Getting Started Guide

Models: P-10, P-20, P-30

3 July 2012

Classification: [Protected] | P/N: 704885
Important Information

Latest Documentation
The latest version of this document is at:
http://supportcontent.checkpoint.com/documentation_download?ID=10950
For additional technical information, visit the Check Point Support Center
(http://supportcenter.checkpoint.com).

Revision History

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>03 July 2012</td>
<td>Added First Time Wizard for Gaia</td>
</tr>
<tr>
<td></td>
<td>Added Gaia to Restoring Using the WebUI (on page 43)</td>
</tr>
<tr>
<td>26 August 2010</td>
<td>Initial version</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 Power-1  Getting Started Guide).
Health and Safety Information

Read the following warnings before setting up or using the appliance.

⚠️ **Warning** - Do not block air vents. A minimum 1/2-inch clearance is required.

⚠️ **Warning** - This appliance does not contain any user-serviceable parts. Do not remove any covers or attempt to gain access to the inside of the product. Opening the device or modifying it in any way has the risk of personal injury and will void your warranty. The following instructions are for trained service personnel only.

To prevent damage to any system board, it is important to handle it with care. The following measures are generally sufficient to protect your equipment from static electricity discharge:

- When handling the board, to use a grounded wrist strap designed for static discharge elimination.
- Touch a grounded metal object before removing the board from the antistatic bag.
- Handle the board by its edges only. Do not touch its components, peripheral chips, memory modules or gold contacts.
- When handling processor chips or memory modules, avoid touching their pins or gold edge fingers.
- Restore the communications appliance system board and peripherals back into the antistatic bag when they are not in use or not installed in the chassis. Some circuitry on the system board can continue operating even though the power is switched off.
- Under no circumstances should the lithium battery cell used to power the real-time clock be allowed to short. The battery cell may heat up under these conditions and present a burn hazard.

⚠️ **Warning** - DANGER OF EXPLOSION IF BATTERY IS INCORRECTLY REPLACED. REPLACE ONLY WITH SAME OR EQUIVALENT TYPE RECOMMENDED BY THE MANUFACTURER. DISCARD USED BATTERIES ACCORDING TO THE MANUFACTURER’S INSTRUCTIONS.

- Disconnect the system board power supply from its power source before you connect or disconnect cables or install or remove any system board components. Failure to do this can result in personnel injury or equipment damage.
- Avoid short-circuiting the lithium battery; this can cause it to superheat and cause burns if touched.
- Do not operate the processor without a thermal solution. Damage to the processor can occur in seconds.

For California:

Perchlorate Material - special handling may apply. See http://www.dtsc.ca.gov/hazardouswaste/perchlorate

The foregoing notice is provided in accordance with California Code of Regulations Title 22, Division 4.5, Chapter 33. Best Management Practices for Perchlorate Materials. This product, part, or both may include a lithium manganese dioxide battery which contains a perchlorate substance.

Proposition 65 Chemical

Chemicals identified by the State of California, pursuant to the requirements of the California Safe Drinking Water and Toxic Enforcement Act of 1986, California Health & Safety Code s. 25249.5, et seq. ("Proposition 65"), that is "known to the State to cause cancer or reproductive toxicity" (see http://www.calepa.ca.gov)

WARNING:

Handling the cord on this product will expose you to lead, a chemical known to the State of California to cause cancer, and birth defects or other reproductive harm. Wash hands after handling.

Federal Communications Commission (FCC) Statement:

Note: 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.

Information to user:

The user's manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form.

Canadian Department Compliance Statement:

This Class A digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.
Japan Class A Compliance Statement:

European Union (EU) Electromagnetic Compatibility Directive


This product is in conformity with Low Voltage Directive 2006/95/EC, and complies with the requirements in the Council Directive 2006/95/EC relating to electrical equipment designed for use within certain voltage limits and the Amendment Directive 93/68/EEC.

