

Tips to Securing Your Network in a Mobile and Web 2.0 World

Thursday, September 30, 2010
1:00 pm Pacific / 4:00 pm Eastern

Introductions



Moderator:
Kevin Hogan, Editorial Director
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Speakers



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Brainerd, MN



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Brainerd School District
Brainerd, MN

Agenda

- Review today's school security landscape
- Identify top security challenges
- Discuss solutions
- Hear how Brainerd ISD secures its network

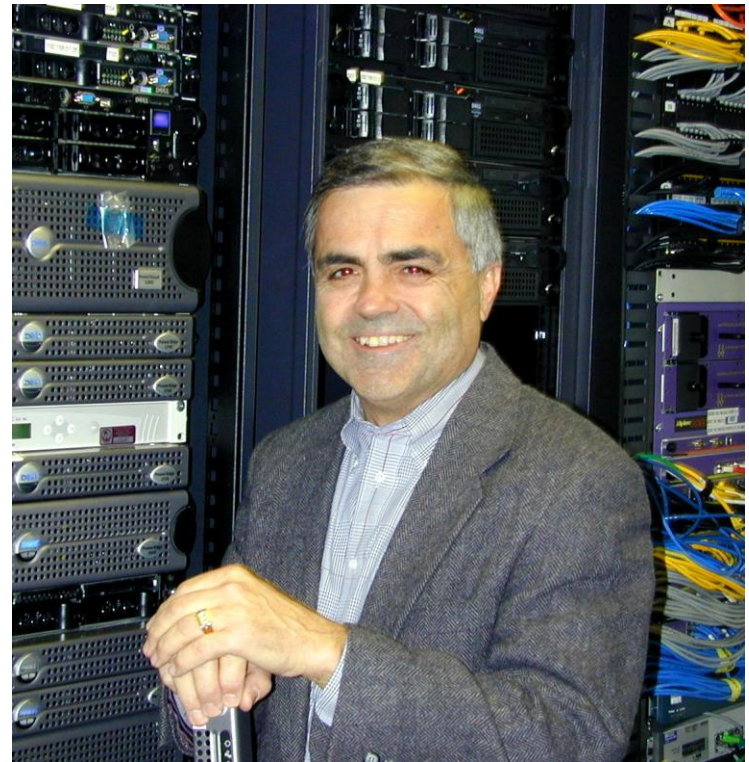
Polling Question #1

How much of your time does network security take?

1. < 25%
2. 25-50%
3. 50-75%
4. > 75%

Terrell Tucker

Director of Engineering Services
Lightspeed Systems



Security in Today's Schools

- Securing your network while opening up valuable Web 2.0 learning opportunities
- Protecting against the growing dangers of malware and increasingly sophisticated viruses
- Blocking threats opened up by mobile computing and personally-owned devices coming onto your network
- Stopping email threats before they bring down your system
- Proactively preparing policies and educating users for rapid and efficient response should a security event arise

Security Challenge: Web 2.0



More and more schools are allowing students to access Web 2.0 tools and social media.

While they offer tremendous learning opportunities, they also pose security risks.

- Inappropriate Content
- Cyberbullying
- Non-Educational Use

Opening up Web 2.0...Securely



- Collaborative efforts
- Anytime/Anywhere
- Expand beyond the classroom
- Balance between walled garden and free for all

Security Challenge: Mobile Devices



- 75 % of students are bringing personally owned devices on to your network. How are you handling this?
- Importance of allowing mobile computing and personally owned devices on network
- Increased threat of security risks
- Successfully manage network to accommodate devices

Allowing Mobile Devices...Securely



- Student owned devices can stretch district dollars
- Avoid purchasing technology but still utilize it
- Examples
 - Cell Phones instead of clickers
 - Laptops/Tablets/E-readers for digital textbooks
- Challenges
 - Viruses/Malware
- Inappropriate content

Security Challenge: Viruses



- Significant threat to school networks
- The numbers of viruses and malware grow every day
- Can have a devastating effect on the network
 - Shutdown Network
 - Damage or Delete critical files
 - Search network for sensitive data

Protecting against viruses



- Desktop Protection
 - AntiVirus/Anti Malware
 - OS Patches
 - Critical Application Patches
- Gateway Protection
 - Prevent access to known bad or suspicious sites
- Mobile User Protection
 - Extend access limitations off network
- Educate Users

