



Alteon Firewall 5100 Series 2.2.7.0

Release Notes

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Regulatory Compliance

International regulatory statements of conformity

This is to certify that the Nortel Networks 8000 Series chassis and components installed within the chassis were evaluated to the international regulatory standards for electromagnetic compliance (EMC) and safety and were found to have met the requirements for the following international standards:

- EMC - Electromagnetic Emissions – CISPR 22, Class A
- EMC - Electromagnetic Immunity – CISPR 24
- Electrical Safety – IEC 60950, with CB member national deviations

Further, the equipment has been certified as compliant with the national standards as detailed below.

National electromagnetic compliance (EMC) statements of compliance

FCC statement (USA only)

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the Federal Communications Commission (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. If it is not installed and used in accordance with the instruction manual, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case users will be required to take whatever measures may be necessary to correct the interference at their own expense.

ICES statement (Canada only)

Canadian Department of Communications Radio Interference Regulations

This digital apparatus does not exceed the Class A limits for radio-noise emissions from digital apparatus as set out in the Radio Interference Regulations of the Canadian Department of Communications.

Règlement sur le brouillage radioélectrique du ministère des Communications

l'appareil numérique respecte les limites de bruits radioélectriques visant les appareils numériques de classe A prescrites dans le Règlement sur le brouillage radioélectrique du ministère des Communications du Canada.

CE marking statement (Europe only)

EN 55 022 statements

This is to certify that the Nortel Networks equipment are shielded against the generation of radio interference in accordance with the application of Council Directive 89/336/EEC. Conformity is declared by the application of EN 55 022 Class A (CISPR 22).

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

Achtung: Dieses ist ein Gerät der Funkstörgrenzwertklasse A. In Wohnbereichen können bei Betrieb dieses Gerätes Rundfunkstörungen auftreten, in welchen Fällen der Benutzer für entsprechende Gegenmaßnahmen verantwortlich ist.

Attention: Ceci est un produit de Classe A. Dans un environnement domestique, ce produit risque de créer des interférences radioélectriques, il appartiendra alors à l'utilisateur de prendre les mesures spécifiques appropriées.

EN 55 024 statement

This is to certify that the Nortel Networks equipment is shielded against the susceptibility to radio interference in accordance with the application of Council Directive 89/336/EEC. Conformity is declared by the application of EN 55 024 (CISPR 24).

EC Declaration of Conformity

This product conforms to the provisions of the R&TTE Directive 1999/5/EC.

VCCI statement (Japan/Nippon only)

This is a Class A product based on the standard of the Voluntary Control Council for Interference (VCCI) for information technology equipment. If this equipment is used in a domestic environment, radio disturbance may arise. When such trouble occurs, the user may be required to take corrective actions.

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラス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。

BSMI statement (Taiwan only)

This is a Class A product based on the standard of the Bureau of Standards, Metrology and Inspection (BSMI) CNS 13438, Class A.

警告使用者：

這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

MIC notice (Republic of Korea only)

This device has been approved for use in Business applications only per the Class A requirements of the Republic of Korea Ministry of Information and Communications (MIC). This device may not be sold for use in a non-business application. Reference Regulatory label on the base of the equipment for specific Korean approval information.

National Safety Statements of Compliance

CE marking statement (Europe only)

EN 60 950 statement

This is to certify that the Nortel Networks equipment are in compliance with the requirements of EN 60 950 in accordance with the Low Voltage Directive. Additional national differences for all European Union countries have been evaluated for compliance. Some components installed within the 8000 Series chassis may use a nickel-metal hydride (NiMH) and/or lithium-ion battery. The NiMH and lithium-ion batteries are long-life batteries, and it is very possible that you will never need to replace them. However, should you need to replace them, refer to the individual component manual for directions on replacement and disposal of the battery.

Lithium Battery Cautions

Caution—This product contains a lithium battery. Batteries are not customer replaceable parts. They may explode if mishandled. Do not dispose of the battery in fire. Do not disassemble or recharge.

(Norge) ADVARSEL—Litiumbatteri - Eksplosjonsfare. Ved utskifting benyttes kun batteri som anbefalt av apparatfabrikanten. Brukt batteri returneres apparatleverandøren.

