment from ESD.

*   Use a grounded wrist strap designed to prevent static discharge.
*   Touch a grounded metal object before removing a component from the antistatic bag.
*   Handle the add-on card by its edges only; do not touch its components, peripheral chips, memory modules or gold contacts.
*   When handling chips or modules, avoid touching their pins.
*   Put the card and peripherals back into their antistatic bags when not in use.

1-2   General Safety Guidelines

*   Always disconnect power cables before installing or removing any components from the computer.
*   Disconnect the power cable before installing or removing any cables from the system.
*   Make sure that the add-on card is securely and properly installed on the motherboard to prevent damage to the system due to power shortage.

1-3   An Important Note to Users

All images and layouts shown in this user's guide are based upon the latest PCB Revision available at the time of publishing. The card you have received may or may not look exactly the same as the graphics shown in this manual.

Notes

Chapter 2
Technical Specifications and Hardware Installation

2-1   Connecting the AOC-SIM1U/AOC-SIM1U+ and AOC-USB2RJ45 Add-On Cards

The AOC-SIM1U/AOC-SIM1U+ add-on cardis connected to a dedicated LAN Ethernet port located on the AOC-USB2RJ45 add-on card via an SMC proprietary cable (CBL-0165L) for external LAN access. One end of the CBL-0165L cable is connected to the mini USB connector (J3) located on the AOC-SIM1U/AOC-SIM1U+ card and the other end to that of the AOC-USB2RJ45 card. There are two LEDs located on the LAN port to indicate network links and activities.

Refer to Figure 2-1 below for the configuration the entire SKT-0240L package and AOC-SIM1U/AOC-SIM1U+ add-on card.

Figure 2-1. SKT-0240L Package and AOC-SIM1U/AOC-SIM1U+ Add-on Card
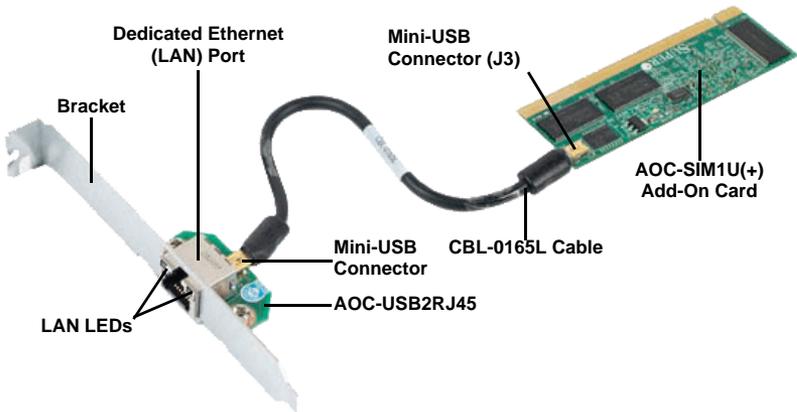
NOTE: You can also use LAN1 on the motherboard if you do not need the dedicated LAN support. However, dedicated LAN is recommended for better graphic support when the KVM feature is used.

NOTE: The SKT-0240L is included in the AOC-SIM1U/AOC-SIM1U+ shipping package only.

2-2   Components

The front components of the AOC-SIM1U/AOC-SIM1U+ add-on card are shown in Figure 2-2. Rear components are shown in Figure 2-3.

Figure 2-2. AOC-SIM1U/AOC-SIM1U+ Add-on Card – Front View
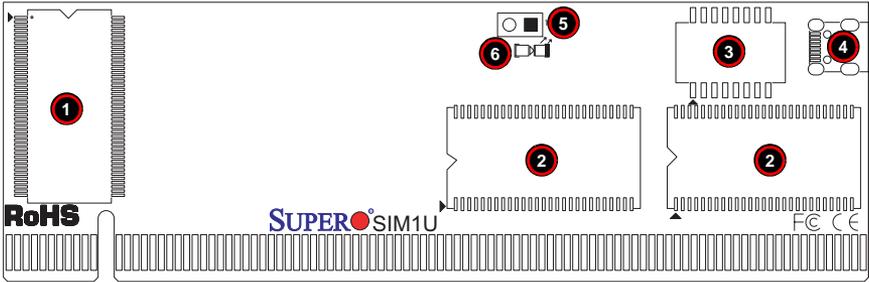
Figure 2-3. AOC-SIM1U/AOC-SIM1U+ Add-on Card – Rear View
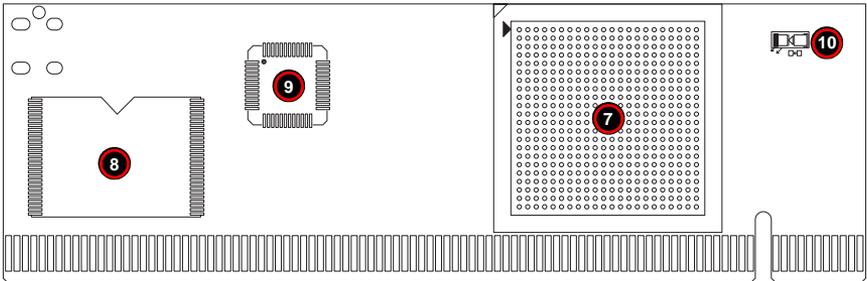
Table 2-1 lists all the AOC-SIM1U/AOC-SIM1U+ add-on card's components.

Table 2-1. AOC-SIM1U/AOC-SIM1U+ Add-on Card Components

Number	Description
1	V-RAM (64 Mb/166 MHz)
2	SDRAM (128 Mb/133 MHz)
3	Transformer
4	J3: Mini USB 9-pin Connector
5	JP5: Kira 100 Processor Reset
6	D3: Standby Power LED Indicator
7	Raritan's Kira 100 RISC System on Chip
8	Flash Memory

Table 2-1. AOC-SIM1U/AOC-SIM1U+ Add-on Card Components (Continued)

Number	Description
9	PHY LAN
10	Heartbeat LED

Mini USB Connector (J3)

There is a mini USB connector (J3) located on the AOC-SIM1U/AOC-SIM1U+ add-on card and another mini USB connector is located on the AOC-USB2RJ45. Use Cable CBL-0165L to connect the two mini USB connectors on both add-on cards for external LAN access.

Refer to Section 2-1: "Connecting the AOC-SIM1U/AOC-SIM1U+ and AOC-USB2RJ45 Add-On Cards" on page 2-1 for details. See Table 2-2 for the pin definitions.

Table 2-2. Mini USB Pin Definitions (J3)

Pin #	Definition
1	Eth-TX_H
2	Eth-TX_L
3	Phy-100
4	Eth-RX_L
5	Eth-RX_H
6	Phy-ACT
7	Dedicated LAN-Detected
8	3V-duall
9	Ground

RISC CPU Reset (JP5)

Jumper JP5 is used to reset the Kira 100 Processor, NIC, and R.T. Close Pin 1 and Pin 2 to enable this function. After a reset or AC power-on, the AOC-SIM1U/AOC-SIM1U+ add-on card will automatically detect if a cable (CBL-0165L) is connected. If a cable is not detected, the AOC-SIM1U/AOC-SIM1U+ will transfer the *Remote Control* function to LAN1 on the motherboard. If a cable is detected, the AOC-SIM1U/AOC-SIM1U+ uses the dedicated LAN attached to it via the mini USB connector to manage motherboard activities via the Remote Console. See Table 2-3 for jumper settings.

Table 2-3. RISC CPU Reset

Setting	Description
Open	Disabled (Default)
Close	Enabled

NOTE: The SKT-0240L is included in the AOC-SIM1U/AOC-SIM1U+ shipping package only.

2-3   LED Indicators

Led indicators are described in this section below.

Dedicated LAN LED Indicators on the AOC-USB2RJ45

Figure 2-4. AOC-USB2RJ45 Dedicated LAN LED Indicators

Activity LED   Link LED
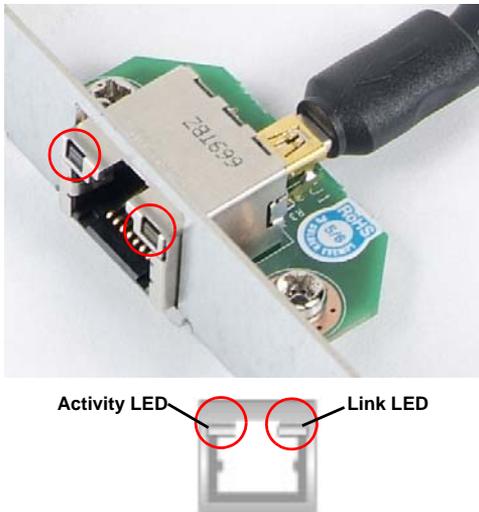
There are two LAN LED Indicators located on the (Dedicated) LAN port on the AOC-USB2RJ45 Add-On Card (see Figure 2-4). The green LED indicates activity, while the power LED may be green or off to indicate the speed of the Ethernet connection. See Table 2-4 for more information.

Table 2-4. AOC-USB2RJ45 Dedicated LAN LED Indicators

LED	Color	Activity	Description
Activity LED	Amber	Flashing	Active
Link LED	Green	Off	No Connection or 10 Mb/s
		Green	100 Mb/s

Standby Power LED Indicator (D3)

When this LED is on, the standby power is on. Be sure to remove power cables before installing or removing components.

Heartbeat LED Indicator

The Heartbeat LED, located on the rear side of the AOC-SIM1U/AOC-SIM1U+ add-on card, indicates the functionality and activity of the add-on card. This LED blinks when the AOC-SIM1U/AOC-SIM1U+ is active.

However, when the Linux OS and the drivers are being loaded after each AC power-on or reset, the Heartbeat LED is off for about a minute. It then goes on again to indicate that the AOC-SIM1U/AOC-SIM1U+ is active. See Table 2-5 for details.

Table 2-5. Heartbeat LED

Activity	Description
On (Blinking)	AOC-SIM1U/AOC-SIM1U+ active
Off (for 1 minute)	Loading Firmware
Off (Continuously)	AOC-SIM1U/AOC-SIM1U+ is not active

2-4   Block Diagram

Figure 2-5. AOC-SIM1U/AOC-SIM1U+ Add-on Card Block Diagram
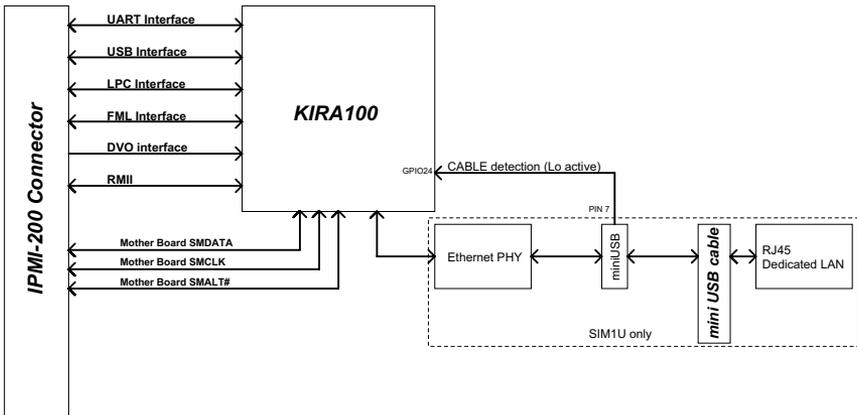
The block diagram for the AOC-SIM1U/AOC-SIM1U+ add-on card is shown in Figure 2-5.

2-5   Installation

This section covers installation of the AOC-SIM1U/AOC-SIM1U+ add-on card into your system.

SMC Motherboards with AOC-SIM1U/AOC-SIM1U+ Support

The following Supermicro motherboards support the AOC-SIM1U/AOC-SIM1U+ add-on card:

- The X7DB8/X7DBE/X7DB8+/X7DBE+/X7DB8-X/X7DBE-X/X7DB3 Series
- The X7DA8/X7DAE/X7DVA-8/X7DVA-E/X7DVL-3/i Series (see Note below)
- The X7DCX Series (not shown)
- The X7DVL-E Series
- The PDSM4+/PDSME+ Series

NOTE: KVM-over-LAN is not supported by the X7DA8, X7DAE or X7DVL-3/i motherboards.

SIM1U Slot Locations

To properly use the AOC-SIM1U/AOC-SIM1U+ add-on card, be sure to install it in the right slot. Refer to the motherboard layouts below for AOC-SIM1U/AOC-SIM1U+ slot locations.