Product Disposal

This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office or your household waste disposal service.
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important Information</td>
<td>3</td>
</tr>
<tr>
<td>Health and Safety Information</td>
<td>4</td>
</tr>
<tr>
<td>Introduction</td>
<td>9</td>
</tr>
<tr>
<td>Welcome</td>
<td>9</td>
</tr>
<tr>
<td>Power-1 Overview</td>
<td>9</td>
</tr>
<tr>
<td>This document provides:</td>
<td>10</td>
</tr>
<tr>
<td>Shipping Carton Contents</td>
<td>10</td>
</tr>
<tr>
<td>Terminology</td>
<td>10</td>
</tr>
<tr>
<td><strong>Configuring Power-1</strong></td>
<td>13</td>
</tr>
<tr>
<td>Mounting Power-1 in a Rack</td>
<td>14</td>
</tr>
<tr>
<td>Connecting the Power Cables and Power On</td>
<td>14</td>
</tr>
<tr>
<td>Available Software Images</td>
<td>15</td>
</tr>
<tr>
<td>Initial Configuration</td>
<td>15</td>
</tr>
<tr>
<td>Using the First Time Configuration Wizard on Gaia</td>
<td>17</td>
</tr>
<tr>
<td>Starting the Gaia First Time Configuration Wizard</td>
<td>17</td>
</tr>
<tr>
<td>Welcome</td>
<td>17</td>
</tr>
<tr>
<td>Available Releases</td>
<td>18</td>
</tr>
<tr>
<td>Authentication Details</td>
<td>18</td>
</tr>
<tr>
<td>Date and Time Setup</td>
<td>18</td>
</tr>
<tr>
<td>Device Name</td>
<td>18</td>
</tr>
<tr>
<td>Network Connection</td>
<td>19</td>
</tr>
<tr>
<td>Products</td>
<td>19</td>
</tr>
<tr>
<td>Security Management Administrator</td>
<td>20</td>
</tr>
<tr>
<td>Security Management GUI Clients</td>
<td>20</td>
</tr>
<tr>
<td>Dynamically Assigned IP</td>
<td>21</td>
</tr>
<tr>
<td>Secure Internal Communication (SIC)</td>
<td>21</td>
</tr>
<tr>
<td>Summary</td>
<td>21</td>
</tr>
<tr>
<td>Using the First Time Configuration Wizard on SecurePlatform</td>
<td>22</td>
</tr>
<tr>
<td>Starting the First Time Configuration Wizard</td>
<td>22</td>
</tr>
<tr>
<td>Welcome</td>
<td>23</td>
</tr>
<tr>
<td>Appliance Date and Time Setup</td>
<td>23</td>
</tr>
<tr>
<td>Network Connections</td>
<td>23</td>
</tr>
<tr>
<td>Routing Table</td>
<td>23</td>
</tr>
<tr>
<td>Host, Domain Settings, and DNS Servers</td>
<td>23</td>
</tr>
<tr>
<td>Management Type</td>
<td>24</td>
</tr>
<tr>
<td>Summary</td>
<td>25</td>
</tr>
<tr>
<td>Creating the Network Object</td>
<td>26</td>
</tr>
</tbody>
</table>
# Power-1 Hardware

**Front Panel Components**
- Power-1 11000 Series Front Panel
- Power-1 9070 Front Panel
- Power-1 5070 Front Panel
- Managing Power-1 Using the LCD Panel
- Expansion Line Cards
- Hard Disk Drives

**Rear Panel Components**
- Main Power Switch
- Redundant Power Supply Units
- Cooling Fans
- Customer Replaceable Parts
  - Power Supply
  - Cooling Fan
  - Expansion Line Card
  - Hard Disk Drive

## Restoring Factory Defaults

- Restoring Using the WebUI
  - Gaia
  - SecurePlatform
- Restoring Using the Console Boot Menu
- Restoring Using the LCD Panel

## Registration and Support

- Registration
- Support
- Where To From Here?
Chapter 1

Introduction

In This Chapter

Welcome 9
Power-1 Overview 9
Shipping Carton Contents 10
Terminology 10

Welcome

Thank you for choosing Check Point’s Power-1. We hope that you will be satisfied with this system and our support services. Check Point products are the most up to date and secure solutions available today.

Check Point also delivers worldwide educational, professional and support services through a network of Authorized Training Centers, Certified Support Partners and Check Point technical support personnel. We make sure that you get the most out of your security investment.

For more about the Internet Security Product Suite and other security solutions, see the Check Point Web site (http://www.checkpoint.com), or call Check Point at 1(800) 429-4391. For more technical information about Check Point products, consult the Check Point Support Center (http://supportcenter.checkpoint.com).

Welcome to the Check Point family. We look forward to meeting all of your current and future network, application and management security needs.

Power-1 Overview

The family of Power-1 appliances enables organizations to maximize security in high-performance environments such as large campuses or data centers. Combining integrated firewall, IPSec VPN, and intrusion prevention with advanced acceleration technologies, Power-1 delivers a high-performance security platform capable of blocking application layer threats. Even as new threats appear, Power-1 appliances maintain or increase performance while protecting the network against attacks.

Key Features:
Introduction

- Proven, enterprise-class firewall, VPN, and intrusion prevention
- Accelerated security performance, including SecureXL and CoreXL technologies
- Integrated load balancing and dynamic routing for data center reliability levels
- Centrally managed from Security Management Server/Power-1
- Automatic security protection updates from SmartDefense Services

This document provides:

- A brief overview of essential Power-1 concepts and features
- A step by step guide to getting Power-1 up and running

Note - Screen shots in this guide may apply only to the highest model to which this guide applies.

