

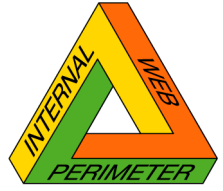


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Check Point® SecureXL Turbocard Driver Version 2.1.0 for NG with Application Intelligence (R55) Release Notes



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Introduction

Thank you for using Check Point SecureXL Turbocard.

This document contains important information not included in the SecureXL Turbocard user guide. Review this information before installing the product. The latest version of this document can be found at:

<http://www.checkpoint.com/techsupport/freedownloads.html>.

What's New

- Improved stability of the Turbocard acceleration driver.

SecureXL Turbocard System Requirements

- Pentium III CPU or above
- Intel 750x, Serverworks HE, or Serverworks GC chipsets
- PCI2.2 (full sized 32-/64-bit PCI slot) compliant server, 64-bit 33/66MHZ PCI slot is recommended
- 512MB RAM (SecureXL Turbocard's 500,000 concurrent connection table capacity requires 1GB of RAM).

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- Check Point SecurePlatform NG with Application Intelligence (R55)
 - Check Point NG with Application Intelligence (R55) HFA_13 or above.

Installing SecureXL Turbocard Software

Prior to Installation

- 1 SecureXL Turbocard software package contains:
 - SecureXL Turbocard s3500 driver: `s3500-2.1.0-26.i386.rpm`
 - SecureXL Turbocard s3500 driver for SmartUpdate: `s3500_su-2.1.0-26.tgz`
 - SecureXL Turbocard s3500 PKCS11 library: `s3500_pkcs11-1.3.3-2.i386.rpm`
- 2 Verify that the SecureXL Turbocard system requirements are met.

For details regarding how to install SecurePlatform or SecureXL Turbocard, refer respectively to the “*SecurePlatform*” or “*SecureXL Turbocard*” user guides.

Software Installation

- 1 Login as user admin.
- 2 Switch to **Expert** mode: `expert`
- 3 If you have downloaded the software drivers from the Check Point Web Site copy the the files to an empty directory (e.g. `/home`) and proceed with step7.
- 4 Insert the SecureXL Turbocard System Software CD into the system CD drive.
- 5 Mount the CD: `mount /mnt/cdrom`
- 6 Copy the software to your home directory: `cp /mnt/cdrom/software/* /home`
- 7 Go to your home directory: `cd /home/`
- 8 Upgrade the SecureXL Turbocard Drive RPM: `rpm -U s3500-2.1.0-26.i386.rpm`
- 9 Restart the machine (shut it down and start it up again).

After rebooting, SecurePlatform will add the three Ethernet ports of the SecureXL Turbocard to the system configuration.

If there are no other Ethernet adapters in the system then the SecureXL Turbocard will be assigned Eth0, Eth1 and Eth2, with the top RJ-45 connector being Eth0 and the bottom connector being Eth2. If the system has other Ethernet adapters installed then the SecureXL Turbocard ports will be assigned to the next available Ethernet interface.



Note - You will not see the interfaces in the SecurePlatform Web User Interface or `sysconfig` interface display until the SecureXL Turbocard installation process is completed.

Post Installation

- 1 Login as the user `admin` and switch to **Expert** mode: `expert`
- 2 From the SecurePlatform command shell run: `turbocard check`
- 3 If the software and hardware are installed correctly the following message should be printed on the screen: **Self Test Passed**.
If a failure message is displayed, refer to the "Troubleshooting" section of the "*Check Point SecureXL Turbocard User Guide*".
- 4 Write down the SecureXL Turbocard interfaces: `turbocard link`
- 5 Run `sysconfig`.
 - a Select **Network Interfaces**.
 - b Select **Show configuration**.
- 6 Check that the three new interfaces were added.
- 7 The order of previously defined interfaces may have changed after installing the SecureXL Turbocard and the IP addresses may be assigned to the wrong interface. Therefore, configure all interfaces, including the three new Turbocard interfaces, using `sysconfig` under **Network Interfaces**.



Note - If you removed interfaces and installed SecureXL Turbocard, the 'old' interfaces may appear under 'Network Interfaces' in the `sysconfig` until you reconfigure the interfaces.

Uninstalling SecureXL Turbocard software

- 1 Login as the user `admin` and switch to **Expert** mode.
- 2 Uninstall SecureXL Turbocard Driver: `rpm -e s3500`
- 3 Restart the machine.