Figure 2-6. X7DB8/X7DBE/X7DB8+/X7DBE+/X7DB8-X/X7DBE-X/X7DB3 Series

SIM1U Slot (Slot 7)
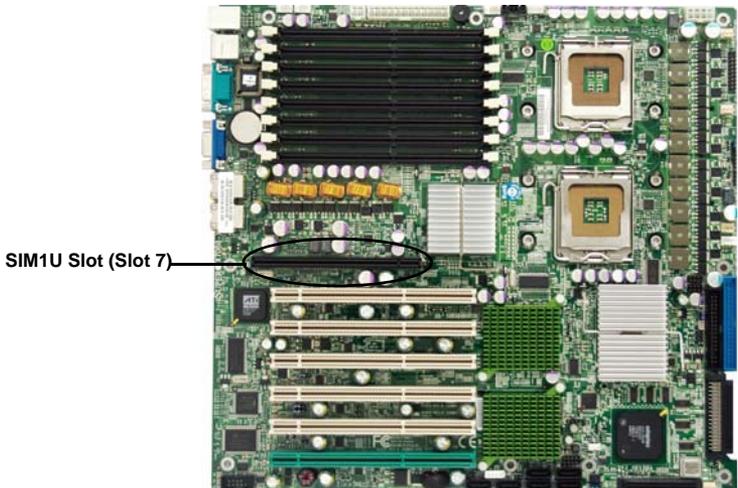
**Figure 2-7. X7DA8/X7DAE/X7DVA-8/X7DVA-E/X7DVL-3/i Series**

SIM1U Slot (Slot 7)

Figure 2-8. X7DVL-E

SIM1U Slot
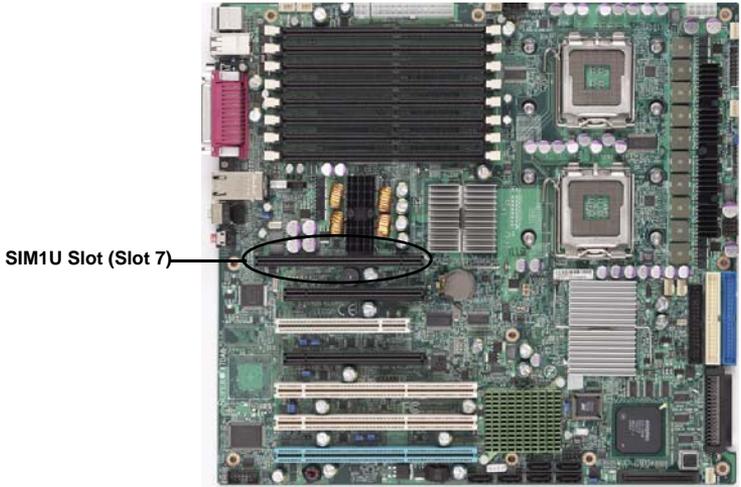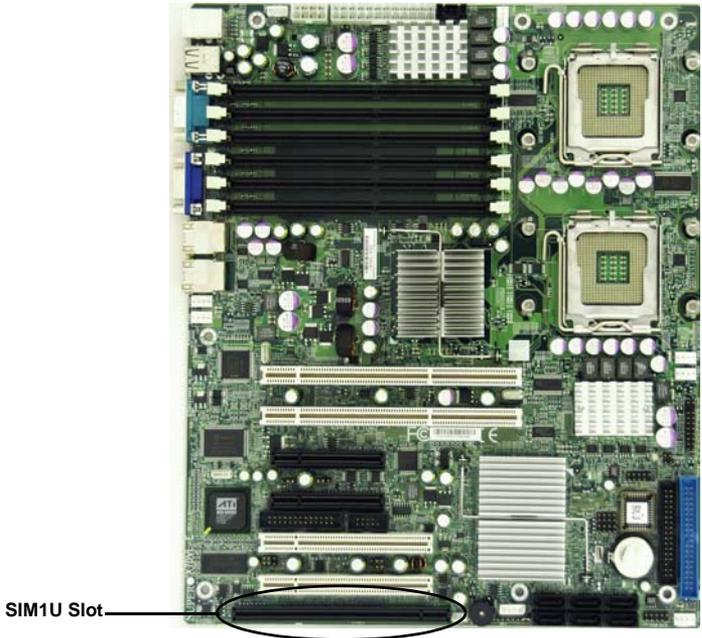
Figure 2-9. PDSM4+/PDSME+ Series

SIM1U Slot
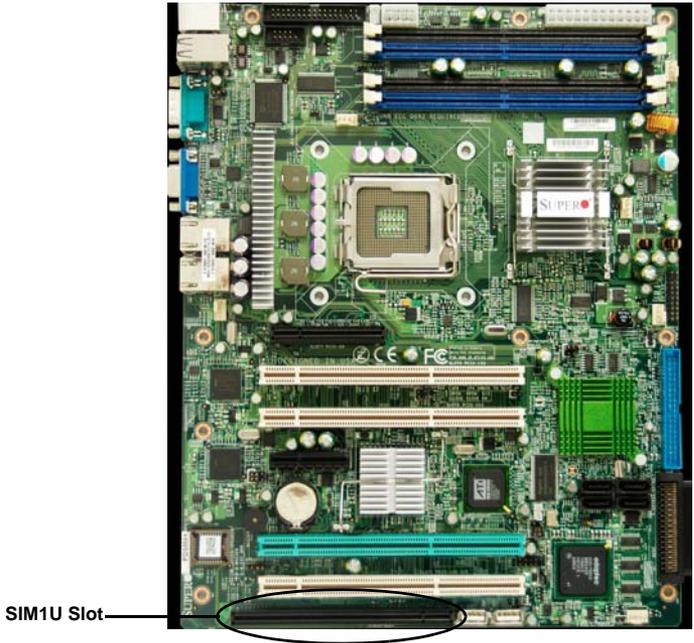
Chapter 3
Software Application and Usage

3-1   Introduction

With an independent I/O processor embedded in Raritan's Kira 100 RISC System Chip, the AOC-SIM1U/AOC-SIM1U+ add-on card allows you to access, monitor, manage and interface with systems that are in remote locations via LAN. The necessary utilities for the access and configuration of the add-on card are included on the Supermicro bootable CDs that came with your card. This section provides information on the configuration and the access of the IPMI card on the network.

NOTE: KVM-over-LAN is available on the AOC-SIM1U+ only. All features and options related to the functionality of KVM-over-LAN are supported by the AOC-SIM1U+ only. In addition, KVM-over-LAN is not supported by the following motherboards:

- X7DA8/X7DAE
- X7DVL-3/X7DVL-i.

3-2   Configuring IP/MAC Addresses and other Network Settings

To configure IP/MAC addresses and other IPMI network settings using the IPMICFG utility, use the procedure below.

Configuring an IP/MAC Address or Other IPMI

1. Run the IPMICFG utility from the bootable CD that came with your shipment.

2. Refer to the table below to configure the IP/MAC addresses.

Board	IPMI	MAC	IP	Communication Through
X7 Series with LAN 82563EB, 82575	SIM1U	IPMI Card	Available IP/DHCP	Dedicated LAN
		LAN1		LAN1 on Mainboard
X7 Series with LAN 82573	SIM1U	IPMI Card	Available IP/DHCP	Dedicated LAN
		LAN1		LAN1 on Mainboard
H8 DDR2 Memory	SIM1U	IPMI Card	Available IP/DHCP	Dedicated LAN
				LAN1 on Mainboard
H8QM3/i-x	SIM1U	IPMI Card	Available IP/DHCP	Dedicated LAN
		LAN1	LAN1	LAN1 on Mainboard

NOTE: When the SIM1U/+ card is used with the on-board 82573 LAN the HTTP function of the SIM1U and KVM-over-LAN functions will not work.

3. Follow the instructions given in the *Readme.txt* file to configure Gateway IP/ Netmask IP addresses, to enable/disable DHCP and to configure other IPMI settings.

NOTE: The *Readme.txt* file is included in the CD that came with your shipment. A copy of the *Readme.txt* file, dated 07/11/2008, is also included below.

```
IPMICFG Version 1.10 (Build 080711) Copyright 2008 SuperMicro
Computer Inc.
Usage: IPMICFG params (Example: IPMICFG -m 192.168.1.123)
  -m                 Show IP and MAC
  -m IP              Set IP (format: ###.###.###.###)
  -a MAC             Set MAC (format: ##:##:##:##:##:##)
  -k                 Show Subnet Mask
  -k Mask            Set Subnet Mask (format: ###.###.###.###)
  -dhcp              Get the DHCP status
  -dhcp on           Enable the DHCP
  -dhcp off          Disable the DHCP
  -g                 Show Gateway IP
  -g IP              Set Gateway IP (format: ###.###.###.###)
  -r                 BMC cold reset
  -garp on           Enable the Gratuitous ARP
  -garp off          Disable the Gratuitous ARP
  -fd                Reset to the factory default
  -ver               Get Firmware revision
  -vlan              Get VLAN status
  -vlan on [VLANtag] Enable the VLAN and set the VLAN tag
                     If VLANtag is not given it uses previously
....................saved value.
  -vlan off          Disable the VLAN
  -raw               Send a RAW IPMI request and print response.
                     Format: NetFn LUN Cmd [Data1 ... DataN]
```

3-3   Accessing the AOC-SIM1U/AOC-SIM1U+ Add-on Card

Use the procedure below to access the AOC-SIM1U/AOC-SIM1U+ add-on card from a computer.

Using the Onboard LAN1 Connection

1. Choose a computer that is connected to the same network and open the IPMIView utility.

2. Go to FILE>NEW>SYSTEM. Type SYSTEM NAME, IP ADDRESS OF LAN1, and DESCRIPTION in the appropriate blanks and press the ENTER key.

3. Select the system from the IPMI Domain. Type the LOGIN ID and PASSWORD in the appropriate blanks to log into the IPMIView utility.

Using the Dedicated LAN

1. Choose a computer that is connected to the same network and open the browser.

2. Type in the IP address of each server that you want to connect in the address bar in your browser.

3. Once the connection is made the LOGIN screen appears, as shown in Figure 3-1.

3-4   Logging In

Figure 3-1. Login Screen
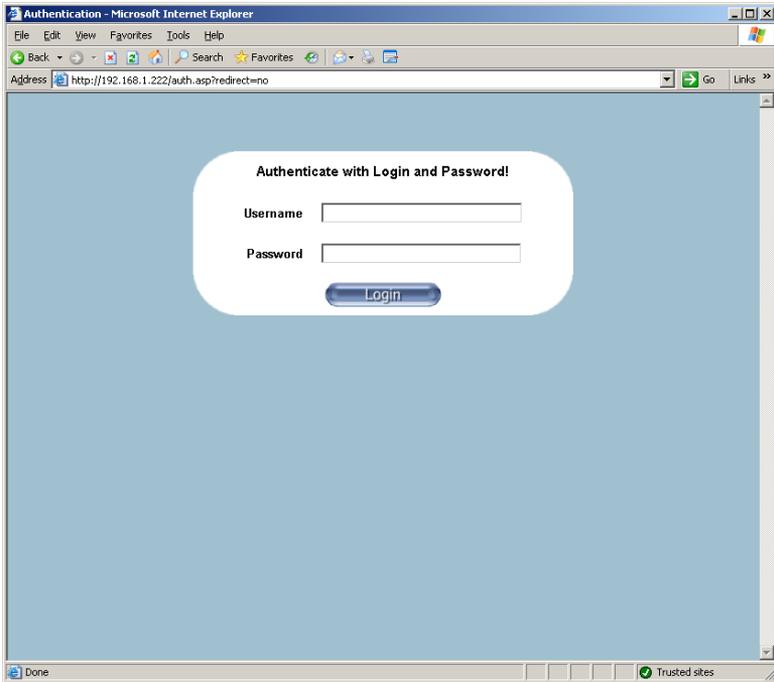
Once you are connected to the remote server, the LOGIN screen appears (Figure 3-1). To login, use the procedure below.

Logging In to the IPMICFG Utility using the Login Screen:

1.   Type in your Username in the USERNAME box.

2.   Type in your Password in the PASSWORD box and click on the LOGIN button.

NOTE: The default username is ADMIN. The default password is ADMIN.

The HOME PAGE screen (Figure 3-2) appears.

NOTE: KVM-over-LAN is available on the AOC-SIMLP-B+ and AOC-SIMLP-3+ AOC-SIM1U/AOC-SIM1U+ add-on card only.

Home Page Screen

The HOME PAGE screen (Figure 3-2) appears after login. Table 3-1 lists and describes its components.

Figure 3-2. Home Page Screen
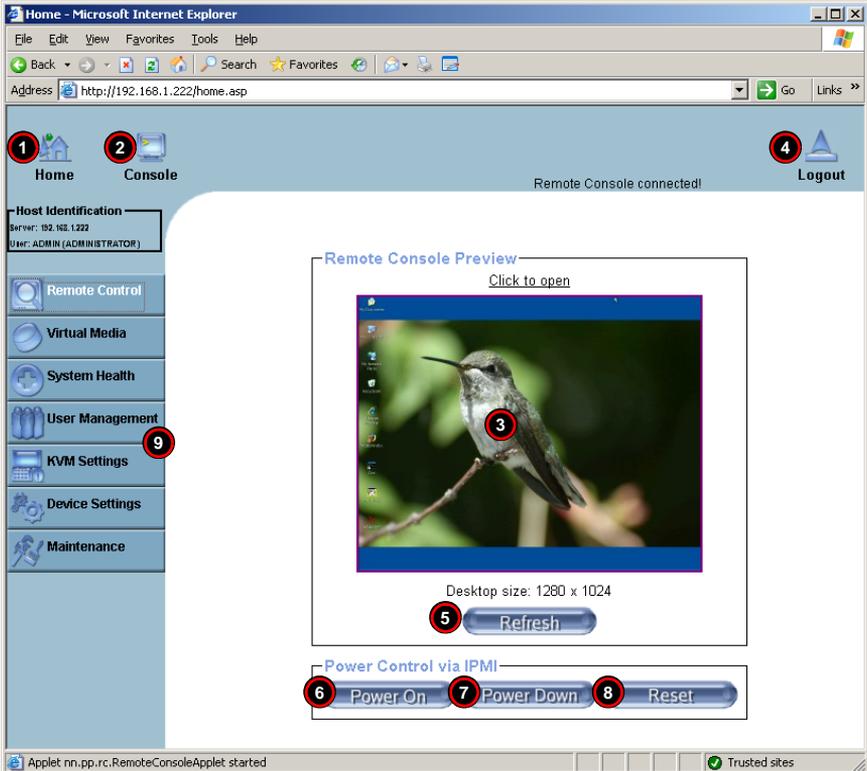
Table 3-1. Home Page Screen Components

Item	Name	Description
1	Home Icon	Click this icon to return to the HOME PAGE screen.
2	Console Icon	Click this icon to go to the REMOTE CONSOLE screen.
3	Remote Console Screen	Displayed in the window is the REMOTE CONSOLE screen. Click on this window to go to the REMOTE CONSOLE screen.
4	Logout Icon	Click on this icon to log out of the system. This will display the LOGIN screen again (Figure 3-1).
5	Refresh Button	Click on this icon to refresh the screen of the remote console preview.