Security challenge: Email



- Common distribution for many viruses
- Phishing Emails
- Inappropriate content from Spam

Blocking email threats



- Spam blocking with AV Scanning
 - AV Scan Internal as well as External
- Educate Users
- OS Patches
- Mail Server Patches

Educating Users

- Create policies for acceptable use
- Warn users of the reality of risks
- Educate users about email best practices
- Teach users the threat warning signs
- Create proactive policies so users know what to do when a threat appears

Polling Question #2

What is your biggest challenge when managing the health and security of your network?

1. School computers that go home with users
2. User-owned devices that come on the network
3. Infections spread through Web 2.0 platforms
4. Malware and spyware
5. Email viruses
6. Other

Pam Dyson

- Director of Technology, Brainerd ISD



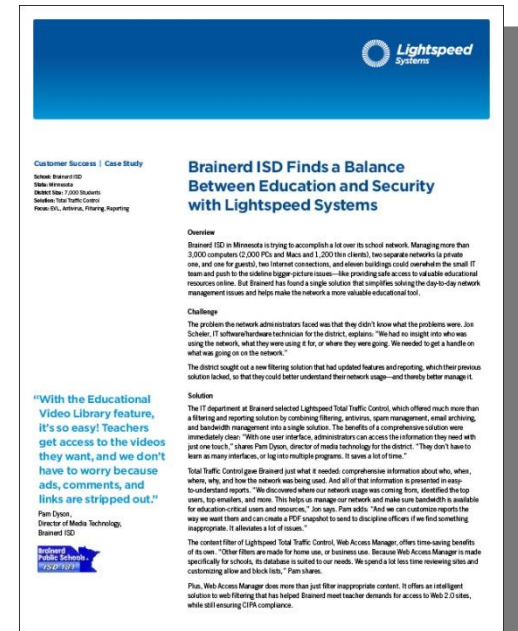
Jon Scheler

- Network Administrator, Brainerd ISD



Brainerd Independent School District

- Brainerd, MN
- 11 schools in district
- 3200 total workstations
 - 2500 PC and laptops
 - 700 thin clients
- Mobile labs throughout district
- Safe online learning environment



The screenshot shows a case study document from Lightspeed Systems. At the top right is the Lightspeed Systems logo. Below it, the title reads "Brainerd ISD Finds a Balance Between Education and Security with Lightspeed Systems". The document includes a "Customer Success | Case Study" header, a list of school details (Brainerd ISD, 3200 students, 3200 workstations), and a "Overview" section. The "Challenge" section describes the network complexity and security concerns. The "Solution" section details the implementation of Lightspeed Total Traffic Control and Web Access Manager. A quote from Pam Oyon, Director of Media Technology, is included: "With the Educational Video Library feature, it's so easy! Teachers get access to the videos they want, and we don't have to worry because ads, comments, and links are stripped out." The document also features a small "Brainerd Independent School District" logo at the bottom left of the page.

District Technology Initiatives

- Wireless network for multiple campuses
- Guest network and private LAN
- Virtualized desktop infrastructure
- Allows personally owned mobile devices on network

The Need:

- Effective security software
 - Client-based, on each system
- Comprehensive AV solution
 - Real-time protection to keep users safe
- Mobile devices protection
 - Personally owned devices on network
- User education program

Effective Security Software

- Lightspeed Systems Security Manager
 - Client-based, on each system
 - Simple to manage and monitor
 - Requires little to no interaction from end user
 - Real-time protection, updated every hour
 - Able to block certain processes
 - Example: Flash or Java auto-updates

Security Manager: Reporting

- Comprehensive network reporting
 - Gain valuable insight into systems
 - Examples:
 - Installed Applications and Versions
 - Hardware Specifications
 - Registry Information
 - Accessible remotely

Security Manager - Reporting

- Server Status
- User Reports
- Content Filter
- Content Guide
- Custom Reports
- Educational Video Library
- Firewall
- Message Journaling
- Power Manager
- Security Agent
 - Computers with Security Agent
 - Current Security Agent Users
 - Security Agent Updates
 - Applications
 - Recently Installed
 - Inventory
 - Removed
 - Usage
 - Computers
 - Programs
 - Scan Results
 - Spam Mail Blocker
 - Suspicious Traffic
 - Traffic Classification
 - Traffic Limiter

