QUANTUM

21 March 2025

QUANTUM SMART-1 6000-L/6000-XL APPLIANCES

Getting Started Guide

CHECK POINT™

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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.

Certifications
For third party independent certification of Check Point products, see the Check Point Certifications page.

Check Point Quantum Smart-1 6000-L/6000-XL Appliances
For more about this release, see the home page.

Latest Version of this Document in English
Open the latest version of this document in a Web browser.
Download the latest version of this document in PDF format.

Feedback
Check Point is engaged in a continuous effort to improve its documentation.
Please help us by sending your comments.

Revision History

Date	Description
17 February 2022	Rebranding - New Check Point logo
29 April 2021	Improved formatting and layout
25 April 2021	Updated *"Declaration of Conformity" on page 26*
03 March 2021	Improved formatting and layout
01 March 2021	First release of this document

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Introduction

Welcome

Thank you for choosing the Quantum Check Point Smart-1 6000-L/6000-XL Appliances, part of the Check Point Infinity consolidated architecture. You are now minutes away from setting up the most advanced security platform designed to prevent the most sophisticated threats today and in the future. 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, or call Check Point at 1(800) 429-4391. For more technical information about Check Point products, consult the Check Point Support Center.

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

Quantum Smart-1 6000-L and Smart-1 6000-XL Overview

Check Point Smart-1 platforms welcome the 6th generation of Cyber Security. The Smart-1 6000-L/6000-XL dedicated appliances are optimized for performance and scalability with both hardware and OS (operating system) hardened from the core.

Check Point Infinity architecture consolidates management of multiple security layers, providing superior policy efficiency and enabling you to manage security through a single pane of glass. The single management centrally correlates all types of events across all network environments, cloud services and mobile infrastructures.

The new Smart-1 appliances of the 6th generation are the gold standard platform for consolidated Security Management including policy, logs and events in a single box.

The new Smart-1 6000-L and Smart-1 6000-XL appliances deliver a performance boost of up to 200% compared to 5th generation appliances. This provides flexibility to double the number of managed gateways instantly.

Key features include:

- Up to 200% improvement in log collection with up to 300K logs/sec ingestion leading the industry with instantaneous search results
- Up to 80% faster report and views generation
- Optimized hardware and OS with the latest Gaia R81
- Double the system capacity in minutes by upgrading from Base to Plus package
- Faster system response and load times with increased memory (RAM) by 50% up to 384GB
- Better system resiliency utilizing fast and reliable SSD storage in Smart-1 6000-XL
- Complete feature and tool set including full Threat visibility, best practices and compliance, SmartEvent and Multi-Domain management and automation
- Wide variety of storage and network interfaces, including copper & fiber 1GbE and 10GbE interfaces
- Manage up to 150/400+ Security Gateways with Smart-1 6000-L/6000-XL respectively

Shipping Carton Contents

Item	Description
Appliance	One Smart-1 6000-L/6000-XL appliance
Rails box	■ Telescoping Rails Kit (2U)
Doc Kit (Documentation)	■ Enterprise Products Safety, Environmental, and Regulatory Information booklet ■ Quick Start Guide ■ Installing Telescoping Rails Guide ■ Software License Agreement & Hardware Warranty
Accessories	■ 2 power cords ■ 1 standard LAN cable ■ 1 serial console cable DB9 to DB9 ■ 1 DB9 to RJ-45 adapter ■ Copper RJ-45 loopback plug (for Hardware Diagnostic Tool)
Bezel	■ Front panel bezel

Mounting the Smart-1 Appliances in a Rack

Installing Telescoping Rails

You can install your Smart-1 appliance with the Telescoping Rails hardware.

See the *Installing the Quantum Smart-1 6000-L/6000-XL Telescopic Rails* booklet for illustrated installation procedures.

Appliance Air Vents

Make sure that the appliance air vents have sufficient airflow from front to rear when the appliance is mounted in a rack.

Important - If the appliance vents are blocked, the appliance can become too hot and it can be damaged.

The appliance and rack rails have been tested in extreme conditions and do not block air flow to the appliance. These appliances are specifically designed to install with these rails. The appliance is supported in an environment between 5-35 degrees Celsius.

Configuring Smart-1 Appliances

Starting the Appliance

Connect the appliance to a power source and turn on the appliance. When the appliance is ready, you can run the First Time Configuration Wizard to configure it.

To start the appliance:

1. Connect the appliance's management interface to a PC with the included Ethernet cable.
2. Connect both power cables to the power supply units in the rear panel.
3. If the power did not come up, press the **Power** button to power it up.
4. The appliance turns on.

When the appliance is ready, you can run the First Time Configuration Wizard to configure it.

Available Software Images

The Smart-1 6000-L/6000-XL appliances come with the R81 software image.

To follow the installation progress and see when the appliance is ready, connect to the appliance with a serial console cable.

For more about software images, see the *Smart-1 600-S/600-M/6000-L/6000-XL home page*.

Initial Configuration

Configure the appliance with the Gaia First Time Configuration Wizard. See the *Quantum Smart-1 Appliances Quick Start Guide* provided with your appliance.

Advanced Configuration

You can configure advanced options on Gaia OS from the Gaia Portal or the Gaia Clish.

Connecting to the Smart-1 Appliances CLI

To connect to the command line interface of the Smart-1 Appliances, use one of these:

- Use the included serial console cable (DB9-to-DB9), or the DB9-to-RJ-45 adapter, and a terminal emulation software, such as PuTTY (from Windows) or Minicom (from Unix/Linux).
- Use an SSH connection to the management interface (if SSHD is configured).

To connect to the appliance CLI using the serial console cable DB9-to-DB9 and a terminal emulation software:

1. Connect one end of the serial console cable DB9-to-DB9 directly to the Serial console port on the appliance.
2. Use a screwdriver to attach the cable screws to the Serial console port.
3. Connect the other end of the serial console cable to your computer (console server).
4. On your computer, open a terminal emulation software.
5. Configure the serial connection parameters: 9600bps, 8 bits, no parity, 1 stop bit (8N1), Flow Control - None.
6. Establish the serial connection to the appliance.