Table 3-1. Home Page Screen Components (Continued)

Item	Name	Description
6	Power On Button	Click on this button to power on the system of the remote host.
7	Power Down Button	Click on this button to power down the system of the remote host.
8	Reset Button	Click on this button to reset the remote host.
9	Home Page Menu	Click on these buttons to display and use their sub-menu functions as specified in Table 3-2.

3-5   Home Page Functions

Table 3-2 contains a brief summary of HOME PAGE menu. The sub-menu functions of this menu are further detailed in following sections.

Table 3-2. Home Page Menus

Function Key	Description
Remote Control	Click on this icon for remote access and management of Video Console Redirection. See "Remote Control" below for further details.
Virtual Media[a]	Click on this icon to use virtual remote media devices. See "Virtual Media" below for further details.
System Health	Click on this icon to view and manage health monitoring for remote systems. See "System Health" below for further details.
User Management	Click on this icon for User Management. See "User Management" for further details.
KVM Settings[a]	Click on this icon to configure keyboard, Video and mouse settings. See "KVM Settings" below for further details.
Device Settings	Click on this icon to configure the SIMBL device settings. See "Device Settings" below for further details.
Maintenance	Click on this icon to access, diagnose and manage hardware devices. See "Maintenance" below for further details.

a. For large data transfers like KVM and Virtual Media, dedicated LAN (100Mb/sec) should be used. The on-board LAN (through I^{2}C interface, 100Kb/sec) is too slow.

Remote Control

Click on the REMOTE CONTROL button to activate the KVM Console, SOL Console and Remote Power menu options.

KVM Console

Clicking on this menu option brings up the REMOTE CONSOLE screen (Figure 3-3) for configuring settings for the remote host. See Table 3-3 for a list and description of major controls and features of this console screen. Also see Section 3-6: "Remote Console Screen Controls" on page 3-48 for further details on controls and options found in the REMOTE CONSOLE screen.

Figure 3-3. Remote Console Screen
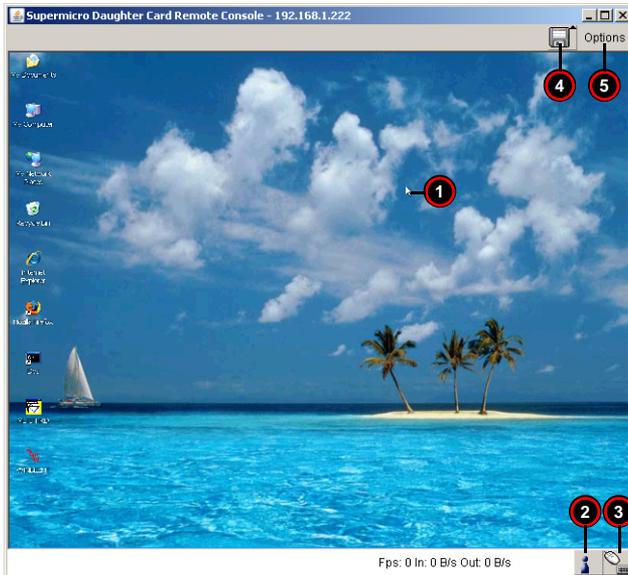
Table 3-3. Remote Console Screen Controls and Features

Item	Name	Description
1	Mouse Cursor	The mouse cursor changes to reflect either **Single/Synchronized Mouse Mode** or **Double Mouse Mode**. In the Single/Synchronized Mouse Mode, this cursor indicates the system that is currently active. For the Double Mouse mode, this is the cursor for the remote host.
2	Network Number Icon	This icon indicates the number of networks (users) that are connected via Console Redirection. (The number of figure icons indicates the number of users connected.)
3	Keyboard/Mouse Icon	This icon indicates the availability of the Keyboard and Mouse.
4	Drive Redirect Icon	Click on this icon to expand out the controls for drive redirection on the system you are viewing. See "Drive Redirection Controls" for further details.
5	Options Button	Click on this button to see the REMOTE CONSOLE OPTIONS menu. See "Options Menu" for further details on this menu.

SOL Console

Click on this menu option to bring up the Serial over LAN (SOL) remote console.

Figure 3-4. SOL Console Screen
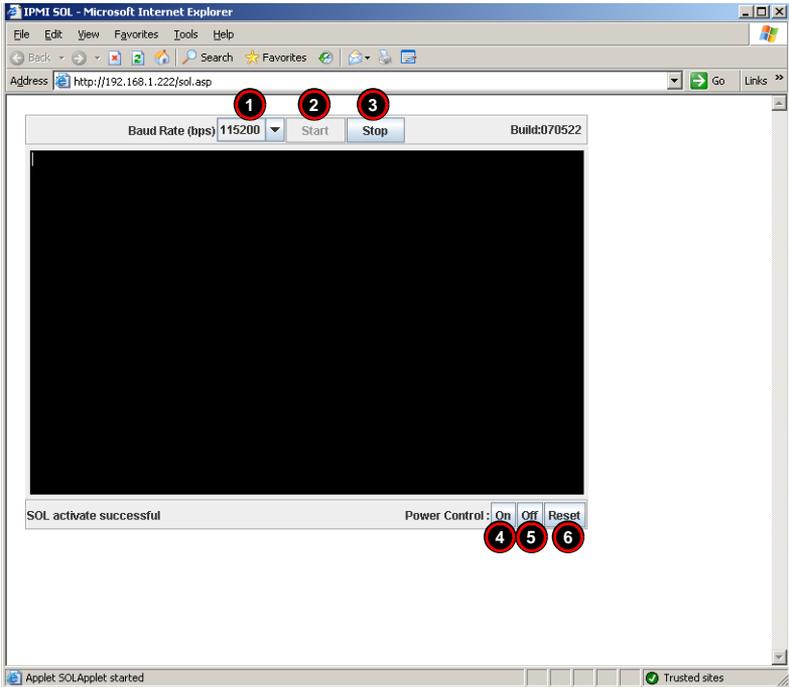
Table 3-4. SOL Console Screen Controls and Features

Item	Name	Description
1	Baud Rate	Use this drop-down list box to set the Baud rate for the SOL Console to use.
2	Start Button	Click this button to start data download to the SOL CONSOLE screen.
3	Stop Button	Click this button to stop data download to the SOL CONSOLE screen.
4	Power On Button	Click on this button to power on the system of the remote host.
5	Power Down Button	Click on this button to power down the system of the remote host.
6	Reset Button	Click on this button to reset the remote host.

Remote Power

Click on this menu option to bring up the REMOTE POWER screen (Figure 3-5) for configuring the power settings for the Remote Console. See Table 3-5 for a list and description of major controls in this screen.

Figure 3-5. Remote Power Screen
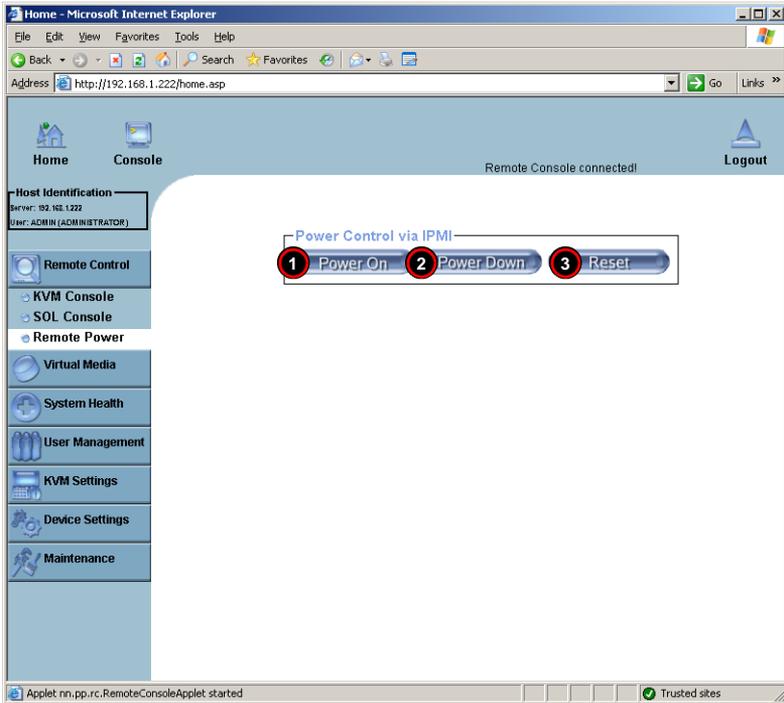
Table 3-5. Remote Power Screen Controls

Item	Name	Description
1	Power On Button	Click on this button to power on the remote host.
2	Power Down Button	Click on this button to power down the remote host.
3	Reset Button	Click on this button to reset the remote host.

Virtual Media

Click on the VIRTUAL MEDIA button to display the Floppy Disk, CD-ROM Image, Drive Redirection and Virtual Media Options menu options.

Floppy Disk

Click on this menu option to bring up the FLOPPY DISK screen (Figure 3-6). See Table 3-6 for a list and description of controls in this screen.

Figure 3-6. Floppy Disk Screen
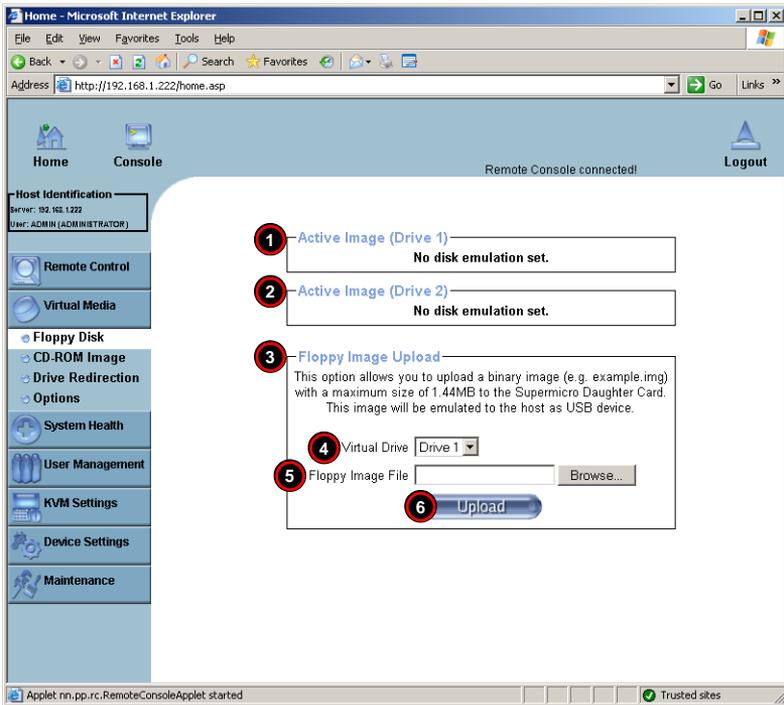
Table 3-6. Floppy Disk Screen Controls

Item	Name	Description
1	Active Image (Drive1)	This section displays the data that has been uploaded to Drive 1 of the remote host.
2	Active Image (Drive2)	This section displays the data that has been uploaded to Drive 2 of the remote host.

Table 3-6. Floppy Disk Screen Controls (Continued)

Item	Name	Description
3	Floppy Image Upload	This section allows you to upload the floppy image as FLOPPY located in the remote host. The floppy image uploaded is in the binary format with a maximum size of 1.44MB. It will be loaded to the Supermicro SIMBL card and will be emulated to the host as a USB device.
4	Virtual Drive Drop-down List Box	Use this drop-down list to select a drive in the remote host as a destination drive for your image data upload.
5	Floppy Image File	Click on BROWSE to preview and select the files that you wish to upload to the host drive selected in Item 4 above.
6	Upload Button	Once the correct file name appears in the box for the FLOPPY IMAGE FILE, click UPLOAD to upload the floppy image to the drive specified in the remote host you selected using the VIRTUAL DRIVE drop-down list (Item 4).

CD-ROM Image

Click on this menu option to share data stored in your local CD-ROM drive with other users in the remote host through the Windows Share application via USB. You can also use this menu option to bring up the CD-ROM screen (Figure 3-7). See Table 3-7 for a list and description of controls in this screen.

Figure 3-7. CD-ROM Image Screen

Table 3-7. CD-ROM Image Screen Controls

Item	Name	Description
1	Active Image (Drive1)	This window displays the file name of the data currently active in host Drive 1.
2	Active Image (Drive2)	This window displays the file name of the data currently active in host Drive 2.
3	Image on Windows Share	This option allows the user to configure Windows Share settings. It allows you to decide how you want to share the data stored in your local CDROM with users in the remote host.
4	Virtual Drive	Specify the drive that you want to share your data with in the remote host.

Table 3-7. CD-ROM Image Screen Controls (Continued)

Item	Name	Description
5	Share Host	Key in the IP Address or the name of the system you wish to share data with via Windows Share.
6	Share Name	Key in the name of the system you wish to share data with in the remote host.
7	Path to Image	Key in the location of source files that you wish to share via Windows Share.
8 9	User/Password (Optional)	Key in the USERNAME and PASSWORD for the person to access the data that you want to share and click the SET button to enter your selections.

Drive Redirection

Click on this menu option to make local drives accessible for other users via console redirection, and brings up the DRIVE REDIRECTION screen (Figure 3-8). See Table 3-8 for a list and description of controls in this screen.

This function allows you to share your local drives (Floppy, CD-ROM and HDDs) with users in the remote systems.

