**Awareness, Confidence, and Policies**

WSU Computer and Network Security Awareness Training

Revised January 2015


- Information
- Reduced Risk
  (At work and at home)
- Reduced Anxiety
- Hopefully More Sleep

**Agenda**

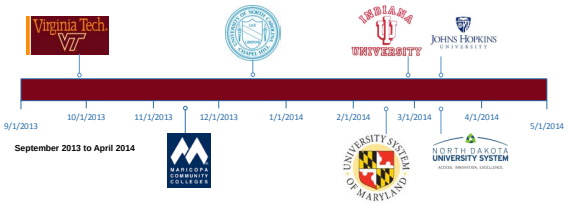
- Awareness
  - Who are we up against and why?
  - What are we up against?
- Confidence
  - How can I help myself and WSU?
  - Examples
- Policy
  - What is expected of me?

## Awareness

Who are we up against and why?

- Recent Headlines
- Humans as Adversaries
- Our Digital Assets


## High Value Targets




Types of Data Compromised/Stolen:
Names, SSN, DOB, Contact Information, Bank Account Numbers, Drivers License Numbers

3,376,673 People Affected

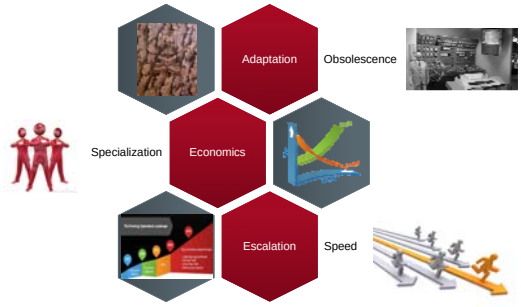
## WSU's Environment

- 9.4 Trillion Security-Relevant Events per Day

In the Last 6 Months at WSU:

- Server Compromises
- PCI-Related Compromises (Credit/Debit Card)
- Hundreds of Workstation Compromises
- Dozens of Compromised Email Accounts
- Dozens of Compromised VPN Accounts

## Humans as Adversaries



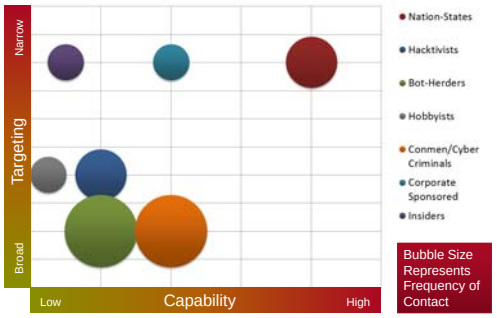

## Our Digital Assets


## Awareness

Who are we up against and why?

- WSU's Digital Adversaries

## WSU's Digital Adversaries




## Confidence

How can I help myself and WSU?

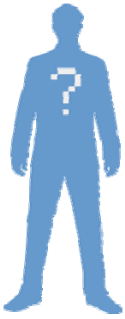
- Trust, but Verify
- Reducing Anxiety: Keeping Yourself Safe
- Reducing Risk: Keeping WSU Safe
- What About the Cloud?


## Trust, but Verify

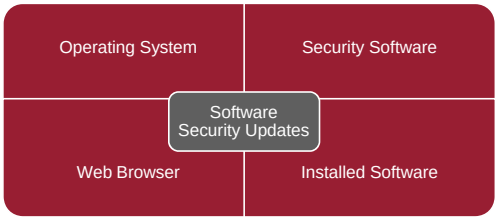
IT'S ALL ABOUT TRUST

- Identity and Authenticity
  - More than just usernames and passwords
- Indicators
  - Can be positive or negative
- Nothing is black & white

THINK before you click.



## Reducing Anxiety: Keeping Yourself Safe




Patch Early, Patch Often
Set to Auto
What are Zero Days?

Do not buy software in response to unexpected pop-up messages or emails. Especially messages that claim to have scanned your PC.

## Reducing Anxiety: Keeping Yourself Safe


**Be Unpredictable**
Example Password:
1Dnlg34h1Dnlt514!!

It would take 1 desktop PC 71 Quadrillion years to crack this password.

