Important Information

Latest Software
We recommend that you install the most recent software release to stay up-to-date with the latest functional improvements, stability fixes, security enhancements and protection against new and evolving attacks.

Latest Documentation
The latest version of this document is at: (http://supportcontent.checkpoint.com/documentation_download?ID=13482)
To learn more, visit the Check Point Support Center (http://supportcenter.checkpoint.com).

Revision History

<table>
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<tr>
<th>Date</th>
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</tr>
</thead>
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<tr>
<td>13 August 2013</td>
<td>Added Updating to Firmware 0.76 (on page 6)</td>
</tr>
<tr>
<td>22 July 2013</td>
<td>LOM version 0.76 firmware released. These are changes in this version:</td>
</tr>
<tr>
<td></td>
<td>• Added random number field to Login window (“Initial Login” on page 6)</td>
</tr>
<tr>
<td></td>
<td>• Updated Launching the Java KVM Client (on page 7)</td>
</tr>
<tr>
<td></td>
<td>• Added support for RADIUS servers (“RADIUS Settings” on page 15)</td>
</tr>
<tr>
<td></td>
<td>• Updated Reset Factory Settings (on page 20)</td>
</tr>
<tr>
<td></td>
<td>• Added support for System Administrator (on page 20)</td>
</tr>
<tr>
<td>13 February 2012</td>
<td>First release of this document</td>
</tr>
</tbody>
</table>

Feedback
Check Point is engaged in a continuous effort to improve its documentation.
Please help us by sending your comments (mailto:cp_techpub_feedback@checkpoint.com?subject=Feedback on Lights Out Management 21000 Appliances Administration Guide).
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Chapter 1

Using Lights Out Management

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Introduction

The Check Point Lights Out Management (LOM) is an optional card that you can use with Check Point appliances. You can use Lights Out Management to remotely control Check Point appliances using a dedicated management channel. This card also works when the appliance is turned off or not responding.

The 21400 Appliance LOM port supports 10 and 100 Mbps Ethernet links.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Activity</td>
</tr>
<tr>
<td></td>
<td>• OFF - No Activity</td>
</tr>
<tr>
<td></td>
<td>• Slow Blink (Amber) - Activity</td>
</tr>
<tr>
<td>2</td>
<td>Link</td>
</tr>
<tr>
<td></td>
<td>• OFF - No Link</td>
</tr>
<tr>
<td></td>
<td>• ON (Green) - Link is active</td>
</tr>
</tbody>
</table>
Updating to Firmware 0.76

We recommend that you install the new LOM firmware version .76 on all 21400 Appliances. This version includes many improvements:

- Improved security against external threats
- RADIUS authentication
- Enhancements and fixed bugs

Go to sk88064 (http://supportcontent.checkpoint.com/solutions?id=sk88064) to download firmware version .76.

WebUI Requirements

- A web browser. The Java KVM and VM clients are only supported on Internet Explorer and Chrome.
- Java™ software installed on the local computer.

Initial Login

To log in to the LOM WebUI:

1. Open a web browser and enter the default IP address of the LOM card: 192.168.0.100. The login window opens.
2. Enter the default User name (admin) and password (admin).
3. Enter the number that is shown. This is a random number that adds security and helps to prevent unauthorized access to the LOM card.
4. Click Login.

   Note - After 30 minutes of inactivity you are automatically logged out. Use the Sessions Time (on page 18) window to change this inactivity setting.
Chapter 2

Appliance Control from the WebUI

In This Chapter
- Launching the Java KVM Client
- Mounting a Remote ISO Image
- Power Control
- Uploading a Certificate
- Device Information
- Hardware Inventory
- Event Log

Launching the Java KVM Client

The Java KVM client opens a virtual console for the appliance. The Java KVM client also accesses ISO images on your local computer and lets you upload them to the appliance.

Use the Console button in a LOM window to launch the Java KVM client to open a console window and use the appliance CLI.

The Last Console Capture section in the KVM Console window shows a screen capture of the CLI window.

To launch the Java KVM client:
1. Click Console.
   - In some Internet browsers, a Warning Security window opens.
2. Click Run.
   - The CLI window opens, and shows the CLI for the appliance.
Using Special Keyboard Commands

You can use the Java KVM client to send special keystrokes to the console window.

To use a special keyboard command:
1. From the menu bar, select Keyboard.
2. Choose the option that activates the special key.
   - Full Keyboard lets you to use all the keys on the keyboard.
3. Type one or more keystrokes.
4. Select Keyboard and clear the option for the special key.

