

# Check Point Embedded NGX

Version 8.2.64

Release Notes



5 August 2014

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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.

## Latest Documentation

The latest version of this document is at:

([http://supportcontent.checkpoint.com/documentation\\_download?ID=22453](http://supportcontent.checkpoint.com/documentation_download?ID=22453))

To learn more, visit the Check Point Support Center (<http://supportcenter.checkpoint.com>).

## Revision History

Date	Description
05 August 2014	First release of this document

## 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 Check Point Embedded NGX Version 8.2.64 Release Notes](mailto:cp_techpub_feedback@checkpoint.com?subject=Feedback on Check Point Embedded NGX Version 8.2.64 Release Notes)).

# Safety, Environmental, and Electronic Emissions Notices

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.

Before you install or remove a chassis, or work near power supplies, turn off the power and unplug the power cord.

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.
- Class 1 laser product warning - A totally enclosed laser system containing a class 1 laser.

## Rack Mount Instructions

The following or similar rack-mount instructions are included with the installation instructions:

1. Elevated Operating Ambient - 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 specified by the manufacturer.
2. Reduced Air Flow - Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.

3. Mechanical Loading - Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.
4. Circuit Overloading - Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on over current protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.
5. Reliable Earthing - 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).

### **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:**

#### **For a Class A digital device or peripheral**

**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.

#### **For a Class B digital device or peripheral**

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### **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.

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

**Japan Compliance Statement:****Class A**

この装置は、クラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。 VCCI-A

**Class B**

この装置は、クラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。取扱説明書に従って正しい取り扱いをして下さい。 VCCI-B

**European Union (EU) Electromagnetic Compatibility Directive**

This product is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility Directive (2004/108/EC). For the evaluation regarding the Electromagnetic Compatibility (2004/108/EC)

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.

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# Chapter 1

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## Introduction

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## Highlights of This Version

Embedded NGX 8.2 has these new and improved features:

- New platforms with integrated ADSL modem\*\*
- ExpressCard cellular modem slot\*\*
- Gigabit SFP ports\*\*
- Multicast routing support (PIM-SM v2/DVMRP protocol support)\*
- Dynamic routing enhancement (RIP protocol support addition)\*
- Support for new cellular modems\*
- L2TP dialup connection support
- Cellular modem extended information
- Full URL logging
- Enhanced URL filtering
- Extended troubleshooting tools

\* Available only on N series appliances.

\*\* Available only on N series ADSL models.

**Note:** Some features are license dependent.

## Supported Platforms

Embedded NGX 8.2 GA supports the following hardware platforms:

- Check Point Safe@Office **100B** series
- Check Point Safe@Office **200** series
- Check Point Safe@Office **400W** series
- Check Point Safe@Office **500** series
- Check Point Safe@Office **1000N** series
- Check Point **UTM-1 Edge X** series
- Check Point **UTM-1 Edge W** series



- Check Point **UTM-1 Edge N** series
- Check Point ZoneAlarm **Z100G**
- NEC SecureBlade **300**

## Availability

Embedded NGX 8.2 is available to existing Embedded NGX customers with a valid software subscription contract. For more information and documentation, visit the Check Point website <http://www.checkpoint.com/>.



**Warning:** Check Point Security Management users upgrading to firmware v8.2 need to download and install the Management Update Package.

## Changes from 8.2.26 to 8.2.64

### 8.2.64

- Resolved: SSL/TLS MITM vulnerability (CVE-2014-0224). For more information, see sk101186 (<http://supportcontent.checkpoint.com/solutions?id=sk101186>).

### 8.2.63

- Resolved: Two routes with the same source network sometimes interfered and wrong routing decision was taken
- Resolved: OSPF is not working when the internet connection is of PPP type
- Resolved: IE11 does not support RDP
- Added support for ZTE MF669 3G modem

### 8.2.61

- Resolved: On change of configuration in SmartProvisioning the whole set is applied (and not only the diff)

### 8.2.60

- Added support for ZTE MF190 USB modem in 3G mode

### 8.2.59

- Resolved: Unable to authenticate with ' character for VPN users (or any user)
- Resolved: Security Zone based rules configured from central management are not enforced (since 8.1 GA)
- Added support for HUAWEI K4605 USB modem in 3G mode
- Added support for HUAWEI E177 and Vodafone K3806 USB modems in 3G mode
- Added support for SIERRA 320U and MF667 USB modems in 3G mode

### 8.2.58

- Added support for HUAWEI K4605 USB modem in 3G mode

### 8.2.57

- Added support for HUAWEI E177 and Vodafone K3806 USB modems in 3G mode

- Security Zone based rules configured from central management are not enforced (since 8.1 GA)

