



IPMI User Guide



Version 1.0

Release Date: 2015/06/19

Overview

Icon Descriptions

The icons are used in the manual to serve as an indication of interest topics or important messages. Below is a description of these icons:



NOTE: This check mark indicates that there is a note of interest and is something that you should pay special attention to while using the product.



WARNING: This exclamation point indicates that there is a caution or warning and it is something that could damage your property or product.

Online Resources

The listed websites are links to the on-line product information and technical support.

Resource	Website
Lanner	http://www.lannerinc.com
Product Resources	http://www.lannerinc.com/download-center/
RMA	http://eRMA.lannerinc.com

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Compliances

CE

This product has passed the CE test for environmental specifications. Test conditions for passing included the equipment being operated within an industrial enclosure. In order to protect the product from being damaged by ESD (Electrostatic Discharge) and EMI leakage, we strongly recommend the use of CE-compliant industrial enclosure products.

FCC Class A

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 instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Safety Guidelines

Follow these guidelines to ensure general safety:

- Keep the chassis area clear and dust-free during and after installation.
- Do not wear loose clothing or jewelry that could get caught in the chassis. Fasten your tie or scarf and roll up your sleeves.
- Wear safety glasses if you are working under any conditions that might be hazardous to your eyes.
- Do not perform any action that creates a potential hazard to people or makes the equipment unsafe.
- Disconnect all power by turning off the power and unplugging the power cord before installing or removing a chassis or working near power supplies
- Do not work alone if potentially hazardous conditions exist.
- Never assume that power is disconnected from a circuit; always check the circuit.

LITHIUM BATTERY CAUTION:

Risk of Explosion if Battery is replaced by an incorrect type. Dispose of used batteries according to the instructions

Operating Safety

Electrical equipment generates heat. Ambient air temperature may not be adequate to cool equipment to acceptable operating temperatures without adequate circulation. Be sure that the room in which you choose to operate your system has adequate air circulation.

Ensure that the chassis cover is secure. The chassis design allows cooling air to circulate effectively. An open chassis permits air leaks, which may interrupt and redirect the flow of cooling air from internal components.

Electrostatic discharge (ESD) can damage equipment and impair electrical circuitry. ESD damage occurs when electronic components are improperly handled and can result in complete or intermittent failures. Be sure to follow ESD-prevention procedures when removing and replacing components to avoid these problems.

Wear an ESD-preventive wrist strap, ensuring that it makes good skin contact. If no wrist strap is available, ground yourself by touching the metal part of the chassis.

Periodically check the resistance value of the antistatic strap, which should be between 1 and 10 megohms (Mohms).

EMC Notice

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 instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case users will be required to correct the interference at their own expense.

Consignes de sécurité

Suivez ces consignes pour assurer la sécurité générale :

- Laissez la zone du châssis propre et sans poussière pendant et après l'installation.
- Ne portez pas de vêtements amples ou de bijoux qui pourraient être pris dans le châssis. Attachez votre cravate ou écharpe et remontez vos manches.
- Portez des lunettes de sécurité pour protéger vos yeux.
- N'effectuez aucune action qui pourrait créer un danger pour d'autres ou rendre l'équipement dangereux.
- Coupez complètement l'alimentation en éteignant l'alimentation et en débranchant le cordon d'alimentation avant d'installer ou de retirer un châssis ou de travailler à proximité de sources d'alimentation.
- Ne travaillez pas seul si des conditions dangereuses sont présentes.
- Ne considérez jamais que l'alimentation est coupée d'un circuit, vérifiez toujours le circuit. Cet appareil génère, utilise et émet une énergie radiofréquence et, s'il n'est pas installé et utilisé conformément aux instructions des fournisseurs de composants sans fil, il risque de provoquer des interférences dans les communications radio.

Avertissement concernant la pile au lithium

- Risque d'explosion si la pile est remplacée par une autre d'un mauvais type.
- Jetez les piles usagées conformément aux instructions.
- L'installation doit être effectuée par un électricien formé ou une personne formée à l'électricité connaissant toutes les spécifications d'installation et d'appareil du produit.
- Ne transportez pas l'unité en la tenant par le câble d'alimentation lorsque vous déplacez l'appareil.
- La machine ne peut être utilisée qu'à un lieu fixe comme en laboratoire, salle d'ordinateurs ou salle de classe.

Sécurité de fonctionnement

- L'équipement électrique génère de la chaleur. La température ambiante peut ne pas être adéquate pour refroidir l'équipement à une température de fonctionnement acceptable sans circulation adaptée. Vérifiez que votre site propose une circulation d'air adéquate.
- Vérifiez que le couvercle du châssis est bien fixé. La conception du châssis permet à l'air de refroidissement de bien circuler. Un châssis ouvert laisse l'air s'échapper, ce qui peut interrompre et rediriger le flux d'air frais destiné aux composants internes.
- Les décharges électrostatiques (ESD) peuvent endommager l'équipement et gêner les circuits électriques. Des dégâts d'ESD surviennent lorsque des composants électroniques sont mal manipulés et peuvent causer des pannes totales ou intermittentes. Suivez les procédures de prévention d'ESD lors du retrait et du remplacement de composants.
 - Portez un bracelet anti-ESD et veillez à ce qu'il soit bien au contact de la peau. Si aucun bracelet n'est disponible, reliez votre corps à la terre en touchant la

partie métallique du châssis.

Vérifiez régulièrement la valeur de résistance du bracelet antistatique, qui doit être comprise entre 1 et 10 mégohms (Mohms).

Consignes de sécurité électrique

- Avant d'allumer l'appareil, reliez le câble de mise à la terre de l'équipement à la terre.
- Une bonne mise à la terre (connexion à la terre) est très importante pour protéger l'équipement contre les effets néfastes du bruit externe et réduire les risques d'électrocution en cas de foudre.
- Pour désinstaller l'équipement, débranchez le câble de mise à la terre après avoir éteint l'appareil.
- Un câble de mise à la terre est requis et la zone reliant les sections du conducteur doit faire plus de 4 mm² ou 10 AWG.

Procédure de mise à la terre pour source d'alimentation CC Procédure de mise à la terre pour source d'alimentation CC

- Desserrez la vis du terminal de mise à la terre.
 - Branchez le câble de mise à la terre à la terre.
 - L'appareil de protection pour la source d'alimentation CC doit fournir 30 A de courant.
- Cet appareil de protection doit être branché à la source d'alimentation avant l'alimentation CC.
- pour refroidir l'équipement à une température de fonctionnement acceptable sans circulation adaptée. Vérifiez que votre site propose une circulation d'air adéquate.
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Vérifiez régulièrement la valeur de résistance du bracelet antistatique, qui doit être comprise entre 1 et 10 mégohms (Mohms).