## Reducing Anxiety: Keeping Yourself Safe

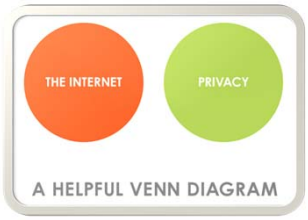
### Treat Personal Information Like Cash

| Social Security Number | Credit Card Number | Bank & Utility Account Numbers |
|---|---|---|

Every time you are asked for this type of information ask:
Can I Trust The Request?

## Reducing Anxiety: Keeping Yourself Safe


## The Internet Is Not a Private Place




## Reducing Anxiety: Keeping Yourself Safe

**Email**

Practice Email Etiquette

Spam Reduction:

| | |
|---|---|
| Use A Filter | • Email Security Settings |
| Limit Exposure | • Use multiple addresses<br>• Try not to display in public |
| Check Privacy Policies | • Check to see if they sell your email address |
| Use Caution | • When installing software look for pre-checked boxes that automatically sign up for email updates from partners |

## Reducing Anxiety: Keeping Yourself Safe

Phishing:

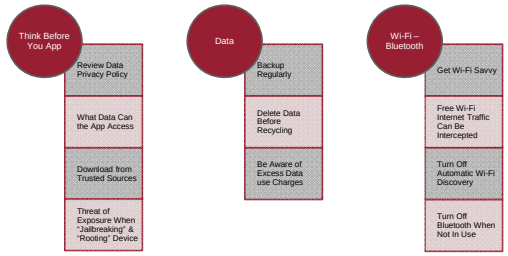
- Legit companies do not ask for personal info via email or text
- Messages may appear to be from organizations you do business with
- May include threatening statements to close account if you fail to respond
- Do not click on links or phone numbers provided in message – May redirect to spoof sites
- If concerned look up organization independently and contact them directly

## Locks Mean Protection

- Screen Locks
- HTTPS
- Remote Access
- Encryption

## Mobile Computing - Basics

## Mobile Computing




## Reducing Risk: Keeping WSU Safe


- See previous slides
- Risk-Based Approach
  - Nothing is black & white

## What About the Cloud?

- Is my data more secure or less secure in the cloud?

Additional Considerations

- Most Cloud Providers Use Non-Negotiable Terms of Service
  - What are terms of use?
  - Who owns the rights to user content?
  - Does the service sell or share user information with 3rd parties?

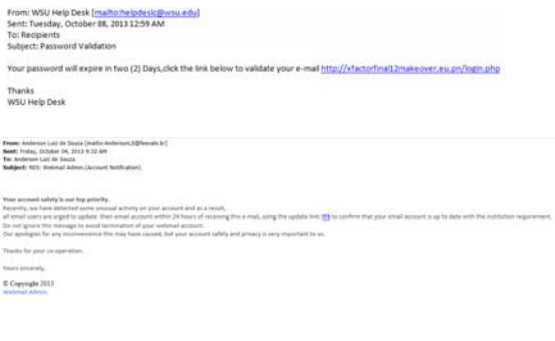
**WSU Non-Public and WSU Confidential Data Is Not To Be Stored In An Unauthorized Cloud!!**

**Confidence**

Examples


## Phishing


## Spear-Phishing



## Ransomware


**Preventive Measures**

- Perform regular backups of critical information. This data should be kept on a separate device, and backups stored offline.
- Maintain up-to-date anti-virus software.
- Keep your operating system and software up-to-date with the latest patches.
- Do not follow unsolicited web links in email.
- Use caution when opening email attachments.
- Follow safe practices when browsing the web

## Policy

What is expected of me?

- WSU Policies
- State & Federal Requirements

## WSU Policies

- A balancing act
- Requires universal Participation

As a user of Washington State University Information Technology Resources, it is your responsibility to help in the protection and proper use of our information and technology assets.

## WSU Policies

- **Public Data:**
  - Of interest to the general public and for which there is no University business need or legal reason to limit access
- **Non-Public Data:**
  - Not appropriate or available for general public use
- **Confidential Data:**
  - Restricted for legal or other University business reasons

- Electronic Communication Policy– EP4
- University Data Policies – EP8
- Wireless LAN Policy – EP13
- University Antivirus Policy – EP14
- University Network Policies – EP16
- Computer and Network User Identification and Password Policy– EP18
- University Domain Name Policy – EP21