Shipping Carton Contents

This section describes the contents of the shipping carton.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appliance</td>
<td>A single Power-1 appliance</td>
</tr>
<tr>
<td>Rack Mounting Accessories</td>
<td>Hardware mounting kit</td>
</tr>
<tr>
<td>Cables</td>
<td>• 2 Power cables</td>
</tr>
<tr>
<td></td>
<td>• 1 Standard RJ-45 network cable</td>
</tr>
<tr>
<td></td>
<td>• 1 Serial console cable</td>
</tr>
<tr>
<td></td>
<td>• 1 RJ-45 loopback plug</td>
</tr>
<tr>
<td>Documentation</td>
<td>• Quick Start Guide</td>
</tr>
<tr>
<td></td>
<td>• Getting Started Guide</td>
</tr>
<tr>
<td></td>
<td>• Image Management Guide</td>
</tr>
<tr>
<td></td>
<td>• User license agreement</td>
</tr>
</tbody>
</table>

Terminology

The following terms are used in this guide:
• **Gateway**: The security engine that enforces the organization's security policy and acts as a security enforcement point.

• **Security Policy**: The policy created by the system administrator that regulates the flow of incoming and outgoing communication.

• **Security Management Server**: The server used by the system administrator to manage the security policy. The organization's databases and security policies are stored on the Security Management Server and downloaded to the gateway.

• **SmartConsole**: GUI applications that are used to manage various aspects of security policy enforcement. For example, SmartView Tracker is a **SmartConsole** application that manages logs.

• **SmartDashboard**: A **SmartConsole** GUI application that is used by the system administrator to create and manage the security policy.

• **Locally Managed Deployment**: When all Check Point components responsible for both the management and enforcement of the security policy (the Security Management Server and the gateway) are installed on the same machine.

• **Centrally Managed Deployment**: When the gateway and the Security Management Server are installed on separate machines.
Chapter 2

Configuring Power-1

In This Chapter

Mounting Power-1 in a Rack 14
Connecting the Power Cables and Power On 14
Available Software Images 15
Initial Configuration 15
Using the First Time Configuration Wizard on Gaia 17
Using the First Time Configuration Wizard on SecurePlatform 22
Creating the Network Object 26
Advanced Configuration 26

The workflow for configuring Power-1 is:

1. Mount the Power-1 in the rack.
2. Connect the cables and power on.
3. Perform the initial configuration.
4. Add the Power-1 object in SmartDashboard and install a policy.
Mounting Power-1 in a Rack

Mount the system in the rack with the network ports facing the front of the rack.

Connecting the Power Cables and Power On

1. Connect the power cables.
2. On the back panel, turn on the Power button to start the appliance.

Note - When a power supply fails or is not connected to the outlet, an alarm sounds continuously. If you hear the alarm, replace the faulty power supply immediately, and connect the new unit to an A/C outlet ("Removing the Power Supply" on page 36).
3. Wait for the appliance to initialize and boot. The status of the appliance appears on the LCD screen:

![Initializing Please wait...]

The appliance is ready for use when the model number is displayed.

## Available Software Images

Power-1 comes with multiple software images. Select the software image that you want to use. Reverting to a software image takes a few minutes. To follow the progress and see when the appliance is ready, connect to the appliance using a serial console.

For more about software images, see the Power-1 Image Management Guide for the applicable version ([http://support.checkpoint.com](http://support.checkpoint.com)).

>Note - Gaia is available for R75.40 and higher.

## Initial Configuration

Do the initial configuration of the appliance with the First Time Configuration Wizard. There are different First Time Configuration Wizard options for the Gaia and the SecurePlatform operating system.
Go to the applicable section:

- Using the First Time Configuration Wizard on Gaia (on page 17)
- Using the First Time Configuration Wizard on SecurePlatform (on page 22)
Using the First Time Configuration Wizard on Gaia

Use the First Time Configuration Wizard to do the initial configuration of the Gaia appliance.

Note - The pages that you see in the wizard depend on the software image and the options you select. You will not see all the pages that are in this section.

Starting the Gaia First Time Configuration Wizard

To start the First Time Configuration Wizard:

1. Connect a standard network cable to the appliance management interface and to your management network.
   The management interface is marked **Internal**. This interface is preconfigured with the IP address `192.168.1.1`.

2. Connect to the management interface from a computer on the same network subnet.
   For example: IP address `192.168.1.x` and net mask `255.255.255.0`. This can be changed in the WebUI, after you complete the First Time Configuration Wizard.

3. To access the management interface, open a connection from a browser to the default management IP address: `https://192.168.1.1`

4. The login page opens. Log in to the system using the default username and password: `admin` and `admin`

5. Click **Login**.

   Note - The features configured in the First Time Configuration Wizard are accessible after completing the wizard using the WebUI menu. The WebUI menu can be accessed by navigating to `https://<appliance_ip_address>`.

6. The **First Time Configuration Wizard** runs.

Welcome

The Welcome page introduces the product.
### Available Releases

The appliance comes with different software images. Select the software image that you want to install. You can change to another software image after the First Time Configuration Wizard is completed.