Mounting a Remote ISO Image

Use the JViewer window in the Java KVM client to mount a remote ISO image on the appliance.
To mount a remote ISO image:
1. Launch the Java KVM client.
   For more information, see Launching the Java KVM Client (on page 7).
2. From the menu bar, select **Device > Redirect ISO**.
   Click **Open**. The ISO file is mounted on the appliance.
4. From the **Power Control** window, select **Reset Server**.
   The appliance resets and loads the ISO image.

### Power Control

Use the **Power Control** window to restart the appliance and turn it on and off.

⚠️ **Important** - We recommend that you use WebUI or the CLI to shut down the appliance. Use the **Power Off Server** option only in an emergency.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Server Status</td>
<td>Shows the status of the appliance (<strong>OFF</strong> or <strong>ON</strong>).</td>
</tr>
<tr>
<td>Reset Server</td>
<td>Restarts the appliance (warm boot).</td>
</tr>
<tr>
<td>Power Off Server</td>
<td>Shuts down the appliance when it is <strong>On</strong>.</td>
</tr>
<tr>
<td>Power On Server</td>
<td>Turns on the appliance when it is <strong>Off</strong>.</td>
</tr>
</tbody>
</table>
Uploading a Certificate

Use the **Certificate** window to upload a new SSL certificate to the appliance. You can also see the default certificate information.

Device Information

Use the **Device Information** window to show details about the LOM card.
Hardware Inventory

Use the **HW Inventory** window to show details about the appliance hardware. Turn on the appliance to show the hardware details.

![HW Inventory](image)

Event Log

Use the **Event Log** window to show logged events on the appliance.
System Management Software Events

The **System Management Software Events** window shows logged software events for the LOM card and the appliance.
Chapter 3

LOM Management from the WebUI

Managing LOM Card Users

You can create, modify, and delete users. You can also assign these privileges to users:

- **Administrator** - User can configure all of the LOM settings.
- **Operator** - User can see most of the LOM settings. User can configure some of the LOM settings.
- **No access** - User cannot log in to the LOM card.

To create a user:

1. Click **LOM User Management > Users**.
2. Select an empty row and click **Create**.
   The **User Add** window opens.
3. Configure these parameters for the new user.
• **User Name**: The user name can have a maximum of 14 characters
• **Password**: The password must be complex and include upper and lower case letters, a number or a special character
• **Confirm Password**: Enter the password again
• **Network Privileges**: Select the privileges for the user

<table>
<thead>
<tr>
<th>Setting</th>
<th>Administrator</th>
<th>Operator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Enter KVM console</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Create user</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Modify user</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Delete user</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Configure date and time settings</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Edit login message</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Control remote power management</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Configure network setting</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Configure keyboard and mouse settings</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Update LOM card firmware</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Reboot the appliance</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

**To modify a user:**
1. Select an existing user from the list and click **Modify**.
   The **User Modify** window opens.
   You cannot modify the user name.
2. To change the password:
   a) Select **Change Password**.
   b) Enter and confirm the new password.
3. In **Network Privileges**, select the new privileges for the user.
4. Click **Modify User** to apply the changes.

**To delete a user:**
1. Select an existing user from the list and click **Delete**.
   A confirmation window opens.
2. Click **OK**.
RADIUS Settings

Use the RADIUS Settings window to configure the LOM card to connect to a RADIUS server. Specified users in the RADIUS database can log in to the LOM card.

To configure RADIUS:

1. On the RADIUS server, set Reply-Message for the privilege for each user in the User file. Otherwise, the LOM card rejects the user account. The parameter in the file that defines privileges for the LOM user is: Reply-Message = "privilege=<LEVEL>". Make sure that there are no blank spaces in the privilege parameter.
   The privilege levels are:
   Administrator
   Operator
   No-Access (user cannot log in to the LOM card)
   Sample parameter for a user with administrator privileges:
   
   Reply-Message = "privilege=Administrator"

2. Configure the secret on the RADIUS server. This value is also entered in the Secret field.
   For example, In clients.conf, change the secret line to: Secret = testing123