To connect to the appliance CLI using the the DB9-to-RJ-45 adapter and a terminal emulation software:

Your appliance may be shipped with one of two types of the DB9-to-RJ-45 adapters:

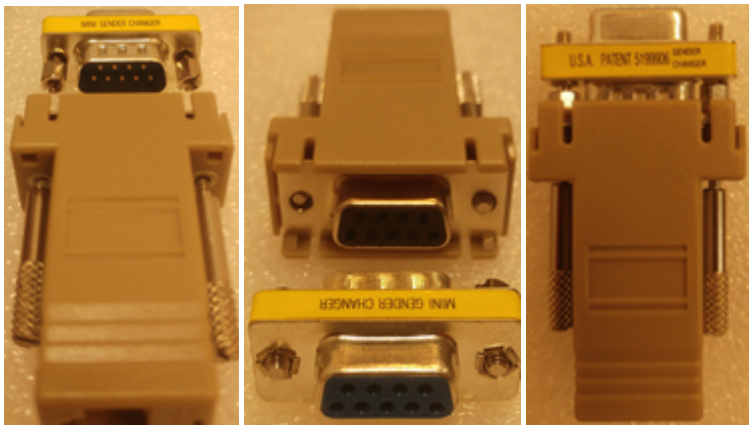
Type of the DB9-to-RJ-45 adapter	Description
A DB9-to-RJ-45 adapter *without* plastic protrusions on the DB9 end	The adapter connects directly to the Serial console port on the Smart-1 Appliances.
A DB9-to-RJ-45 adapter *with* plastic protrusions on the DB9 end (these protrusions are part of the adapter's plastic body - they protrude above and below the DB9 connector)	The adapter connects to the Serial console port on the Smart-1 Appliances through the DB9 gender changer. ■ Your appliance may be shipped with the DB9 gender changer already connected. ■ If the DB9 gender changer is not already connected to the appliance, it is provided in a parts bag with this DB9-to-RJ-45 adapter type.

If your appliance is shipped with the DB9-to-RJ-45 adapter without plastic protrusions on the DB9 end:

1. Connect the DB9 connector of the DB9-to-RJ-45 adapter directly to the Serial console port on the appliance.
2. Use a screwdriver to attach the DB9-to-RJ-45 adapter screws to the Serial console port.
3. Connect the RJ45 end of the serial console cable to the RJ45 port on the DB9-to-RJ-45 adapter.
4. Connect the other end of the serial console cable to your computer (console server).
5. On your computer, open a terminal emulation software.
6. Configure the serial connection parameters: 9600bps, 8 bits, no parity, 1 stop bit (8N1), Flow Control - None.
7. Establish the serial connection to the appliance.

If your appliance is shipped with the DB9-to-RJ-45 adapter that has plastic protrusions on the DB9 end:

1. Connect the DB9 gender changer to the Serial console port on the appliance.
2. Use a screwdriver to attach the DB9 gender changer screws to the appliance.
3. Connect the DB9-to-RJ-45 adapter to the DB9 gender changer.
4. Use a screwdriver to attach the DB9-to-RJ-45 adapter screws to the DB9 gender changer.



5. Connect the RJ45 end of the serial console cable to RJ45 port on the DB9-to-RJ-45 adapter.
6. Connect the other end of the serial console cable to your computer (console server).
7. On your computer, open a terminal emulation software.
8. Configure the serial connection parameters: 9600bps, 8 bits, no parity, 1 stop bit (8N1), Flow Control - None.
9. Establish the serial connection to the appliance.

To connect to the appliance CLI using an SSH connection to the management interface (if SSHD is configured):

1. If you connect to your appliance through a Firewall, make sure to define the applicable security rules that allow such SSH connection from your computer to your appliance.
2. On your computer, open an SSH client software (for example, PuTTY).
3. Start a connection to the IP address that you assigned to the **MGMT** interface on your appliance.
4. Log in with the applicable credentials:

State	Username	Password
Before completing the First Time Configuration Wizard	`admin`	`admin`
After completing the First Time Configuration Wizard	Your configured password	Your configured password

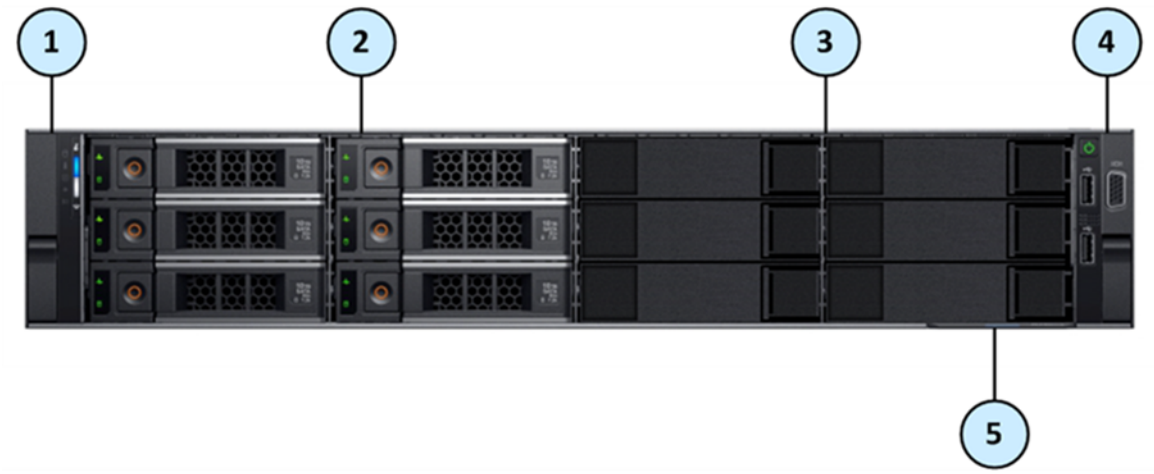
Configuring SmartEvent

To learn how to connect the SmartEvent components to a Security Management Server and to a Multi-Domain Management Server, see the *Logging and Monitoring Administration Guide* for your Management Server version.