If you select a SecurePlatform software image, use the SecurePlatform First Time Configuration Wizard to configure the appliance.

### Authentication Details

The default password gives you access to the appliance. For security purposes, change it to a more secure password.

### Date and Time Setup

Set the system time and date for the appliance:

- Manually
- From a time server, using Network Time Protocol (NTP)

### Device Name

Set the **host name**, **domain name**, and **DNS servers** for IPv4 addresses. The host name must start with a letter and cannot be named com1, com2,...com9.

You can use the Gaia WebUI to configure IPv6 DNS servers.
**Network Connection**

**Connection Information** - Configure the IPv4 interface information for the management interface. You can change the Management IP address. Connectivity is maintained with an automatically created secondary interface. After you complete the First Time Configuration Wizard, you can remove this interface in the **Interface Management > Network Interfaces** page.

**DHCP Server** - You can configure the Gaia appliance to be a Dynamic Host Configuration Protocol (DHCP) server.

**To define a DHCP server on the Gaia appliance Internal interface:**
1. In **DHCP Server**, select **Enabled**.
2. Define the **IP Pool**. This is the range of IPv4 addresses that the server assigns to hosts.

---

**Products**

**Products**

Select the Gaia products that are installed on the appliance.

**Advanced**

Use these options to configure an appliance that is a cluster member or in a High Availability deployment.

- **Unit is part of a cluster** - the options are:
Configuring Power-1

- **ClusterXL** - For more about ClusterXL configurations, see the applicable version of the *ClusterXL Administration Guide*.

- **VRRP** - For more about VRRP clusters, see the applicable version of the *Gaia Administration Guide*.

- **Define Security Management as** - In a Management High Availability deployment, define this Security Management server as *Primary* or *Secondary*. For more about Management High Availability, see the applicable version of the *Security Management Administration Guide*.

Search for these guides in the Support Center (http://supportcontent.checkpoint.com/solutions?id=sk67581).

Security Management Administrator

*Note* - You only see this page when the Gaia appliance is a Security Management server.

Define the name and password of an administrator that can connect to the Security Management server using SmartConsole clients.

Security Management GUI Clients

*Note* - You see this page when the appliance is a Security Management.
Define the clients that are allowed to connect to the appliance using a web browser or SSH client. These clients can manage the appliance using a web or SSH connection. For security reasons, we recommend that you do not use the Any IP address option.

**Dynamically Assigned IP**

Note - You see this page when the appliance is a Security Gateway.

A Dynamically Assigned IP (DAIP) gateway is a gateway where the external interface IP address is assigned dynamically by the ISP.

Select this option if this Security Gateway uses dynamically assigned IP addresses.

**Secure Internal Communication (SIC)**

Define the Secure Internal Communication (SIC) Activation Key. The same key is used by the gateway object in SmartDashboard.

**Summary**

Click Finish to complete the First Time Configuration Wizard and configure the appliance. You can log in to the WebUI after some minutes.

Note - We recommend that you back up the system configuration. You can use the Gaia add backup command.
Using the First Time Configuration Wizard on SecurePlatform

Do the initial configuration of the SecurePlatform appliance with the First Time Configuration Wizard.

Note - The pages that you see in the wizard depend on the software image and the options you select. You will not see all the pages that are in this section.

Starting the First Time Configuration Wizard

To start the First Time Configuration Wizard:

1. Connect a standard network cable to the appliance’s management interface and to your management network.
   The management interface is marked **Internal**. This interface is preconfigured with the IP address 192.168.1.1.
2. Connect to the management interface, from a computer on the same network subnet as the management interface.
   For example: IP address 192.168.1.x and netmask 255.255.255.0. This can be changed in the WebUI.
3. To access the management interface, open a connection from a browser to the default management IP address: https://192.168.1.1:4434.
   Note - Pop-ups must always be allowed on https://<appliance_ip_address>.

   The login page opens.
4. Log in to the system using the default login name/password: *admin/admin* and click **Login**.
   Note - The features configured in the wizard are accessible after completing the wizard via the WebUI menu. The WebUI menu can be accessed by navigating to https://<appliance_ip_address>:4434.
5. Change the administrator password, as prompted. The default password gives you access to the appliance. For security purposes, you must change it to a more secure password.
   In the Password recovery login token section, download a Login Token to use if you forget the password. We recommend that you save the password recovery login token file in a safe storage.
6. The **First Time Configuration Wizard** runs.

**Welcome**

The **Welcome** page summarizes the steps of the First Time Configuration Wizard.

**Appliance Date and Time Setup**

Configure date and time in the **Date and Time Setup** page. Click **Apply**.

**Network Connections**

Configure the network connections in the **Network Connections** page.

