

Cisco Security Advisory: Cisco Network Admission Control Shared Secret Vulnerability

Advisory ID: cisco-sa-20080416-nac

<http://www.cisco.com/warp/public/707/cisco-sa-20080416-nac.shtml>

Revision 1.1

Last Updated 2008 April 25 2000 UTC (GMT)

For Public Release 2008 April 16 1600 UTC (GMT)

Please provide your [feedback](#) on this document.

Contents

[Summary](#)

[Affected Products](#)

[Details](#)

[Vulnerability Scoring Details](#)

[Impact](#)

[Software Versions and Fixes](#)

[Workarounds](#)

[Obtaining Fixed Software](#)

[Exploitation and Public Announcements](#)

[Status of this Notice: FINAL](#)

[Distribution](#)

[Revision History](#)

[Cisco Security Procedures](#)

Summary

A vulnerability exists in the Cisco Network Admission Control (NAC) Appliance that can allow an attacker to obtain the shared secret that is used between the Cisco Clean Access Server (CAS) and the Cisco Clean Access Manager (CAM).

Cisco has released free software updates that address this vulnerability.

This advisory is posted at <http://www.cisco.com/warp/public/707/cisco-sa-20080416-nac.shtml>.

[\[Expand all sections\]](#) [\[Collapse all sections\]](#)

☐ Affected Products

☐ Vulnerable Products

The following table lists all Cisco NAC Appliance software versions affected by this vulnerability.

NAC Software Release	Vulnerable Versions
3.5.x	All 3.5.x versions
3.6.x	All 3.6.x versions prior to 3.6.4.4
4.0.x	All 4.0.x versions prior to 4.0.6
4.1.x	All 4.1.x versions prior to 4.1.2

☐ Products Confirmed Not Vulnerable

Cisco NAC Appliance software versions 3.6.4.4 and later in the 3.6.x train; 4.0.6 and later in the 4.0.x train; and 4.1.2 and later in the 4.1.x train are not vulnerable. No other Cisco products are currently known to be affected by this vulnerability.

[Top of the section](#) [Close Section](#)

☐ Details

The Cisco NAC Appliance solution allows network administrators to authenticate, authorize, evaluate, and remediate wired, wireless, and remote users and their machines prior to allowing users onto the network. The solution identifies whether machines are compliant with security policies and repairs vulnerabilities before permitting access to the network.

A vulnerability exists in the Cisco NAC Appliance that can allow an attacker to obtain the shared secret used by the CAS and the CAM from error logs that are transmitted over the network. Obtaining this information could enable an attacker to gain complete control of the CAS remotely over the network.

This vulnerability is documented in Cisco Bug ID [CSCsj33976](#) ([registered](#) customers only) and has been assigned Common Vulnerabilities and Exposures (CVE) identifier CVE-2008-1155.

[Top of the section](#) [Close Section](#)

☐ Vulnerability Scoring Details

Cisco has provided scores for the vulnerability in this advisory based on the Common Vulnerability Scoring System (CVSS). The CVSS scoring in this Security Advisory is done in accordance with CVSS version 2.0.

CVSS is a standards-based scoring method that conveys vulnerability severity and helps determine urgency and priority of response.

Cisco has provided a base and temporal score. Customers can then compute environmental scores to assist in determining the impact of the vulnerability in individual networks.

Cisco has provided an FAQ to answer additional questions regarding CVSS at

<http://www.cisco.com/web/about/security/intelligence/cvss-qandas.html>.

Cisco has also provided a CVSS calculator to help compute the environmental impact for individual networks at

<http://intellishield.cisco.com/security/alertmanager/cvss>.

CSCsj33976 - NAC Appliance Shared Secret Vulnerability

Calculate the environmental score of [CSCsj33976](#)

CVSS Base Score - **10.0**

Access Vector	Access Complexity	Authentication	Confidentiality Impact	Integrity Impact	Availability Impact
Network	Low	None	Complete	Complete	Complete

CVSS Temporal Score - **8.3**

Exploitability	Remediation Level	Report Confidence
Functional	Official-Fix	Confirmed

[Top of the section](#) [Close Section](#)

[-] Impact

Successful exploitation of the vulnerability could allow an attacker to take complete control of the CAS remotely over the network.

[Top of the section](#) [Close Section](#)

[-] Software Versions and Fixes

Each row of the following software table (below) describes the earliest possible releases that contain the fix for this vulnerability. These are shown in the "First Fixed Release" column. A device running a release in the given train that is earlier than the release in a specific column (less than the First Fixed Release) is known to be vulnerable. The release should be upgraded at least to the indicated release or a later version (greater than or equal to the First Fixed Release label).

Affected Releases	First Fixed Releases
NAC Appliance software version 3.5.x	Vulnerable - Contact TAC

NAC Appliance software version 3.6.x	3.6.4.4
NAC Appliance software version 4.0.x	4.0.6
NAC Appliance software version 4.1.x	4.1.2

You can download NAC Appliance software from <http://www.cisco.com/tacpage/sw-center/ciscosecure/cleanaccess.shtml>. When considering software upgrades, also consult <http://www.cisco.com/go/psirt> and any subsequent advisories to determine exposure and a complete upgrade solution.

In all cases, customers should exercise caution to be certain the devices to be upgraded contain sufficient memory and that current hardware and software configurations will continue to be supported properly by the new release. If the information is not clear, contact the Cisco Technical Assistance Center (TAC) or your contracted maintenance provider for assistance.