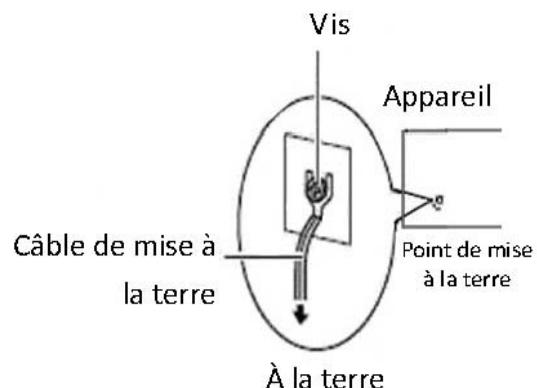
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Cet appareil de protection doit être branché à la source d'alimentation avant l'alimentation CC.



Revision History

Version	Date	Descriptions
V0.1	2014/12/09	Preliminary
V1.0	2015/06/19	Official release

IPMI

IPMI Navigations

IPMI Navigation

IPMI, abbreviation of Intelligent Platform Management Interface, offers system administrators to manage and monitor computing platforms with standardized interface and protocol. Due to its messaging and hardware-based nature, IPMI works independently from the operating system, so that system administrators are able to remotely manage and monitor computing platform status.

Lanner's IPMI provides rich management features that will enable users to remote monitor their host machines, while configuring control options. These include:

- Remote control viewing options
- DNS configuration options
- SSL upload/generate/view options
- Network setting
- Firmware update
- User information management

The following will provide a simple walkthrough of Lanner's IPMI interface.

Reminder

The images shown in the following section are based on the latest version available at the time of this writing. Therefore, the images may or may not look identical to the screens on your computing systems.

The following interface images are based on web browser operation.

Before You Start

- Make sure the proper LAN connection to your system.
- IPMI card has been properly installed.
- Prepare a desktop or laptop that is connecting to the same network. Start the computer. (Preferrably a laptop).
- Make sure JAVA is installed in the computer you are using.

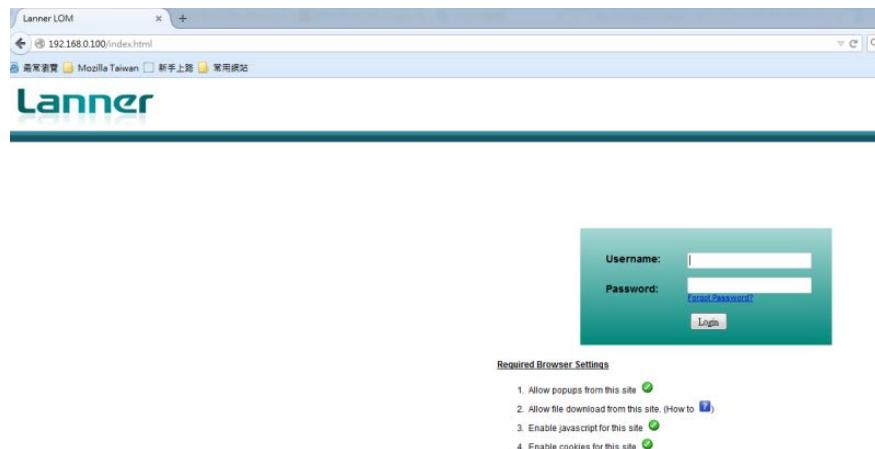
IP Configuration

- Configure the IP address on the computer you are using. Please input "192.168.0.100:80".
- Go to "JAVA" program, then go to "Exception Site List" and add a new location "192.168.0.100:80".

Getting Started

Open a web browser and input "192.168.0.100:80" to launch IPMI interface.

You will be required to enter "Username" and "Password". The default username and password are "admin" for both.



Dashboard

The "Dashboard" provides an overall information about the status of the device and remote server.

Device Information

Device Power Status: the power state of the monitored device

Firmware Revision: firmware revision information

Firmware Build Date: the date that the firmware was built

Network Information

MAC Address: displays MAC address information

V4 Network Mode: the status of V4 network

IPv4 Address: the IP address information

V6 Network Mode: the status of V6 network

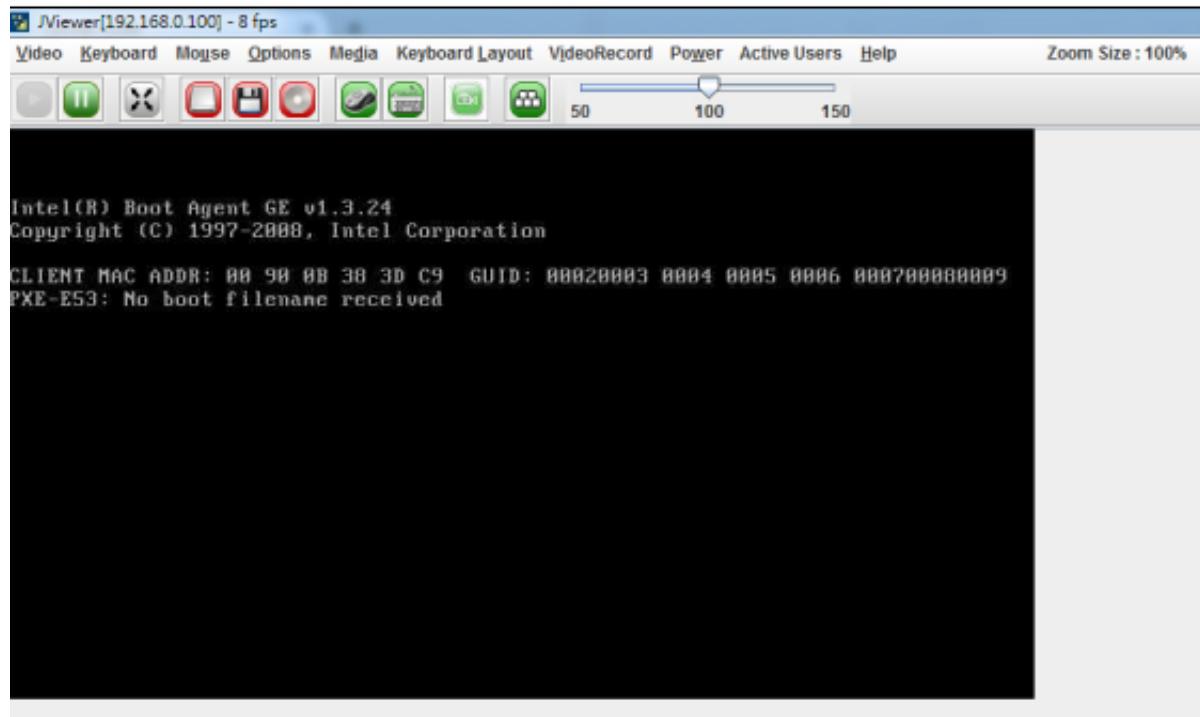
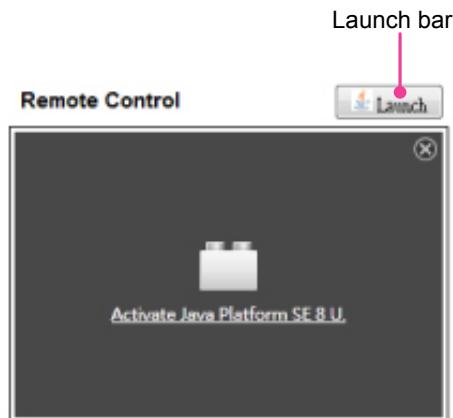
Remote Control

Click the "Launch" bar to display the remote console, which is the host machine being monitored. The operating system running on the host machine can be viewed as well.