Smart-1 Appliances Hardware

This section describes the front and rear panel elements of the Smart-1 6000-L/6000-XL appliances.

Front Panel



Item	Component	Description
1	Left control panel	Contains the status LED indicators and system notification LED indicator.
2	Disk slots	Enable you to install storage devices that are supported on your system. Smart-1 6000-L/6000-XL is supplied with 6 or 12 disks. You can install 6 additional disks if your system starts with 6 X 4TB disks. See *Quantum Smart-1 6000-L/6000-XL Replacing Storage Devices*.
3	Disk blanks	Disk blanks that cover the empty disk slots.
4	Right control panel	Contains the power button, two USB 2.0 ports, and a VGA connector.
5	Service tag	The service tag contains the MAC address, serial number, and the appliance model. The service tag is a slide-out label panel.

Storage Devices

RAID Levels and Disk Storage

- Smart-1 6000-L - The supplied Enterprise graded SATA III 3.5" HDDs (Hard Disk Drives) are hot swappable.
- Smart-1 6000-XL - The supplied Enterprise graded 2.5" SSDs (Solid State Drives) come in 1TB and 4TB capacities depending on your storage requirements and are hot swappable.
- Hot swappable disks are supplied in hot swappable disk carriers that fit in the disk slots.

- If you do not immediately install a replacement disk when a disk fails, leave the failed disk in place to ensure proper appliance cooling until the new disk is installed.

	Smart-1 6000-L 4TB HDD Disks	Smart-1 6000-XL 4TB SSD Disks	Smart-1 6000-XL 1TB SSD Disks
Default RAID Level	5, 6, 50 for 6 disks	5, 6, 50 for 6 disks	5, 6, 50 for 6 disks
Default Storage	6 x 4TB disks	6 x 4TB disks	6 x 1TB disks
Optional Storage	12 x 4TB disks	12 x 4TB disks	N/A
Supported RAID Levels	5, 6, 10, 50, 60 for 12 disks	5, 6, 10, 50, 60 for 12 disks	5, 6, 50 for 6 disks

Best Practice -The recommended default storage options for Smart-1 6000-XL appliances are:

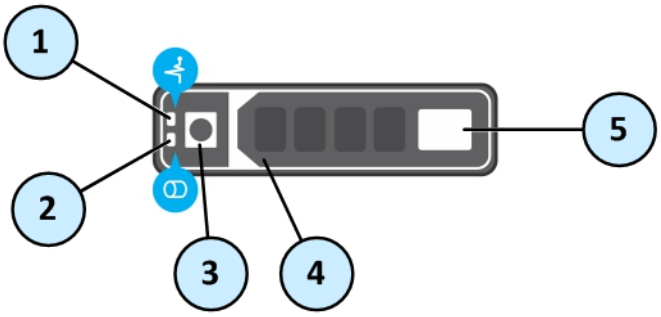
- 6 x 1TB disks when using a Smart-1 6000-XL appliance as a Management Server only.
- 6 x 4TB disks when using a Smart-1 6000-XL appliance as a Management Server+Log Server or a Log Server only. This is due to additional storage space required for logs.

Numbering of the Disk Slots on the Front Panel

Smart-1 6000-L/6000-XL Front Panel			
Slot 0: Disk	Slot 3: Disk	Slot 6: *Optional*	Slot 9: *Optional*
Slot 1: Disk	Slot 4: Disk	Slot 7: *Optional*	Slot 10: *Optional*
Slot 2: Disk	Slot 5: Disk	Slot 8: *Optional*	Slot 11: *Optional*

Note - See the slot numbers below the bottom row of disk slots on the appliance.

Disk Carrier



Item	Description
1	Status indicator LED. Shows the power condition of the disk. For LED patterns, see the table below.
2	Activity indicator LED. Shows whether the disk is currently in use or not.
3	Release button.
4	Release handle.
5	Disk.

Status indicator LED patterns

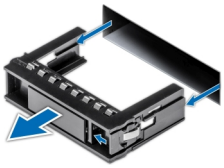
Status Indicator LED Pattern	Disk Condition
Steady green	Disk is online.
Flashes green twice per second	Identifying disk or preparing disk for removal.
Blinks green, amber, and then turns off	Predicted disk failure.
Blinks amber four times per second	Disk failed.
Blinks green slowly	Disk is rebuilding.
Blinks green for three seconds, blinks amber for three seconds, then turns off after six seconds	Disk rebuild stopped.
Off	Disk is ready for insertion or removal. The status indicator LED remains off until all disks are initialized after the system is turned on. Disks are not ready for insertion or removal during this time.

Disk Slot Blanks

Smart-1 6000-L/6000-XL lets you install additional disks. This section shows how to remove and install disk blanks that cover the empty disk slots.

To remove a disk blank on Smart-1 6000-L/6000-XL:

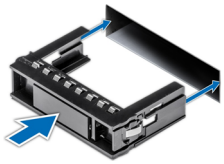
1. Press the release button to open the release handle on the disk blank.
2. While holding the handle, slide the disk blank out of the disk slot.



To install a disk blank on Smart-1 6000-L/6000-XL:

Important - If you are not replacing the failed disk immediately, then to maintain proper system cooling, install a disk blank in the empty disk slot. You can also remove the disk from the disk carrier and install the empty disk carrier into its disk slot.

1. Insert the disk blank into the disk slot.
2. Push the disk blank into the disk slot.
3. The release button should click into place.