You can change the Management IP address. Connectivity is maintained with an automatically created secondary interface. You can remove this interface after you complete the First Time Configuration Wizard in the **Network > Network Connections** page.

**Routing Table**

Configure the routing settings on the **Routing Table** page.

**Host, Domain Settings, and DNS Servers**

Set the Host, Domain and DNS Servers in the **Host, Domain Settings, and DNS Servers** page.

The host name must start with a letter and cannot be named com1, com2,...com9.

In the DNS section, set the DNS servers for the appliance.
Management Type

Set how the appliance is managed in the Management Type page.

- **Locally Managed Deployment**: The appliance is a Security Gateway and a Security Management server. The Security Management server manages the Security Policy that is enforced by the Security Gateway.

- **Centrally Managed Deployment**: The appliance is a Security Gateway, without a Security Management server. The Security Gateway is managed by a remote Security Management server.

Locally Managed Deployment

This section describes how to configure the appliance for locally managed deployment.

Check Point Cluster

Configure the cluster type. If you select *This appliance is part of a Power-1 Cluster*, the options are:

- Primary cluster member
- Secondary cluster member

For information about clusters, see the *ClusterXL Administration Guide* (http://supportcenter.checkpoint.com) for your Check Point version.

Web/SSH and GUI Clients Configuration

Define the clients that are allowed to connect to the appliance using a web browser or SSH client. These clients can manage the appliance using a web or SSH connection.

You can define a Host according to Hostname or IP address. Enter a comma-separated list of IP addresses from which you manage the appliance. Enter Any to manage the appliance from anywhere.

>Note - Do not use the Any value for security reasons.

After you complete the First Time Configuration Wizard, more options are available using the WebUI menu.

Download SmartConsole Applications

Configuring a security policy for a Locally Managed Power-1 (configured in the Management Type page) requires you to install the SmartConsole applications. In the Download SmartConsole Applications window, you can download SmartConsole and install it on Windows machines.
The release notes of your Check Point version in the Check Point Support Center (http://supportcenter.checkpoint.com), lists compatible Windows operating systems for SmartConsole.

**Centrally Managed Deployment**

This section describes how to configure the appliance for centrally managed deployment.

**Gateway Type**

Configure the gateway type for a *Centrally Managed* Power-1.

**Web/SSH and GUI Clients Configuration**

Define the clients that are allowed to connect to the appliance using a web browser or SSH client. These clients can manage the appliance using a web or SSH connection.

You can define a Host according to Hostname or IP address. Enter a comma-separated list of IP addresses from which you manage the appliance. Enter *Any* to manage the appliance from anywhere.

*Note* - Do not use the *Any* value for security reasons.

After you complete the First Time Configuration Wizard, more options are available using the WebUI menu.

**SIC Setup**

Configure the SIC (Secure Internal Communication) settings for a *Centrally Managed* appliance. Enter a SIC Activation Key. The same key is used by the gateway object in SmartDashboard.

**Summary**

The Summary page opens.

Click *Finish* to complete the First Time Configuration Wizard. You can log in to the appliance after some minutes.

*Note* - You should back up the system configuration. Open the WebUI interface and go to Appliance > Backup and Restore.
Creating the Network Object

Configure the Power-1 object as a gateway object in the Security Management server database.

1. Launch SmartDashboard.
2. Configure a new gateway object for the appliance.
3. Enter the IP address for the appliance.
4. For a centrally managed deployment, establish Secure Internal Communication (SIC). Enter the activation key you used in the First Time Configuration Wizard.
5. Configure the topology.
6. Install the security policy.

Advanced Configuration

Advanced configuration on Gaia

Advanced configuration on Gaia can be done using the WebUI or the CLI.

Advanced configuration on SecurePlatform

Advanced configuration on SecurePlatform can be done using the `sysconfig` menu from the CLI.

>Note - The `sysconfig` menu is only available after running the First Time Configuration Wizard in the WebUI.

Connecting to the Power-1 CLI

You can connect to the command line interface of the Power-1 appliance using:

- The provided serial console cable (DTE to DTE) and terminal emulation software such as HyperTerminal (from Windows) or Minicom (from Unix/Linux systems).
  Connection parameters for Power-1 appliances are: 9600bps, no parity, 1 stop bit (8N1), flow control None.
- An SSH connection to the management interface (if SSHD is configured).
Chapter 3

Power-1 Hardware

In This Chapter

Front Panel Components 27
Rear Panel Components 33
Customer Replaceable Parts 35

This chapter provides instructions for installing and removing hardware components on the Power-1 appliance.

Front Panel Components

This section describes the features and components located on the appliance front panel.

