



DATA SECURITY IN A VIRTUAL ENVIRONMENT

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VERIZON DBR

70% of breaches involved companies with fewer than 100 employees.

VERIZON DBR

More than ½ of all U.S. Companies have suffered a data breach.

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PONEMON INSTITUTE

79% of data breach incidents are caused by negligence.

50% by employee negligence.

29% by third-party negligence.

NATIONAL CYBER SECURITY ALLIANCE

2 out of 3 consumers said they experienced a tech support scam in the past year.

Of those who “continued with a fraudulent interaction” 50 percent were between the ages of 18 and 34 (millennials)

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Google Duo: Allows up to 12 in the group chat and has end-to-end encryption.

Facetime: If everyone is an ios user, FT is available for up to 32 users and it encrypts. Doesn't have the option to share screen to 'walk through' a document.

Webex: Video calls up to 100 with end-to-end encryption and has a free option.

GoToMeeting: 14 day free trial than \$12 a month w/up to 150 people. Is encrypted and allows you to share screen.

WhatsApp: End to end encryption is always on- it can't be turned off. Uses your data plan or wi-fi not cellular allows for video conferencing for small groups.

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ZOOM

In December of 2019 had 10 million users- passed 200 million in beginning of April 2020

System weaknesses allowed an attacker to take over the microphone or camera on Mac/ios & steal passwords on windows. This was “patched” on 4/1/20

Zoom Bombing

- Use password protection for all meetings
- Don't post the meeting on-line or through a social platform.

Privacy Concerns

- Zoom has admitted it “incorrectly suggested” that they provide end-to-end encryption. (they don't)
- If you're using the ios app- your info is shared with Facebook.
- All you pms through the platform during a session are made available to the host at the end.

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CONDUCTING A DATA AUDIT

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THE BROKER AS EMPLOYER

Social Security Numbers?
 Health Insurance Forms?
 Drivers License Numbers?
 Birthdate?
 Physical Address or E-mail address?
 Telephone Number?
 Vehicle Information?

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Social Security Number?
 Photocopy of Driver's License
 Physical Address?
 E-mail Address?
 Social Media?
 Telephone?
 Birthdates?
 Earnest Money Check?
 Mortgage Application?
 Home Warranty Application?
 Employment History?
 Divorce Decree or Marriage License?
 Credit Card numbers?

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Why am I keeping this?

1. State Regulations
2. My Accountant Told Me To
3. My Attorney Told Me To
4. Data Mining In The Future

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WHERE IS DATA STORED?

Filing cabinet
 Digital file
 The “cloud”

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WHERE IS THE DATA STORED?

Do Agents keep copies of data separate from the files maintained by the brokerage?

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HOW IS DATA SECURED?

Lock
Encryption
Hmmm....

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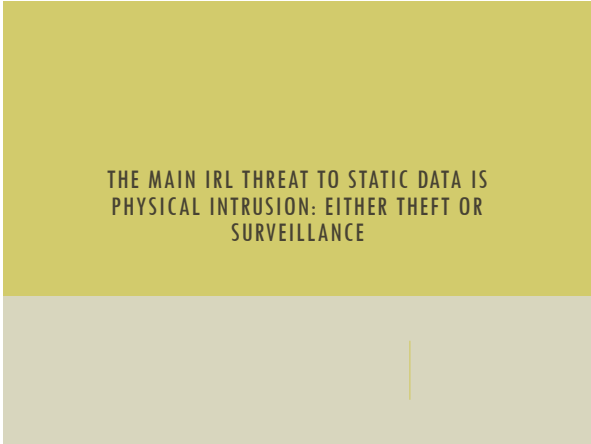
WHO HAS ACCESS?



ESI BEST PRACTICES

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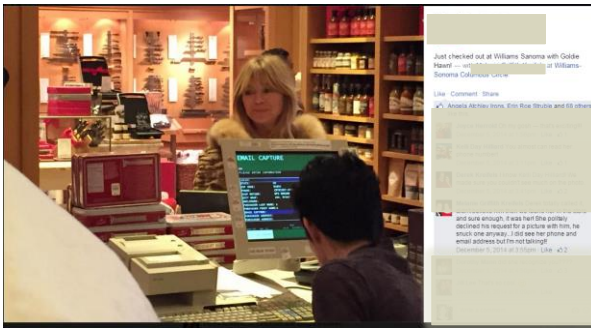
IRL SECURITY

Lock static data that contains personally identifiable information.