Figure 3-8. Driver Redirection Screen

Table 3-8. Driver Redirection Screen Controls

Item	Name	Description
1	Active Image (Drive1)	This window displays the file name of the data currently active in host Drive 1.
2	Active Image (Drive2)	This window displays the file name of the data currently active in host Drive 2.
3	Drive Redirection	Use this window to configure Drive Redirection settings.
4	Disable Drive Redirection	Check the box to disable Drive Redirection. Once this function is disabled, local drives will not be accessible for other users in remote host.

Table 3-8. Driver Redirection Screen Controls (Continued)

Item	Name	Description
5	Force Read Only	Check this box to allow the data stored in local drives to be read in a remote system, but it cannot be overwritten to ensure data integrity and system security.
6	Apply Button	Once you've configured your settings, click the APPLY button to enter your settings.
7	Reset Default button	You can key in your own setting values and reset these values as "default" by clicking on this button to reset the defaults.

Virtual Media Options

Click on this menu option to bring up the VIRTUAL MEDIA OPTIONS screen (Figure 3-9). See Table 3-9 for a list and description of controls in this screen.

Figure 3-9. Virtual Media Options Screen
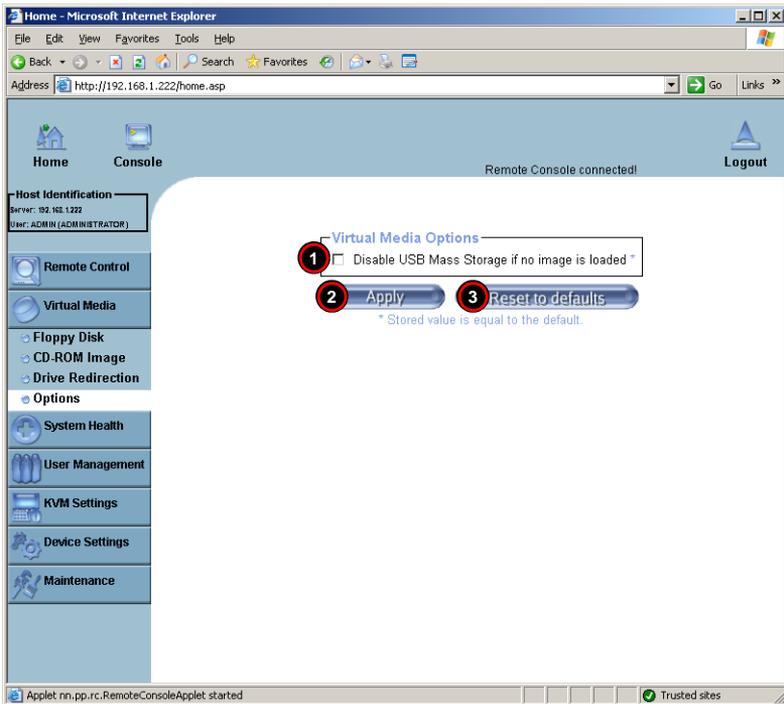
Table 3-9. Virtual Media Options Screen Controls

Item	Name	Description
1	Virtual Media Options Check Box	Use this option to disable or enable USB MASS storage in the remote host. Check this box to disable the function of VIRTUAL MEDIA OPTIONS to prevent data stored in a local drive from being accessed, or uploaded by the user in the remote host. The default setting is "enabled" (checked).
2	Apply Button	Once you've checked the VIRTUAL MEDIA Options check box, click APPLY to enter this value.
3	Reset to Defaults Button	If you want to set DISABLED as the default setting for VIRTUAL MEDIA OPTIONS, click on this button.

System Health

Click on the SYSTEM HEALTH button to display the Chassis Control, Monitor Sensor, System Event Log and Alert Settings menu options.

Chassis Control

Click on this menu option to bring up the CHASSIS CONTROL screen (Figure 3-10). See Table 3-10 for a list and description of controls in this screen.

Figure 3-10. Chassis Control Screen
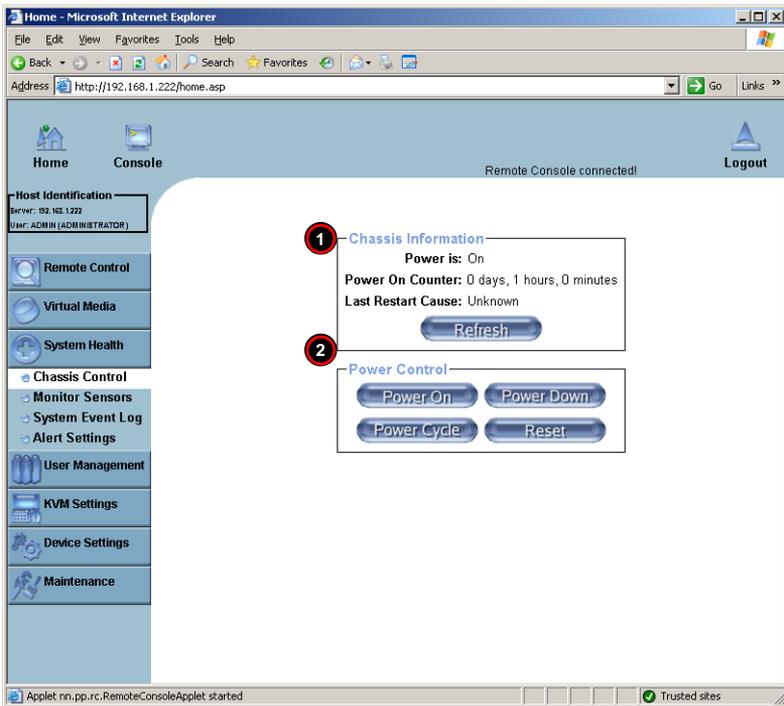
Table 3-10. Chassis Control Screen Controls

Item	Name	Description
1	Chassis Information	The following remote chassis information are included: • Power Is: This indicates if the system is on or off for the remote host. • Power On Counter: If power is on, then the counter indicates the length of time the power has been turned on. • Last Restart Cause: This item states the reason why the host system is restarted if the system has been turned off. • Refresh: Click the REFRESH button to update the information in the CHASSIS INFORMATION section above.
2	Power Control	The following Power Control items are included: • Power On: Click on this button to power on the system for the remote host. • Power Down: Click on this button to power down the system for the remote host. • Power Cycle: Click on this button to power down the system for the remote host and turn it back on later. • Reset: Click on this button to reset the remote console.

Monitor Sensor

Click on this menu option to bring up the MONITOR SENSOR screen (Figure 3-11). This screen displays a table with health monitoring information. See Table 3-11 for details on this table's information. Clicking the Refresh button refreshes the data in the screen.

Figure 3-11. Monitor Sensor Screen
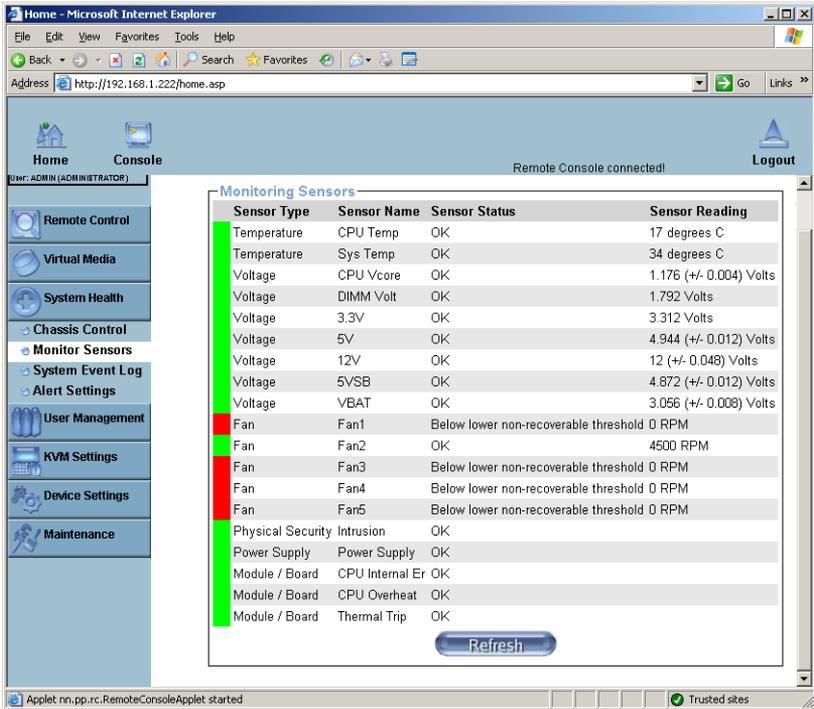
Table 3-11. Monitoring Sensors Table

Sensor Type	Sensor Name	Description
Temperature Monitoring	CPU1 Temperature (Temp A, Temp B)	Temp A: CPU1 Core1 Temperature, Temp B: CPU1 Core2 Temperature,
	CPU2 Temperature (Temp A, Temp B)	Temp A: CPU2 Core1 Temperature, Temp B: CPU2 Core2 Temperature,
	System Temperature	

Table 3-11. Monitoring Sensors Table (Continued)

Sensor Type	Sensor Name	Description
Voltage Monitoring	CPU1 VCore	CPU1 Vcore: CPU1 Core Voltage
	CPU2 VCore	CPU2 Vcore: CPU2 Core Voltage
	3.3V	
	5V, 5VSB	5VSB: 5V Standby
	+12V, -12V	
	1.5V	
	VBAT	VBAT: Battery Voltage
Fan Control	Fan1/CPU Fan	CPU Fan
	Fan2/CPU Fan	CPU Fan
	Fan 3 – Fan 6	System Fans/Chassis Fans
Physical Security	Chassis Intrusion	Monitors chassis intrusion
Power Supply		There is a 5-pin connector (PWRI2C) on the motherboard for the power supply (if it supports power I^2C and power fail detect functions). The IPMI will monitor the power failure status.
Module/Board CPU0 Internal E.		Internal Error reported from CPU0. If Quad CPU motherboard is used, that means one of the CPUs has an error.
Module/Board CPU1 Internal E.		Internal Error reported from CPU1, if Dual CPU motherboard is used.
Module/Board CPU Overheat		When the CPU temperature exceeds this preset temperature, the overheat LED or alert will be triggered, the CPUs will slow down, the CPU fans will be in the full speed mode.
Module/Board Thermal Trip		There is thermal sensor in CPU that is triggered when temperature is too high. When this sensor is triggered, the CPU will shut itself down automatically to prevent damage. IPMI monitors this signal and logs the status in the event log.

System Event Log

Click on this menu option to bring up the SYSTEM EVENT LOG screen (Figure 3-12). This screen displays the System Health Event Log for the remote host system. See Table 3-12 for details on this screen's controls and features.

Figure 3-12. System Event Log Screen
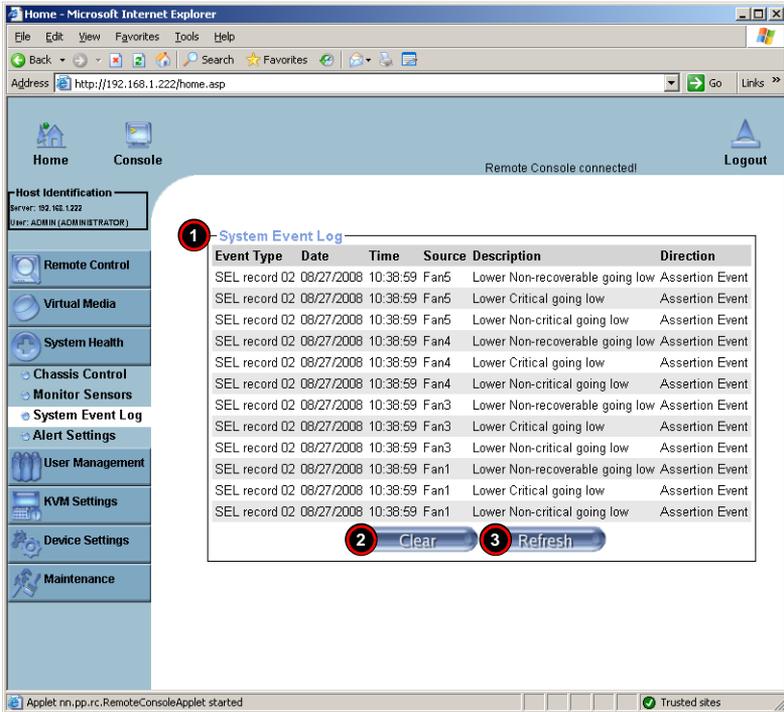
Table 3-12. System Event Log Screen Controls and Features

Item	Name	Description
1	System Event Log	This table lists system event log information in order of its latest appearance.
2	Clear Button	Clicking this button clears information from the System Event Log.
3	Refresh Button	Clicking this button refreshes the data on the screen.

Alert Settings

Click on this menu option to bring up the ALERT SETTINGS screen (Figure 3-13), which displays alert settings for the remote host system. The items monitored include a FILTER LIST, a POLICY LIST and a LAN DESTINATION LIST. Clicking on the heading for each of these lists displays only that display list on the screen.