The screenshot shows a web browser window for the URL 192.168.0.100/index.html. The browser's address bar and toolbar are visible at the top. Below the toolbar, the Lanner logo is displayed. A navigation menu bar contains links for Dashboard, Configuration, Remote Control, and Maintenance. The main content area is titled "Dashboard". It contains a section for "Device Information" with details: Device Power Status: On, Firmware Revision: 1.1, and Firmware Build Time: Apr 19 2013 10:39:46 CST. Another section, "Network Information (Edit)", lists: MAC Address: 00:90:0B:32:52:BA, V4 Network Mode: Static, IPv4 Address: 192.168.0.100, and V6 Network Mode: Disable. At the bottom of the dashboard, there is a "Remote Control" section with a "Launch" button and a Java Platform SE 8 U. activation message. The footer of the page includes the website address www.lannerinc.com.

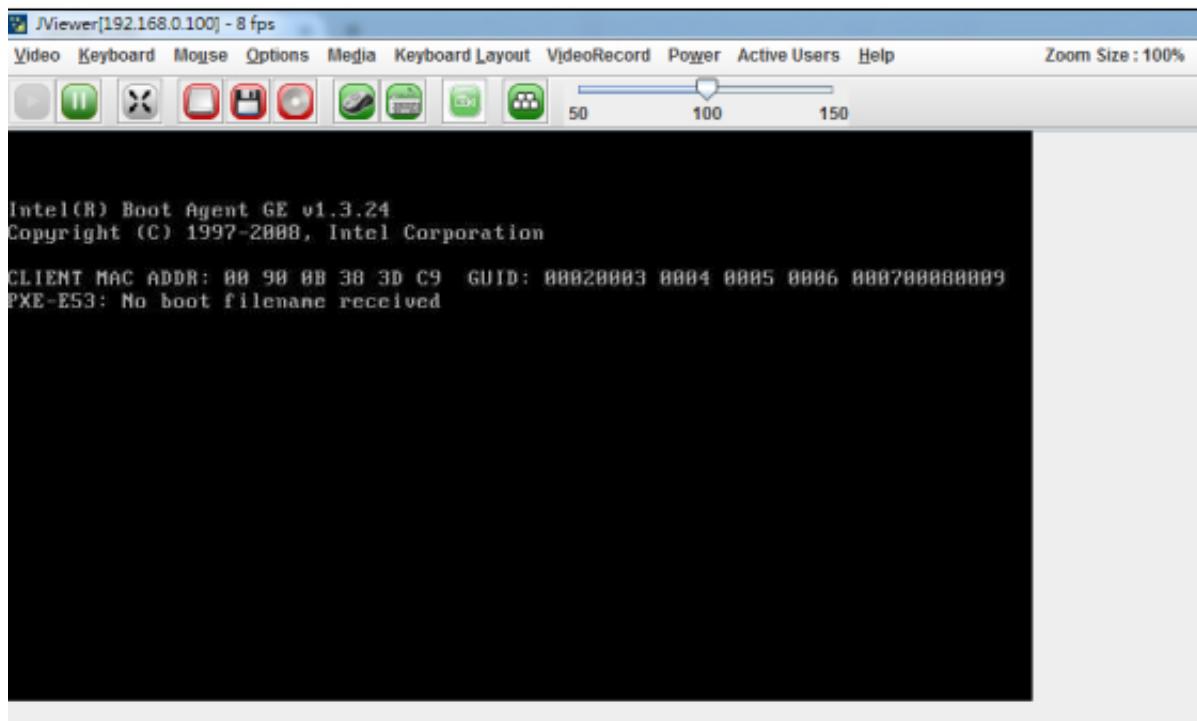
Remote Control -- Launched

Once you clicked the “Launch” bar, the remote control screen will be enlarged and the status of the remote console can be viewed.



Introducing the Remote Control Functions

The Remote Control interface comes with many handy functions for you to navigate the remote console operating system.



Video

Click "Video" on the task bar to open menu for video related options

Pause Redirection: pause the console redirection

Resume Redirection: resume the console redirection

Refresh Video: refresh the video image of remote console status

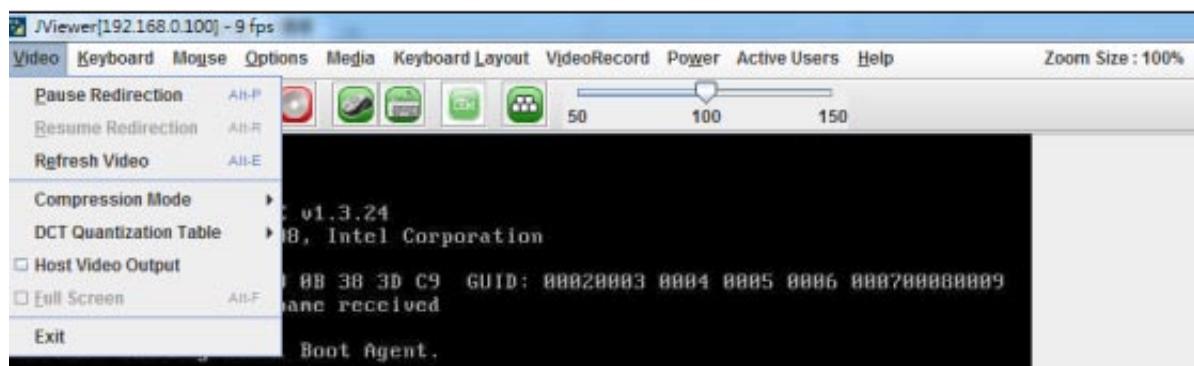
Compression Mode: select compression mode

DCT Quantization Table: view DCT Quantization Table

Host Video Output: host machine video output option

Full Screen: to enable full screen viewing option

Exit: to exit



Keyboard

Click "Keyboard" on the task bar to view keyboard related options:

Hold Right Ctrl Key

Hold Right Alt Key

Hold Left Ctrl Key

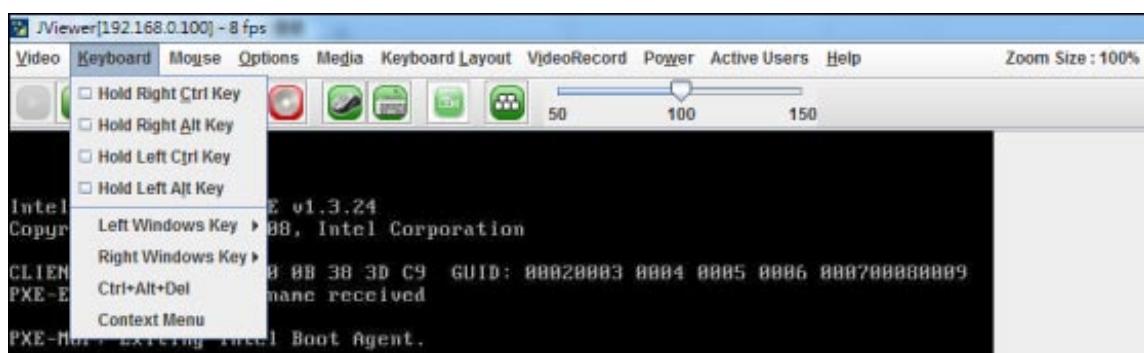
Hold Left Alt Key

Left Windows Key

Right Windows Key

Ctrl+Alt+Del

context Menu



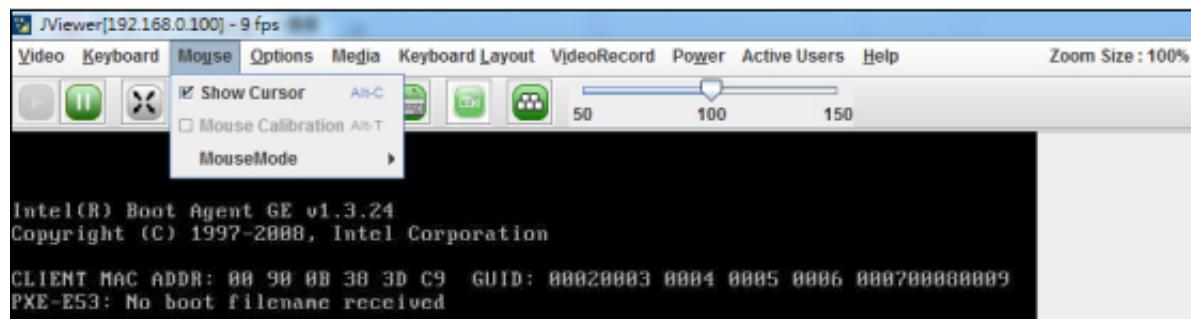
Mouse

Click "Mouse" on the task bar to open menu for mouse related options

Show Cursor: enable or disable mouse cursor

Mouse Calibration: set mouse calibration

Mouse Mode: select mouse modes



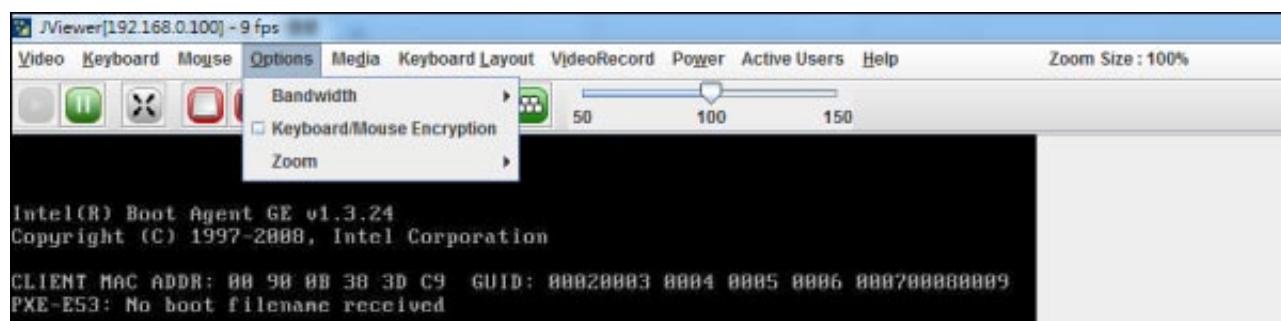
Options

Click "Options" on the task bar to view navigation options:

Bandwidth: set bandwidth

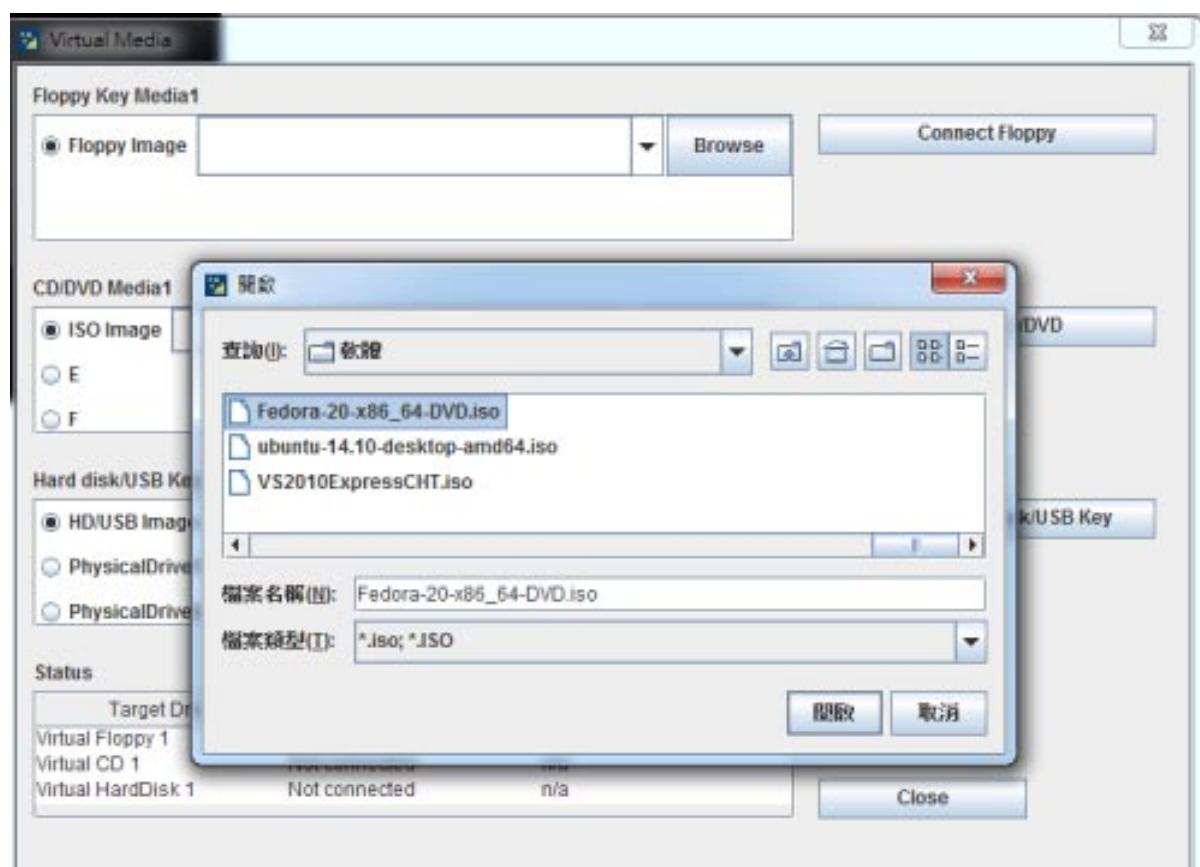
Keyboard/Mouse Encryption: enable or disable keyboard/mouse encryption

Zoom: set zooming options



Media

Click "Media" and the "Virtual Media" window will pop up. This will allow you to select and open .iso files from Floppy, CD/DVD or Hard Disk/USB devices.