**Power-1 11000 Series Front Panel**

<table>
<thead>
<tr>
<th>Key</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LCD display screen</td>
</tr>
<tr>
<td>2</td>
<td>Management connection port - Ethernet connection to a remote management workstation</td>
</tr>
</tbody>
</table>
### Power-1 Hardware

<table>
<thead>
<tr>
<th>Key</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Synchronization port - for synchronizing with cluster members or a high availability peer</td>
</tr>
<tr>
<td>4</td>
<td>Console port - for a serial connection to the appliance using a terminal emulation program such as HyperTerminal</td>
</tr>
<tr>
<td>5</td>
<td>Keypad</td>
</tr>
<tr>
<td>6</td>
<td>Power indicator LED</td>
</tr>
<tr>
<td>7</td>
<td>USB ports</td>
</tr>
<tr>
<td>8</td>
<td>Future expansion slot</td>
</tr>
<tr>
<td>9</td>
<td>Expansion line card exp1 (2 or 4 ports)</td>
</tr>
<tr>
<td>10</td>
<td>Built in Ethernet ports (Lan1 - Lan8)</td>
</tr>
<tr>
<td>11</td>
<td>Expansion line card exp2 (2 or 4 ports)</td>
</tr>
<tr>
<td>12</td>
<td>Hard disk drive</td>
</tr>
</tbody>
</table>

---

### Power-1 9070 Front Panel

---

<table>
<thead>
<tr>
<th>Key</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LCD display screen</td>
</tr>
<tr>
<td>Key</td>
<td>Description</td>
</tr>
<tr>
<td>-----</td>
<td>-------------</td>
</tr>
<tr>
<td>2</td>
<td>Management connection port - Ethernet connection to a remote management workstation</td>
</tr>
<tr>
<td>3</td>
<td>Synchronization port - for synchronizing with cluster members or a high availability peer</td>
</tr>
<tr>
<td>4</td>
<td>Console port - for a serial connection to the appliance using a terminal emulation program such as HyperTerminal</td>
</tr>
<tr>
<td>5</td>
<td>Screen operation keys</td>
</tr>
<tr>
<td>6</td>
<td>Power indicator LED</td>
</tr>
<tr>
<td>7</td>
<td>USB ports</td>
</tr>
<tr>
<td>8</td>
<td>Future expansion slot</td>
</tr>
<tr>
<td>9</td>
<td>Expansion line card exp1 (2 or 4 ports)</td>
</tr>
<tr>
<td>10</td>
<td>Built in Ethernet ports (Lan1 - Lan8)</td>
</tr>
<tr>
<td>11</td>
<td>Expansion line card exp2 (2 or 4 ports)</td>
</tr>
<tr>
<td>12</td>
<td>Hard disk drive</td>
</tr>
</tbody>
</table>

**Power-1 5070 Front Panel**

![Power-1 5070 Front Panel Diagram]
### Managing Power-1 Using the LCD Panel

The appliance has an LCD panel that you can use to do basic management operations. You can enable DHCP. You can configure the management IP address, netmask, and default gateway of the appliance. You can reboot the appliance.

#### Menu Options

<table>
<thead>
<tr>
<th>Menu</th>
<th>Sub-menu</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network</td>
<td>DHCP</td>
<td>Enable or disable IP address allocation using DHCP</td>
</tr>
<tr>
<td>Menu</td>
<td>Sub-menu</td>
<td>Purpose</td>
</tr>
<tr>
<td>------</td>
<td>----------</td>
<td>---------</td>
</tr>
<tr>
<td></td>
<td>Set Internal IP or Set Mgmt IP</td>
<td>Set the management interface IP address (cannot be edited when DHCP is enabled)</td>
</tr>
<tr>
<td></td>
<td>Set Netmask</td>
<td>Set the management interface network mask (cannot be edited when DHCP is enabled)</td>
</tr>
<tr>
<td></td>
<td>Set Default GW</td>
<td>Set the management interface default gateway (cannot be edited when DHCP is enabled)</td>
</tr>
</tbody>
</table>

System

|        | Reboot | Reboot the appliance |

**LCD Panel Keys**

<table>
<thead>
<tr>
<th>To</th>
<th>Press</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enter the main menu</td>
<td>![ENTER]</td>
</tr>
<tr>
<td>Navigate the menu</td>
<td>![UP] or ![DOWN]</td>
</tr>
<tr>
<td>Select a menu option</td>
<td>![ENTER]</td>
</tr>
<tr>
<td>Go back to previous menu</td>
<td>![ESC]</td>
</tr>
</tbody>
</table>

**When Entering an IP Address**

<table>
<thead>
<tr>
<th>To</th>
<th>Press</th>
</tr>
</thead>
<tbody>
<tr>
<td>Move to the next digit</td>
<td>![ENTER]</td>
</tr>
<tr>
<td>Move back to the previous digit</td>
<td>![ESC]</td>
</tr>
</tbody>
</table>
### Expansion Line Cards

The Power-1 appliance contains optional expansion slots that accommodate cold-swappable network line cards.