## 8.2.55

- Added support for 3G modem MobiData MBD-200HU
- Added CLI flags to alter DHCP client behavior
- Improved NAT performance when using dynamic objects
- Resolved: End Point connect stops connecting to edge when changing SNMP management policy
- Resolved: Polycom video conference Software (Telepresence M100) couldn't connect when hide nat is used
- Resolved: Fix socket leak in SSH connections
- Resolved: VLAN limitation for EdgeN devices using a limited node license
- Resolved: NTP connectivity issues when using PPPOE connection
- Resolved: Diagnostics page required read/write ADMIN permissions
- Resolved: Long output from SSH commands causes the stream to freeze
- Resolved: EAP on WLAN chooses radius automatically on Z100G
- Resolved: Wrong value in traffic monitor
- Resolved: Load balancing info is reset when there are changes in internet configuration or connectivity
- Resolved: Edge freezes after few internet disconnections
- Resolved: The Block-Frame attribute status of the UFP feature, is set to disabled after editing the content of the displayed message in Services > Web filtering > Settings
- 802.1x is not supported on some of the hardware models. For a software image that contains 802.1x support, contact the Check Point technical assistance center. For more information, see sk89322 (<http://supportcontent.checkpoint.com/solutions?id=sk89322>).

## 8.2.50

- Added support for Huawei Ec1561 modem
- Added additional SSH connections
- Resolved: Command `info device` displays SMP node limitation
- Resolved: Unknown connection type appears in the SMP logs
- Resolved: The `export` CLI command should prepend `clear nat rules` only when export is called without parameters
- Resolved: WAN connection is restarted whenever WAN configuration is set, even if the configuration was not changed
- Resolved: Edge N becomes unresponsive when transfer a shared file over PPTP Tunnel
- Resolved: `syslog` messages do not display IP address correctly on kernel generated messages
- Resolved: First ADSL connection attempt always fails if not configured fast enough
- Resolved: PPTP tunnel fixes

## 8.2.48

- Upgraded PPPoE plugin for EdgeX
- Added support for Novatel MC547
- Added support for Huawei E372 and Pantech UMW190 USB serial modem
- Added support for E75.20 Endpoint Security VPN

- Resolved: Box forwarded GRE packet to the wrong destination if two tunnels had the same IP address
- Resolved: Reconnect a VPN tunnel if tunnel-test failed
- Resolved: Disconnected NATed EPC tunnel also disconnected all other NATed tunnels from the same source
- Resolved: TCP connection was frozen during P2 renegotiation, if TCP streamer was active and traffic was passing
- Resolved: Problem accessing certain HTTP servers from some linux clients
- Resolved: Edge Device dropped MM packet during renegotiation
- Resolved: Users (with no Admin permissions) behind hotspot should not have access to my.firewall page

## 8.2.45

- Resolved: Ping and traceroute did not work with firmware 8.2.44

## 8.2.44

- Resolved: When the MTU of an Edge N switch is configured less than the default value (1500), the device drops packets that are larger than the MTU
- Resolved: When Vstream is enabled with an unstable connection and packets are lost, sometimes the connection is dropped
- Resolved: Changing the GMT offset time in a SmartProvisioning profile does not change the time on an Edge device
- Resolved: Multiple security vulnerabilities. For more information see sk65460 (<http://supportcontent.checkpoint.com/solutions?id=sk65460>).
- Resolved: Trying to allocate more than 200 DHCP addresses can cause the device to restart
- Resolved: DHCP requests do not pass through a VTI tunnel

## 8.2.42

- Brand name changed to Check Point

## 8.2.39

- Resolved: Hotspot logs in the even and security tabs

## 8.2.38

- Resolved: In some cases disabling the L2TP while connecting to the management causes the appliance to reboot

## 8.2.37

- Improve L2TP performance
- Resolved: Gateway-bind network feature to support unassigned LAN port

## 8.2.36

- Resolved: In some cases when connected with L2TP and a virus is caught the appliance reboots
- Add better support for Internet Explorer 9

## 8.2.35

- Resolved: Ping command from GUI causes the appliances to reboot

- USB Monitor should always run

## 8.2.34

- Add better treatment of VPN tunnel (Add delete\_IKE\_SA feature)
- 3G infor feature should be disabled by default

## 8.2.33

- Resolved: In some cases enterprise site disappears after reboot
- Resolved: While SC/EPC is connected to the appliance and trying to disconnect from management the appliance reboots
- Fix checkboxes in the HA (High Availability) tab
- Fix appliance behavior with EPC