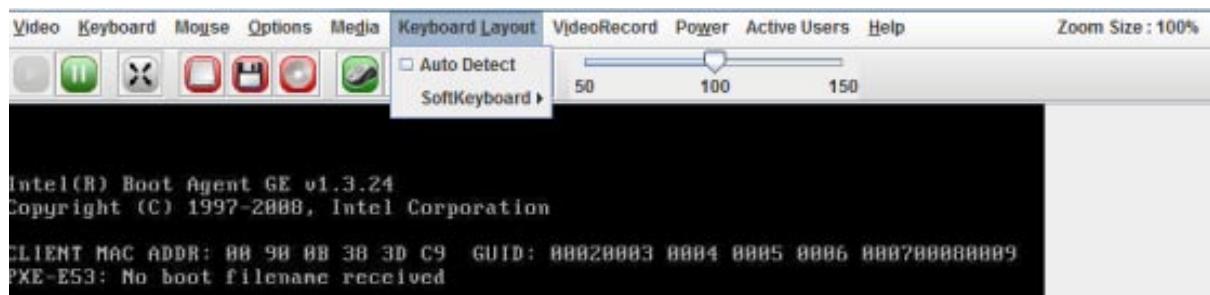


Keyboard Layout

Click "Keyboard Layout" on the task bar to view keyboard layout options:

Auto Detect: enable or disable "Auto Detect"

SoftKeyboard: select and open virtual soft keyboard



VideoRecord

Click "VideoRecord" on the task bar to view video recording options

Start Record: start recording the current conditions of the operating remote console

Stop Record: stop the recording process

Settings: view and select Setting options



Power

Click "Power" on the task bar to view power related options

Reset Server: reset the remote server

Immediate Shutdown: shut down the system immediately

Orderly Shutdown: set shutdown order

Power On Server: power on the remote server

Power Cycle Server: the server will go through a cold boot and reset



Active Users

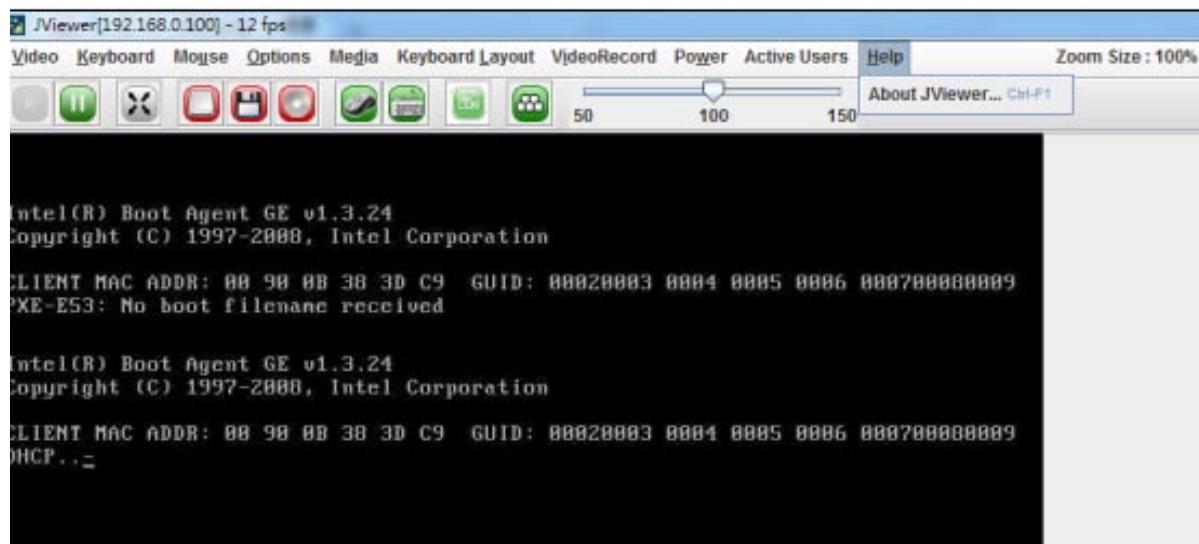
Click "Active Users" on the task bar to view the number of active users. The information will be shown by user name and IP address.



Help

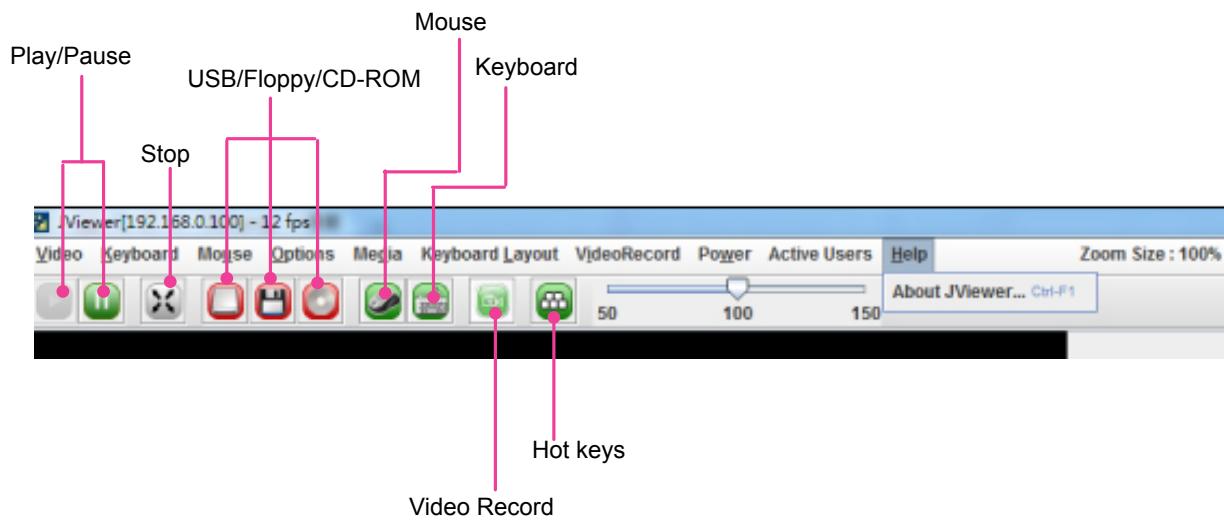
Click "Help" on the task bar to view other options

About JViewer: displays information about the software program of this remote control



Icons on the Task Bar

There are useful icons on the task bar to activate certain functions.



Configuration

The “Configuration” provides setting options for “DNS”, “Mouse Mode”, “Network”, “Network Link”, “NTP”, “Services”, “SSL”, and “Users”.

