

# Network Access Control Resources

This white paper provides pointers to some resources that we've found helpful in our research on Network Access Control (NAC) architectures and interoperability.

## Core Architectures

The NAC interoperability demonstrations highlight three different architectures, from the Trusted Computing Group, Cisco, and Microsoft. You can learn more about each of these by reading our white papers and by investigating the web sites for each architecture. In addition, the IETF (Internet Engineering Task Force) Network Endpoint Assessment group has begun work in this area. Resources from these four groups are highlighted below.

### Microsoft's Network Access Protection

Microsoft's Network Access Protection web site has a wealth of good resources describing both the architecture and the products Microsoft is developing, as well as pointers to partners.

<http://www.microsoft.com/nap>

*Network Access Protection Platform Architecture*, linked from the main NAP web page, is an excellent overview that has good technical detail and explains the MS-NAP architecture as well as its implementation within Windows.

### IETF's Network Endpoint Assessment Working Group

The Network Endpoint Assessment (NEA) Working Group in the Internet Engineering Task Force (IETF) is working on standards so that all the NAC architectures can interoperate. The starting point to see the groups work is

<http://www.ietf.org/html.charters/nea-charter.html>

The NEA WG is working on two drafts that will standardize protocols developed by the TCG TNC:

PB-TNC: A Posture Broker Protocol (PB) Compatible with TNC

PA-TNC: A Posture Attribute Protocol (PA) Compatible with TNC

Most of the NEA WG's activities take place on the [nea@ietf.org](mailto:nea@ietf.org) email list. To join this list or access the archives, go to

<http://www1.ietf.org/mailman/listinfo/nea>

### Trusted Computing Group's Trusted Network Connect

Trusted Computing Group is an industry consortium whose members develop and promote open, vendor-neutral, industry standard specifications for trusted computing building blocks and software interfaces across multiple platforms. Trusted Network Connect (TNC) is an architecture and set of specifications that enable the application and enforcement of security requirements for endpoints connecting to the corporate network. The TNC web site has white papers explaining the architecture, as well as information on participating vendors and products that adhere to the TNC specifications.

<http://www.trustedcomputinggroup.org/groups/network/>

A nice overview of NAC and different approaches can be found in the whitepaper

*Controlling Network Access and Endpoints*.

### Cisco's Network Admission Control

The starting point for all Cisco NAC information is

<http://www.cisco.com/go/nac/>

with NAC Framework of participating vendors at

<http://www.cisco.com/go/nac/framework/>

## InteropLabs Las Vegas 2008 NAC Resources

The NAC Labs team has written several brief White Papers to help you understand NAC technology and architectures, and how NAC might work in your own network. These white papers are all available at the NAC iLabs booth, and on-line at the NAC resource page.

<http://www.opus1.com/nac/>

Our white papers include:

*What is NAC?*

*What is 802.1X?*

*Getting Started with NAC*

*Merging NAC Strategies of Microsoft and TCG/TNC*

*Switch Features*

*How to Handle NAC Exceptions*

*Access Controls in NAC*

*Making NAC Security-Aware with IF-MAP*

*Network Access Control Resources*

*What is the IETF's Network Endpoint Assessment?*

*What is the TCG's Trusted Network Connect?*

*What is Microsoft Network Access Protection?*

As part of preparing the NAC demonstrations for Las Vegas 2008 Interop, we have also uploaded all the configurations to the NAC home page (<http://www.opus1.com/nac/>) which may be useful in understanding what we did or how you can replicate this work in your own test lab.

### Articles

Network World had been focusing on NAC with many articles. Start at

<http://www.networkworld.com/topics/nac.html>

Network Computing does the same. Search for NAC from the home page:

<http://www.networkcomputing.com/>

### Background Technology: 802.1X

One of the technology topics that NAC makes heavy use of is IEEE 802.1X. If you are not familiar with 802.1X, some older White Papers prepared by the iLabs team might be helpful in understanding this key technology to any NAC implementation. We've placed these White papers on 802.1X and EAP, including *What is 802.1X*, *What are your EAP Authentication Options?*, *802.1X Inner Authentication Methods*, and *802.1X Resources*, on the NAC home page:

<http://www.opus1.com/nac/>

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