(Sverige) VARNING—Explosionsfara vid felaktigt batteribyte. Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren. Kassera använt batteri enligt fabrikantens instruktion.

(Danmark) ADVARSEL! Litiumbatteri - Eksplosionsfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af samme fabrikat og type. Levér det brugte batteri tilbage til leverandøren.

(Suomi) VAROITUS—Paristo voi räjähtää, jos se on virheellisesti asennettu. Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

Safety Information

Caution—Nortel Networks products are designed to work with single-phase power systems having a grounded neutral conductor. To reduce the risk of electric shock, do not plug Nortel Networks products into any other type of power system. Contact your facilities manager or a qualified electrician if you are not sure what type of power is supplied to your building.

Caution—Not all power cords have the same ratings. Household extension cords do not have overload protection and are not meant for use with computer systems. Do not use household extension cords with your Nortel Networks product.

Caution—Your Nortel Networks product is shipped with a grounding type (three-wire) power cord. To reduce the risk of electric shock, always plug the cord into a grounded power outlet.

NOM statement (Mexico only)

The following information is provided on the devices described in this document in compliance with the safety requirements of the Norma Oficial Mexicana (NOM):

Exporter: Nortel Networks, Inc.
4655 Great America Parkway
Santa Clara CA 95054 USA

Importer: Nortel Networks de México, S.A. de C.V.
Avenida Insurgentes Sur #1605
Piso 30, Oficina
Col. San Jose Insurgentes
Deleg-Benito Juarez
México D.F. 03900

Tel: 52 5 480 2100

Fax: 52 5 480 2199

Input: 100 to 240 VAC, 50 to 60 Hz, 9 A max. per power supply
single supply, or + one redundant supply configurations

Información NOM (unicamente para México)

La información siguiente se proporciona en el dispositivo o en los dispositivos descritos en este documento, en cumplimiento con los requisitos de la Norma Oficial Mexicana (NOM):

Exportador: Nortel Networks, Inc.
4655 Great America Parkway
Santa Clara, CA 95054 USA

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Avenida Insurgentes Sur #1605
Piso 30, Oficina
Col. San Jose Insurgentes
Deleg-Benito Juarez
México D.F. 03900

Tel: 52 5 480 2100

Fax: 52 5 480 2199

Embarcar a: 100 to 240 V CA, 50 to 60 Hz, 9 A max. por fuente de poder
una fuente o una + configuraciones de una fuente redundante



Release Notes

These release notes provide the latest information regarding the Alteon Firewall 5100 Series (models ASF 5105, ASF 5106 ASF 5109, ASF 5112, ASF 5114, and ASF 5124) for Release 2.2.7.0. This supplement modifies information found in the complete documentation. Please keep this information with your Nortel Networks product manuals.

Late-Breaking News and Support

Before you put your system into commission, please check the Nortel Networks Technical Support Web site for the latest software and documentation on the Alteon Firewall. Be sure to review the Readme file on the Software Detail Information page, which has the list of open Change Requests (CRs) and closed CRs for this release. To access the Web site:

- Point your browser to: <http://www.nortelnetworks.com/cs>. The Technical Support page will open.
- Select the “Browse product support” tab.
 - ① Select from **Product Family (Alteon / Alteon Switched Firewall System)**
 - ② ...choose a product... (**ASF Standalone Firewall (5100 series)**)
 - ③ ...and get the content. (**Software**)Then click on **Go**.
- Click on a software title and enter the registered user name and password previously assigned to you by Nortel Networks Technical Support. This will open the Software Detail Information page.

If you are not a registered user, please click on the **Register** link on the left-hand column of the Nortel Networks Technical Support Web site, and complete the registration process.

NOTE – The Nortel Networks Technical Support Web site also provides access to customer support for accounts under warranty or accounts that are covered by a maintenance contract.

- You must authenticate at the Check Point Web site to obtain the Alteon Firewall software. Instructions are provided on the Software Detail Information page to help you access and navigate the Check Point Web site.