Hardware Summary

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Domain	Computer	IP Address	Summary
LIGHTSPEED	lightspeed/adam_laptop	10.16.44.11	HP; 4 processors; Intel(R) Xeon(TM) CPU 2.40GHz; 2 GB RAM; 33.91 GB fixed disk; Microsoft Windows 2000 Server; MAC/IP address 00:02:B3:E7:46:3F/10.16.0.147
LIGHTSPEED	lightspeed/angus_laptop	10.16.3.32	D845WD; 1 processor; Intel(R) Pentium(R) 4 CPU 2.00GHz; 2 GB RAM; 37.26 GB fixed disk; Microsoft Windows 2000 Server; MAC/IP address 00:02:B3:CE:74:0E/10.16.0.237
LIGHTSPEED	lightspeed/angus_vista	10.16.3.25	Shuttle Inc; 2 processors; Intel(R) Pentium(R) D CPU 3.00GHz; 2 GB RAM; 186.31 GB fixed disk; Microsoft Windows XP Professional; MAC/IP address 00:30:1B:B9:95:A7/10.16.51.1;00:50:56:C0:00:01/192.168.154.1;00:50:56:C0:00:08/192.168.239.1
LIGHTSPEED	lightspeed/beau_laptop	10.16.7.178	Dell Inc.; 2 processors; Intel(R) Core(TM)2 CPU T7200 @ 2.00GHz; 1022.11 MB RAM; 74.47 GB fixed disk; Microsoft Windows XP Professional; MAC/IP address 00:15:C5:4E:3D:25/10.16.3.36;00:18:DE:8B:0A:DC/0.0.0.0
LIGHTSPEED	lightspeed/bradan_WinXP	10.16.51.1	D845WD; 1 processor; Intel(R) Pentium(R) 4 CPU 2.40GHz; 2 GB RAM; 37.26 GB fixed disk; Microsoft Windows 2000 Server; MAC/IP address 00:02:B3:CB:D7:9B/10.16.0.236
LIGHTSPEED	lightspeed/bruce_vista	10.16.3.39	HP; 4 processors; Intel(R) Xeon(TM) CPU 2.40GHz; 2 GB RAM; 33.91 GB fixed disk; Microsoft Windows 2000 Server; MAC/IP address 00:02:B3:E7:46:3F/10.16.0.147
LIGHTSPEED	lightspeed/bruce_Win2k3	10.16.3.36	Dell Inc.; 2 processors; Intel(R) Core(TM)2 CPU T7200 @ 2.00GHz; 1022.11 MB RAM; 74.47 GB fixed disk; Microsoft Windows XP Professional; MAC/IP address 00:15:C5:4F:62:A5/10.16.3.70
LIGHTSPEED	lightspeed/dallas_vista	10.16.80.116	HP; 4 processors; Intel(R) Xeon(TM) CPU 2.40GHz; 2 GB RAM; 33.91 GB fixed disk; Microsoft Windows 2000 Server; MAC/IP address 00:0B:CD:FD:E6:03/10.16.7.250
LIGHTSPEED	lightspeed/david_tabletpc	10.16.3.50	Dell Computer Corporation; 2 processors; unknown processor name; 1.5 GB RAM; 16.94 GB fixed disk; Microsoft Windows 2000 Server; MAC/IP address 00:06:5B:3A:42:D1/10.16.81.7;00:06:5B:3A:42:D1/10.16.81.7
LIGHTSPEED	lightspeed/elijah_vista	10.16.3.44	Dell Computer Corporation; 1 processor; Intel(R) Pentium(R) III CPU - S 1400MHz; 1023.49 MB RAM; 16.95 GB fixed disk; Microsoft Windows 2000 Server; MAC/IP address 00:53:45:00:00/10.16.4.200;00:02:B3:C9:69:3E/10.16.0.11
LIGHTSPEED	lightspeed/elijah_WinXP	10.16.80.114	Dell Computer Corporation; 1 processor; Intel(R) Pentium(R) 4 CPU 2.80GHz; 510.98 MB RAM; 167.62 GB fixed disk; Microsoft Windows XP Professional; MAC/IP address 00:02:B3:E6:A0:E5/10.16.80.125
LIGHTSPEED	lightspeed/gordon_vista	10.16.3.16	Dell Computer Corporation; 1 processor; Intel(R) Pentium(R) 4 CPU 2.40GHz; 1.5 GB RAM; 37.24 GB fixed disk; Microsoft Windows 2000 Server; MAC/IP address 00:C0:9F:18:CB:3E/10.16.1.15
LIGHTSPEED	lightspeed/jordan_win2k	10.16.31.32	Dell Inc. ; 2 processors; Intel(R) Pentium(R) D CPU 2.80GHz; 1022.08 MB RAM; 74.5 GB fixed disk; Microsoft Windows XP Professional; MAC/IP address 00:13:72:13:E8:47/10.16.44.11
LIGHTSPEED	lightspeed/yoshua_vista	10.16.50.1	Compaq; 1 processor; unknown processor name; 1023.55 MB RAM; 74.5 GB fixed disk; Microsoft Windows 2000 Server; MAC/IP address 00:02:A5:EB:C7:2C/10.16.1.17;00:02:A5:EB:C7:28/
LIGHTSPEED	lightspeed/kenneth_tabletpc	10.16.59.10	Gateway; 1 processor; unknown processor name; 383.54 MB RAM; 18.64 GB fixed disk; Microsoft Windows 2000 Professional; MAC/IP address 00:10:4B:C7:1B:93/10.16.3.50