Figure 3-13. Alert Settings Screen
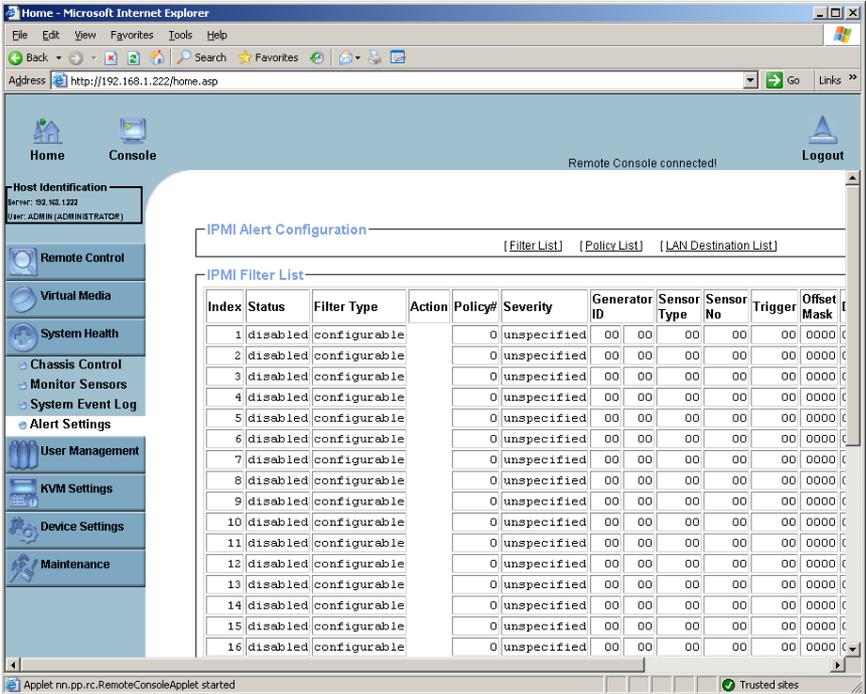
User Management

Click on the USER MANAGEMENT button to display the Change Password, Users & Groups and Permissions menu options.

Change Password

Click on this menu option to bring up the CHANGE PASSWORD screen (Figure 3-14). See Table 3-13 for a list and description of controls in this screen.

Figure 3-14. Change Password Screen
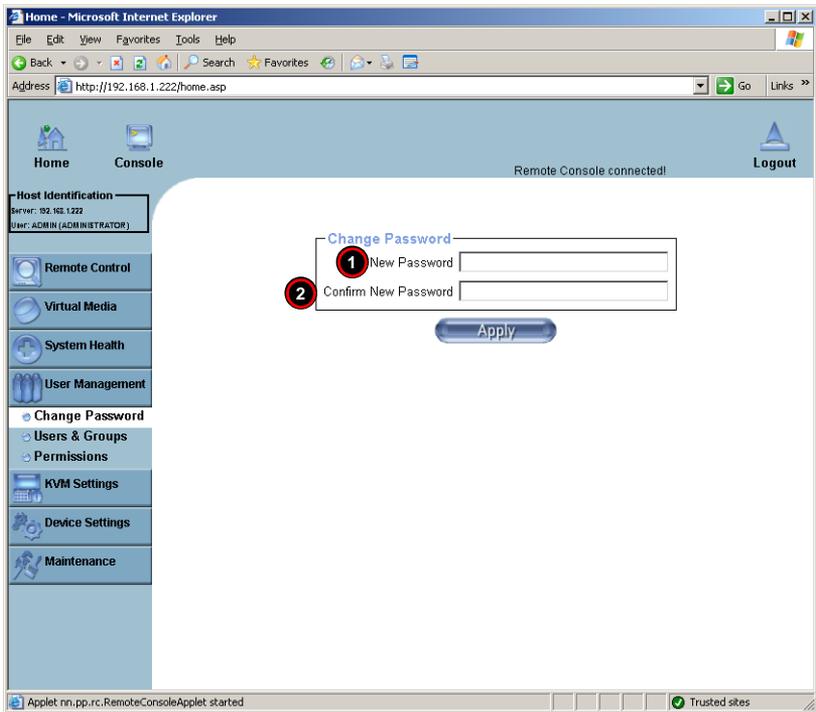
Table 3-13. Change Password Screen Controls

Item	Name	Description
1	New Password Field	Key in your new password in the field.
2	Confirm New Password Field	Key in your new password in the field again and click the APPLY button to confirm it.

Users & Groups

Click on this menu option to bring up the USERS & GROUPS screen (Figure 3-15). See Table 3-14 for a list and description of controls in this screen.

**Figure 3-15. Users & Groups Screen**
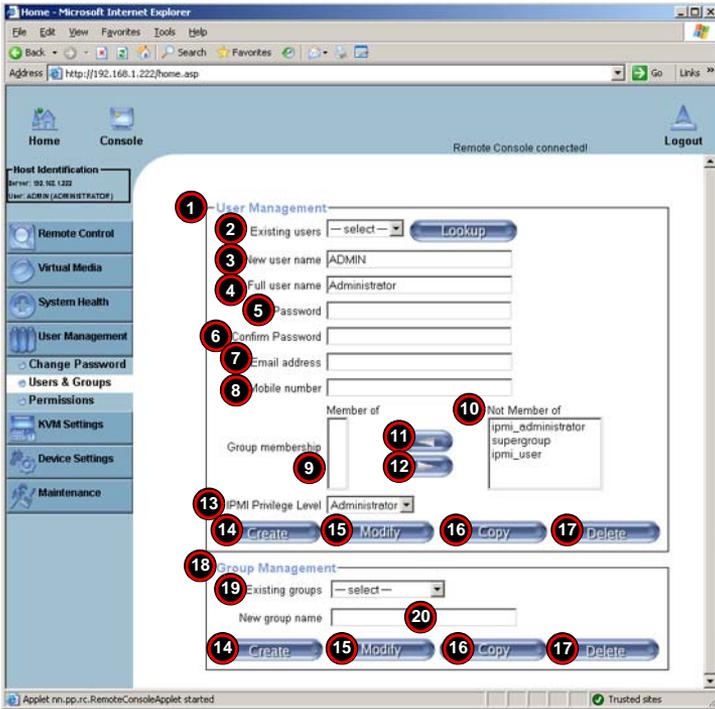
Table 3-14. Users & Groups Screen Controls

Item	Name	Description
1	User Management	This window displays the user's information.
2	Existing Users	Select an existing user for information updates. Once a user is selected, click on the LOOKUP button on right to view user information.
3	New User Name	Enter a new user name in this field.
4	Full User Name	Enter a full user name in this field.
5	Password	Type the user's password in the field and then type the password again in the next field to confirm it. The password must be four (4) characters or longer in length.
6	Confirm Password	
7	Email Address	(Optional) Enter the user's email address in the field.
8	Mobile Phone	(Optional) Enter the user's mobile phone number in the field.

Table 3-14. Users & Groups Screen Controls (Continued)

Item	Name	Description
9 –12	Group Membership	This section allows you to enter Group Membership information. The GROUP MEMBERSHIP field (Item 9) indicates the group that the user belongs to. To select a group: 1. Click on the group name on the NOT MEMBER OF pane (Item 10) to select it. 2. Click on the backwards arrow (Item 11) to enter the group name in the GROUP MEMBERSHIP field (Item 9). 3. Reverse the procedure using the forwards arrow (Item 12) to remove the user from a group.
13	IPMI Privilege Level	Click on the arrow key on the right to activate the PRIVILEGE SELECTION menu. The IPMI PRIVILEGE LEVEL contains five categories: NO ACCESS, USER, OPERATOR, ADMINISTRATOR and OEM.
14	Create	Click on this button to enter a new user's or group information in the USER/GROUP MANAGEMENT fields.
15	Modify	Click on this button to modify a user's or group information in the USER/GROUP MANAGEMENT fields.
16	Copy	Click on this button to copy a user's or group information in the USER/GROUP MANAGEMENT fields. **Copy User** 1. Choose an EXISTING USER from the selection box. 2. Enter a new user name in the NEW USER NAME field. 3. Click on the COPY button and a new user with the name you have entered will be created. The properties of the selected user will be copied to the new user. **Copy Group** 1. Choose an EXISTING group from the selection box. 2. Enter a new group name in the NEW GROUP NAME field.\ 3. Click on the COPY button and a new group with the name you've typed in will be created. The properties of the selected group will be copied to the new group.
17	Delete	Click on this button to delete a user's or group information in the User/Group Management fields.
18 – 20	Group Management	This section allows you to either select, modify, copy, delete or create a group for better user management. You can either select a group from the EXISTING GROUPS drop-down list box (Item 19), or you can create a group by entering a name in the NEW GROUP NAME field (Item 20) and then pressing the CREATE button. Groups can be deleted, copied or modified by selecting them from the EXISTING GROUPS drop-down list box (Item 19) and clicking on the DELETE, COPY or MODIFY buttons respectively.

Permissions

Click on this menu option to bring up the PERMISSIONS screen (Figure 3-16). See Table 3-15 for a list and description of controls in this screen.

Figure 3-16. Permissions Screen
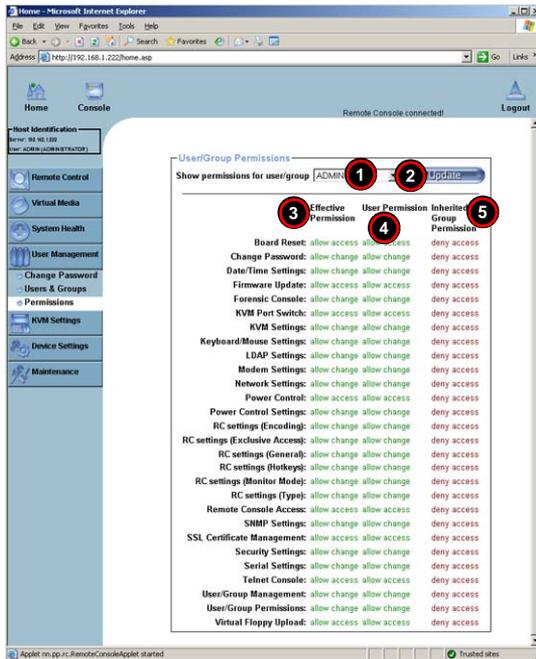
Table 3-15. Permissions Screen Controls

Item	Name	Description
1	Show Permissions for User/Group	Use this drop-down list box to select your user/group permissions selection.
2	Update Button	Click this button to update permissions information to correspond to the selection you made in the SHOW PERMISSIONS FOR USER/GROUP drop-down list box.
3	Effective Permissions	This table column indicates the actual permissions a user/group has.
4	User Permissions	This table column indicates the actual permissions a user has.
5	Inherited Group Permissions	This table column indicates the permissions a user has due to the fact that he or she belongs to a certain group.

KVM Settings

Click on the KVM SETTINGS button to display the User Console and Keyboard/Mouse menu options.

User Console

Click on this menu option to bring up the USER CONSOLE screen (Figure 3-17). See Table 3-16 for a list and description of controls in this screen.

Figure 3-17. User Console Screen

Table 3-16. User Console Screen Controls

Item	Name	Description
1	User Selection Field	This drop-down list box allows you to select which group the user belongs to.
2	Update Button	Once you've selected the group name, click on the UPDATE button to save the selections.
3	Transmission Encoding	This section allows you to decide how (the video) data is transmitted between the local system and the remote host. **NOTE:** You can only select one item from Item 4, 5 and 7.
4	Automatic Detection	Select this option to allow the OS to automatically detect the networking configuration settings such as the bandwidth of the connection line, and transmit data accordingly.
5	Pre-configured	This option allows you to select the data transmission setting from a pre-defined options list. The pre-configured settings will provide the best result because the compression and color depth settings will be adjusted for optimization based on the network speed indicated.
6	Network speed	Once you've selected the pre-configured option above, you then can select a desired network speed setting from this drop-down list box.
7	Manually	You can select a desired network speed setting using this option. This allows you to adjust both Compression (Item 8) and Color Depth (Item 9) settings individually.
8	Compression	This drop-down list box is used to specify data compression. Data signal transmission is compressed to save bandwidth. High compression rates will slow down network interfacing, so you can not not use these when several users are connected to the network.
9	Color Depth	This drop-down list box is used to select either 16-bit high colors or 8-bit 256-colors. The standard color depth is 16-bit high color, and is recommended for compression level 0. For typical desktop interfaces, the setting of 8-bit 256-colors is recommended for faster data transmission.
10	Remote Console Type	This section allows you to decide which Remote Console Viewer to use.
11	Default Java VM (JVM)	Select this option to use the default Java Virtual Machine of your web browser. This can be the Microsoft JVM or the Sun JVM, depending on the configuration of your browser.
12	Sun Microsystems Java Browser Plugin	Select this option when the JVM used to run the code for the Remote Console is a Java Applet. If you use this function for the first time and the appropriate Java plugin is not yet installed in your system, you may download and install it automatically. To download and install it, you need to check YES in the dialogs. Downloading Sun's JVM will allow you to use a stable and identical JVM across different platforms. **NOTE:** If your internet connection is slow, please pre-install the JVM on your administration machine.
13	Miscellaneous Remote Console Settings	This section allows you to specify some other Remote Console settings.

Table 3-16. User Console Screen Controls (Continued)

Item	Name	Description
14	Start in Monitor Mode	Check this box to enable the Start in Monitor Mode, which allows data to be displayed in the remote monitor as soon as the Remote Console is activated. **NOTE:** The data displayed in the remote monitor is ready-only.
15	Start in Exclusive Access Mode	Check this box to enable the Exclusive Access Mode immediately at Remote Console startup. This forces all other users connected to the network to close, and no other users can open the Remote Console until you disable this function or log off.
16	Mouse Hotkey	This section allows you to configure a hot key combination for mouse mode.
17	Hotkey	This drop-down list box allows you to use a hot key combination to specify either Mouse Synchronization Mode or Single Mouse Mode.
18	Remote Console Button Keys	This section allows you to define button keys for the remote host. The button keys allow simulating keystrokes on a remote host or issuing commands to a remote system. These button keys are needed when you have a missing key or when you want to prevent interference to the local system. After a remote console button key is set, it will appear on the right upper corner of the remote monitor screen. **NOTE:** For details instructions in creating button keys, please click on the link – Click here for Help.
19	Button Keys	Enter the syntax of a button key in the field provided. **NOTE:** For detailed instructions in creating button keys, please click on the link – Click here for Help.
20	Name	Key in the name of a button key in the field provided. **NOTE:** For details instructions in creating button keys, please click on the link – Click here for Help.
21	More Entries Button	Click on this button to create more Button Keys.
22	Apply Button	When you have made all your changes to this screen, click the APPLY button to apply all your changes to the system.
23	Reset to Defaults Button	Click this button to restore all default settings to the screen.