[Top of the section](#) [Close Section](#)

Workarounds

There are no workarounds for this vulnerability.

[Top of the section](#) [Close Section](#)

Obtaining Fixed Software

Cisco has released free software updates that address this vulnerability. Prior to deploying software, customers should consult their maintenance provider or check the software for feature set compatibility and known issues specific to their environment.

Customers may only install and expect support for the feature sets they have purchased. By installing, downloading, accessing or otherwise using such software upgrades, customers agree to be bound by the terms of Cisco's software license terms found at http://www.cisco.com/en/US/docs/general/warranty/English/EU1KEN_.html, or as otherwise set forth at Cisco.com Downloads at <http://www.cisco.com/public/sw-center/sw-usingswc.shtml>.

Do not contact psirt@cisco.com or security-alert@cisco.com for software upgrades.

☐ **Customers with Service Contracts**

Customers with contracts should obtain upgraded software through their regular update channels. For most customers, this means that upgrades should be obtained through the Software Center on Cisco's worldwide website at <http://www.cisco.com>.

☐ **Customers using Third Party Support Organizations**

Customers whose Cisco products are provided or maintained through prior or existing agreements with third-party support organizations, such as Cisco Partners, authorized resellers, or service providers should contact that support organization for guidance and assistance with the appropriate course of action in regards to this advisory.

The effectiveness of any workaround or fix is dependent on specific customer situations, such as product mix, network topology, traffic behavior, and organizational mission. Due to the variety of affected products and releases, customers should consult with their service provider or support organization to ensure any applied workaround or fix is the most appropriate for use in the intended network before it is deployed.

☐ **Customers without Service Contracts**

Customers who purchase direct from Cisco but do not hold a Cisco service contract, and customers who purchase through third-party vendors but are unsuccessful in obtaining fixed software through their point of sale should acquire upgrades by contacting the Cisco Technical Assistance Center (TAC). TAC contacts are as follows.

- +1 800 553 2447 (toll free from within North America)
- +1 408 526 7209 (toll call from anywhere in the world)
- e-mail: tac@cisco.com

Customers should have their product serial number available and be prepared to give the URL of this notice as evidence of entitlement to a free upgrade. Free upgrades for non-contract customers must be requested through the TAC.

Refer to <http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml> for additional TAC contact information, including localized telephone numbers, and instructions and e-mail addresses for use in various languages.

☐ **Exploitation and Public Announcements**

The Cisco PSIRT is not aware of any public announcements or malicious use of the vulnerability described in this advisory.

This issue was discovered by Cisco through internal testing.

[Top of the section](#) [Close Section](#)

☐ **Status of this Notice: FINAL**

THIS DOCUMENT IS PROVIDED ON AN "AS IS" BASIS AND DOES NOT IMPLY ANY KIND OF GUARANTEE OR WARRANTY, INCLUDING THE WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE. YOUR USE OF THE INFORMATION ON THE DOCUMENT OR MATERIALS LINKED FROM THE DOCUMENT IS AT YOUR OWN RISK. CISCO RESERVES THE RIGHT TO CHANGE OR UPDATE THIS DOCUMENT AT ANY TIME.

A stand-alone copy or Paraphrase of the text of this document that omits the distribution URL in the following section is an uncontrolled copy, and may lack important information or contain factual errors.

[Top of the section](#) [Close Section](#)

☐ **Distribution**

This advisory is posted on Cisco's worldwide website at :

<http://www.cisco.com/warp/public/707/cisco-sa-20080416-nac.shtml>

In addition to worldwide web posting, a text version of this notice is clear-signed with the Cisco PSIRT PGP key and is posted to the following e-mail and Usenet news recipients.

- cust-security-announce@cisco.com
- first-teams@first.org
- bugtraq@securityfocus.com
- vulnwatch@vulnwatch.org
- cisco@spot.colorado.edu
- cisco-nsp@puck.nether.net
- full-disclosure@lists.grok.org.uk

- comp.dcom.sys.cisco@newsgate.cisco.com

Future updates of this advisory, if any, will be placed on Cisco's worldwide website, but may or may not be actively announced on mailing lists or newsgroups. Users concerned about this problem are encouraged to check the above URL for any updates.

[Top of the section](#) [Close Section](#)

☐ Revision History

Revision 1.1	2008-April-25	Updated CVSS link for CSCsj33976 .
Revision 1.0	2008-April-16	Initial public release.

[Top of the section](#) [Close Section](#)

☐ Cisco Security Procedures

Complete information on reporting security vulnerabilities in Cisco products, obtaining assistance with security incidents, and registering to receive security information from Cisco, is available on Cisco's worldwide website at http://www.cisco.com/en/US/products/products_security_vulnerability_policy.html. This includes instructions for press inquiries regarding Cisco security notices. All Cisco security advisories are available at <http://www.cisco.com/go/psirt>.

[Top of the section](#) [Close Section](#)

Help us help you.



Please rate this document.



Excellent

Good

Average

Fair

Poor



This document solved my problem.



Yes

No

Just browsing



Suggestions for improvement:

(256 character limit)



[Home](#)

[How to Buy](#)

[Login](#)

[Profile](#)

[Feedback](#)

[Site Map](#)

[Help](#)

[Contacts & Feedback](#) | [Help](#) | [Site Map](#)

© 2008 - 2009 Cisco Systems, Inc. All rights reserved. [Terms & Conditions](#) | [Privacy Statement](#) | [Cookie Policy](#) |

[Trademarks of Cisco Systems, Inc.](#)