The screenshot shows a web browser window with the URL 192.168.0.100/index.html. The page title is "Lanner". The top navigation bar has tabs: Dashboard, Configuration, Remote Control, and Maintenance. The Configuration tab is selected and highlighted in green. A dropdown menu for Configuration is open, listing: DNS, Mouse Mode, Network, Network Link, Device Power, NTP, Services, SSL, and Users. The "SSL" option is also highlighted in green. The main content area displays device information: Dashboard gives information about the status of the device and remote server; Device Info includes Network Link, NTP, Services, and Firmware Revision; Firmware Build shows 2013 10:39:46 CST; and Network Interface (edit).

DNS Server Settings

Click “DNS” under “Configuration” to access DNS (Domain Name System) setting options

The screenshot shows the “DNS Server Settings” page. The top navigation bar has tabs: Dashboard, Configuration, Remote Control, and Maintenance. The Configuration tab is selected. The main content area is titled “DNS Server Settings”. It includes sections for Host Configuration (Host Settings: Automatic, Host Name: AM100900B010203), Domain Name Configuration (Domain Settings: Manual, Domain Name:), IPv4 Domain Name Server Configuration (DNS Server Settings: Manual, Preferred DNS Server: 0.0.0, Alternate DNS Server: 0.0.0), and IPv6 Domain Name Server Configuration (DNS Server Settings: Manual, Preferred DNS Server: ::, Alternate DNS Server: ::). A note at the bottom states: “Manage DNS settings of the device.”

Manage DNS Setting of the device

Host Settings: select "Automatic" or "Manual"

Host Name: the host name is automatically displayed if you choose "Automatic" for Host Setting

Domain Name Configurations

Domain Settings: select domain setting mode

Domain Name: you may have to specify the domain name if "Manual" is chosen for DNS Server Settings

IPv4 Domain Name Server Configurations

DNS Server Settings: select "Automatic" or "Manual"

Preferred DNS Server: enter the IP address for the preferred DNS server, such as 192.168.0.100

Alternate DNS Server: enter the IP address for an alternative DNS server

IPv6 Domain Name Server Configurations

DNS Server Settings: select "Automatic" or "Manual"

Preferred DNS Server: enter the IP address for the preferred DNS server, such as 192.168.0.100

Alternate DNS Server: enter the IP address for an alternative DNS server



Save: Save configuration changes

Reset: Reset configurations

Mouse Mode Settings

Click on "Mouse Mode Settings" under "Configuration" to access redirection console mouse mode setting options.

Set Mode to Absolute (Recommended when server OS is Windows)

Set Mode to Relative (Recommended when server OS is Linux)

Select the mode based on the operating system of the remote console.

A screenshot of a web-based management interface for Lanner equipment. At the top, there's a navigation bar with the Lanner logo and links for Dashboard, Configuration, Remote Control, and Maintenance. The Configuration link is currently selected. Below the navigation is a sub-menu titled "Mouse Mode Settings". A note states: "Redirection console mouse mode settings can be modified here." It then displays the message: "The current Mouse Mode is ABSOLUTE." followed by two radio button options: "Set Mode to Absolute (Recommended when server OS is Windows)" and "Set Mode to Relative (Recommended when server OS is Linux)".

Redirection console mouse mode settings can be modified here.

The current Mouse Mode is ABSOLUTE.

Set Mode to Absolute (Recommended when server OS is Windows)

Set Mode to Relative (Recommended when server OS is Linux)

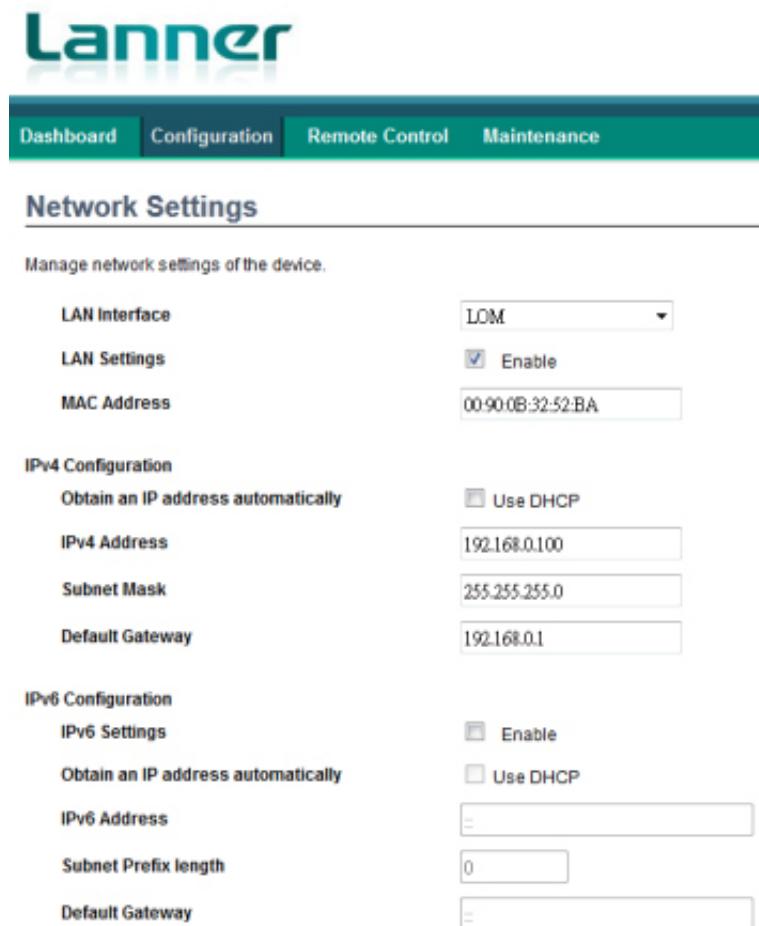
Save **Reset**

Save: Save configuration changes

Reset: Reset configurations

Network Settings

Click on "Network Settings" under "Configuration" to manage network settings of the remote device.



The screenshot shows the Lanner network configuration interface. At the top, there's a navigation bar with tabs: Dashboard, Configuration (which is selected and highlighted in green), Remote Control, and Maintenance. Below the navigation bar, the title "Network Settings" is displayed. A sub-instruction "Manage network settings of the device." is present. The configuration area is divided into sections: LAN Interface, IPv4 Configuration, and IPv6 Configuration. Under LAN Interface, "LAN Interface" is set to "LOM", "Enable" is checked, and the MAC Address is listed as "00:90:0B:32:52:BA". In the IPv4 Configuration section, "Obtain an IP address automatically" is checked, and the IP address is set to "192.168.0.100". Subnet Mask is "255.255.255.0" and Default Gateway is "192.168.0.1". The IPv6 Configuration section includes fields for IPv6 Settings (Enable checked), Obtain an IP address automatically (unchecked), IPv6 Address, Subnet Prefix length (set to 0), and Default Gateway.

LAN Interface: configure the LAN interface

LAN Settings: click to enable the support of LAN settings

MAC Address: displays the MAC address of the device. This cannot be modified.