Left Control Panel

Item	Indicator	Icon	Description
1	Status LED indicators	N/A	Indicate the status of the system. For more information, see *"Status LED Indicators" below*.
2	System notification LED indicator		Indicates the system health. For more information, see *"System Notification LED Indicator" on the next page*. Note that the button is not supported.

Status LED Indicators

The status LED indicators are always off and only turns on to a solid amber if any error occurs.

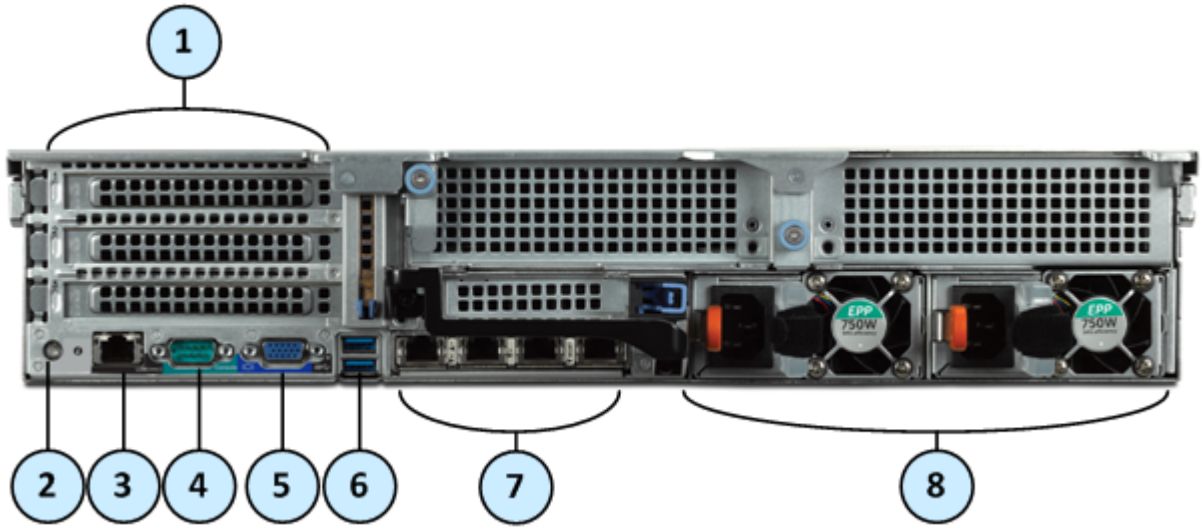
Icon	Description	Condition
	Drive indicator	The indicator turns solid amber if there is a drive error.
	Temperature indicator	The indicator turns solid amber if the system experiences a thermal error (for example, the ambient temperature is out of range or there is a fan failure).
	Electrical indicator	The indicator turns solid amber if the system experiences an electrical error (for example, voltage out of range, or a failed power supply unit (PSU) or voltage regulator).
	Memory indicator	The indicator turns solid amber if a memory error occurs.
	PCIe indicator	The indicator turns solid amber if a PCIe card experiences an error.

System Notification LED Indicator

The system notification indicator is located on the left control panel of your system. The LED is functioning and descriptions are in the table below. The button is not supported.

System Notification LED Indicator Code	Condition
Off	Indicates that the appliance is turned on and the system is healthy.
Blinking amber	Indicates that the system is experiencing a fault. Check the System Event Log, see the `/var/log/messages` files or run the `dmesg` command from Expert mode. For more information about error messages, contact Check Point Technical Support.

Rear Panel



Item	Component	Description
1	PCIe expansion slots	The expansion slots enable you to connect PCI Express expansion cards. For more information on the expansion cards that are supported on your appliance, see *Quantum Smart-1 600-M/6000-L/6000-XL Appliances Line Cards*.
2	System notification LED	Off - Indicates that the appliance is turned on and the system is healthy. Blinking amber - Indicates that the system is experiencing a fault. Check the System Event Log, see the `/var/log/messages` files or run the `dmesg`command from Expert mode. For more information about error messages, contact Check Point Technical Support.
3	LOM (iDRAC)	Enables LOM (iDRAC) management. For more information, see sk122914.
4	Serial console port	Enables you to connect a serial device to the appliance.
5	VGA port	Enables you to connect a display device to the appliance.
6	USB 3.0 ports	The USB ports are 9-pin and USB 3.0 compliant. These ports enable you to connect USB devices to the appliance.
7	Onboard network ports	4 Ethernet ports: ■ The appliance connects to the network (Ethernet ports 1, 2, and 3). See *"Integrated NIC LEDs" below*. ■ Manage the appliance (**MGMT** port).
8	Power Supply Units	For more information about the PSU configurations, see: *Quantum Smart-1 6000-L/6000-XL Replacing AC Power Supply Units* *Quantum Smart-1 6000-L/6000-XL Replacing DC Power Supply Units*.

Integrated NIC LEDs

The NIC on the back panel has LED indicators that provide information about the network activity and link status.

Item	Component	Description
1	Link LED	Off - Link off: No connectivity or the port is turned off. Steady green - Link on: 1Gbit/s data rate is selected. Steady amber - Link on: 100Mbit/s data rate is selected. Steady amber - Link on: 10Mbit/s data rate is selected.
2	Activity LED	Off - Link off: No connectivity, the port is turned off, or link is on without traffic. Blinking green - Link is on with traffic.

Expansion Line Card LEDs

The line card has LED indicators that provide information about the network activity and link status.

2 x 10GbE Expansion Line Cards

Item	Component	Description
1	Link LED	Off - Link off: No connectivity or the port is turned off. Steady green - Link on: 10Gbit/s data rate is selected. Steady amber - Link on: 1Gbit/s data rate is selected.
2	Activity LED	Off - Link off: No connectivity, the port is turned off, or link is on without traffic. Blinking green - Link is on with traffic.

