

Groovy Cyber Security for Financial Aid...It's Far Out!

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Ban the Data Breach!



Note: The Peace symbol is a combination of the [semaphore](#) signals for the letters "N" and "D", standing for "nuclear disarmament".[[]In semaphore the letter "N" is formed by a person holding two flags in an inverted "V", and the letter "D" is formed by holding one flag pointed straight up and the other pointed straight down. Superimposing these two signs forms the shape of the centre of the peace symbol... Wikipedia.or/wiki/Peace_symbols.

Why All The Hype?

- ❑ Top targets of cyber crime include Banks, shopping sites, and educational institutions.
- ❑ Educational data was involved in 17% of the breaches in 2015.
- ❑ Symantec listed education third overall among the top most-attacked and breached sectors.

Over 1.35 million personal identities were exposed in the education sector in 2015. Thirty percent of these were the result of phishing attacks or improper use on social media₉.

So Many Laws...

- ▣ **Gramm-Leach Bliley Act - GLB act**, also known as the Financial Services Modernization Act, created in 1999. Financial Institutions must safeguard private customer data
Loan Servicing counts₅.
- ▣ **Family Educational Rights and Privacy Act – FERPA.** Restricts the release of student data to non-students₆.

Oregon State Data Protection Standards

- ▣ **Oregon Administrative Rules(OAR), Student Records.** 7
- ▣ **Oregon Data Breach Law – ORS 646A.604.**
Effective January 2016. 8
 - ▣ Requires businesses and government agencies to notify the Oregon Attorney General's office when the personal data of at least 250 Oregonians has been compromised.
- ▣ **Organization Standards.**
 - Many institutions have their own rules for safeguarding personal information.

It's Heavy, It's A Hustle. It's Just Not Hip

- **Man in the middle attacks.** Take control of a server and steal information before it gets to desired destination.
- **Sniffer programs** – Installed on your PC, or on a server and log information entered over internet. Can be installed on PC to record keystrokes(keystroke logger) or even on your home WiFi router.
- **Inside access** – Employee with access.

To Go Where No Staff Have Gone Before

- ▣ First Steps: Staff Awareness, and consistent and up to date training.
 - Discover what Cyber security standards and practices already exist.
 - Know what your access level is.
 - Know the data you are protecting and why.
 - Become aware of threats. Ask your IT staff .
 - Plan of action. Meet and discuss. Repeat.

Good Cyber Security Practices

Best Practices

- **Passwords**

- Strong passwords first line of defense. Most hacking now involves gaining access to your username/password.

“It can only be attributable to human error” – Hal, A Space Odyssey, 1968.

“The future ain’t what it used to be.” – Yogi Berra

Internet Awareness :

- **HTTPS** sites only for secure info. Hyper Text Transfer Protocol Secure
 - Look at the web address.
 - Use if entering personal information, account numbers, credit card info.
 - Ensures you are logging into correct site, encrypts communication between your browser and their site.

“Heheheheheeee Wipe Oooout!” – Wipeout, Beach Boys

Wipe your data when it's time.

Wiping involves writing over computer data.

▣ **Hardware.**

- Wipe hard drives.
- No Pii on thumb drives or disks unless encrypted.
- Keep track of hardware. Wipe machines when recycling.

Antivirus Protection

- ❑ All devices must have good antivirus software.
- ❑ Many good ones out there. Follow the advice of your IT department.
- ❑ Install on all devices at home as well.
- ❑ **Keep it updated.** Automatic updates are the best.
- ❑ Is it ok to disable to install programs?
 - Yes, but you should scan the program install first, and disconnect from internet/wifi while disabling antivirus.
 - Remember to enable it again!

Additional Cyber Tips

- ▣ **VPN.** Utilize Virtual Private Network when away from office or within office for secure data. Same as HTTPS.
- ▣ **Phone, tablet, laptop.** Know your settings.
 - ▣ Read up on security. Keep it updated. Keep apps updated. Lock down website tracking and cookies.
- ▣ **Home Wifi.**
 - Change Your Router Admin Username and Password. Anyone can find the defaults.
 - Change the Network Name(SSID). What if it's Comcast? Can be done.
 - Turn on encryption. Look for WPA2 Personal (it may show as WPA2-PSK. Shows up in security settings.

Conclusion

- ▣ Know what you need to protect and why.
- ▣ Learn how to protect it. Execute plan.
- ▣ Teach everyone about it. Very important they are aware.
- ▣ Repeat
- ▣ **Don't OPM it.**

Questions?

Reference Material

- 1. <http://www.internetociety.org/internet/what-internet/history-internet/brief-history-internet>
- 2. https://www.nasfaa.org/uploads/documents/Financial_Aid_Data_Sharing.pdf
- 3. “Data Protection & Privacy in 31 Jurisdictions worldwide”
https://www.huntonprivacyblog.com/wpcontent/uploads/sites/18/2011/04/DDP2015_United_States.pdf
- 4. <https://ifap.ed.gov/fsahandbook/attachments/1617FSAHbkActiveIndexMaster.pdf>
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- 7 http://www.ode.state.or.us/services/studentrecords/oar_for_student_records.pdf
- 8. <https://www.oregonlaws.org/ors/646A.604>
- 9. [11. https://www.tenable.com/blog/data-breach-101-cyber-security-issues-in-higher-education](https://www.tenable.com/blog/data-breach-101-cyber-security-issues-in-higher-education)

- ▣ Good reading:
- ▣ <https://www.educause.edu/focus-areas-and-initiatives/policy-and-security/cybersecurity-initiative/community-engagement/security-awareness>
- ▣ <http://www.howtogeek.com/howto/33949/htg-explains-what-is-encryption-and-how-does-it-work/>
- ▣ <http://www.pcworld.com/article/2043095/heres-what-an-eavesdropper-sees-when-you-use-an-unsecured-wi-fi-hotspot.html>
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