Keyboard/Mouse

Click on this menu option to bring up the KEYBOARD/MOUSE screen (Figure 3-18). See Table 3-17 for a list and description of controls in this screen.

Figure 3-18. Keyboard/Mouse Screen
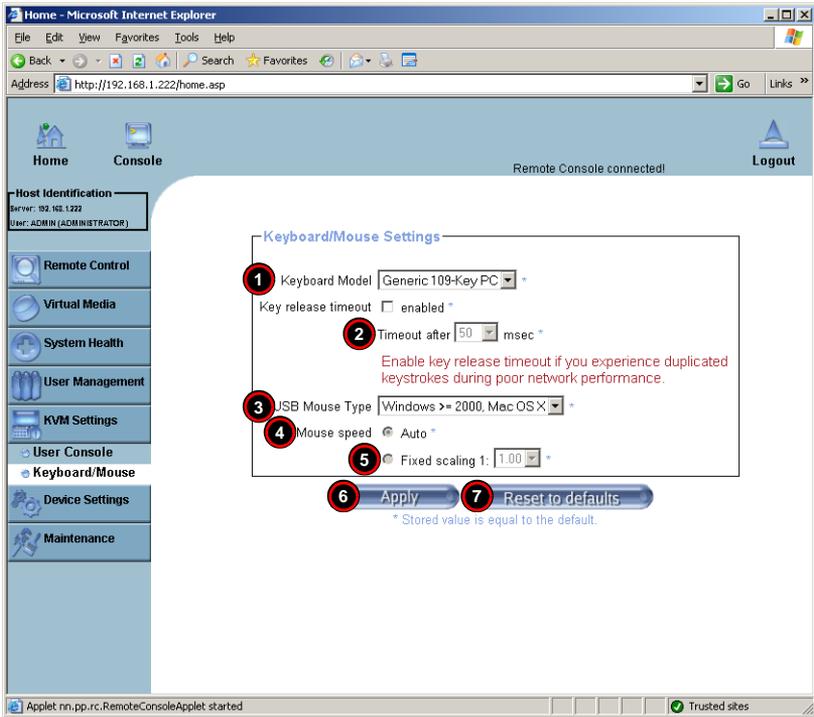
Table 3-17. Keyboard/Mouse Screen Controls

Item	Name	Description
1	Key Release Timeout	Check this box to enable this drop-down list box, which sets the time limit for a key to be pressed by the user.
2	Timeout after_____msec	If the KEY RELEASE TIMEOUT check box has been enabled, then use this drop-down list box to select the time-out setting for the item above.
3	USB Mouse Type	For the USB Mouse to function properly, please select the correct OS for your system from this drop-down list box.
4	Mouse Speed-Auto	Select this option to allow your system to automatically set your mouse speed.
5	Fixed Scaling	Select this selection to enable a drop-down list box for manually setting your mouse speed.

Table 3-17. Keyboard/Mouse Screen Controls (Continued)

Item	Name	Description
6	Apply Button	Click on this button to apply your selections from this screen to the system.
7	Reset to Defaults Button	You can cancel your selections and switch back to the default values by clicking on this button.

Device Settings

Click on the DEVICE SETTINGS button to display the Network, Dynamic DNS, Security, Certificate, Date/Time and Event Log menu options.

Network

Click on this menu option to bring up the NETWORK screen (Figure 3-19). See Table 3-18 for a list and description of controls in this screen.

Figure 3-19. Network Screen

Table 3-18. Network Screen Controls

Item	Name	Description
1	Network Basic Settings	This section allows you to configure basic settings for your network.
2	IP Auto Configuration	Select a desired item from this drop-down list for your IP Auto Configuration. The options are NONE, DHCP, and BOODP.
3	Preferred Host Name	Enter a Preferred Host Name in the field provided. **NOTE:** This field is used for DHCP settings only.
4	IP Address	Enter the IP Address for the remote host in the field provided.
5	Subnet Mask	Enter the net mask of the local network in the field provided.
6	Gateway IP Address	Enter the local network router's IP address in this field for the accessibility of the users that are not connected to the local network.
7	Primary DNS Server IP Address	Enter the IP Address of the Primary Domain Name Server in this field.
8	Secondary DNS Server IP Address	Enter the IP Address of the Secondary Domain Name Server in the field. It will be used when the Primary DNS Server cannot be contacted.
9	Network Miscellaneous Setting	This section allows you to configure Network Miscellaneous settings.
10	Remote Console & HTTPS Port	Enter the port numbers that the remote host and the HTTP server are listening. If a number is not entered in the field, the default value is used.
11	HTTP Port	Enter the port number that the HTTP server is listening. If a number is not entered in the field, the default value is used.
12	SSH Port	Enter the port number the SSH server is listening. If a number is not entered in the box, the default value is used.
13	Bandwidth Limit	Enter the maximum bandwidth value for network interfacing. The value should be in Kbits per second.
14	Enable SSH Access	Click this check box to enable SSH Access.
15	Disable Setup Protocol	Check this check box to disable the Setup Protocol function for the SIMBL card.
16	LAN Interface Setting	This section allows you to configure LAN Interface settings.
17	LAN Interface Speed	Use this drop-down list box to select a desired speed. The options are: AUTO-DETECT, 10 MEGA BITS PER SECOND or 100 MEGA BITS PER SECOND. If AUTO-DETECT is selected, the LAN Interface Speed will be set at the optimized speed based on the system configurations detected by the OS.
18	LAN Interface Duplex Mode	Use this drop-down list box to select a desired LAN Interface Duplex Mode. The options are: AUTO-DETECT, HALF DUPLEX and FULL DUPLEX. If AUTO-DETECT is selected, the LAN Interface Duplex Mode will be set to the optimized setting based on the system configurations detected by the OS.

Table 3-18. Network Screen Controls (Continued)

Item	Name	Description
19	Apply Button	Click on this button to apply your selections from this screen to the system.
20	Reset to Defaults Button	You can cancel your selections and switch back to the default values by clicking on this button.

Dynamic DNS

Click on this menu option to bring up the DYNAMIC DNS screen (Figure 3-20). See Table 3-19 for a list and description of controls in this screen.

Figure 3-20. Dynamic DNS Screen
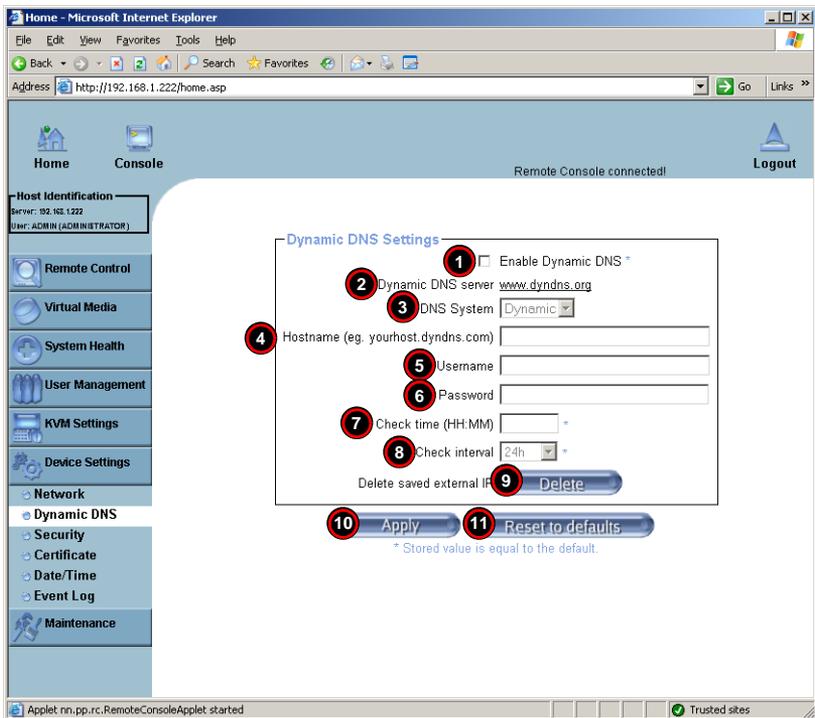
Table 3-19. Dynamic DNS Screen Controls

Item	Name	Description
1	Enable Dynamic DNS	Check this check box to enable the Dynamic DNS service.
2	Dynamic DNS Server www.dyndns.org	Click this link to access the DynDNS web site. This is the server name where the DDNS Service is registered.

Table 3-19. Dynamic DNS Screen Controls (Continued)

Item	Name	Description
3	DNS System	If you have enabled the Dynamic DNS (Item 1 above), then you can use this drop-down list box to select from the CUSTOM or DYNAMIC options. Select CUSTOM to use your own system as the DNS server. Select DYNAMIC to use the pre-configured Dynamic DNS as your server.
4	Hostname	Enter the name you want to use for the remote host server.
5 and 6	Username/Password	Enter the username and the password for the remote host user.
7	Check time (HH:MM)	Enter the time the SIMBL card first registers with the DNS server in the **HH:MM** Format. (example: 07:25, 19:30)
8	Check Interval	Enter the interval for the IPMI to report to the Dynamic DNS again.
9	Delete Button	Click on the Delete button to delete the IP Address for an external system that has been previously entered and saved.
10	Apply Button	Click on this button to apply your selections from this screen to the system.
11	Reset to Defaults Button	You can cancel your selections and switch back to the default values by clicking on this button.

Security

Click on this menu option to bring up the SECURITY screen (Figure 3-21). See Table 3-20 for a list and description of controls in this screen.

Figure 3-21. Security Screen
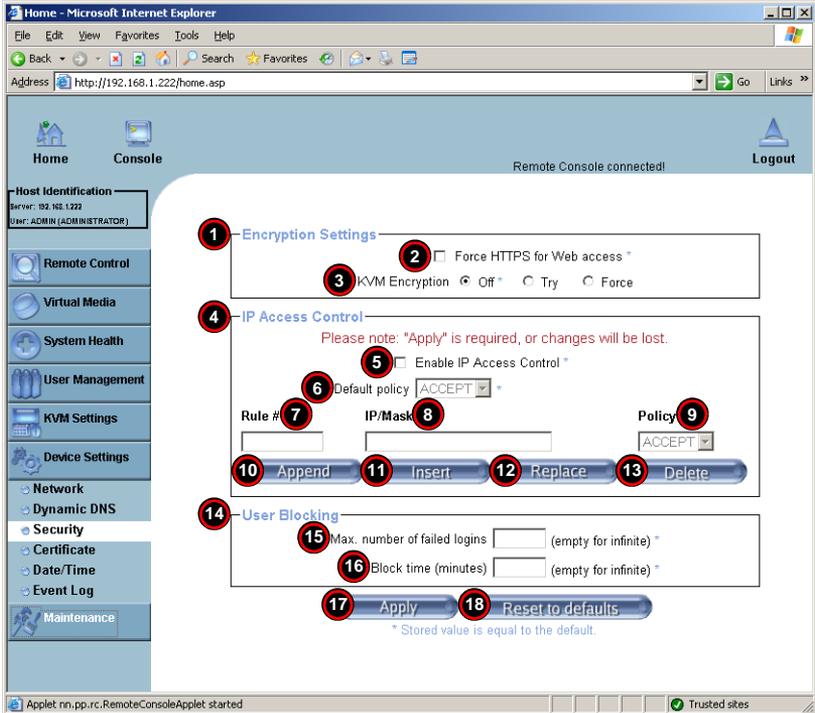
Table 3-20. Security Screen Controls

Item	Name	Description
1	Encryption Settings	This section allows you to configure encryption settings.
2	Force HTTPS for Web Access	This check box allows you to enable security in your web connection by forcing you to use HTTPS for web access. If enabled, you will need to use an HTTPS connection to access to the web.

Table 3-20. Security Screen Controls (Continued)

Item	Name	Description
3	KVM Encryption	These options allow you to configure the encryption of the RFB protocol. RFB is used by the remote host to transmit video data displayed in the host monitor to the local administrator machine, and transmits keyboard and mouse data from the local administrator machine back to the remote host. The options are as follows: • If set to OFF, no encryption is used. • If set to TRY, the applet (-JVM of the remote host) attempts to make an encrypted connection, and when a connection cannot be established an unencrypted connection is used. • If set to FORCE, the applet makes an encrypted connection, with an error reported if no connection is made.
4	IP Access Control	This section allows you to configure IP Access Control settings.
5	Enable IP Access Control	This check box allows you to enable IP Access Control. This function is used to limit user access to the network by identifying them by their IP addresses. **NOTE:** This function is available to the LAN interface only.
6	Default Policy	When IP Access Control is ENABLED, you can select either ACCEPT or DROP, allowing access or denying access according to pre-defined rules. **NOTE:** If this option is set to DROP, and you do not have a set of rules that will accept the internet connection, then the internet connection over LAN is impossible. In this case, you need to change your security settings via modem or by disabling the IP Access Control.
7	Rule#	Enter a rule number in the box for a command (or commands) that are used by the IP Access Control.
8	IP/Mask	Enter the IP Address or an IP Address Range for which the command(s) will be applied.
9	Policy	This item instructs the IPMI what to do with the matching packages. **NOTE:** The sequence or the order of the rules is important. The rules are checked in the ascending order until a rule matches. All rules below the matching one will be ignored. The default policy applies if no matching rules are found.
10	Append Button	Click this button to add IP Address/Mask, rules or commands to the existing ones.
11	Insert Button	Click this button to insert IP Address/Mask, rules or commands to the existing ones.
12	Replace Button	Click this button to replace an old IP Address/Mask, rule or command with a new one.
13	Delete Button	Click this button to delete (a part of) an existing IP Address/Mask, rule or command.
14	User Blocking	This section allows you to set the conditions for how a user is blocked.