For Check Point Release Notes, go to http://www.checkpoint.com/techsupport/installation/ng/release_notes.html

For Check Point User Documentation, go to <http://www.checkpoint.com/support/technical/documents/index.html>

- A Readme file for Release 2.2.7.0 is kept on the Software Detail Information page. Just click on the **ReadMe** link to download the file to your work station.

Documentation

The following manuals are supplied on a CD-ROM that ships with new products:

- *Alteon Firewall 5100 Series 2.2.5 User's Guide and Command Reference* (p/n. 213455-J)
- *Alteon Firewall 5100 Series User's Hardware Installation Guide* (p/n. 216382-B)
- *Alteon Firewall 5100 Series BBI Quick Guide* (p/n 216383-B)

The manuals are PDF files that can be read and printed using the free Acrobat Reader software available from Adobe Systems Incorporated (<http://www.adobe.com>).

To access a manual, open the "welcome.pdf" file on the *Alteon Firewall 5100 Series Documentation* CD-ROM and select a title. When the manual opens, you can navigate through it by selecting the bookmarks on the left side of the window or by scrolling through the pages.

You can also download the manuals from the Nortel Networks Technical Support Web site. To access the site, follow the procedure in "[Late-Breaking News and Support](#)" on page 7 but select **Documentation** instead of **Software**. The Documentation page will open sorted by date. Click on a title to open it in your browser.

To reduce clutter on the Documentation page, click on the **RLs** header. This will sort the page by Release and omit any document that doesn't have a Release version.

Check Point Product Name Changes

For FP-3 and later releases, Check Point changed the names of some products that are referenced in the Alteon Firewall 5100 system. These names have been changed, where applicable, in the Alteon Firewall 5100 Series user documentation, the Command Line Interface (CLI) and the Browser-Based Interface (BBI). A table of name changes is provided here:

Table 1 Check Point Product Name Changes for FP-3 and later releases

Current Name	Name Prior to NG FP-3
SmartDashboard	Policy Editor
SmartView Tracker	Log Manager or Log Viewer
SmartView Status	Status Manager or System Status
SmartView Monitor	Real-Time Monitor or Traffic Monitor
Smart Center Server	Management Server
SMART Clients	Management Clients
SmartUpdate (see note below)	SecureUpdate

NOTE – SmartUpdate/SecureUpdate is not supported by the Alteon Firewall for installing patches. You must use the Alteon Firewall software releases.

Check Point Feature Pack Support

Release 2.2.7.0 is a maintenance release that supports FireWall-1 NG Application Intelligence:

Table 2 Check Point version and corresponding ASF software images

NG Version	Hot Fix Accumulator	ASF Software Images
R55	HFA-08	ASF5100_2.2.7.0_R55.img/iso/.pkg
R54	HFA-412	ASF5100_2.2.7.0_R54.img/iso/.pkg

NOTE – Release 2.2.5.0 with support for R55 with HFA-03 is pre-installed on units shipped to the field. The 2.2.5.0 software CD that accompanies shipments supports R55 as well.

New Features

The changes in 2.2.7.0 include support for Check Point features, Floodgate and ClusterXL. The support is implemented internally. These features are documented on pages 10-16.

Also, an option for upgrading software has been added (see “[New Commands](#)” on page 14).

ClusterXL

Check Point ClusterXL and Alteon Firewall VRRP are similar implementations of the same features. ClusterXL requires an additional license with the Cluster XL feature from Check Point. Alteon Firewall VRRP however, does not require the additional license. Both VRRP and ClusterXL are supported on 2.2.7.0. This declaration supersedes the notes on pages 81 and 125 of the *Alteon Firewall 5100 Series 2.2.5 User's Guide and Command Reference* that say support for ClusterXL won't be available until version 2.3 is released. This declaration also supersedes the statement in the BBI On-line Help that says ClusterXL is not supported (see Network ▶ Monitor ▶ VRRP and open the On-line Help page).

NOTE – For a step-by-step procedure to configure ClusterXL on the Alteon Firewall 5100 series, refer to the High Availability Configurations document (part number: 318721-A) on the Nortel Web site at <http://www.nortelnetworks.com/cs>.