Upgrading SecureXL Turbocard Software

- 1 Verify that the SecureXL Turbocard system requirements are met.
- 2 Login as the user admin and switch to **Expert** mode.
- 3 Upgrade the SecureXL Turbocard Driver to: `rpm -U s3500-2.1.0-26.i386.rpm`
- 4 Restart the machine.

PKCS#11 Library Installation for IPsec IKE Acceleration

SecureXL Turbocard provides an implementation for the RSA PKCS#11 (v 2.11) standard, using the openCryptoki software library. Turbocard powers the PKCS#11 Cryptoki implementation by accelerating highly CPU extensive operations for accelerating IKE procedures.

Software Installation

- 1 Ensure that SecureXL Turbocard Hardware and software are installed.
- 2 Login as user admin and switch to Expert mode
- 3 If you have downloaded the software drivers from the Check Point Web Site copy the files to an empty directory (e.g. /home) and proceed with step 7.
- 4 Insert the SecureXL Turbocard System Software CD into the system CD drive.
- 5 Mount the CD: `mount /mnt/cdrom`
- 6 Copy the software to your home directory:
`cp /mnt/cdrom/software/s3500_pkcs11-1.3.3-2.i386.rpm /home`
- 7 Go to your home directory: `cd /home/`
- 8 Install SecureXL Turbocard PKCS#11 Library for IPsec IKE Acceleration:
`rpm -i s3500_pkcs11-1.3.3-2.i386.rpm`
- 9 Restart the machine (shut it down and start it up again).
- 10 Login as user admin and switch to Expert mode
- 11 Configure PKCS11 using `cpconfig` or `cpPKCS11Config` command. Use the command syntax from Check Point VPN-1/FireWall-1 NG AI R55 User manual.
Alternatively, configure PKCS11 using the `ConfigPKCS11onCP` script in the `/usr/sbin` directory.

Post Installation

- 1 Login as the user admin and switch to **Expert** mode: `expert`
- 2 Run `cpconfig` selecting the option `PKCS#11 Token`, and execute the `Tests` submenu.
- 3 Verify that all tests pass successfully.

Uninstalling PKCS#11 Software

- 1 Login as the user admin and switch to Expert mode.
- 2 Remove the SecureXL Turbocard PKCS#11 library module:

```
rpm -e s3500_pkcs11
```

Updating PKCS#11 Software

- 1 Login as the user admin and switch to Expert mode.
- 2 Remove the previous SecureXL Turbocard PKCS#11 library module:

```
rpm -e s3500_pkcs11
```
- 3 Install the new RPM using steps defined in the above Software Installation section.

Restrictions

- 1 All cluster members should have the same installed products (specifically SecureXL Turbocard software driver) otherwise ClusterXL will not function.
- 2 All cluster members should have SecureXL Turbocard installed.
- 3 More than one SecureXL Turbocard per machine is not supported.
- 4 Systems that have 2GB of RAM or more, may not allow the SecureXL Turbocard to load. In this case, `mem=1024MB` must be added to the `/etc/grub.conf` kernel command line.
- 5 The SecureXL Turbocard Gigabit Ethernet ports will not auto-negotiate with a 10/100 port. The ports must connect to a Gigabit Ethernet switch or Gigabit Ethernet NIC.
- 6 The SecureXL Turbocard is not able to process IP fragments that are larger than 6890 bytes. Such packets are dropped.
- 7 SecureXL Turbocard supports up to 255 802.1q VLAN Virtual Interfaces.
- 8 By default traffic can be forwarded only between SecureXL Turbocard interfaces, use the other interfaces on the machine for traffic to the machine itself.

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- NAT is not supported for connections that are forwarded through a non SecureXL Turbocard interface.
 - VPN is not supported for connections that are forwarded through a non SecureXL Turbocard interface.
 - To enabled simple (no NAT or VPN) connections forwarding through non SecureXL Turbocard interfaces add the following line to
\$FWDIR/boot/modules/fwkernel.conf:
fw_cphwd_allow_mixed_traffic=1
- 9** Dynamic routing is not supported between SecureXL Turbocard interfaces and other interfaces on the same machine.
- 10** A Turbocard device cannot be connected directly (or through a switch) to a Gateway that runs Check Point's Performance Pack. They can work simultaneously only if separated by a router.
- 11** DHCP relay is not supported on a Gateway which has a Turbocard installed.