IPv4 Configuration

Obtain an IP address automatically: tick to enable the use of DHCP to automatically obtain an IP address

IPv4 Address: enter the IP address for IPv4 network if DHCP is not enabled

Subnet Mask: enter the "Subnet Mask" if DHCP is not enabled

Default Gateway: enter the "Default Gateway" address if DHCP is not enabled

IPv6 Configuration

IPv6 Settings: tick to enable IPv6 setting in order to enter values for IPv6 address, subnet prefix length and default gateway. If IPv6 is not in use, simply skip this setting.

Obtain an IP address automatically: tick to enable the use of DHCP to automatically obtain an IP address

IPv4 Address: enter the IP address for IPv6 network if DHCP is not enabled

Subnet Mask: enter the "Subnet Mask" if DHCP is not enabled

Default Gateway: enter the "Default Gateway" address if DHCP is not enabled



Save: Save configuration changes

Reset: Reset configurations

Network Link Configuration

Click "Network Link Configuration" under "Configuration" to manage network link settings of the device.

A screenshot of a web-based network configuration interface. At the top is a navigation bar with tabs: Dashboard, Configuration (which is selected and highlighted in green), Remote Control, and Maintenance. Below the navigation bar is a section titled "Network Link Configuration". A sub-instruction says "Manage network link settings of the device.". There are four configuration fields: "LAN Interface" set to "LOM", "Auto Negotiation" with a radio button selected for "ON", "Link Speed" set to "100 Mbps", and "Duplex Mode" set to "Full Duplex". At the bottom of this section are two buttons: "Save" and "Reset".

LAN Interface	LOM
Auto Negotiation	<input checked="" type="radio"/> ON <input type="radio"/> OFF
Link Speed	100 Mbps
Duplex Mode	Full Duplex

LAN Interface: configure the LAN interface

Auto Negotiation: enable it to configure the service configurations automatically. If this is "OFF", you may have to manually configure "Link Speed" and "Duplex Mode".

Link Speed: configure the link speed if "Auto Negotiation" is OFF

Duplex Mode: configure the Duplex Mode if "Auto Negotiation" is OFF



Save: Save configuration changes

Reset: Reset configurations

NTP Settings

Click "NTP Settings" under "Configuration" to either configure the NTP server or view and modify the device's date and time.



The screenshot shows the Lanner web interface. The top navigation bar has tabs: Dashboard (highlighted in green), Configuration, Remote Control, and Maintenance. Below the navigation is a section titled "NTP Settings". A sub-instruction says: "Here you can either configure the NTP server or view and modify the device's Date & Time settings." There are four input fields: "Date" (set to January 1, 2010), "Time" (set to 00:26:23), "UTC Timezone" (set to (GMT+/-0) Hour(s)), and "NTP Server" (set to time.nist.gov). A checked checkbox labeled "Automatically synchronize Date & Time with NTP Server" is present. At the bottom are three buttons: Refresh, Save, and Reset.

Date: configure the device's date setting

Time: configure the device's time setting in hour/minute/second format

UTC Timezone: configure the device's current time zone

NTP Server: configure the NTP (Network Time Protocol) server

You may tick on "Automatically synchronize Data & Time with NTP Server" so that the time and data information will be automatically updated once a NTP server is configured.

Refresh Save Reset

Refresh: click it to refresh NTP information

Save: save the configuration changes

Reset: reset the NTP setting

Services

Click "Service" under "Configuration" to view and modify the list of services under BMC. The table presents current status of available services. You may click "Modify" at the bottom right to modify the information.



The screenshot shows the Lanner web interface. The top navigation bar has tabs: Dashboard, Configuration (highlighted in green), Remote Control, and Maintenance. Below the navigation is a section titled "Services". A sub-instruction says: "Below is a list of services running on the BMC. It shows current status and other basic information about the services. Select a slot and press "Modify" button to modify the services configuration." A table lists seven services with columns: #, Service Name, Current State, Interfaces, Nonsecure Port, Secure Port, Timeout, Maximum Sessions, and Active Sessions. The table has a header row and six data rows. At the bottom right is a "Modify" button.

#	Service Name	Current State	Interfaces	Nonsecure Port	Secure Port	Timeout	Maximum Sessions	Active Sessions
1	web	Active	LCM	80	443	1000	20	1
2	ivm	Active	LCM	7578	N/A	N/A	2	N/A
3	cd-media	Active	LCM	5120	N/A	N/A	1	N/A
4	ft-media	Active	LCM	5122	N/A	N/A	1	N/A
5	hd-media	Active	LCM	5123	N/A	N/A	1	N/A
6	ssh	Active	N/A	22	8022	N/A	N/A	N/A
7	telnet	Active	N/A	23	N/A	600	N/A	N/A

SSL Certificate Configuration

Click "SSL Certificate Configuration" under "Configuration" to configure SSL certificate into the BMC. With SSL, the device can be accessed in a secured mode.

Upload SSL: upload SSL certificate and provide key file into the BMC

The screenshot shows the Lanner web interface with the following details:

- Header:** Lanner logo, Dashboard, Configuration (selected), Remote Control, Maintenance.
- Title:** SSL Certificate Configuration
- Description:** This page is used to configure SSL certificate into the BMC. Using this, the device can certificate in readable format.
- Buttons:** Upload SSL, Generate SSL, View SSL.
- Fields:**
 - Current Certificate: Thu Jan 1 00:00:00 1970
 - New Certificate: Browse... No file selected.
 - Current Privacy Key: Thu Jan 1 00:00:00 1970
 - New Privacy Key: Browse... No file selected.

Generate SSL: generate SSL certificate based on configuration details

The screenshot shows the Lanner web interface with the following details:

- Title:** SSL Certificate Configuration
- Description:** This page is used to configure SSL certificate into the BMC. Using this, the device can certificate in readable format.
- Buttons:** Upload SSL, Generate SSL, View SSL.
- Fields:**
 - Common Name(CN): [Input field]
 - Organization(O): [Input field]
 - Organization Unit(OU): [Input field]
 - City or Locality(L): [Input field]
 - State or Province(ST): [Input field]
 - Country(C): [Input field]
 - Email Address: [Input field]
 - Valid for: [Input field] days
 - Key Length: [Input field] bits

View SSL: view the uploaded SSL

Upload SSL	Generate SSL	View SSL
Basic Information		
Version	3	
Serial Number	F76E8C9068B63605	
Signature Algorithm	sha1WithRSAEncryption	
Public Key	(2048 bit)	
Issued From		
Common Name(CN)	www.lannerinc.com	
Organization(O)	Lanner	
Organization Unit(OU)	Software Department II	
City or Locality(L)	Taipei	
State or Province(ST)	Taiwan	
Country(C)	TW	
Email Address	nimo_hsieh@lannerinc.co	
Validity Information		
Valid From	Apr 19 02:37:34 2013 GMT	
Valid To	Apr 19 02:37:34 2014 GMT	
Issued To		
Common Name(CN)	www.lannerinc.com	
Organization(O)	Lanner	
Organization Unit(OU)	Software Department II	
City or Locality(L)	Taipei	
State or Province(ST)	Taiwan	

User Management

Click "User Management" under "Configuration" to access current list of available users. You may add, modify or delete users on the list.