3. In the Lights Out Management WebUI, select Configuration > RADIUS.
   The RADIUS Settings window opens.

4. Configure the settings for RADIUS remote authentication.

5. Click Save.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RADIUS Authentication</td>
<td>When selected, enables RADIUS based authentication.</td>
</tr>
<tr>
<td>Port</td>
<td>Port of the RADIUS server (default 1812).</td>
</tr>
<tr>
<td>Time Out</td>
<td>Number of seconds that the LOM card waits for a response from the RADIUS server. After this time, the RADIUS authentication fails and the user cannot log in to the LOM. The value is between 3 - 300 seconds.</td>
</tr>
<tr>
<td>Server Address</td>
<td>IPv4 address of the RADIUS server.</td>
</tr>
<tr>
<td>Secret</td>
<td>Case-sensitive text string. This value is the same as setting on the RADIUS server. The string contains between 4 - 31 characters.</td>
</tr>
</tbody>
</table>
Configuring LOM Keyboard and Mouse

To configure the remote console keyboard and mouse settings, select the operating system for the client computer.

To configure keyboard and mouse settings:
1. Select LOM KVM Settings > Keyboard/Mouse.
2. Select the operating system.
   - Absolute - for Windows
   - Relative - for Linux
3. Click Apply Changes.

Configuring LOM Network

Use the Network window to configure the network settings of the LOM card.

Important - If you change the IP address of the LOM card, the LOM session disconnects and the WebUI closes. Login to the WebUI using the new IP address.

To configure the network settings:
1. Select LOM Settings > Network.
2. Select Static and enter these parameters.
   - IP Address: The IP address of the LOM card.
   - Subnet Mask: The subnet mask of the LOM card’s local network.
• **Gateway IP Address**: IP address of the default gateway.
• **Remote Console and HTTPS Port**: Port number for the LOM card.

3. Click **Apply Changes**.

### Setting the Date and Time

Use the **Date/Time** window to configure the date and time of Lights Out Management. The default time setting is taken from the operating system.

![LOM Date/Time Settings](image)

### Defining a LOM Login Message

Use the **Login Message** window to configure the message that shows in the Lights Out Management login window.

![Login Message Setting](image)
To edit a login message:
1. Select LOM Settings > Login Message.
2. Enter the login message text.
3. Click Apply Changes.

Sessions Time

Use the Sessions Time window to configure the maximum time that the WebUI can stay idle before the user is logged out.

![Sessions Time window](image)

Update LOM Firmware

Use the Update Firmware window to update the firmware of the LOM card. You can upgrade to a newer version or rollback to an earlier version.

Make sure that the new firmware file is on your local computer before you start to update the LOM card firmware.

**Important** - Do not unplug the AC or DC power supply for the appliance while the firmware is updating. Failure to do so can cause permanent damage to the LOM card.

At the end of the upgrade process, we recommend that you clear the history of the Internet browser.
To update the LOM card firmware:
1. Make sure that the appliance is off.
2. Select Maintenance > Update Firmware.
3. Click Start Upload.
   The LOM card enters update mode and the Firmware Upload window opens.
   When the device enters update mode, you must complete the firmware update or click Cancel to resume using the LOM card.
4. Click Browse.
5. Select the new LOM card firmware file.
   After the file is uploaded, the LOM card compares the firmware versions.
6. Click OK.
   The Firmware Upgrade window shows the Existing and New firmware versions.
7. Select the new firmware version.
8. Click Start Upgrade.
   After the new firmware is installed, the LOM card restarts.
9. Log in to the LOM.
10. Reset the LOM to the factory default settings ("Reset Factory Settings" on page 20).
11. We recommend that you configure the LOM settings as if it is the first time that you are using it.
12. We recommend that you do these steps before you use the appliance:
a) Remove the AC or DC power supply cable.
b) Wait for 15 seconds.
c) Reconnect the cables.
d) Turn on the appliance.

Reset Factory Settings

Use the Unit Reset window to reset the LOM card to the factory default settings and delete all the data and settings.

To reset the LOM card to the factory default settings:
1. Select Reset LOM to Factory Default.
2. Click Reset.
   A warning window opens.
3. Click OK.
   The LOM card resets to factory settings.

System Administrator

Use the System Administrator window to configure the setting for the system administrator superuser account for the LOM card. The only account that can log in to the LOM card with the console port is the system administrator account. You cannot change the admin user name for the system administrator account.

Note - The system administrator account can only log in to the Console port on the appliance. It cannot use the WebUI to configure the LOM card.
To change the system administrator password:
1. Select Change Password.
2. Enter and confirm the new password.
3. Click Apply Changes.