- Power-1 5070 supports one network expansion slot
- Power-1 9070 supports two network expansion slots

According to type, each expansion line card contains two or four ports. The following types of expansion line card are currently available:

#### Compatible line cards

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPPWR-ACC-4-1C</td>
<td>1000BaseT line card</td>
</tr>
<tr>
<td>CPPWR-ACC-4-1SRF</td>
<td>1GbE Multi-mode SR fiber optic line card</td>
</tr>
<tr>
<td>CPPWR-ACC-4-1LRF</td>
<td>1GbE Single-mode LR fiber optic line card</td>
</tr>
<tr>
<td>CPPWR-ACC-2-10SRF</td>
<td>10GbE Multi-mode SR fiber optic line card</td>
</tr>
<tr>
<td>CPPWR-ACC-2-10LRF</td>
<td>10GbE Single-mode LR fiber optic line card</td>
</tr>
</tbody>
</table>

### Hard Disk Drives

Power-1 5070 contains one hard disk drive. The hard disk drive is not hot-swappable. You must power the appliance off before attempting to remove or install a hard disk drive.
Power-1 9070 and 11000 series models contain two hot-swappable redundant hard disk drives (RAID1).

**RAID1 Mirroring**

Implemented by a dedicated RAID controller, the Power-1 9070 model performs RAID1 mirroring across two hard disk drives. Mirror rebuild is automatic.

**Rear Panel Components**

This section describes components located on the rear panel of the appliance.
Main Power Switch

The main power switch controls power to the entire unit. This appliance has two main power switches for your convenience.

Redundant Power Supply Units

Located at the right rear of the appliance, two hot-swappable power supply units provide built-in power redundancy. Each power supply connects to an electric outlet.

When a power supply fails or is not connected to the outlet, an alarm sounds continuously.

Cooling Fans

The Power-1 appliance contains three replaceable cooling fans. Each cooling fan operates independently of the others, providing redundancy in the event of failure.
Customer Replaceable Parts

For maximum availability and easy maintenance, the appliance has many customer replaceable parts.

<table>
<thead>
<tr>
<th></th>
<th>Power-1 5070</th>
<th>Power-1 9070</th>
<th>Power-1 11000 Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supplies</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Cooling fans</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Expansion line cards</td>
<td>1</td>
<td>1 with additional slot</td>
<td>1 with additional slot</td>
</tr>
<tr>
<td>Hard disk drives</td>
<td>1</td>
<td>2 (RAID-1) Hot swappable</td>
<td>2 (RAID-1) Hot swappable</td>
</tr>
</tbody>
</table>
Unless directed to do so by Check Point technical support, customers are prohibited by warranty and support agreements from replacing any parts. Customers are prohibited from opening the Power-1 case under any circumstances.

**Power Supply**

This section presents the procedures for removing and installing a power supply unit. Power-1 appliance contains two redundant power supplies.

### Removing the Power Supply

To remove a power supply unit:

1. If the alarm sounds, press the red alarm button to the right of the power supply. The alarm stops.
2. Remove the power cord.
3. Loosen the retaining screw located above the power socket.
4. Pull the extraction handle to remove the power supply unit.
Note - Use only the extraction handle to remove the power supply unit. To prevent damaging the power supply, do not pull on the retaining screw, power cord clip or any other part of the unit.

Installing the Power Supply

To install a replacement power supply:
1. Insert the power supply into its slot and push firmly until it clicks into place.
2. Tighten the retaining screws.
3. Insert the power cord. Verify that the green LED is illuminated.

Cooling Fan

This section presents the procedures for removing and installing a fan unit. The Power-1 appliance contains three cooling fans. It is not necessary to power off the appliance before adding or removing a fan unit.
Removing Fan Units

To remove a fan unit:
1. Loosen the four retaining screws in the corners of the fan assembly.
2. Gently pull the fan unit out of the appliance.

Installing Fan Units

To install a fan unit:
1. Insert the fan unit into the appliance. Push firmly until it clicks into place.
2. Tighten the four retaining screws in the corners of the fan assembly.

Expansion Line Card

This section presents the procedures for removing and installing an expansion line card unit. The built-in Ethernet ports (Lan1 Lan8) are not customer replaceable.

<table>
<thead>
<tr>
<th></th>
<th>Power-1 5070</th>
<th>Power-1 9070</th>
<th>Power-1 11000 Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expansion line cards</td>
<td>1</td>
<td>1 with additional slot</td>
<td>1 with additional slot</td>
</tr>
</tbody>
</table>

**Important** - Make certain that you are electromagnetically grounded when performing the following procedures. Static electricity can damage the appliance.
Removing Expansion Line Cards
To remove an expansion line card:
1. Power off the appliance and remove the power cords from the power supply units.
2. Loosen the retaining screws on either side of the expansion line card.
3. Holding the screws, pull the expansion line card out of the slot.

