

EDUCAUSE
2006



DALLAS
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Welcome

Network Management Constituent Group Annual Meeting October 10, 2006

Introductions

- **New Support from Educause**

- <http://connect.educause.edu>

- Blog

- Wiki

- Surveys

- **Current Hot Topics**

- Network Documentation

- 802.1x Network Authentication

- Trusted Computing/Network Access Control

- Network Convergence

- Other

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New Support from Educause

- **BLOG**

- There was no apparent desire on the part of the group members represented at the meeting groups part to utilize a BLOG to supplement support of the Network Management Constituent Group.

- **WIKI**

- There was also no apparent desire on the part of the group members represented at the meeting for supplementing support of the Network Management Constituent group with a WIKI.

Survey

- There was considerable interest on the part of the group to utilize the new online survey tool to do quick feedback surveys on particular subjects. There were several questions about the capabilities of the tool. We are going to attempt to get more specific information about the

capabilities and post the responses to the list.

Network Documentation

- **What kinds of tools are being used?**

- Telecom Management Systems
 - Axis
- Drawing Tools
 - Visio
 - Netviz
- Vendor Specific Network Management Systems
 - Cisco Works
 - Spectrum
 - Epicenter
- Home grown solutions
 - PERL Scripts

802.1x Network Authentication

- **Who has implemented it?**

- A show hands indicated that only about 4 schools had implemented 802.1x authentication. Of these one school had implemented it on the wired network for public access terminal authentication. The rest of the implementations were all for wireless networks.

- **What applications are being used for the authentication source.**

- There were five different configurations being used.
 - Funk/Juniper Steel Belted Radius
 - Free Radius with an LDAP backend
 - Radiator
 - Cisco Secure with an LDAP backend
 - Microsoft Radius with an Active Directory Backend
- Consensus was that all of these approaches were working well for the institution using them.
- Some concern was raised about support for the Open Source applications

Clients

- Concerns were raised about the ease of client configuration
 - MAC client was see as fairly simple
 - Windows client is difficult to configure
 - Funk/Juniper Odyssey Client being used by a few

- <http://www.juniper.net/products/aaa/odyssey/>

Network Access Control / Trusted

Computing Environment

- **How many people have deployed it.**
 - Very small group that had deployed the solutions yet. Looked like only four schools that had implemented it.
- **Whose software is being used?**
 - Bradford Networks Campus Manager
 - Cisco Clean Access
- **Largest Installation in terms of Nodes?**
 - 28,000 Network Nodes
- **Return on Investment?**
 - Consensus was that it was an excellent return on investment
- **Why Bradford?**
 - Mostly a matter of scalability.
Cisco Clean Access 2,500 client stations per server
Bradford 10,000 client stations per server
- Reason for switching?
 - Lack of scalability for Clean Access
- **Client Software Categorization?**
 - Software Version
Software Firewall
Other General Software
 - Software Version and Signature Version
- Anti Virus
 - Clients Supported
- 10 or so major providers
- **Enforcement Control?**
 - Bradford “SNMP”
- **Links**
 - <http://www.bradfordnetworks.com>
 - <http://www.cisco.com/en/US/products/ps6128/index.html>

Network Convergence

VOIP

- **How many schools are doing VOIP?**

- **Seventeen Total Schools**

- 5 Nortel Systems

- 4 Cisco Systems

- 6 Avaya

- 1 Mitel

- 1 NECInfrstur

- **Infrastructure Setups**

- Cisco Switching Infrastructure

- 3 Avaya VOIP phone systems

- 1 Nortel VOIP phone system

- Extreme Switching Infrastructure

- 1 Nortel Voip phone system –1 Nortel –1 Avaya

- Foundary Switching Infrastructue

Network Convergence

IP Television

- **How may schools are using Multicast for TV distribution?**
 - 2 Schools currently

- **1 In house run with Video Furnace**
 - Software Client
 - 8 Channels
- **1 Outsourced in Housing only**
 - <http://www.purdigital.net/> Vendor
 - Set top boxes with remote control
 - Software client available
 - 200 Channels

Wireless Computing

- **What products are being used?**
 - Cisco Fat APs with Bluesocket
 - Cisco thin APs former Airspace
 - Extreme Wireless
 - Meru
 - Aruba
- **Issues?**
 - High Density Classroom Environments

Primary reason MERU was selected by several schools
Aruba users are also happy
Cisco Airspace users are also happy
- **Usage? Maximum Simultaneous Users?**
 - 1 School with 2000 +
 - 4 Schools worth 1500 -1999
 - 3 Schools with 1000 – 1499
 - 15 Schools with 750 – 999
 - 9 Schools with 500 – 749
 - 7 Schools with 250 – 499
 - 7 Schools with 1 – 249
- **How are you handling guests or affiliates?**
 - Outsourced with third party vendor
 - Internet Only on separate SSID
 - Affiliate accounts with Bradford Networks Campus Manager
 - In house software for Web based Sponsored Account Creation
 - Web page interface to LDAP backend