RELEASE NOTES:



Alteon Firewall 5100 Series Release 2.2.4

Part Number: 213456-K, February 2004



4655 Great America Parkway Santa Clara, CA 95054 Phone 1-800-4Nortel www.nortelnetworks.com Copyright © 2004 Nortel Networks, Inc., 4655 Great America Parkway, Santa Clara, California, 95054, USA. All rights reserved. Part Number: 213456-K.

This document is protected by copyright and distributed under licenses restricting its use, copying, distribution, and decompilation. No part of this document may be reproduced in any form by any means without prior written authorization of Nortel Networks, Inc. Documentation is provided "as is" without warranty of any kind, either express or implied, including any kind of implied or express warranty of non-infringement or the implied warranties of merchantability or fitness for a particular purpose.

U.S. Government End Users: This document is provided with a "commercial item" as defined by FAR 2.101 (Oct 1995) and contains "commercial technical data" and "commercial software documentation" as those terms are used in FAR 12.211-12.212 (Oct 1995). Government End Users are authorized to use this documentation only in accordance with those rights and restrictions set forth herein, consistent with FAR 12.211-12.212 (Oct 1995), DFARS 227.7202 (JUN 1995) and DFARS 252.227-7015 (Nov 1995).

Nortel Networks, Inc. reserves the right to change any products described herein at any time, and without notice. Nortel Networks, Inc. assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by Nortel Networks, Inc. The use and purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of Nortel Networks, Inc.

Alteon Firewall 5100 Series, 5008, 5010, 5012, 5100, 5300, 5400, 5500, 5600, 5700, 5105, 5109, 5112, 5114, 5308, 5408, 5610, 5710, Alteon iSD-SFD, Alteon Firewall, Firewall OS, Alteon SFA, Alteon Firewall Accelerator, and Alteon Accelerator OS are trademarks of Nortel Networks, Inc. in the United States and certain other countries.

Check Point, OPSEC, and SmartUpdate are trademarks of Check Point Software Technologies Ltd. FireWall-1 and VPN-1 are registered trademarks of Check Point Software Technologies Ltd.

Any other trademarks appearing in this manual are owned by their respective companies.



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

f 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 Méxicana (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 Méxicana (NOM):

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

Importador: 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

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, and ASF 5114) for Release 2.2.4. 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 Customer Support Web site for the latest software and documentation on the Alteon Firewall. Be sure to review the readme.txt file collocated with the software, 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.
- Enter the registered user name and password previously assigned to you by Nortel Networks Customer Support.

If you are not a registered user at Nortel Networks, please click on the **Register** button on the left-hand column of the Nortel Networks Customer Support Web site, and follow the 5-step registration process.

• Once you have signed in, go to the Software page for the Alteon Firewall by selecting:

Alteon > ASF Standalone Firewall (5100 series) (Software)

- Click on "Date" in the list header to sort the Software page by date (ascending or descending).
- Follow the "Software Download Procedure" on page 14 to download the present software release, patch release software (if it exists), and readme.txt file.

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



Documentation on CD ROM

The Alteon Firewall 5100 Series User's Guide and Command Reference (Part No. 213455-H), the Alteon Firewall 5100 Series User's Hardware Installation Guide (Part No. 216382-A), and the Alteon Firewall 5100 Series BBI Quick Guide (Part No. 216383-A), are supplied on a CD-ROM that ships with this product. 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 book 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 and these Release Notes from the Nortel Networks Customer Support Web site at http://www.nortelnetworks.com/cs.

If required, enter the user name and password previously assigned to you by Nortel Networks Customer Support. Then select Alteon ► Alteon Switched Firewall System (Documentation).

CheckPoint 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:

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

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

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 2.2.4 comes in two software versions: one supports FireWall-1 NG Feature Pack 3 (FP3), with HFA 318 and the other supports FireWall-1 NG Application Intelligence (R55).

NOTE – The software version that is pre-installed on units shipped to the field supports R55. The software CD that accompanies shipments supports R55 as well. The software version that supports FP3 is exclusively for release on the Check Point Web site (see the "Software Download Procedure" on page 14 for download instructions).