ClusterXL Configuration

The instructions in the *Alteon Firewall 5100 Series 2.2.5 User's Guide and Command Reference* for configuring High Availability (HA) and Active-Active (AA) can be used to configure ClusterXL with the following exceptions:

Installing the Redundant Alteon Firewall

Use this procedure as is for ClusterXL, but make sure `/cfg/net/vrrp/clusterxl` is disabled before you start.

Configuring the Redundant Alteon Firewall

Use this procedure as is for ClusterXL.

VRRP Interface

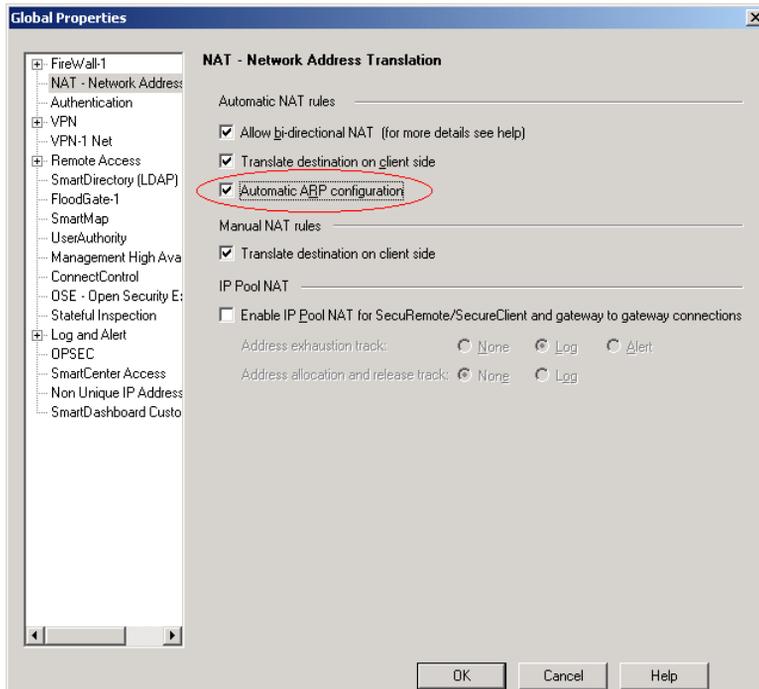
Use this procedure as is for ClusterXL, but configure both `addr1` and `addr2` as 0.0.0.0.

Configure HA or AA at the Check Point SmartDashboard

Use this procedure as is for ClusterXL, but do not configure addr2 as instructed in Step 8. Also, do not perform Step 9 (see **NOTE** for explanation).

NOTE – ClusterXL and Proxy ARP (on the ASF 5100 series) do not work together. For that reason, make sure you disable Proxy ARP at the CLI (see `/cfg/net/adv/parp`) prior to configuring ClusterXL. Since Proxy ARP is disabled it is not necessary to perform Step 9.

Allow Check Point to handle Proxy ARP as shown below.



Example Check Point SmartDashboard Configuration for HA or AA

Per Step 4, when you open the General Properties window, be sure to check ClusterXL. Then, after finishing the instructions in Step 5:

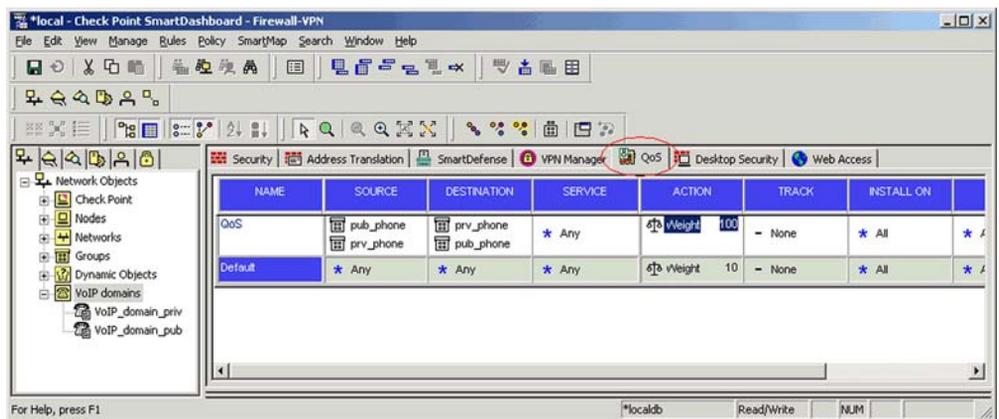
- Select the **ClusterXL** option. This will only appear if you checked ClusterXL in Step 4.
- At the **Gateway Cluster Properties ClusterXL** window check **High Availability (New Mode)** or **Load Sharing (Multicast, Unicast Mode)** and **Fail-Over Tracking (Log)**.