2 x 1GbE Expansion Line Cards

Item	Component	Description
1	Link LED	Off - Link off: No connectivity or the port is turned off. Steady amber - Link on: 1Gbit/s data rate is selected.
2	Activity LED	Off - Link off: No connectivity, the port is turned off, or link is on without traffic. Blinking green - Link is on with traffic.

Replacing and Upgrading Components

The Smart-1 Appliances has parts that you can easily replace to minimize downtime. There are also components that you can install to upgrade the appliance. These are the parts and components that can be used with the appliance:

- Telescoping rails
- Line cards
- Transceivers
- AC and DC power supply units
- Storage devices
- System memory
- Storage Area Network (SAN) card

For more information about installing these parts and components, see the *Smart-1 600-S/600-M/6000-L/6000-XL home page*.

Unless directed to do so by Check Point technical support, you are prohibited by warranty and support agreements from replacing any parts.

RAID Configuration

RAID (Redundant Array of Independent Disks) combines multiple storage devices into logical units to increase data reliability and disk performance through redundancy. RAID arrays configured for fault tolerance can survive one or more disk failures without losing data.

The Smart-1 6000-L/6000-XL RAID controllers run a variety of storage solutions that range from disk mirroring to nested RAID. The nested levels use two standard RAID levels for additional reliability and performance. RAID levels on the Smart-1 controllers are initially set as defaults. Other supported RAID levels are optional.

You must configure RAID if you change:

- A default RAID level.
- The number of storage devices.

You do not need to configure RAID again when a faulty disk is replaced. The replaced disk is synchronized automatically.

Note - If you add disks to an appliance, place them in numerical order starting with the first available disk slot. See the numbering of the disk slots in *"Storage Devices" on page 14*.

Note- Only RAID firmware updates provided by Check Point are supported.

Related Documents:

- *Quantum Smart-1 6000-L/6000-XL Replacing Storage Devices*
- *Quantum Smart-1 6000-L/6000-XL RAID Administration Guide*

Hardware Diagnostic Tool and Restoring Factory Defaults

Appliance Hardware Diagnostic Tool

Use the Appliance Hardware Diagnostic Tool (Diagnostic Tool) to make sure that the appliance hardware is working properly and complies with the appliance specifications.

Restoring Factory Defaults

If necessary, restore the appliance to its factory default settings or select a new image.

Important - If you restore factory defaults or select a new image, all information on the appliance is deleted.

Running the Hardware Diagnostic Tool

You can run the Hardware Diagnostic Tool by connecting to the Console port with a Terminal emulation program.

To run the Hardware Diagnostic Tool:

1. Connect the supplied DB9 serial cable to the serial console port on the rear of the appliance.
2. Connect to the appliance using a terminal emulation program such as Microsoft HyperTerminal or PuTTY.
   a. 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.
   b. Define the serial port settings: 9600 BPS, 8 bits, no parity, 1 stop bit.
   c. From the **Flow control** list, select **None**.
3. Reboot or turn on the appliance.
4. When this message shows, hit any key to go into the **Boot** menu. You have about five seconds.

   ```
   Press any key to see the boot menu [Booting in 5 seconds]
   ```

5. From the **Boot** menu, select `HW Diagnostics`
6. Press **Enter**.

Restoring in the Gaia Portal

Use the **Gaia Portal** to restore the appliance to the factory default settings. You can select one of the software images on the appliance.

To restore a Gaia appliance in the Gaia Portal:

1. In your web browser, connect to the management IP address: `https://<Appliance_IP_Address>`
2. Log in to the **Gaia Portal** of the appliance with the administrator username and password.
3. In the left navigation tree, click **Maintenance** > **Factory Defaults**.

   The **Factory Defaults** window opens.
4. Select the image version to restore.
5. Click **Apply**.

   The appliance reboots and installs the selected version from scratch.

Restoring in the Gaia Clish

To restore the appliance in the Gaia Clish:

1. Connect to the command line on the appliance - over SSH, or console.
2. Log in to Gaia Clish.
3. Run this command:

   `set fcd revert <image_name>`

   A "`Reverting to factory defaults`" message appears.

   Example:

```
Gaia> set fcd revert Gaia_R81
Warning! This command will erase all the current configuration on this
appliance and will revert it to the selected image.
Are you sure you want to continue such action? (Yes/No) [No]
yes

Reverting to factory defaults Gaia_R81
Gaia>

INIT: Sending processes the TERM signal
```

Restoring Using the Console Boot Menu

To restore the appliance with the console Boot menu:

1. Connect to the appliance using the serial port on the rear panel. See *"Connecting to the Smart-1 Appliances CLI " on page 11*.
2. From the computer, open 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, or reboot the appliance.

   The appliance initializes, and status messages are shown in the terminal emulation program.

   ```
   Loading the system...
   Press any key to see the boot menu [Booting in 4 seconds]
   GRUB loading, please wait...
   ```

8. When this message is shown, you have approximately five seconds to hit any key to activate the **Boot** menu.
9. From the **Boot** menu, select the relevant **Reset to factory defaults** image.
10. Press **Enter**.

    The appliance reboots and installs the selected version from scratch.

Registration and Support

Registration

The appliance requires a product-specific Check Point license. Get a license and register at the Check Point Appliance Registration site.

The MAC address of the Management Interface is required to obtain a license.

To find the MAC address of the Management Interface in Gaia Clish:

1. Connect to the command line on the appliance - over SSH, or console.
2. Log in to the Gaia Clish with the administrator username and password.
3. Get the name of the Management Interface:

   ```
   show management interface
   ```

4. Get the MAC Address of the Management Interface:

   ```
   show interface <Name_of_MGMT_interface> mac-addr
   ```

5. Copy the MAC address from the screen.

To find the MAC address of the Management Interface in Gaia Portal:

1. In your web browser, connect to the management IP address: `https://`*<appliance_ip_address>*
2. Log in to the Gaia Portal of the appliance with the administrator username and password.
3. In the top left corner, in the **View mode** field, select **Advanced**.
4. In the left navigation tree, click **Network Management> Network Interfaces**.
5. The **Management Interface** section at the bottom shows the name of the Management Interface.
6. In the **Interfaces** section at the top, select the Management Interface.
7. From the toolbar, click **Edit**.
8. In the caution pop-up window, click **OK**:

   ```
   You are about to change the settings of an interface you are connected
   to.
   Click OK to proceed, Cancel to return.
   ```

9. Click th **Ethernet** tab.
10. Copy the MAC address from the **Hardware Address** field.
11. Click **Cancel**.

Support

For additional technical information about Check Point products, visit the *Check Point Support Center*.