Security Manager - Reporting

REPORTS PROPERTIES POLICIES DATABASES TOOLS CONFIGURATION SECURITY AGENTS POWER MANAGER

Server Status
User Reports
Content Filter
Content Guide
Custom Reports
Educational Video Library
Firewall
Message Journaling
Power Manager
Security Agent
Computers with Security Agent
Current Security Agent Users
Security Agent Updates
Applications
Recently Installed
Inventory
Removed
Usage
Computers
Programs
Scan Results
Spam Mail Blocker
Suspicious Traffic
Traffic Classification
Traffic Limiter

Applications Inventory

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Application Name	# Installed
µTorrent	1
1-Step RoboPDF 3.1	1
3DM 2	1
ABBYY FineReader 5.0 Sprint Plus	1
ACDSee 9 Photo Manager	1
ActivePerl 5.6.1_Build 633	1
ActivePerl 5.8.7_Build 815	1
ActiveState Perl Dev Kit 5.3_Build 530	1
ActiveState Visual Perl 1.8.1.2827	1
Ad-Aware SE Personal	3
Adobe Acrobat - Reader 6.0.2 Update	1
Adobe Acrobat 5.0	3
Adobe Acrobat 6.0 Standard	1
Adobe Atmosphere Player for Acrobat and Adobe Reader	1
Adobe Download Manager (Remove Only)	1
Adobe Download Manager 1.2 (Remove Only)	1
Adobe Download Manager 2.0 (Remove Only)	5

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AV/Malware Solution

- Largest threats on network
 - Malware and Phishing
- Management of threats
 - Security Manager
 - Real-time scanning engine to keep unaware users safe
 - Significant drop in malware infections
 - AV Strikeforce
 - Support team available 24/7
 - Disinfection and/or quarantine of infected systems
 - Create and push out definitions or disinfect scripts within 2 hours or less

Mobile Devices Protection

- Allows personally owned devices on middle and high school campuses
- Using VLANs, ACLs, and WLAN controller, able to keep network separate from private network
- Still able to filter and track mobile users using Lightspeed's Guide Mobile Filter
 - Provides an extension of user access policies to off-network computers

User Education Program

- Integral component of network security
- Inform all users of basic principals of information security
 - Lock workstations
 - Be aware of pop-ups
 - Email safety
 - Notify technical staff immediately with any discrepancies
- Clearly defined Acceptable Use Policies

Today's Webinar



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Q&A and Resources

Information and Resources

- <http://www.lightspeedsystems.com/products/Security-Manager.aspx>
- <http://www.lightspeedsystems.com/resources/>
- <http://www.lightspeedsystems.com/support/Technical-Support.aspx>

Thank You!

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