NOTE – ClusterXL Legacy Mode is not supported in this release.

- If you selected **Load Sharing**, click on **Advanced** and select **IPs** (third option) to base the sharing method on.
- When you have finished configuring ClusterXL do not click OK, but go directly to Step 6.

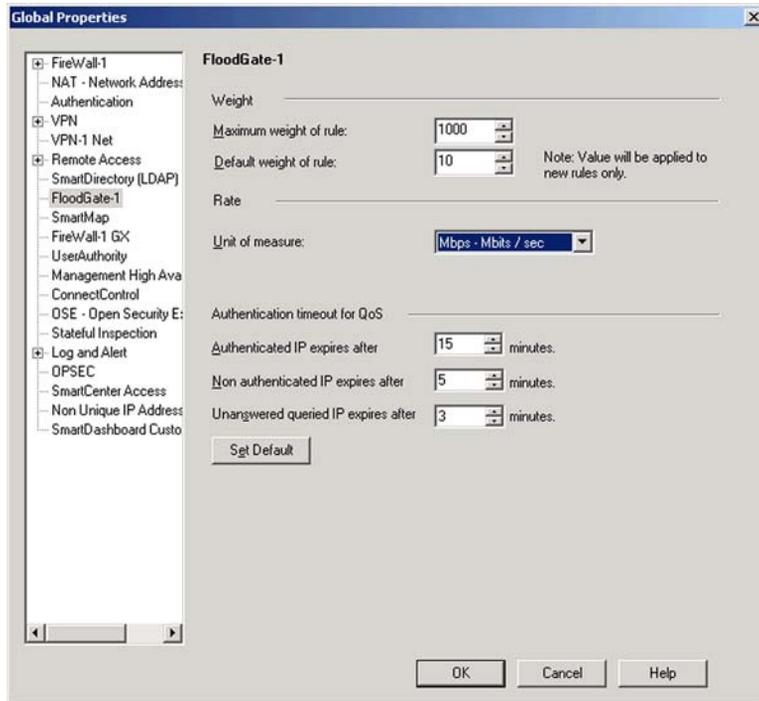
FloodGate-1

FloodGate-1 is Check Point's Quality of Service (QoS) feature. To use the option, you must obtain an additional license and enable FloodGate-1 when you install the Check Point management tools (see page 41 in the *Alteon Firewall 5100 Series 2.2.5 User's Guide and Command Reference*). This will setup a QoS tab in your SmartDashboard that will allow you to configure QoS rules.



Enter rule parameters as you would for setting security policy. The weight you set for the flow depends on the flow's priority level in your network. That in turn is dependent on the general properties you set for QoS.

To set general properties for QoS, select Policy > Global Properties > FloodGate-1 tab.



The properties you select depend on the number of flows needing QoS guarantees and the bandwidth needed to ensure sufficient service for a given flow. Refer to the SmartDashboard online help for QoS issues by pressing the help button on the General Properties window.

New Commands

The `cdrom` command has been added to the Software Management Menu. The entire menu is shown below.

`/boot/software` Software Management Menu

```
[Software Management Menu]
  cur          - Display current software status
  activate     - Select software version to run
  download     - Download a new software package via TFTP/FTP
  cdrom        - Get a new software package via CD-ROM
  del          - Remove downloaded (unpacked) releases
```

Here are the command syntax and usage for `/boot/software/cdrom`;

Command Syntax and Usage

`cdrom`

This command downloads the upgrade software from a CD-ROM. Upgrading this way is an alternative to downloading directly from a tftp or ftp server. You must first download the .pkg file to a CD-ROM burner workstation to burn as a data CD.

