

Solution Brief

Nortel Networks

Alteon Switched Firewall receives Common Criteria Certification

With ICSA 4.0, OPSEC, and now Common Criteria (CC) EAL4 certification, three independent standards organizations confirm the Alteon Switched Firewall's proven ability to enhance network performance, persistence, and protection against both external and internal security threats.

For customers, especially those in national and state government departments and agencies, CC certification provides assurance that Nortel Networks Alteon Switched Firewall products have been rigorously tested and validated against a set of requirements established by the worldwide International Standards Organization to ensure IT security.



Nortel Networks has received Common Criteria Evaluation Assurance Level 4 (EAL4) certification for its Alteon Switched Firewall security products. Certification to Common Criteria EAL4 is awarded only after an in-depth analysis of product design and development methodology, backed by extensive testing. Nortel Networks firewall systems that achieved Common Criteria EAL4 certification include the Alteon Switched Firewall 5710, 5610, 5408, and 5308, running Check Point FireWall-1 NG software. This certification satisfies requirements put forth by NSTISSP #11, of the U.S. Government acquisition policy for Information Assurance products.

What is CC and what does certification mean?

The Common Criteria for Information Technology Security Evaluation (CCITSE) is a set of evaluation criteria agreed to by the United States' National Security Agency/National Institute of Standards and Technologies and equivalent bodies in 13 other countries. It was designed to resolve the technical and conceptual differences among existing standards for the evaluation of security systems and products.

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EAL4 certificates are currently recognized by the following countries: United States, Canada, Australia, New Zealand, France, Germany, Finland, Greece, Israel, Italy, The Netherlands, Norway, Spain, and the United Kingdom.

Background

The growth in network threats—which has paralleled the growth in the public networks and ubiquitous interconnection between partners, customers, and remote employees—has highlighted the need for security in corporate networks. How do you trust the claims that vendors make about the security features in their products?

New mandates for Common Criteria certification

While originally only the most security-conscious companies and government entities sought Common Criteria certification, many additional enterprises and governments are holding their vendors to a higher level of accountability for the products they purchase to secure their networks.

The U.S. Department of Defense directive—NSTISSP #11, effective July 2002—requires any product acquired for national security systems to achieve CC Evaluation Assurance level (EAL) 3 certification for non-cryptographic module products.

- EAL-1 examines the product and its documentation for conformity, establishing that the Target does what its documentation claims.
- EAL-2 tests the structure of the product through an evaluation, which includes the product's design history and testing.
- EAL-3 evaluates a product in design stage, with independent verification of the developer's testing results, and evaluates the developer's checks for vulnerabilities, the development environmental controls, and the Target's configuration management.

Common Criteria independent verification, along with the ICSA 4.0 and Check Point Technologies OPSEC certifications that Nortel Networks has also received, attests to the overall reliability and suitability of the Alteon Switched Firewall products to safeguard network data assets and applications.

This trust or assurance is an important consideration for those making purchasing decisions for the security of their networks. Industry certifications—specifically addressing security from a non-biased, third-party evaluation with a universally accepted set of criteria—are the best way to establish the required trust in the products.

With the growth of multi-national companies and renewed interest in security resulting from increased network threats, it has become more difficult for countries to agree that any one country's certification standards are sufficient.

Similarly, the need to protect privacy and security of personal information in industries such as healthcare, addressed under the Health Information Portability and Accountability Act of 1996, and the financial industry, addressed under the Gramm-Leach-Bliley Act, are fueling even more need for common security evaluation criteria.

Evaluation assurance levels

To meet the great variation in required levels of security within and between both government and commercial interests, there are seven levels of evaluation (EAL-1 through EAL-7).

- EAL-4 is an even greater in-depth analysis of the development and implementation of the Target and may require more significant security engineering costs.
- EALs 5-7 require even more formality in the design process and implementation, analysis of the Target's ability to handle attacks and prevent covert channels, for products in high-risk environments. In the United States, evaluation to EALs 5-7 must be done by the National Security Agency (NSA) for the U.S. government.

Nortel Networks and Common Criteria

To meet our customers' needs for security assurance, efforts were initiated on several Nortel Networks Alteon Switched Firewall products to ensure they met Evaluation Assurance Levels 1-4 of the Common Criteria certification.

The following ASF models received EAL certification, effective August 14, 2003:



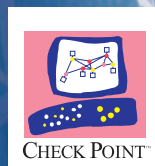
- € Alteon Switched Firewall 5710
- € Alteon Switched Firewall 5610
- € Alteon Switched Firewall 5408
- € Alteon Switched Firewall 5308

The CESG website has certification details listed at this URL:

<http://www.cesg.gov.uk/site/iacs/index.cfm?menuSection=1&displayPage=152&id=135>

Over the next several months, work will begin on CC certification for additional ASF products. As Common Criteria evaluation tends to be a long process, please check with your local sales or channel representative for the current certification status of any Nortel Networks product.

The Alteon Switched Firewall system enables multi-gigabit firewall performance. Delivering up to 4.2 Gbps throughput, the system is a tight coupling of two key components – an Alteon Switched Firewall Accelerator together with the Alteon Switched Firewall Director. The Alteon Switched Firewall system delivers best-of-breed security protection through tight integration with Check Point's FireWall-1 Next Generation software and SecureXL technology, making it one of the leading high-performance firewalls on the market.



Additional Alteon Switched Firewall certifications include ICSA 4.0 and OPSEC

ICSA Labs tests firewall products against a standard yet evolving set of criteria that define an industry-accepted standard that all products claiming to have firewalling capabilities must attain. The complete ASF product family has been certified to comply with or exceed the specifications in the Required Services Security Policy - Corporate Category, currently the most stringent ICSA 4.0 standard.



Version 4.0 of the ICSA Labs Modular Firewall Certification Criteria accommodates the evolution of the firewall market. Version 4.0 is the culmination of over a year and half of work with industry experts, end users, and the

Firewall Product Developers Consortium – an international forum of competing developers of firewall products that work toward common goals to benefit both members and end users. Version 4.0 reflects the different functional requirements in today's multi-segmented firewall market.

Check Point Software Technologies "Secured by Check Point" Appliance program is part of Check Point's Open Platform for Security (OPSEC) partner alliance program. "Secured by Check Point" appliances meet Check Point's stringent security, usability, and interoperability requirements, enabling customers to deploy appliances into their networks with complete confidence."





Additional resources:

<http://www.nortelnetworks.com/solutions/security>

<http://www.commoncriteria.org>

<http://niap.nist.gov/cc-scheme/ValidatedProducts.html>

http://www.icsalabs.com/html/communities/firewalls/newsite/certification/vendors_4/nortel/index.shtml

<http://www.trusecure.com/corporate/press/2002/firewallcert120302.shtml>

<http://www.opsec.com>

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www.nortelnetworks.com

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