UserID	Username	User Access	Network Privilege	SNMP Status	Detail ID
1	anonymous	Disabled	Administrable	Disabled	1
2	admin	Enabled	Administrable	Enabled	2
3	-	-	-	-	3
4	-	-	-	-	4
5	-	-	-	-	5
6	-	-	-	-	6
7	-	-	-	-	7
8	-	-	-	-	8
9	-	-	-	-	9
10	-	-	-	-	10

Add User Modify User Delete User

Remote Control

Click "Remote Control" and you may choose "Console Redirection" or "Server Power Control" option.

The screenshot shows the Lanner web interface with the 'Remote Control' menu item highlighted. Under 'Console Redirection', a Java console window is open, displaying a black screen with white text. The text includes system details like MAC Address (00:90:0B:32:52:BA), IPv4 Address (192.168.0.100), and network modes. It also shows a prompt for selecting a boot device: 'Press F10: Selecting Intel Boot Device' and 'Select and Set the primary boot device'. There is a 'Refresh' button at the top left of the console window.

Console Redirection

Click "Console Redirection" under "Remote Control".

Press the button "Java Console" to launch the viewing of the remote console. This is the same as the "Launch" on the "Dashboard" page. Please refer to "Dashboard" section for details.

The screenshot shows the 'Console Redirection' page from the Lanner web interface. At the top, there is a navigation bar with tabs: Dashboard, Configuration, Remote Control (which is active and highlighted in red), and Maintenance. Below the navigation bar, the title 'Console Redirection' is centered. A large, prominent button labeled 'Java Console' is positioned in the center of the page. Below the button, there is a small note: 'Press the button to launch the redirection console and manage the server remotely.'

Server Power Control

Click "Server Power Control" under "Remote Control" to select power control options for the remote console.

You may choose the following actions to perform for the host machine.

Reset Server: reset the remote console server

Power Off Server-Immediate: this will power off the remote console server immediately

Power Off Server – Orderly Shutdown: this will power off the remote console server in an orderly way

Power On Server: this will power on the remote console server

Power Cycle Server: if this is activated, the remote console server will experience a cold boot, which will shut it down first and then boot it up.

The screenshot shows the Lanner web interface with a green header bar containing the Lanner logo and navigation links: Dashboard, Configuration, Remote Control, Maintenance. The main content area has a title "Power Control and Status". Below it, a message says "The current server power status is shown below. To perform a power control operation, select one of the options below and press "Perform Action". A section titled "Host is currently on" contains a list of power control options with radio buttons: Reset Server (selected), Power Off Server - Immediate, Power Off Server - Orderly Shutdown, Power On Server, and Power Cycle Server.

Maintenance

Click on "Maintenance" to view maintenance options, including "Firmware Update", "Preserve Configuration", "Restore Factory Defaults" and "System Administrator".

The screenshot shows the Lanner web interface with a green header bar containing the Lanner logo and navigation links: Dashboard, Configuration, Remote Control, Maintenance. The main content area has a title "Dashboard". On the left, there is a "Device Information" section with the following details: Device Power Status: On, Firmware Revision: 1.1, and Firmware Build Time: Apr 19 2013 10:39:46 CST. On the right, a vertical menu is open under the Maintenance link, showing four options: Firmware Update, Preserve Configuration, Restore Factory Defaults, and System Administrator.

Firmware Update

Click "Firmware Update" under "Maintenance" to update firmware.

Enter Update Mode: this will enable the device in update mode

Enter Preserve Configuration: this will preserve all configurations during firmware update process

The screenshot shows the Lanner web interface with the 'Maintenance' tab selected. Under 'Firmware Update', it says 'Upgrade Firmware of the device. Press "Enter Update Mode" to put the device in update mode.' A warning message states: 'WARNING: Please note that after entering update mode, widgets, other web pages and services will not work. All open widgets will be closed automatically. If upgrade process is cancelled in the middle of the wizard, the device will reset.' There is a checkbox for 'Preserve all Configuration'. Below is a table of 'Preserve Configurable Items' with columns for item number, name, and status. Buttons at the bottom are 'Save Preserve Configuration' and 'Enter Update Mode'.

#	Preserve Configurable Item	Preserve Status
1	SDR	Overwrite
2	SEL	Overwrite
3	IPMI	Overwrite
4	Network	Overwrite
5	NTP	Overwrite
6	Services	Overwrite

Restore Factory Defaults

Click "Restore Factory Defaults" under "Maintenance". This option will bring the device to original factory default setting. Please note that all the currently running services or web pages will not work once this function is enabled. All open widgets will close automatically. If the default restoring progress is cancelled during the process, the device will reset.

The screenshot shows the Lanner web interface with the 'Maintenance' tab selected. Under 'Restore Factory Defaults', it says 'This page will restore the device to default configuration. Press "Restore Factory Defaults" to restore the device default configuration.' A warning message states: 'WARNING: Please note that after entering into restore factory defaults, widgets, other web pages and services will not work. All open widgets will be closed automatically. The device will reset and reboot within few minutes.' Below is a table of 'Preserve Configuration Item' with columns for item number, name, and status. Buttons at the bottom are 'Save Configuration' and 'Restore Factory Defaults'.

#	Preserve Configuration Item
1	Overwrite

System Administrator

This page allows the user to enable or disable access and change the password for the system administrator account.

The screenshot shows the Lanner web interface with the 'Maintenance' tab selected. Under 'System Administrator', it says 'This page allows the user to enable/disable access and change the password for the System Administrator account.' It has fields for 'Username' (sysadmin), 'User Access' (checkbox checked for 'Enable'), 'Change Password' (checkbox unchecked), 'Password', and 'Confirm Password'.

Appendix 6:

Terms and Conditions

Warranty Policy

1. All products are under warranty against defects in materials and workmanship for a period of one year from the date of purchase.
2. The buyer will bear the return freight charges for goods returned for repair within the warranty period; whereas the manufacturer will bear the after service freight charges for goods returned to the user.
3. The buyer will pay for repair (for replaced components plus service time) and transportation charges (both ways) for items after the expiration of the warranty period.
4. If the RMA Service Request Form does not meet the stated requirement as listed on "RMA Service," RMA goods will be returned at customer's expense.
5. The following conditions are excluded from this warranty:

Improper or inadequate maintenance by the customer
Unauthorized modification, misuse, or reversed engineering of the product Operation outside of the environmental specifications for the product.

RMA Service

Requesting a RMA#

6. To obtain a RMA number, simply fill out and fax the "RMA Request Form" to your supplier.
7. The customer is required to fill out the problem code as listed. If your problem is not among the codes listed, please write the symptom description in the remarks box.
8. Ship the defective unit(s) on freight prepaid terms. Use the original packing materials when possible.
9. Mark the RMA# clearly on the box.

Note: Customer is responsible for shipping damage(s) resulting from inadequate/loose packing of the defective unit(s). All RMA# are valid for 30 days only; RMA goods received after the effective RMA# period will be rejected.