When you issue the command, the system prompts you to install the CD and hit ENTER when ready. The system will automatically look for the .pkg file on the CD-ROM. If there is more than one .pkg file, the system will provide the option to select one. If no .pkg files are present, the system will prompt you for the full path on the Firewall's local hard drive.

Upgrade Example using `/boot/software/cdrom`

1. Download the .pkg file from the Check Point web site to a workstation with a CD-ROM burner (see [“Late-Breaking News and Support” on page 7](#) for access instructions).
2. Burn the .pkg file onto a blank CD by following the instructions for your CD-ROM burner for creating a data CD.

3. At the Firewall CLI enter the cdrom command.

```
>> Main# /boot/software/cdrom
Insert the installation CD-ROM. Press ENTER when ready ...
```

4. Install the CD in the Firewall CD-ROM drive.

5. At the Firewall CLI press ENTER. If the system finds the .pkg file on the CD, copy to the Firewall hard drive application directory begins. If the file is not found or the CD wasn't installed, the following messages will appear:

```
Unable to mount cdrom, mount: No medium found

If you have the Software Upgrade Package downloaded in the local
disk, please enter full path to it (press Enter to Abort):
```

6. The Firewall prompts for the full directory path in the event that you have copied the .pkg file to the local hard disk. If you have done this, enter the full path (e.g., /dir1/dir2/ASF5100_2.2.7.0.R55.pkg) and press ENTER. If the system finds the .pkg file at the specified directory on the hard drive, copy to the Firewall application directory begins. Otherwise, the system will abort the process.

```
not an upgrade package (no .pkg suffix)
Failed to get software package
```

7. The copy process will take as long as ten minutes. You will know that the process has completed when the file version shows up in the current software status display.

```
>> Software Management# cur
Version          Name          Status
-----          -
2.2.5.0         tdo          permanent
2.2.7.0         tdo          unpacked
```

8. Now you can activate the software upgrade.

```
>> Software Management# activate
Enter software version to activate: 2.2.7.0
Confirm action 'activate'? [y/n]: y
Activate ok, rebooting
```

Activation is complete when rebooting finishes and the login prompt appears.

Documentation Corrections

Distinguished Name of Management Server

The screen capture under Step 3 on page 219 of the *Alteon Firewall 5100 Series 2.2.5 Installation and User's Guide* does not properly illustrate the means by which you obtain the Distinguished Name of the Management Server. Refer to the screen capture below instead.

Check Point Host - bijukibm

Check Point Host - General Properties

Name:

IP Address: Dynamic Address

Comment:

Color:

Check Point Products

Version:

Type:

SecureClient Policy Server
 SecureClient Software Distribution Server
 Primary Management Station
 SVN Foundation
 Log Server
 SmartView Reporter

Additional Products:

Web Server

Secure Internal Communication

DN:

NOTE – The DN field would have been blank if SIC had not been established for the host in this example.

Cluster Backup and Clone Procedures

Here is additional information that supplements and corrects the “Cluster Backup and Clone Procedures” on page 227 in the *Alteon Firewall 5100 Series 2.2.5 User’s Guide and Command Reference*.

The `/cfg/sys/backup/bcklocal` command (see page 85 in the *Alteon Firewall 5100 Series 2.2.5 User’s Guide and Command Reference*) stores a configuration image on the local hard drive. This configuration is automatically restored in the event of a hard disk crash. The `/cfg/sys/backup/bckremote` command is used to store the same configuration image on a remote tftp or ftp server. This configuration image is also used by the clone procedure (see page 228 in the *Alteon Firewall 5100 Series 2.2.5 User’s Guide and Command Reference*), which offers a convenient way to duplicate (clone) the configuration of an operational Firewall on a fresh Firewall.

Step 1 on page 227 in the *Alteon Firewall 5100 Series 2.2.5 User’s Guide and Command Reference*, tells you to login as root and use the `ctl pstat` command to determine if sync is active between the two Firewalls. The new recommendation is to use the `cphaprob stat` command instead.

If sync is inactive, disable sync at the CLI (`/cfg/fw/sync/dis/apply`), wait two minutes, and enable sync (`/cfg/fw/sync/ena/apply`). This will automatically reboot both firewalls. Then login as root and check the sync status again (`cphaprob stat`).

