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

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
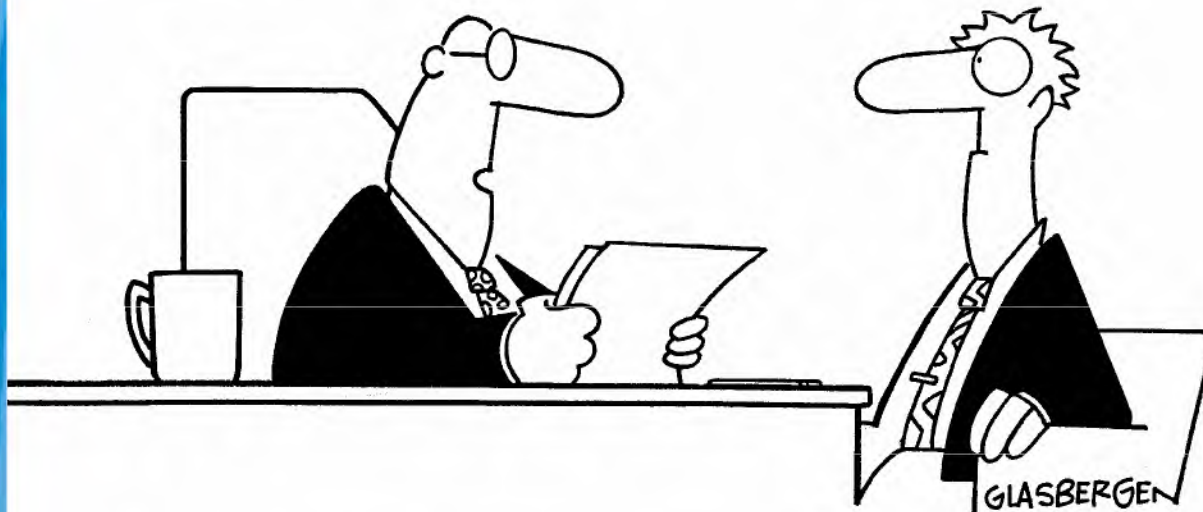
Oh crap!

HACKERS!

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.
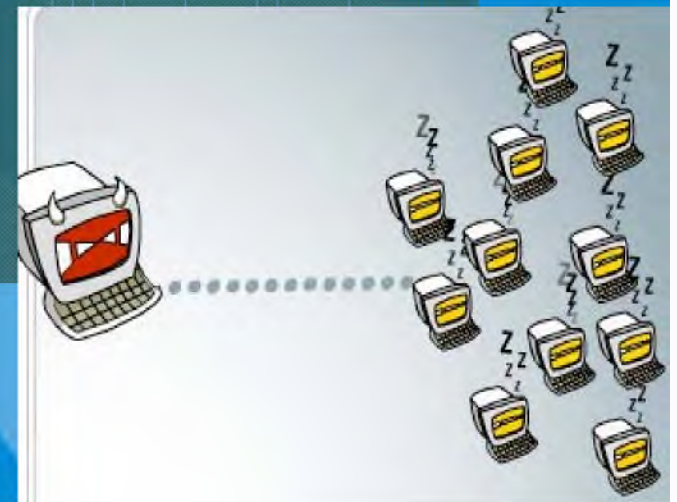
Identity Theft

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www.glasbergen.com

GLASBERGEN

"We're looking for someone who can help us crack down on identity theft. Fill out this application and don't forget to include your Social Security number, date of birth, phone number, home address and mother's maiden name."

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

**digital
self
defense**
Protect yourself and everyone else

The RIT Standards

- Password Standard
  - Minimum Complexity
  - Password Change Cycle
- Desktop Et Portable Computer Security Standard
  - Anti-Virus
  - Patching
  - Fi rewa l l
  - 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

Orientation

Freshmen Orientation

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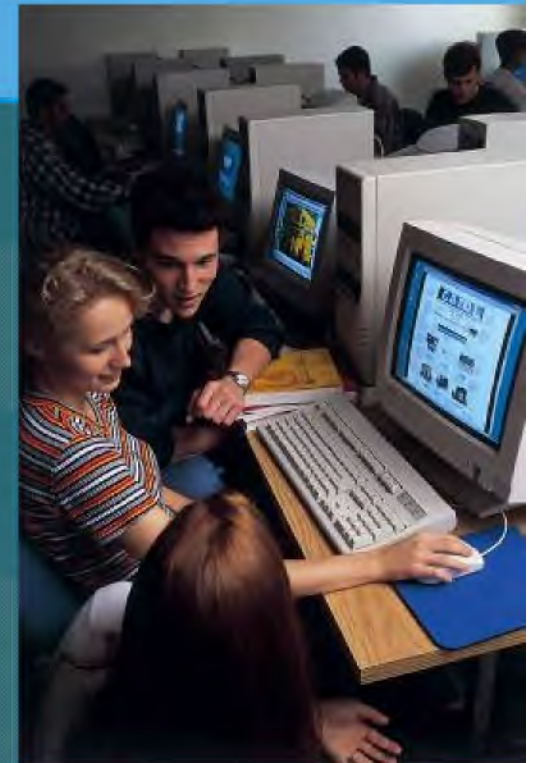
Facebook Presence

Information Security Facebook

– 19,000+ RIT Facebook accounts

– Set up as Group, not Profile

– Current issues

  • Safe social networking info
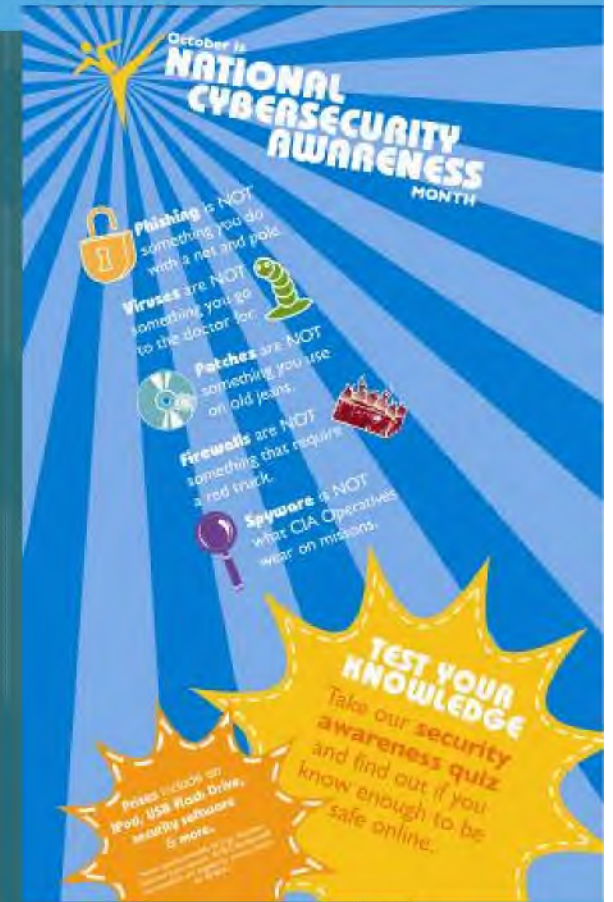
  • Threats and vulnerabilities

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

Digital Self Defense 101

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

Digital Self Defense 102

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

Digital Self Defense 103

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

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Ethical Computing

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 <u>multiple</u> 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/contest/animation.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

    - http://www.researchchannel.org/securityvideo2007/

- 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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