New Hardware Platform for Release 2.2.4

The ASF 5106 has been added to the Alteon Firewall product line. The ASF 5106 has two 10/100 Mbps Ethernet ports and two 10/100/1000 Mbps copper Ethernet ports. Additional specifications, hardware description and installation instructions are included in the *Alteon Firewall 5100 Series Hardware Installation Guide*.

NOTE – Release 2.2.4 does not support the ASF 5112, which has been replaced by the ASF 5114.

New Features/Commands for Release 2.2.4

Here are the new features and the CLI/BBI commands that implement them for Release 2.2.4. These features and commands are documented in the *Alteon Firewall 5100 Series User's Guide and Command Reference*:

- Support for cloning Alteon Firewalls to speed cluster configuration and support for faster system recovery from soft reboots:
 - □ /cfg/sys/backup (menu)
 - □ /cfg/sys/backup/bcklocal
 - □ /cfg/sys/backup/bckremote
- SSH commands to provide SSH access to the Firewall OS shell for a specified user:
 - \Box /cfg/sys/user/adv/user <user name> (menu)
 - D /cfg/sys/user/adv/user <user name>/name



- □ /cfg/sys/user/adv/user <user name>/pubkey
- /cfg/sys/user/adv/user <user name>/ena
- □ /cfg/sys/user/adv/user <user name>/dis
- □ /cfg/sys/user/adv/user <user name>/del
- VRRP settings that support Advanced Failover Checking (AFC) and a port health check interval.
 - /cfg/net/vrrp/phcintvl
 BBI: Network > VRRP Settings / Port HealthCheck Interval (2-3600)
 - □ /cfg/net/vrrp/afc
 BBI: Network ► VRRP Settings / Advance FailOver Check (ena/dis)
 - □ /info/net/vrrp/status (Port HealthCheck Interval, AFC status)
- Support for automated software updating using Check Point SmartUpdate
 - /cfg/fw/smart (menu)
 BBI: Firewall > Settings / SmartUpdate Management (ena/dis)
 - □ /cfg/fw/smart/ena
 - □ /cfg/fw/smart/dis
- Alteon Firewall model identification
 - □ /cfg/sys/cluster/host <*iSD host number*>/hwplatform BBI: Monitor ► About
- Proxy ARP support for VLAN interfaces and for active-active configurations. To support Proxy ARP in active-active configurations, VRRP Group selection was added:

NOTE – Group 1 applies to devices on addr1. Group 2 applies to devices on addr2.

- □ /cfg/net/adv/parp/list <IP Address> <VRRP Group 1,2>
 BBI: Network ▶ Routes ▶ Proxy ARP / VRRP Group (1 or 2)
- Support for Check Point Express Licensing. You can now enable the option for FP3 or R55 during setup (see Step 10 on page 29 in the *Alteon Firewall 5100 Series User's Guide and Command Reference*). For more information, go to http://www.checkpoint.com and view CheckPoint's Express License literature.
- The /maint/tsdump/exdump command was removed.



Closed CRs

For a list of CRs that were closed for this release, see the readme.txt file that accompanies the 2.2.4 software (see "Late-Breaking News and Support" on page 7 for instructions on how to access the readme.txt file on the Nortel Networks Customer Support Web site).

Clarifications

Check Point ClusterXL and Alteon Firewall VRRP

Check Point ClusterXL and Alteon Firewall VRRP are similar implementations of the same features. ClusterXL requires a license from Check Point. Alteon Firewall VRRP does not.

OpenSSL

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

Documentation Corrections

Performance Specifications

The performance specifications for the Alteon Firewall 5100 Series product line have been revised in Table 2:

Characteristic	ASF 5105	ASF 5106	ASF 5109	ASF 5114
Throughput	220 Mbps	300 Mbps	1,200 Mbps	1,600 Mbps
Concurrent Ses- sions	100,000	250,000	300,000	500,000
New Connections Per Second	1,500	1,800	4,200	4,200

Table 2 Alteon Firewall 5100 Series Hardware Performance

Please ignore the data in Table 1-2 on page 17 of the Alteon Firewall 5100 Series User's Guide and Command Reference.



