Integrating Digital Self Defense

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Overview

• Challenges
  - RIT
  - Hacking has changed
  - Students are targets
    • PII and Identity Theft
• Current Initiatives
  - Our goal
• Resources/Opportunities
• Suggestions for Integration
Challenges

Who is RIT?

• At least 3 different audiences
• Various degrees of internet knowledge
  - Not everyone is technology savvy
• 2500 new students each year; 15,000 total
• 3000 faculty and staff
Life on a University Network

The Good

- Power you’ll find nowhere else
  - Internet2
  - Very High Speed Internet Connection
  - Wireless access
  - One of the most wired universities
Network Threats

The Bad

• College campuses make big targets
• RIT faces the same challenges as other large technology universities.
• Threats on our campus:
  - Password Crackers
  - Key Loggers
  - Harassment
  - Sniffing/ Network Monitoring
  - Network Worms
  - Hacking Attempts ft Rootkits
  - Physical Theft

http://www.internetsecurity1.01.net/internetsecurityandprivacy.jpg
External Threats

The Ugly

- Hacking Attempts
- Botnets/Zombie PCs
- Identity Theft
- Phishing

2004 was the first year that proceeds from cybercrime were greater than proceeds from the sale of illegal drugs ... over $105 billion.

-Valerie McNiven, US Treasury - Cybercrime Advisor

External Hacking Attempts

- Hackers are always looking for ways to access accounts
- Hacker’s funding often comes from organized crime
- Hidden attacks
Botnets & Zombie PCs

• Botnets
  - Large numbers of computers that have been compromised with remote control software
  - Used to create and send out adware, spyware, spam, etc.
15% of RIT students are victims of identity theft.

*RIT Computer Use and Ethics Survey, 2003*
Social Engineering

Not all threats to information security rely on technical vulnerabilities

• No matter how well secured the computer, the human vulnerabilities will remain

• Social Engineering takes advantage of human vulnerabilities to perform an attack
We would like our students to:

Practice Digital Self Defense
- Understand the Dangers
- Follow RIT Security Standards
- Practice Ethical Computing
- Use Common Sense
  - Protect themselves and each other
  - Practice safe social networking
The RIT Standards

• Password Standard
  - Minimum Complexity
  - Password Change Cycle

• Desktop & Portable Computer Security Standard
  - Anti-Virus
  - Patching
  - Firewall
  - Anti-Spyware
Paranoia or Common Sense?

Guard personal information!
- Even less sensitive information can be used by an attacker!
- Don’t post it in public places.

Current Initiatives

GAIN
- Target audiences with different communications tools
- Orientation
- Facebook
- Events and contests

TRAIN
- Digital Self Defense workshops

MAINTAIN
- Website and printed materials
  - Awareness materials
- Advisories and alerts
Freshmen Orientation

• 90-minute time slot
• Three sections
  - Information Security
  - Copyright and Illegal File Sharing
  - Safe Social Networking
• Technical presenters partnered with Student Affairs
Facebook Presence

Information Security Facebook
- 19,000+ RIT Facebook accounts
- Set up as Group, not Profile
- Current issues
  • Safe social networking info
  • Threats and vulnerabilities
Special Events

- National Cyber Security Awareness Month Speakers
  - Technical and non-technical
- DHS MS-ISAC National Webcast Initiative
Awareness Contests

- Support desktop and password standards
- Email and poster marketing campaign
- Prizes
- Awareness website
- Quiz
- Contest drawing
Digital Self Defense

Three Workshops
• DSD 101—Introduction
• DSD 102—Desktop Security Software
• DSD 103—Information Handling
Introduction to Digital Self Defense

• General overview of how to practice safe computing and protect yourself and others.
• Online threats
• Balance technical solutions and common sense
Desktop Security Software

- Detailed look at software tools needed to meet the requirements of the Desktop Security Standard
- Software simulation allows users to experience installation and use of security software
Information Handling

- Protect important information belonging to you or RIT.
- Impact of legislative mandates
- Identify RIT Confidential information
- Information Lifecycle
  - Creation, Transfer, Storage, Disposal
Information Security Website

- Alerts and Advisories
- Standards
- User Guides
- Event Announcements
Awareness Brochures

- Support RIT requirements
- Discuss common issues and concerns
  - Desktop Standard
  - Passwords
  - Wireless
  - Instant Messaging
  - Avoiding Identity Theft
Advisories and Alerts

• Email to students, staff, and faculty when absolutely necessary
  - Viruses and other malware
  - Spoofing, phishing and other online scams
  - Patching
• Message Center
According to a recent study on computer use & ethics at RIT:

- 32% of computer crime victims on campus knew their attackers
- Of that 32%, over half said their attacker was either a friend or acquaintance.

*RIT Computer Use and Ethics Survey, 2003*
Will I Be a Victim?

- Almost 15% of RIT students report being harassed online.
- 2 out of 3 students at RIT will be a victim of at least one form of computer abuse or crime.
- 1 out of 3 students at RIT will be a victim of multiple forms of computer abuse or crime.

- *RIT Computer Use and Ethics Survey, 2003*
Internal Resources

* RIT web resources
  - Information Security Website
    * Awareness Site
      (http://security.rit.edu/contestanimation.html)
    * http://security.rit.edu/guides.html
    * http://security.rit.edu/standards/index.html
  - Information Handling (e-Learning Zone)
    * www.rit.edu/~ekfront
  - Awareness videos
    * http://security.rit.edu/awareness.html

* Guest speakers
External resources

- Educause Videos

- Educause 2009 Security Video and Poster Contest
  - http://www.educause.edu/15676
Course Integration Ideas

• What I’ve done
  - Effective Technical Communication (0535.403.01.20073)
  - Cyber Self Defense (4050.220.01 .20072, 20073)
Effective Technical Communication

- Evaluate materials
  - Brochures
  - Information Handling WBT

- Attend events
Cyber Self Defense

- Book Discussion Groups
- Information Handling WBT
- Attend events
Questions?

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