Table 3-20. Security Screen Controls (Continued)

Item	Name	Description
15	Max. Number of Failed Logins	Enter the maximum number of failed attempts or failed logins allowed for a user. If the number of failed logins or attempts exceeds this maximum number allowed, the user will be blocked from system. **NOTE:** If this box is left empty, the user is allowed to try to login to the server indefinitely. For network security, this is not recommended.
16	Block Time (Minutes)	Enter the number of minutes allowed for a user to attempt to login. If the user fails to login within this time allowed, the user will be blocked from system. **NOTE:** If this box is left empty, the user is allowed to try to login to the server indefinitely. For network security, this is not recommended.
17	Apply Button	Click on this button to apply your selections from this screen to the system.
18	Reset to Defaults Button	You can cancel your selections and switch back to the default values by clicking on this button.

Certificate

Click on this menu option to bring up the CERTIFICATE screen (Figure 3-22). See Table 3-21 for a list and description of controls in this screen.

Figure 3-22. Certificate Screen

Table 3-21. Certificate Screen Controls

Item	Name	Description
1	Certificate Signing Request (CSR)	This section allows you to define the Certificate Signing Request (CSR) form. The IPMI uses the Secure Socket Layer (SSL) protocol for encrypted network traffic between itself and the remote host servers. When a connection is made, the IPMI has to expose its identity to a remote host by using a cryptographic certificate. To create a certificate that is unique to a particular IPMI card or SIMBL card, a certification authority (CA) needs to fill out the CSR form indicated in the CSR section.
2	Common Name	Enter the (fully qualified domain) network name of the IPMI.
3	Organization Unit	Enter the name of the department within an organization to which the IPMI belongs.
4	Organization	Enter the name of the organization to which the IPMI belongs.

Table 3-21. Certificate Screen Controls (Continued)

Item	Name	Description
5	Locality/City	Enter the name of the city or the location where the organization is located.
6	State/Province	Enter the name of the state/province where the organization is located.
7	Country (ISO)	Enter the name of the country or the ISO code where the organization is located.
8	Email	Enter the email address of a contact person that is responsible for the IPMI.
9	Challenge Password	Enter a challenge Password for the Certification Authority to authorize necessary changes to the certificate at a later time. The password must be four characters or longer.
10	Confirm Challenge Password	Enter a challenge Password one more time to confirm it.
11	Key Length (bits)	This is the length of key generated in bits.
12	Create Button	Click on this button to create a certificate from the information you have entered on this screen.
13	Reset to Defaults Button	You can cancel your selections and switch back to the default values by clicking on this button.

Date/Time

Click on this menu option to bring up the DATE/TIME screen (Figure 3-23). See Table 3-22 for a list and description of controls in this screen. This screen allows you to set the internal real-time clock for your SIMBL card.

Figure 3-23. Date/Time Screen
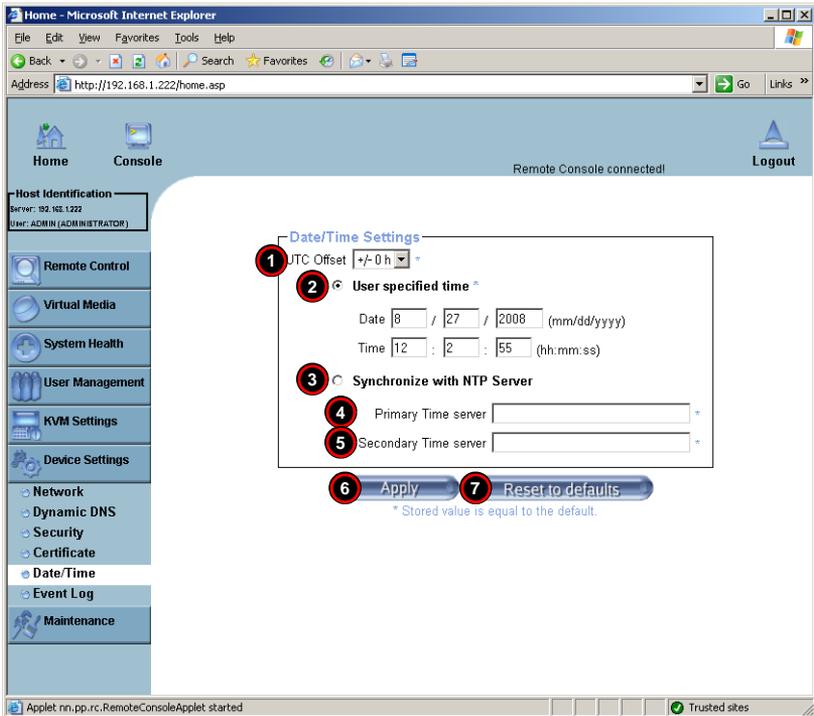
Table 3-22. Date/Time Screen Controls

Item	Name	Description
1	UTC Offset	This window allows you to offset the UTC Timer.
2	User Specified Time	This option allows the user to enter the time values for the SIMBL internal real-time clock.
3	Synchronize with NTP Server	Enabling this option allows you to enter the IP Address for the NTP (Network Time Protocol) Server that you want to synchronize with your SIMBL internal real-time clock.

Table 3-22. Date/Time Screen Controls (Continued)

Item	Name	Description
4 and 5	Primary Time Server/ Secondary Time Server	Enter the IP Address for the primary NTP Server and the secondary NTP Server that you want your SIMBL internal real-time clock to synchronize with. **NOTE:** Daylight saving time cannot be automatically adjusted. Please manually set up the UTC offset twice a year for your timer to work properly.
6	Apply Button	Click on this button to apply your selections from this screen to the system.
7	Reset to Defaults Button	You can cancel your selections and switch back to the default values by clicking on this button.

Event Log

Click on this menu option to bring up the EVENT LOG screen (Figure 3-24). See Table 3-23 for a list and description of controls in this screen.

Figure 3-24. Event Log Screen
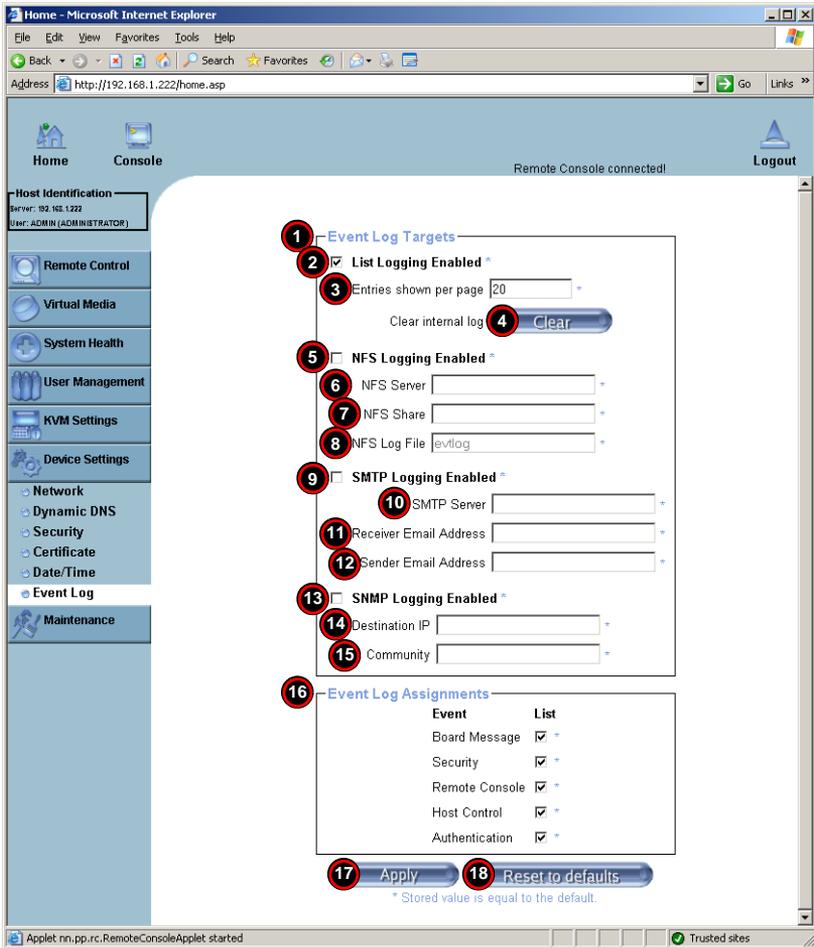
Table 3-23. Event Log Screen Controls

Item	Name	Description
1	Event Log Targets	This section allows you to manually set event log targets and settings.
2	List Logging Enabled	Checking this box activates the event-logging list. To show the event log list, click on the EVENT LOG menu option from the MAINTENANCE menu. **NOTE:** The maximum number of log list entries is 1,000 events. Every entry that exceeds this limit automatically overrides the oldest one in the list. If the RESET button is pressed, all logging information is saved; however, all logging data is also lost if a hard reset is performed or the system loses power.
3	Entries Shown Per Page	Enter the number of entries you want to display on a page into this field.
4	Clear Button	Click this button to clear the internal event log from the memory.
5	NFS Logging Enable	Checking this box enables NFS Logging, which creates a Network File System (NFS) for the event logging data.
6	NFS Server	Enter the IP Address of the NFS Server into this field.
7	NFS Share	Enter the path of the Network File System in which the event logging data is stored into this field.
8	NFS Log File	Enter the filename of the Network File System in which the event logging data is stored into this field.
9	SMTP Logging Enable	Checking this box enables SMTP (Simple Mail Transfer Protocol) logging.
10	SMTP Server	Enter the IP Address for the SMTP Server into this field.
11	Receiver Email Address	Enter the email address into this field that the SMTP event logging data is sent.
12	Sender Email Address	Enter the email address from which the SMTP event logging data is sent into this field.
13	SNMP Logging Enable	Checking this box enables SNMP (Simple Network Management Protocol) logging.
14	Destination IP	Enter the IP address where the SNMP trap is sent into this field.
15	Community	Enter in this field the name of the community if the receiver requires a community string.
16	Event Log Assignments	This section allows you to specify the types and the destination for event logging. For each event listed in this section, check the box next to it if you want to list it for your event log.
17	Apply Button	Click on this button to apply your selections from this screen to the system.
18	Reset to Defaults Button	You can cancel your selections and switch back to the default values by clicking on this button.

Maintenance

Click on the MAINTENANCE button to display the Device Information, Event Log, Update Firmware and Unit Reset menu options.

Device Information

Click on this menu option to bring up the DEVICE INFORMATION screen (Figure 3-25). See Table 3-24 for a list and description of controls in this screen.

**Figure 3-25. Device Information Screen**
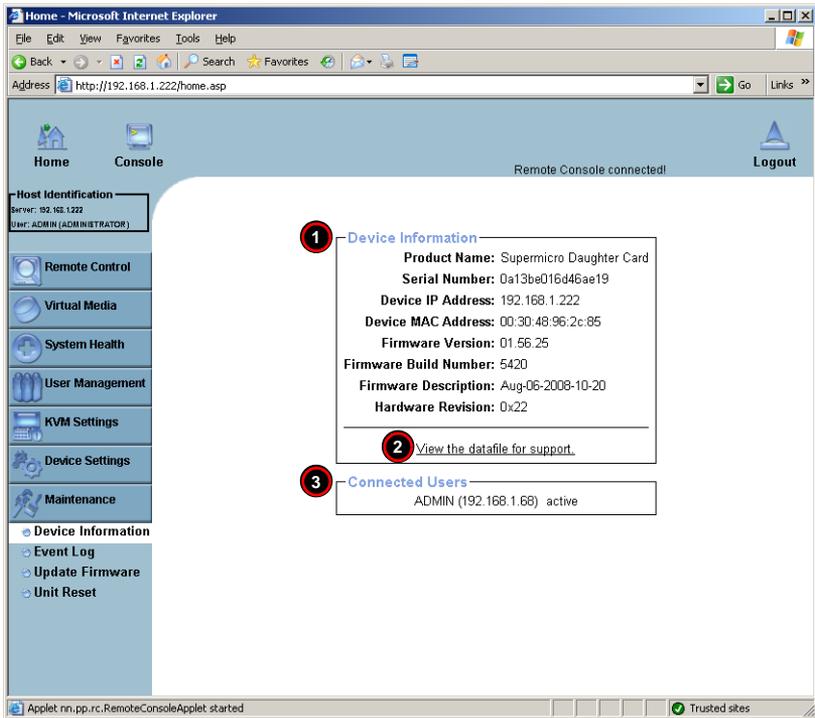
Table 3-24. Device Information Screen Controls

Item	Name	Description
1	Device Information	This section displays information on the SIMBL card and its firmware.
2	View the Data File for Support	Click on this link to view the XML file which contains product information needed for technical support.
3	Connected Users	This section lists the name(s), the IP Address(es) and the status of the connect person(s).

Event Log

Click on this menu option to bring up the EVENT LOG screen (Figure 3-26). This brings up the EVENT LOG list, which contains the information of events that are recorded by the SIMBL in the order of Date/Time, Types, and the descriptions of the events including the IP address(es), person(s) and activities involved.

Figure 3-26. Event Log Screen

Update Firmware

Click on this menu option to bring up the UPDATE FIRMWARE screen (Figure 3-27). See Table 3-25 for a list and description of controls in this screen.