Limit access to data.

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Consider Computer Placement

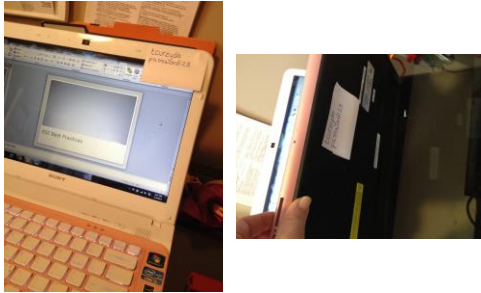


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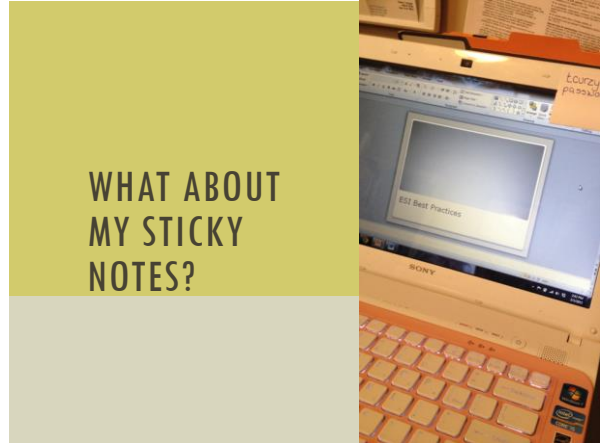
PASSWORDS!

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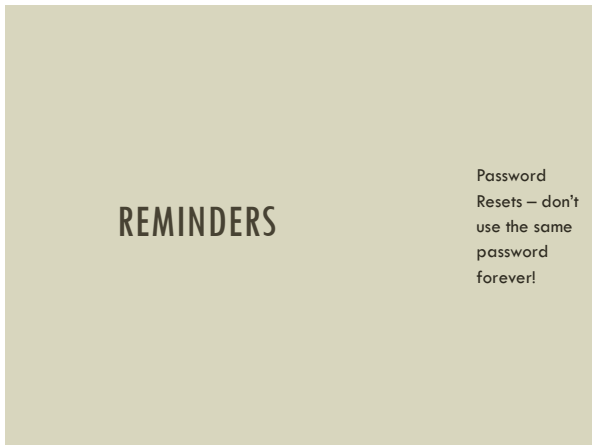


In 2018, 15% of computer users had Password1 as a password

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WHO HAS ACCESS?

Fired IT worker changed password, wants \$200K to fix it, college says 12 / 17

USA TODAY
Vic Ryckaert 8 hrs ago

SHARE SHARE TWEET EMAIL

INDIANAPOLIS — A fired IT employee took his revenge on a for-profit online college before he left, changing a password on an account that stored email and course material for 2,000 students, the Indianapolis-based online school has alleged in a


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PASSWORD STORAGE PROGRAMS

RoboForm Everywhere

The top-rated software program in 2015 according to Top 10 Review (bonus, it's less than \$10)

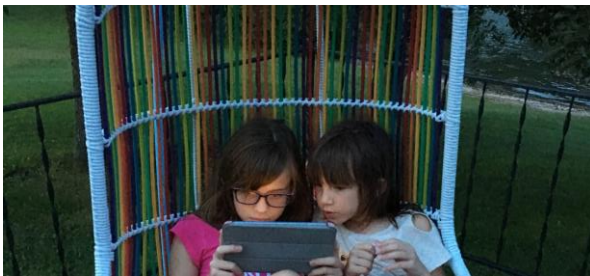
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UPDATES!!!!