## 8.2.32

- Enhance N series ADSL modem reset procedure

## 8.2.31

- Add N series to SNMP MIB
- Resolved: In some cases firmware upgrade failure causes appliance to reboot

### Features

- Change 3G watchdog to 3G Monitor

## 8.2.30

### VPN

- Add Support for EPS R75 (VPN client only)
- Resolved: EPC issue when connecting from internal network on port 443
- EPC server more secure

## 8.2.29

### ADSL

- Improved behavior when connection to the ADSL modem is not possible

## 8.2.28

### Any

- Resolved: "Flash write error" appears when trying to set FW level from GUI when connected to SMP and managing WAN Connection via CLI
- Improved stability when tables are full

### VPN

- Resolved: Endpoint connect does not work from internal networks

## 8.2.27

### SFP

- Resolved: SFP port icon does not turn to green when the cable is connected
- Resolved: In some cases 2 SFP ports are displayed even though there is one port

**ADSL**

- Improve ADSL modem handling when upgrading DSL firmware

**Tools**

- Resolved: Traceroute does not work on HW 1.0-1.3
- Fix stability issues on HW 1.4 DSL units

**Features:****USB Modems**

- Add support for USB Modem ZTE AC2627

## Limitations

- N200: 3 connection types (to Internet) are supported in ADSL models – ethernet via WAN interface, ADSL via DSL port, and external modem via USB port or Express card port. But, only 2 connections (out of 3) can be utilized simultaneously.
- SBXN-200\*-3 models only support firmware 8.2.55 and higher. The model number is printed on a silver sticker on the bottom of your device.

# Chapter 2

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## New Features

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### User Permissions

New in 8.2.45. You can create a user account with permissions to change only service center settings and its own password.

### Embedded ADSL Modem

Embedded NGX 8.2 supports hardware version 1.4 ADSL models with embedded ADSL modem. These models are based on the N series appliances specifications and offered in wired and wireless versions. They include an RJ11 port for connecting to a DSL line and an ExpressCard slot.

### Express Card Cellular Modem Support

Embedded NGX 8.2 supports inserting a cellular modem ExpressCard into the appliance's ExpressCard slot.



**Note:** Available only on N series ADSL models

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## Gigabit Ethernet and SFP Ports

Embedded NGX 8.2 supports SFP ports with 1 Gbps fiber termination. SFP ports are small form-factor pluggable ports that can act as an alterable fiber optic conduit (in addition to the already available copper option), allowing multiple options for connectivity.

The new SFP transceivers supported are:

1. Finisar FTRJ1319P1BTL 1000BaseLX
2. Finisar FTTLF8519P2BNL
3. Agilent (HFBR5710LP)
4. Dlink (DEM-310VT v.E1)

**Note:** Available only on N series ADSL wired models

## Multicast Routing (PIM-SM v2/DVMRP)

Embedded NGX 8.2 offers DVMRP and PIM-SM v2 multicast routing protocols.

**Note:** Available only on N series models

## Dynamic Routing (RIP)

Embedded NGX 8.2 now offers RIP v2 dynamic routing protocol.

**Note:** Available only on N series models

## Support for New Cellular Modems

The new USB 3G modems supported are:

- Sprint U301
- Sierra Wireless U250
- HUAWEI E1762
- HUAWEI EC1260
- HUAWEI EC1261
- ZTE AC2726

**Note:** Available only on N series models

The new ExpressCard 3G modems supported are:

- Novatel Merlin XU870
- Novatel Merlin X950D
- Sierra Wireless AirCard 880E

**Note:** Available only on N series ADSL models

## L2TP Dialup Connection

Embedded NGX 8.2 supports L2TP protocol for faster dial-up connection.

## Cellular Modem Extended Information

Embedded NGX 8.2 displays extended cellular information about the connection in GSM networks. This information aids in deploying the device and troubleshooting any problems that may arise. The following data is displayed:

- Modem Vendor
- Signal strength
- Connected operator
- Cellular technology

**Note:** Available only on wireless and ADSL models

## Full URL Logging

Embedded NGX 8.2 can log all HTTP traffic, both blocked and accepted.

## Enhanced URL Filtering

With embedded NGX 8.2, when using URL filtering, the user can choose whether to block the specific frame or entire page.

## Extended Troubleshooting Tools

Embedded NGX 8.2 allows choosing the source interface on which to run the network diagnostics tools. The interface is selected in the **Setup > Tools** page's **Source Address** field, which displays all connected Internet connections and enabled internal networks. Ping and Traceroute tools can also be used though CLI.