Compliance Information

This appendix contains declaration of conformity, compliance, and related regulatory information.

Declaration of Conformity

Name and address of the authorized trademark:	Check Point Software Technologies Ltd. 5 Shlomo Kaplan Street, Tel Aviv 6789159, Israel
Brand name:	Check Point
Marketing models:	Smart-1 6000-L/6000-XL
Regulated models:	E38S
Manufacturer's name:	Dell Inc.
Manufacturer's address:	One Dell Way, Round Rock, TX 78682, USA
Date First Applied:	12-Apr-17

The models of the declaration described above have been assessed and found to be in compliance with the following harmonized standards, regulations, and technical references:

Category	Technical Specification	Descriptipon
EMC /EMI	**CE** EN 55032:2012/CISPR 32:2012 EN 55032:2015/CISPR 32:2015 EN 55024:2010 +A1:2015/CISPR 24:2010 +A1:2015 EN 61000-3-2:2014/IEC 61000-3-2:2014 (Class D) EN 61000-3-3:2013/IEC 61000-3-3:2013	Electromagnetic Compatibility, Emissions requirements for information technology equipment Immunity characteristics. Limits and methods of measurement
	FCC/IC FCC 47 CFR, Part 15 Subpart B, ICES-003, Issue 6-2016 ANSI C63.4-2014	Information Technology Equipment - Radio Disturbance Characteristics
	VCCI CISPR32: 2016	Information Technology Equipment - Radio Disturbance Characteristics
	AS/NZS _RCM AS/NZS CISPR32:2015, Class A	Information Technology Equipment - Radio Disturbance Characteristics
Safety	EN IEC 62368-1:2020 +A11:2020 IEC 62368-1:2018 IEC 62368-3:2017 AS/NZS 62368.1:2018 UL60950-1, CAN CSA C22.2 No 60950-1-07	Information technology equipment. Electrical Safety requirements, LVD

Category	Technical Specification	Descriptipon
ENERGY	Commission Regulation (EU) No. 617/2013	
RoHS	EN 50581:2012	

Date and place of issue: April 2017, Round Rock, Texas, USA

Safety, Environmental, and Regulatory Information

Notes, cautions, and warnings

Note - A note indicates important information that helps you make better use of your product.

Caution - A caution indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

Warning - A warning indicates a potential for property damage, personal injury, or death.

Safety instructions

For additional important regulatory and safety information for the equipment addressed by this document, see the Regulatory Compliance website at Dell.com/regulatory_compliance. Additional information for your equipment is available at Dell.com/support.

General safety

Warning - Observe the following instructions to help prevent potential for property damage, personal injury, or death.

- The power supply units (PSUs) in your system may produce high voltages and energy hazards. Opening or removing covers that are marked with the triangle symbol with a lightning bolt may expose you to a risk of electric shock. Components inside these compartments should be serviced only by a trained service technician.

  The system may have more than one PSU cable. To reduce the risk of electrical shock, a trained service technician may need to disconnect all PSU cables before servicing the system. Where the system regulatory label has the electric current rating suffixed by (X#), # = maximum number of PSUs per system.
- Do not operate your equipment with any cover(s) removed.
- The internal components, including memory modules, can become extremely hot during operation. Allow sufficient time to cool before handling.
- Do not use damaged equipment, including exposed, frayed, or damaged power cables.
- When connecting or disconnecting power to hot-pluggable PSUs:

  - Install the PSU before connecting the power cable to the PSU.
  - Unplug the power cable before removing the PSU.
  - Disconnect all sources of power from the system by unplugging all power cables from the PSUs.

- Do not use the equipment where it can get wet. Protect equipment from liquid intrusion. If your equipment gets wet, disconnect power to the equipment and to any attached devices. If the computer is connected to an electrical outlet, turn off the AC power at the circuit breaker before attempting to remove the power cables from the electrical outlet. Disconnect any attached devices.
- Do not push any objects into the air vents or openings of the equipment. Doing so can cause fire or electric shock.
- Do not attempt to service the equipment yourself, except as explained in your documentation or in instructions otherwise provided to you by the manufacturer. Always follow installation and service instructions closely.
- If your hardware has a voltage selection switch on the PSU, be sure to set it for the voltage that most closely matches the AC power available at your location.
- Operate the equipment only from the type of external power source indicated on the electrical ratings label.
- To avoid possible damage to the system board, wait 30 seconds after turning off the equipment before removing a component from the system board or disconnecting a peripheral device from the equipment.
- For non-rack-mounted servers, leave 10.2 cm (4 in) minimum of clearance on all vented sides of the equipment to permit the airflow required for proper ventilation. Restricting airflow can damage the equipment or cause overheating.
- Do not stack equipment or place equipment so close together that it is subject to re-circulated or preheated air, such as next to an appliance or exhaust vent.
- Ensure that nothing rests on your equipment's cables.
- Move equipment with care; ensure that all casters and/or stabilizers are firmly connected to the system.
  Avoid sudden stops and uneven surfaces.
- Review the weight limits referenced in your equipment documentation before placing a monitor or other device on top of your equipment.
- Use only approved power cable(s) rated for the equipment. The voltage and current rating of the cable should be greater than the ratings marked on the equipment.
- Plug the equipment power cables into properly grounded electrical outlets. Do not use adapter plugs or remove the grounding prong from a cable. If you must use an extension cable, use a 3-wire cable with properly grounded plugs.
- Observe extension cable and power strip ratings. Ensure that the total ampere rating of all equipment plugged into the extension cable or power strip does not exceed 80 percent of the ampere ratings limit for the extension cable or power strip.
- To help protect the equipment from fluctuations in electrical power, use a surge suppressor, line conditioner, or uninterruptible power supply (UPS).