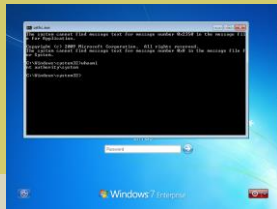
Patches (not just for jeans anymore)

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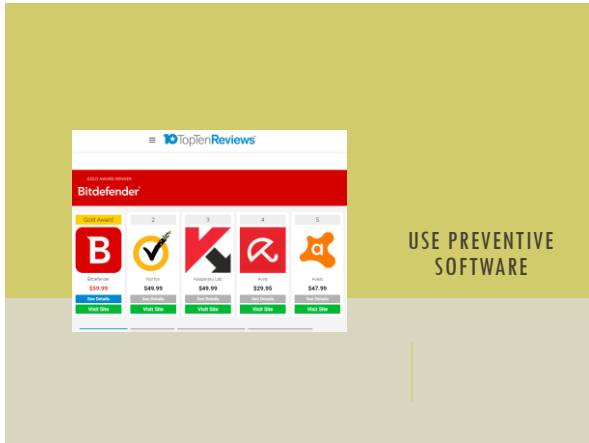
LIMIT ACCESS

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USE ADMINISTRATIVE PRIVILEGES

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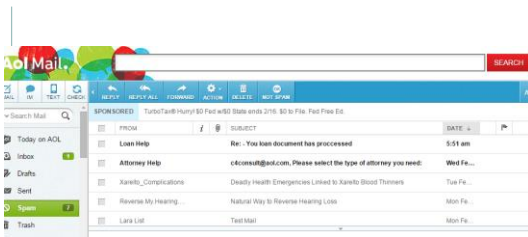
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UNEXPECTED DEVICES

Printers

Video Conferencing

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E-MAIL RISKS

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E-MAIL RISKS

Phishing

Spear Phishing

Social Engineering

Doppelganger Domains

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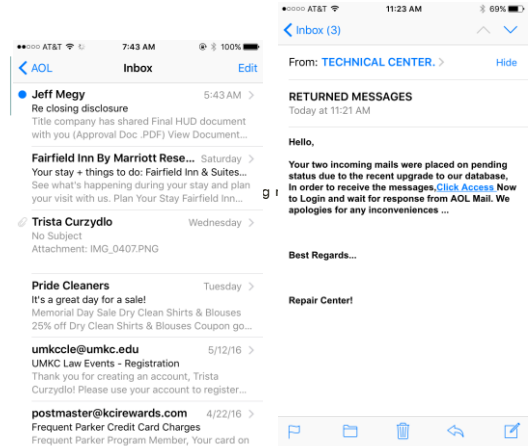
E-MAIL RISKS

Phishing and Spear Phishing

Who is this person and why are they e-mailing me?

FROM	SUBJECT	DATE
Multiple Sclerosis Tre...	Multiple Sclerosis Treatment Guide	Mon Se...
Debbie Rowland	Purchase Short Sale Closing	Mon Se...
Mark Ian	Change of Purchase Price	Mon Se...
ALDI	Please accept this Thank You Gift from ALDI	Mon Se...

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E-MAIL RISKS

Social Engineering

"I know this person and they're asking me to do something, I should do it"

- ✓ Don't hit "reply" start fresh or forward using the address in your contacts or from a business card.

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E-MAIL RISKS

Doppleganger Domains

Domains that mimic legitimate domains used to misdirect traffic or “vacuum” misaddressed e-mails.

trista@tristac.com vs trista@trista_c.com

www.tristac.com vs. www.tristac.realtor

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Be Careful

Unexpected Attachments

Develop a System

E-MAIL MANAGEMENT

38

Top Ten Reviews ranked:

1. HP SecureMail
2. DataMotion
3. Proofpoint
4. EdgeWave
5. Trend Micro

ENCRYPT E-MAIL MESSAGES

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ENCRYPT STORED E-MAIL

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MOBILE DEVICES

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APPLICATIONS

What permissions?
Download only from trusted sources.

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GOING ROGUE

You may not see
Russia from here,
but the Russians can
see you...

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PITCH IT

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FTC V. NAVONE

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INSURANCE

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Property: Courts have held that data isn't tangible property. "Direct physical loss" requirement not satisfied.

General Liability: Limited to harm to body and tangible property.

Crime and Fidelity Bond: Typically only covers tangible property, securities and money.

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Network Security and Privacy Liability

Data Breach Expenses

Regulatory Fines and Defense Expenses

Business Interruption Losses

Information Asset Expenses

Extortion Threat

NETWORK SECURITY POLICY LINES

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