Figure 3-27. Update Firmware Screen
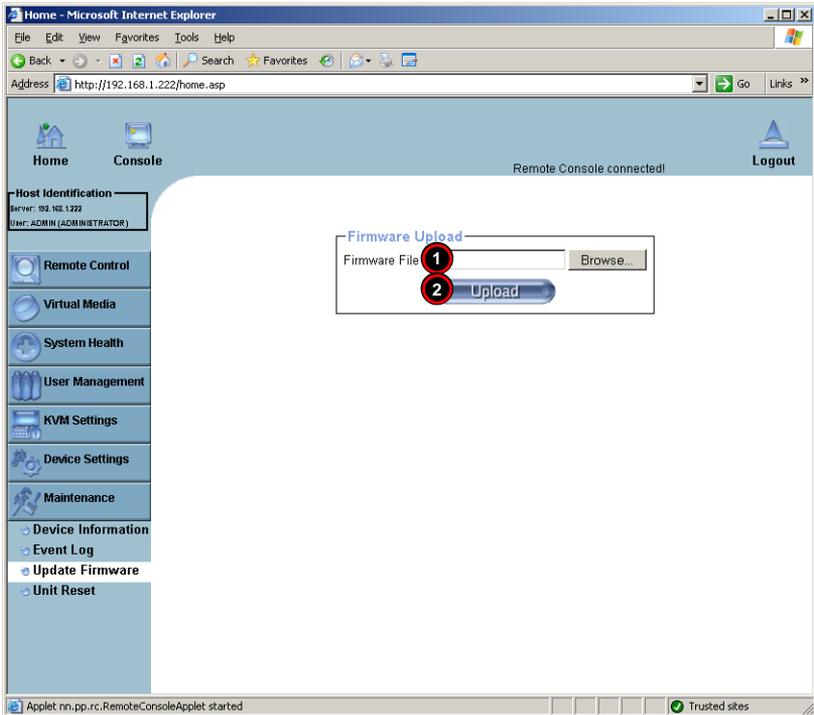
Table 3-25. Update Firmware Screen Controls

Item	Name	Description
1	Firmware File	Enter the name of the firmware you want to update or click on the BROWSE button to select the firmware file.
2	Upload Button	Click on the UPLOAD button to upload the firmware file to the server for the update. **NOTE:** This process is not reversible once the firmware is updated, so proceed with caution. It might take a few minutes to complete the procedure.

Unit Reset

Click on this menu option to bring up the UNIT RESET screen (Figure 3-28). See Table 3-26 for a list and description of controls in this screen.

**Figure 3-28. Unit Reset Screen**
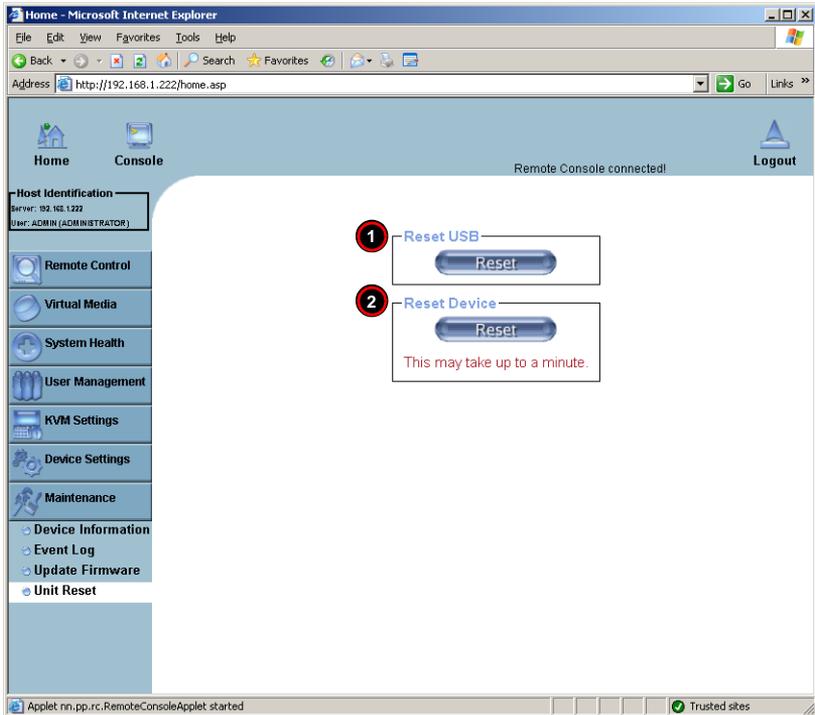
**Table 3-26. Unit Reset Screen Controls**

Item	Name	Description
1	Reset USB	Click the RESET button to reset the USB module.
2	Reset Device	Click the RESET icon to cold reset the IPMI device or SIMBL.

3-6   Remote Console Screen Controls

The REMOTE CONSOLE screen (Figure 3-29) contains additional controls and display icons. These include a button for displaying DRIVE REDIRECTION controls, an OPTIONS menu and icons for displaying the status of the mouse and keyboard on the system.

Figure 3-29. Remote Console Options
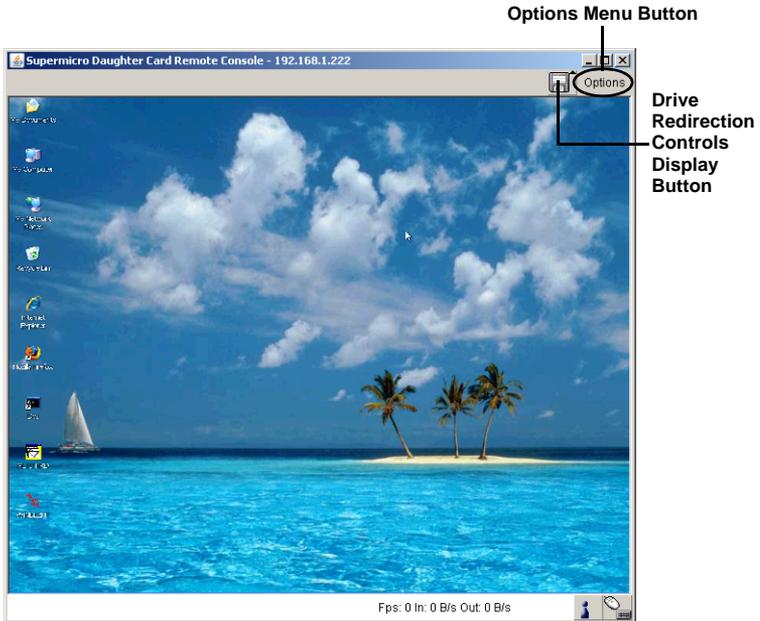
These controls are further detailed and explained below.

Drive Redirection Controls

The DRIVE REDIRECTION controls (Figure 3-30) display is toggled on and off when the DRIVE REDIRECTION CONTROLS DISPLAY button is clicked in the REMOTE CONSOLE screen. See Table 3-27 for a description of each of the controls shown in this display.

**Figure 3-30. Drive Redirection Controls – Displayed**
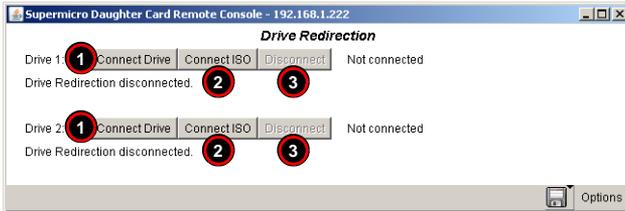
Table 3-27. Drive Redirection Controls

Item	Name	Description
1	Connect Drive	Clicking this button brings up the SELECT A DRIVE TO REDIRECT window (Figure 3-31) for locating a drive and making it accessible for remote console interaction. In this window select a drive from the drop-down list box provided and press OK to confirm your selection. You may additionally click the REFRESH LIST button to refresh the list in the drop-down list box, and you may click the ENABLE WRITE SUPPORT check box enable write support for the drive selected. Once you have clicked CONNECT, and have specified the drive you wish to redirect to, all users logged in remote servers will have access to the local drive that you have selected.
2	Connect ISO	Click this button to allow you to redirect an CD/DVD ISO image. This brings up a CHOOSE ISO IMAGE TO REDIRECT window, which allows you to locate and select a CD ISO image.
3	Disconnect	Click this button to cancel the connection established between a local drive and a remote server. Once you click this button, the drive you have selected will not be accessible for remote console interface.

Figure 3-31. Select a Drive to Redirect Window

Options Menu

After the remote console screen appears, click on the OPTION button on the very upper right corner to display the OPTIONS menu for console video settings and options. Table 3-28 contains a complete list and description of all the menu options in the OPTIONS menu.

Table 3-28. Remote Console Options Menu Options

Menu Option	Description
Monitor Only	Select the MONITOR ONLY menu option to turn on or off the MONITOR ONLY function. If MONITOR ONLY is selected, the KB/MOUSE icon on the lower right corner will be crossed out, you can only view or monitor remote console activities, and any remote console interaction is now no longer available.
Exclusive Access	By selecting the EXCLUSIVE ACCESS menu option, with the appropriate permission, you can use this function to force other users to quit the remote console and claim the console for your own exclusive use. Please note that when this function is selected, the second user icon on the lower left corner of the screen will be crossed out.
Readability Filter	Select this menu option to turn the READABILITY FILTER function on or off. When turned on, this function preserves most of the screen details even when the screen image is substantially scaled down. **NOTE:** This item is available for a system with a JVM 1.4 or higher.
Scaling	Clicking this menu option allows you to scale the remote console screen to a desired size. Clicking on this menu option accesses its submenu for you to select a desired setting from the following options: 25%, 50%, 100% and SCALE TO FIT.
Local Cursor	This function allows you to choose the desired shape for the local cursor pointer. Clicking on this menu option allows you to access its submenu and select a desired shape from the following options: TRANSPARENT, DEFAULT, BIG, PIXEL, and CROSSHAIR. The availability of the shapes depends on the Java Virtual Machine used.
Chat Window	This function allows you to communicate with other users logged in to the same remote host. By clicking on the CHAT WINDOW menu option, you bring up a CHAT window (Figure 3-33) for communicating with other users.
Encoding	This sub-menu contains menu options for setting video encoding settings.
Predefined	This sub-menu sets the video encoding for a predefined setting.
Video Optimized Hi-color	Sets the predefined video setting to optimized for hi-color video display.
Video Optimized	Sets the predefined video setting to optimized for video display.
LAN Hi-color	Sets the predefined video setting to hi-color video at LAN speeds.
LAN	Sets the predefined video setting to LAN download speeds.
DSL	Sets the predefined video setting to DSL download speeds.
UMTS	Sets the predefined video setting to UMTS download speeds.
ISDN	Sets the predefined video setting to ISDN download speeds.
Modem	Sets the predefined video setting to modem download speeds.

Table 3-28. Remote Console Options Menu Options (Continued)

Menu Option	Description
GPRS	Sets the predefined video setting to GPRS download speeds.
GSM	Sets the predefined video setting to GSM download speeds.
Compression	This sub-menu is used to set video compression.
Video Optimized	Select this option for the optimized video compression.
0-None	Set this option for no video compression.
1-Fastest to 9-Best	Set one of these nine settings for varying amounts of video compression from Fastest (least) to Best (full) compression.
Color Depth	Use this sub-menu to set color depth for the REMOTE CONSOLE screen.
16-bit Hi-color	Sets the color depth to a full 16-bit hi-color level.
8-bit 256 colors	Sets the color depth to only 8-bit 256 colors.
4-bit 16 colors	Sets the color depth to only 4-bit 16 colors.
4-bit Grayscale	Sets the color depth to only 4-bit grey scale.
2-bit Grayscale	Sets the color depth to only 2-bit grey scale.
1-bit Black White	Sets the color depth to only 1-bit black and white.
Lossy	This setting toggles the Lossy setting on or off.
Soft Keyboard	Select this menu option to use the soft keys, which have been pre-installed in the "Soft Keyboard" of the particular language selected using the LOCAL KEYBOARD sub-menu (see below). After you have selected the SOFT KEYBOARD menu option, the SOFT KEYBOARD window is displayed as shown in Figure 3-32.
Local Keyboard	Select this sub-menu to manually change the local keyboard setting for remote console interaction and to change the language mapping of your browser machine running the remote console host. The sub-menu displays a list of major languages in the world that you may map your keyboard to.
Hotkeys	This submenu displays a list of hot keys for you choose. Selecting one hot key from the list displays it on the console screen in the upper left corner for you to use as a control button. **NOTE:** You need to use the USER CONSOLE screen (see Figure 3-17) to set hot keys.

Figure 3-32. Example of a Soft Keyboard Window

Figure 3-33. Chat Window
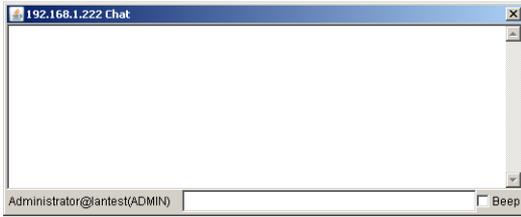
Chapter 4
Frequently Asked Questions

Below for your reference are a couple of frequently asked questions and their answers.

Question 1: How do I flash the firmware of an IPMI card such as a AOC-SIM1U/ AOC-SIM1U+ add-on card?

Answer:

1. Log on to the web interface page of the IPMI card by typing the IP address of the card.

2. Click on the maintenance button.

3. Browse to choose the correct file to flash the firmware.

4. Click on the UPDATE FIRMWARE button and proceed with firmware flashing.

Question 2: How do I setup the IP address and MAC address for the AOC-SIM1U/ AOC-SIM1U+ add-on card?

Answer:

1. Boot the system into DOS and use *ipmicfg* to boot to Windows/Linux

2. Run the utility *ipmicfg* from DOS.

3. Follow the prompts to setup the IP Address and MAC address for the AOC-SIM1U/ AOC-SIM1U+ add-on card.

Contacting Supermicro's Technical Support:

If you still have problems after attempting the recommended solutions, please contact Supermicro Technical Support at (408)503-8000 or visit our web site at www.supermicro.com/support/.

Notes

Disclaimer

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Notes