CPU Clock Specification

The CPU clock specification for the ASF 5106 is stated incorrectly in Table 1-1 on page 16 of the *Alteon Firewall 5100 Series User's Guide and Command Reference* and in the "Physical Characteristics" table on page 46 of the *Alteon Firewall 5100 Series Hardware Installation Guide*. The correct CPU clock specification is 1 GHz.

Proxy ARP

The description under /cfg/net/adv/parp/list/add in the *Alteon Firewall 5100 Series User's Guide and Command Reference* states that a route on the Alteon Firewall is required for each proxy ARP entry. In fact, a route is only required if the destination is not on the same network segment as the Firewall interface.

1000BaseT Standard

The 10/100/1000 Mbps Ethernet ports on the ASF 5106, ASF 5109, and ASF 5114 include support for IEEE 802.3ab (1000BaseT).

Upgrading Software

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

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" on page 13 for an upgrade workaround).
- Upgrading Release 2.1.x is supported on all platforms.

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.



Both the .img image and the .pkg image are installed from an ftp or tftp server using the /boot/software/download command. The .img image overwrites the current software version, while the.pkg image installs it in parallel with the existing version. You can activate .pkg image at your convenience using the /boot/software/activate command.

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 2.2.4

- 1. Point your browser to ASF Standalone Firewall (5100 series) Downloads page (see "Software Download Procedure" on page 14 for instructions).
- 2. Select the Alteon Firewall 2.2.x image file (.iso).
- 3. Copy the file to your ftp/tftp server.

Installing Release 2.2.4

NOTE – Be sure to save your configuration to your ftp/tftp server before installing Release 2.2.4 (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.x 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. Issue the command: install-asf *<model* # (asf5105 or asf5106 or asf5109 or asf5114, whichever matches your model #>). Wait for the installation script to finish. If the Alteon Firewall does not reboot automatically, take the software CD out and reboot the system manually.
- 5. Login as admin and restore the configuration from the ftp/tftp server using the /cfg/gtcfg command. This is required to apply the restored configuration.



Software Download Procedure

Downloading Alteon Firewall software includes a lengthy Web navigation process. Step 1 starts at the Nortel Networks Customer Support Web site (www.nortelnetworks.com/cs). Each associated **Action** takes you to the next **Step/Web Page** or **Dialog Box** in the procedure.

Note: You must have a username and password assigned by Check Point for Step 5 and beyond. If you do not, follow the links in the note on that Web page (Step 5/Software Subscription Download Section) to obtain them.

Step	Web Page or Dialog Box	Action	
1	Nortel Networks Customer Support	Select Alteon	
2	Products By Product Family	Select ASF Standalone Firewall (5100 series) (Software)	
3	Alteon Switched Firewall Software	Select title of latest AF release (requires login)	
4	Software Detail Information	Select www.Checkpoint.com	
5	Software Subscription Download Section	Enter username and password assigned by Check Point	
6	Software Subscription Download Agreement	Select Accept	
7	Downloads & Documentation—Download Selector	Select product: Nortel Alteon Switched Firewall Select version: NG with Application Intelligence for ASF 5100 series or NG for ASF 5100 series (FP3)	
8	Downloads & Documentation Software Subscription Downloads Nortel Alteon Switched Firewall NG with Application Intelligence for ASF 5100 series or FP3 for ASF5100 series	Select version: ASF 2.2.4.0a Select SP/FP/BUILD: R55 or FP3	
9	Downloads & Documentation Software Subscription Downloads Nortel Alteon Switched Firewall NG with Application Intelligence for ASF 5100 series or FP3 for ASF5100 series ASF 2.2.4.0a, R55 or FP3	Select Download Option(s) (Choose image associated with your model: 51xx means all models are supported) Installation CD Image (.iso) for reimage Single System (Boot) Image (.img) for reinstall via tftp Upgrade Image (.pkg) for upgrade via tftp Release Notes	
10	File Download Dialog Box	Select Save	
11	Save As Dialog Box	Enter directory path, then select Save	
12	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		