NOTE – For step-by-step procedures to configure Cluster Backup and Cloning, refer to the Backing Up and Cloning Configurations document (part number: 318722-A) on the Nortel Web site at <http://www.nortelnetworks.com/cs>.

Troubleshooting

Scenario 1: Cloning fails and this error is displayed:

```
Validating downloaded configuration
Failed: Different Image partition
Configuration file has information of os2 image
But the active image in firewall is os1
```

Explanation: The Firewall has two OS images, os1 and os2, one of which is active (command `active-os` at the root login gives the current active OS image).

In this scenario, the backup image is os2 and the active image is os1. This is not supported, so make sure the the backup image is the same as the active image.

Workaround: Switch the active OS on the cloned Firewall to os2 to match the configuration source. To switch active OS, re-image of the box using bootshell command (Using the same version IMG) and then re-run clone command to restore configuration.

Scenario 2: Windows tftp server has problems during download.

Explanation: The download image is greater than 32Mb.

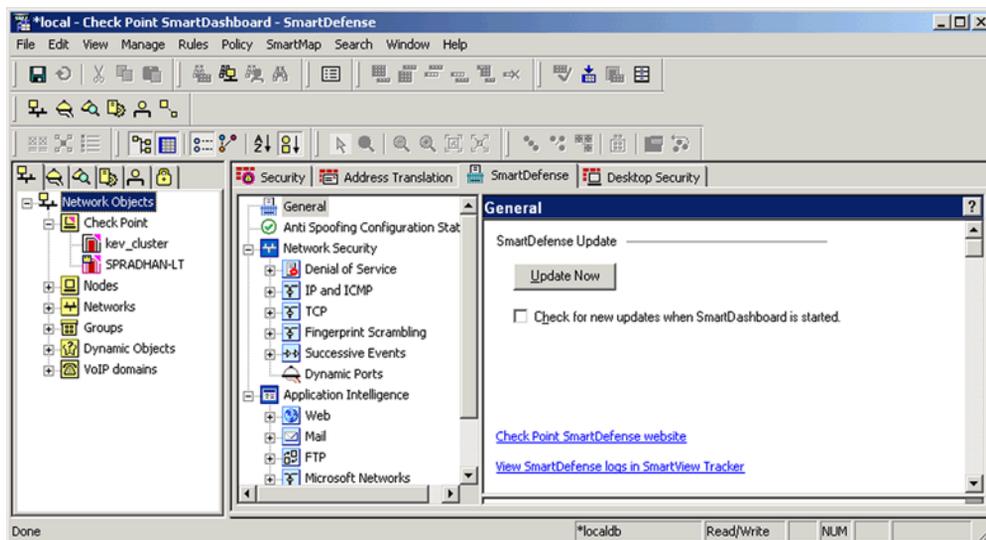
Workaround: Use a Linux tftp server.

Push Policy after SmartDefense Updates

If you have a SmartCenter Server and Gateway configuration, you must enable support for SmartUpdate on your Firewall after receiving SmartDefense updates. Otherwise you will be unable to push policy to your system.

1. Perform a SmartDefense update.

At the SmartDashboard, select the SmartDefense tab and press Update Now.



NOTE – SmartDefense is a subscription service from Check Point. You can learn about the service at the [Check Point SmartDefense website](#) (a link is in the SmartDefense Update window). For more information on SmartDefense, refer to the [Check Point SmartDashboard online help](#).

2. At the CLI, enter `/cfg/fw/smart/ena/apply`.
3. At the SmartDashboard, push policy.
4. At the CLI, enter `/cfg/fw/smart/dis/apply`.

Closed CRs

For a list of CRs that were closed for this release, see the Readme file that accompanies the 2.2.7.0 software. See “[Late-Breaking News and Support](#)” on page 7 for instructions on how to access the Readme file on the Nortel Networks Technical Support Web site.

OpenSSL

This release includes OpenSSL 0.9.6.m with buffer overflow patches.

Upgrading Software

The Alteon Firewall provides a variety of ways to upgrade your software. Before you begin downloading software, consider the following information.