## WSU Policies

**Electronic Communication Policy**
WSU Executive Policy #4

- Recommended Reading
- Understand What You Can Do
- Know What Is Prohibited

## WSU Policies

**University Data Polices**
WSU Executive Policy #8

| Administration | Access | Usage | Maintenance | Security |
|---|---|---|---|---|
| Identifies Data Steward<br><br>Outlines Data Steward Responsibilities | Defines Classification Definitions and Accessibility<br><br>Public<br>Non Public<br>Confidential | Data must be used as intended<br><br>Not for inappropriate purposes<br><br>Must not be used to promote or condone unlawful activities<br><br>Willful misuse can result in access termination and possible civil/criminal charges | Defines who is responsible for maintaining data integrity | Outlines data storage and transmission requirements for each data classification<br><br>Defines preservation and backup requirements<br><br>Data destruction requirements |

## WSU Policies

### Wireless LAN Policy
WSU Executive Policy #13

- Central IT/IS responsible for deployment/ management of access points
- Central IT/IS will specify equipment to prevent compatibility issues
- Authentication service for authorization required
- Access will be through VPN gateway

## WSU Policies

### University Anti-Virus Policy
WSU Executive Policy #14

- Anti-Virus software is required.
- Keep Anti-virus definitions up-to-date
  - System and application patches included
- Scan ALL incoming files
- Contact your Systems Administrator, or the IT Helpdesk (335-4357)

## WSU Policies

### University Network Policy
WSU Executive Policy #16

Additional Best Practices

- Disable unnecessary services/daemons such as mail relay (SMTP), SNMP, telnet, ftp, etc.
- Disable or otherwise protect vulnerable TCP/IP ports.
- Take appropriate steps to physically secure servers from theft or damage.
- Regularly review activity logs for evidence of break-ins and take the appropriate corrective actions.
- Maintain regular system backups to facilitate disaster recovery.
- Remove or disable unused accounts.
- Keep informed of current industry security standards and apply them as appropriate.

## WSU Policies

**Computer and Network User Identification and Password Policy**
WSU Executive Policy #18

- User IDs shall be assigned to individual users
- Passwords are considered confidential and shall not be shared or transferred to others
- Passwords should not be written down where anyone else can find them

## WSU Policies

**University Domain Name Policy**
WSU Executive Policy #21

- Defines .edu and .org DNS policy
- What Qualifies
- Who is Responsible
- How to Acquire

## State & Federal Requirements

Common/Major

- FERPA – Family Educational Rights and Privacy Act (1974)
- DMCA – The Digital Millennium Copyright Act (1998)
- WA OCIO Policy 141 - Securing Information Technology Assets

Less Common

- GLBA – Gramm-Leach-Bliley Act (1999)
- HIPAA – Health Insurance Portability and Accountability Act (2000)
- SOx – Sarbanes-Oxley (2002)
- USA Patriot Act – (2001-present)
- Homeland Security – (2002)

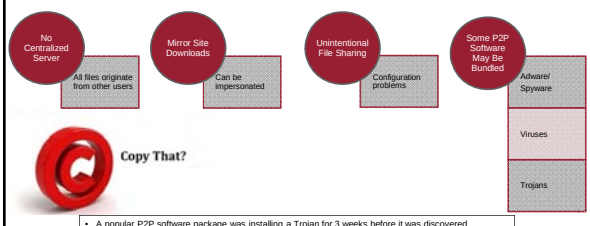
## Summary

- We have some pretty **diverse adversaries**
  - Some have rather **scary capabilities**
- **WE ARE A TARGET**
  - Principles that help **keep you secure =** Principles that help **keep WSU secure**
- WSU computer and network security policies are available online
- **YOU** can make a **BIG** difference

## Questions?

## Reducing Anxiety: Keeping Yourself Safe

**P2P Software**




- A popular P2P software package was installing a Trojan for 3 weeks before it was discovered.
- "Over a 12-hour period, regular searches were performed on KaZaA for Microsoft Outlook Express e-mail files, assuming that users would not intend to share private e-mails. Of 443 searches, 61 percent returned one or more hits for the e-mail files. In addition, other tests showed up word processing documents, Web browser caches and cookies, and financial software files." - SANS

**There are safer ways to share information.**


Washington State University
Training Program
This has been a
WSU Training
Videoconference
If you wish to have your attendance documented in your training history, please notify Human Resource Services within 24 hours of today's date:
hrstraining@wsu.edu