Battery Warning - Incorrectly installing a battery or using an incompatible battery may increase the risk of fire or explosion. Replace the battery only with the same or equivalent type.

- Do not disassemble, crush, or puncture batteries.
- Do not store or place your battery pack next to or in a heat source such as a fire, heat-generating appliance, car or exhaust vent. Heating battery cells to temperatures above 65 °C (149 °F) can cause explosion or fire.
- Do not attempt to open or service batteries. Do not dispose of batteries in a fire or with household waste. See Battery Disposal instructions.

Additional instructions for rack-mounted systems

Caution - If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (Tma) specified by the manufacturer. For more information, see your product documentation.

- Your rack kit has been approved only for the rack cabinet provided. It is your responsibility to ensure that installation of the equipment into any other rack complies with all applicable standards. The manufacturer disclaims all liability and warranties with respect to combinations of equipment with any other rack.
- Before installing your equipment in a rack, install all front and side stabilizers. Failure to install stabilizers can allow the rack to tip over.
- Always load from the bottom up, and load the heaviest items first.
- Do not overload the AC power supply branch circuit that provides power to the rack.
- Do not stand or step on any components in the rack.

Warning - Slide/rail mounted equipment is not to be used as a shelf or work space.

Do not add weight to slide/rail mounted equipment.

- Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips).

The following statement applies only to rack-installed products that are GS-Marked:

This equipment is not intended for use at workplaces with visual display units, in accordance with ?2 of the German ordinance for workplaces with visual display units.

Warning - For equipments using -(48-60)V DC power supplies, a qualified electrician must perform all connections to DC power and to safety grounds. Do not attempt connecting to DC power or installing grounds yourself. All electrical wiring must comply with applicable local or national codes and practices.

Caution - Systems using -(48-60)V DC power supplies may have a connection between the earthed conductor of the DC power supply circuit and the earthing conductor.

The system using a DC power supply must be connected directly to the system-earthing electrode conductor, to a bonding jumper from an earthing terminal bar, or the bus to which the system earthing electrode conductor is connected.

The system using a DC power supply must be located in the same immediate area (such as adjacent cabinets) as any other equipment that has a connection between the earthed conductor of the same DC power supply circuit and the earthing conductor, and also the point of earthing of the DC-powered system.

The DC power supply must be located within the same premises as the equipment.

Switching or disconnecting devices must not be in the earthed circuit conductor between the source of the DC power supply and the oint of the connection of the earthing electrode conductor.

Instructions for the qualified electricians only:

Systems using -(48-60)V DC Power Supplies are intended for restricted access locations in accordance with Articles 110-5, 110-6, 110-11, 110-14, and 110-17 of the National Electrical Code, American National Standards Institute (ANSI)/National Fire Protection Association (NFPA) 70.

Before connection safety ground or power cables, ensure that the power is removed from the DC circuit. To ensure that the power is off, locate the circuit breaker on the DC source circuit (usually at the power distribution fuse bay). Switch the circuit breaker to the off position and, if available, install an approved safety locking device on the circuit breaker or switch.

While grounding techniques vary, a positive connection to a safety (earth) ground is a requirement. When installing the unit, the ground connection must always be made first and disconnected last to prevent a hazard.

Never defeat the ground conductor or operate the equipment in the absence of a suitably installed ground conductor. Contact the appropriate electrical inspection authority or an electrician if you are uncertain that suitable grounding is available.

The system chassis must be securely grounded to the rack cabinet frame. Do not attempt to connect power to the system until grounding cables are connected.

When stranded wiring is required, use approved wiring termination, such as closed-loop or spade-type with upturned lugs. These terminations should be the appropriate size for the wires and must be double crimped, one on the conductor and one on the insulation. For additional information, see the cabling instructions provided with your system.

Ergonomic instructions

Warning - Improper or prolonged keyboard use may result in injury.

Warning - Viewing a display or external monitor screen for extended periods of time may result in eye strain.

Environmental considerations

ENERGY STAR for servers

ENERGY STAR ® Compliance

The Environmental Protection Agency's (EPA) ENERGY STAR program is a joint effort between the EPA and manufacturers to reduce air pollution by promoting energy-efficient products.

ENERGY STAR Label

Any product bearing the ENERGY STAR emblem electronically or physically on the product is certified to comply with the EPA ENERGY STAR requirements as configured when shipped by manufacturer. User information is available at www.dell.com/energystar.

For more information about power management, see www.energystar.gov/powermanagement. For more information about the ENERGY STAR program, see www.energystar.gov.

Battery disposal

Refer to your system documentation for battery replacement instructions.

Do not dispose the battery along with household waste. Contact your local waste disposal agency for the address of the nearest battery deposit site.

Battery directive

In the European Union, this label indicates that the batteries in this product should be collected separately and not disposed of with household waste. Substances in batteries can have a potential negative impact on health and environment and you have a role in recycling waste batteries thus contributing to the protection, preservation, and improvement of the quality of the environment. You should contact your local authority or retailer for details of the collection and recycling schemes available. Alternatively, please visit www.dell.com/recycle.

Waste Electrical And Electronic Equipment (WEEE) Directive

In the European Union, this label indicates that this product should not be disposed of with household waste. It should be deposited at an appropriate facility to enable recovery and recycling. For information on how to recycle this product responsibly in your country, please visit: www.dell.com/recycle.