NOTE – For a step-by-step procedure to Upgrade to Release 2.2.7.0, refer to the Upgrading document (part number: 318723-A) on the Nortel Web site at <http://www.nortelnetworks.com/cs>.

Alteon Firewall Upgrade Matrix

- Upgrading Release 1.x to Release 2.x using an ftp/tftp server is not supported on any platform (see [Upgrading from Release 1.1.2 or 1.1.3](#) for an upgrade workaround).
- Upgrading from Release 2.1.x is supported on all platforms (see “[Upgrading from Release 2.2.x](#)” on page 21).

Alteon Firewall Software Upgrade/Reinstall Options

There are three image versions of Alteon Firewall software; .iso, .img, and .pkg:

- The **.iso image** is for creating the Alteon Firewall software CD. You must download the .iso image to a server that your CD-ROM burner has access to.
- The **.pkg image** is installed from an ftp or tftp server using the /boot/software/download command. The .pkg image installs it in parallel with the existing version.
- The **.img image** is installed from an ftp or tftp server using the boot user login with the ForgetMe password. The .img image overwrites the current software version.

NOTE – For .iso and .img installations, all configuration parameters, logs, etc. are lost. Be sure to save your configuration to an ftp or tftp server using the `/cfg/ptcfg` command and restore it after reinstallation using the `/cfg/gtcfg` command.

Upgrading from Release 1.1.2 or 1.1.3

You must install an .iso image from a CD-ROM to upgrade from 1.x to 2.x. Follow the instructions below to download and install the image.

Downloading Release 2.2.7.0 (.iso)

1. **Point your browser to the Nortel Networks Technical Support Web site** (see **“Late-Breaking News and Support” on page 7** for instructions).
2. **Select the Alteon Firewall 2.2.7.0 image file (.iso) for R55.**
3. **Copy the file to your ftp/tftp server.**

Installing Release 2.2.7.0 (iso)

NOTE – Be sure to save your configuration to your ftp/tftp server before installing Release 2.2.7.0 (see the Firewall CLI commands `/cfg/ptcfg` and `/cfg/gtcfg`). Configuration parameters are lost when you install an ISO image.

1. **Put a blank CD in your CD-ROM burner, select the “File/Burn Image” option (or equivalent), and burn the Release 2.2.7.0 image onto the blank CD.**
2. **Install the CD in the Alteon Firewall CD-ROM drive.**
3. **Reboot the Alteon Firewall and login as root (no password is necessary).**
4. **Run the ASF installation script:**

```
# install-asf <model # (asf5105, asf5106, asf5109, asf5112, asf5114, asf5124) >
```

Wait for the installation script to finish. If the Alteon Firewall does not reboot automatically, remove the software CD and reboot the system manually.

5. **Login as admin and restore the configuration from the ftp/tftp server using the `/cfg/gtcfg` command.**

NOTE – Step 4 sets policy on the Alteon Firewall to *deny all* by default. For Step 5 to work, you must provide access to your tftp/ftp server. To do this, use the `/maint/diag/fw/unldplcy` command, but exercise caution; the command provides access to all. Follow up with a policy push from your SmartCenter server as soon as possible.

Upgrading from Release 2.2.x

The `.img` image overwrites the current software version, while the `.pkg` image installs it in parallel with the existing version. To download the `.img` image, login as the `boot` user with the `ForgetMe` password.

1. **Point your browser to the Nortel Networks Technical Support Web site (see “[Late-Breaking News and Support](#)” on page 7 for instructions).**
2. **Select the Alteon Firewall 2.2.7.0 image file (`.pkg` or `.img`) for R55.**
3. **Copy the file to your ftp/tftp server.**
4. **To install the software, follow the instructions in the *Alteon Firewall User’s Guide and Command Reference* (see “Installing a Minor/Major Release Upgrade”).**

Activating Release 2.2.7.0

You can activate `.pkg` image at your convenience using the `/boot/software/activate` command. For more information on activating the software you just installed, follow the instructions in the *Alteon Firewall 2.2.5 User’s Guide and Command Reference* (see “Activating the Software Upgrade Package”).