Installing Expansion Line Cards
To install an expansion line card:
1. Power off the appliance and remove the power cords from the power supply units.
2. Insert the expansion line card into the slot.
3. Push until the card clicks into place.
4. Tighten the retaining screws on either side of the expansion line card.

Hard Disk Drive
This sections covers installing or removing a hard disk drive.
Removing a Hard Disk Drive

To remove a hard disk drive:

1. **Power-1 5070 only**: Hard disk drive is not hot-swappable. Turn off the appliance and remove the power cords from the power supply unit before attempting to remove the hard disk drive.

2. Using the key supplied in the toolkit, unlock the drive.

3. Slide the release latch toward the left (see the arrow in diagram). The extraction handle pops out.

4. Using the extraction handle, remove the drive from the slot.
Installing a Hard Disk Drive

To install a hard disk drive:

1. **Power-1 5070 only:** Hard disk drive is not hot-swappable. Turn off the appliance and remove the power cords from the power supply unit before attempting to remove the hard disk drive.
2. Slide the replacement hard disk drive into the slot.
3. Push the extraction handle until it closes and the drive clicks into place.
4. Using the key supplied in the toolkit, lock the new drive in place.
Chapter 4

Restoring Factory Defaults

In This Chapter

Restoring Using the WebUI 43
Restoring Using the Console Boot Menu 44
Restoring Using the LCD Panel 45

If necessary, restore the appliance to its factory default settings.

⚠️ Important - If you restore factory defaults, all information on the appliance is deleted.

Restoring Using the WebUI

Use the WebUI of the applicable operating system to restore the appliance to the factory default settings. You can select one of the software images that are available on the appliance.

Gaia

Use the Gaia WebUI to restore the default factory settings.

To restore a Gaia appliance with the WebUI:
1. Open an Internet browser to the management IP address, https://<appliance_ip_address>
2. Log in to the WebUI of the appliance using the administrator username and password.
4. Select the image version that you are restoring.
5. Click Apply.
SecurePlatform

Use the SecurePlatform WebUI to restore the default factory settings.

**To restore a SecurePlatform appliance with the WebUI:**

1. Open Internet Explorer and navigate to the management IP address, https://<appliance_ip_address>:4434
2. Log in to the WebUI of the appliance using the administrator username and password.
3. In the WebUI, click **Appliance > Image Management**.
   The **Image Management** window opens.
4. Select the image version that you are restoring.
5. Click **Revert**.

**Restoring Using the Console Boot Menu**

**To restore the appliance to its default factory configuration using the console boot menu:**

1. Connect the supplied DB9 serial cable to the console port on the front of the appliance.
2. Connect to the appliance using a terminal emulation program such as Microsoft HyperTerminal or PuTTY.
3. Configure the terminal emulation program:
   - In the HyperTerminal **Connect To** window, select a port from the **Connect using** list.
   - In PuTTY select the **Serial** connection type.
4. Define the serial port settings: 9600 BPS, 8 bits, no parity, 1 stop bit.
5. From the **Flow control** list, select **None**.
6. Connect to the appliance.
7. Turn on the appliance.
8. The appliance initializes and status messages are shown in the terminal emulation program.

9. When this message is shown, you have approximately four seconds to hit any key to activate the Boot menu.

10. From the Boot menu, select the relevant Reset to factory defaults image.

11. Press Enter.

---

Restoring Using the LCD Panel

To restore the Power-1 appliance to its default factory configuration using the LCD Panel keys:

1. Reboot or power on the appliance.
2. When the countdown begins, press any of the arrow keys.

The Boot menu appears.
3. Using the arrow buttons, scroll to the relevant default factory image.
4. Press \[\text{ }\].

5. Confirm the reset by pressing \[\text{ }\].
   Pressing any other button causes the Action Canceled message to display:

   ![Action Canceled Message]

   At this point, pressing any key returns you to the boot menu.

6. Once you have confirmed the reset, wait for the appliance to restore the factory image. While the appliance is restored to the default image, a Reverting image don't turn off message displays continuously.

   When the appliance has been restored to its default factory configuration, the appliance reboots and the initializing message appears.
Chapter 5

Registration and Support

In This Chapter

Registration 47
Support 47
Where To From Here? 47

Registration

The appliance requires a product-specific Check Point license. Get a license and register at the Check Point Appliance Registration site (http://register.checkpoint.com/cpapp).

Connect to the WebUI of the appliance to find the MAC address that is required to obtain a license.

- Gaia - From Advanced mode, select Maintenance > Licenses.
- SecurePlatform - Select Information > Appliance Status.

Support

For additional technical information about Check Point products, consult the Check Point Support Center (http://supportcenter.checkpoint.com).

Where To From Here?

You have the basics to get started. The next step is to get more advanced knowledge of your Check Point software.

Check Point documentation is available on the Check Point Support Center (http://supportcenter.checkpoint.com).

Be sure to also use the Online Help when you are working with the Check Point SmartConsole clients.