Registration, Evaluation, Authorization of Chemicals (REACH)

REACH is the European Union (EU) chemical substances regulatory framework. Information on substances of very high concern contained in Dell products in a concentration above 0.1% weight by weight (w/w) can be found at www.dell.com/REACH.
//Waiting for answer from Eitan what to do with Dell references (see mail Nov 16)

India RoHS

This product complies with RoHS requirements as prescribed in E-Waste Management Rules by Government of India. For more information, see www.dell.com/regulatory_compliance.

Ukraine RoHS

України ТЕХНІЧНИЙ РЕГЛАМЕНТ обмеження використання деяких небезпечних речовин в електричному та електронному обладнанні (від 3 грудня 2008 р. N 1057): Обладнання відповідає вимогам Технічного регламенту обмеження використання деяких небезпечних речовин в електричному та електронному обладнанні.

SIMPLIFIED EU DECLARATION OF CONFORMITY FOR RADIO EQUIPMENT DIRECTIVE 2014/53/EU

Hereby, Dell Inc. declares that all CE Marked Dell products incorporating Radio Equipment functionality are in compliance with Directive 2014/53/EU . The full text of the EU declaration of conformity is available at the following internet address: www.dell.com/ regulatory_compliance

Perchlorate material

The product's coin cell battery may contain perchlorate and may require special handling when recycled or disposed. See www.dtsc.ca.gov/hazardouswaste/perchlorate.

Regulatory notices

For additional regulatory information, see the Regulatory Compliance homepage at http://www.dell.com/regulatory_compliance.

Electromagnetic Interference (EMI) is any signal or emission, radiated in free space or conducted along power or signal leads, that endangers the functioning of radio navigation or other safety service or seriously degrades, obstructs, or repeatedly interrupts a licensed radio communications service. Radio communications services include but are not limited to AM/FM commercial broadcast, television, cellular services, radar, airtraffic control, pager, and Personal Communication Services (PCS). These licensed radio services, and unlicensed radio services, such as WLAN or Bluetooth, along with unintentional radiators such as digital devices, including computer systems, contribute to the electromagnetic environment. Electromagnetic Compatibility (EMC) is the ability of items of electronic equipment to function properly together in the electronic environment. While this computer system has been designed and determined to be compliant with regulatory agency limits for EMI, there is no guarantee that interference will not occur in a particular installation. These products are designed, tested, and classified for their intended electromagnetic environment. These electromagnetic environment classifications generally refer to the following harmonized definitions:

- Class B products are intended for use in residential/domestic environments but may also be used in nonresidential/non-domestic environments.

  NOTE: The residential/domestic environment is an environment where the use of broadcast radio and television receivers may be expected within a distance of 10 m from where this product is used.

- Class A products are intended for use in non-residential/non-domestic environments. Class A products may also be utilized in residential/domestic environments but may cause interference and require the user to take adequate corrective measures.

If this equipment does cause interference with radio communications services, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna.
- Relocate the computer with respect to the receiver.
- Move the computer away from the receiver.
- Plug the computer into a different outlet so that the computer and the receiver are on different branch circuits.

If necessary, consult an authorized Technical Support representative or an experienced radio/television or EMC technician for additional suggestions.

Information Technology Equipment (ITE), including peripherals, expansion cards, printers, input/output (I/O) devices, monitors, and so on, that are integrated into or connected to the system should match the electromagnetic environment classification of the computer system.

A Notice About Shielded Signal Cables: Use only shielded cables for connecting peripherals to any device to reduce the possibility of interference with radio communications services. Using shielded cables ensures that you maintain the appropriate EMC classification for the intended environment. It has been determined that this product is a Class A harmonized product. The following sections provide country-specific EMC/EMI or product safety information.

FCC notice (U.S. only)

Class A

This product 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 product generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instruction manual, may cause harmful interference with radio communications. Operation of this product in a residential area is likely to cause harmful interference, in which case you will be required to correct the interference at your own expense. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

Notice: The FCC regulations provide that changes or modifications not expressly approved by Dell Inc. could void your authority to operate this equipment. These limits are designed to provide reasonable protection against harmful interference in a non-residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference with radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the antenna of the radio/television receiver.
- Increase the separation between this equipment and the radio/television receiver.
- Plug the equipment into a different outlet so that the equipment and the radio/television receiver are on different power mains branch circuits.
- Consult an authorized service technician or an experienced radio/television technician for additional suggestions.

Company name: Dell Inc. is the responsible party for this product. For an EMC compliance issue or a regulatory inquiry, please use the following contact information:

Dell Inc.

Worldwide Regulatory Compliance, Engineering and Environmental Affairs

One Dell Way PS4-30

Round Rock, Texas 78682 USA 512-338-4400

Industry Canada, Class A

This Class A digital apparatus complies with Canadian ICES-003.

Notice: The Industry Canada regulations provide that changes or modifications not expressly approved by Dell Inc. could void your authority to operate this equipment.

Industry Canada, Classe A

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

Avis: Dans le cadre des réglementations d'Industry Canada, vos droits d'utilisation de cet équipement peuvent être annulés si des changements ou modifications non expressément approuvés par Dell Inc. y sont apportés.

CE Notice

This product has been determined to be in compliance with 2014/35/EU (Low Voltage Directive), 2014/30/EU (EMC Directive). Versions of this product may have integrated modules or add-in cards supporting wireless and telecommunications operations. These wireless and telecommunications peripherals have been assessed as compliant in this product and, when present, are in compliance with 1999/5/EC (R&TTE Directive, for Radio and Telecommunications Interfaces).

European Union, Class A

Warning - This is a Class A product. In a domestic environment this product may cause radio frequency interference in which case the user may be required to take adequate measures.

A "Declaration of Conformity" in accordance with the preceding directives and standards has been made and is on file at Dell Inc. Products Europe BV, Limerick, Ireland.

For *Enterprise Products Safety, Environmental, and Regulatory Information* in other languages, see the booklet supplied in the shipping carton.

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.