



EFFECTIVE SECURITY:

Don't lose to the Bad Guys!

Mike Burgard Chief Information Security Officer

marconet.com

FREE LUNCH ON MARCO

Join us for our upcoming monthly Lunch Bytes Webinars

12:00 PM - 12:45 PM

- Wednesday, March 20 | Is the Public Cloud Right for you?
- Wednesday, April 17 | Cloud Collaboration: How Marco's UCaaS is Different

Register Online | <u>www.marconet.com/lunchbytes</u>

Email code "Brainstorm" to breanna.schorr@marconet.com

Be the first **THREE** to register will receive **FREE** lunch on Marco



CHANCE TO WIN A DRONE!

- 1. Complete the Registration Form on your seat
- 2. Forms collected during presentation
- 3. Drawing on-site for **DRONE**



HISTORY OF MARCO

Marco

Voice and Data Networks

1985

Continuous Improvement Process and Lean in 2007

1997

.....

2005

Managed Services;

First Acquisition -

MBE in Detroit Lakes

Cloud and Carrier Services

2013

28 Acquisitions; 31,000 Clients 1,000 Managed Clients

2016

1930

The Typewriter

Shop

1973

1975

Copiers

1989

Employee Ownership

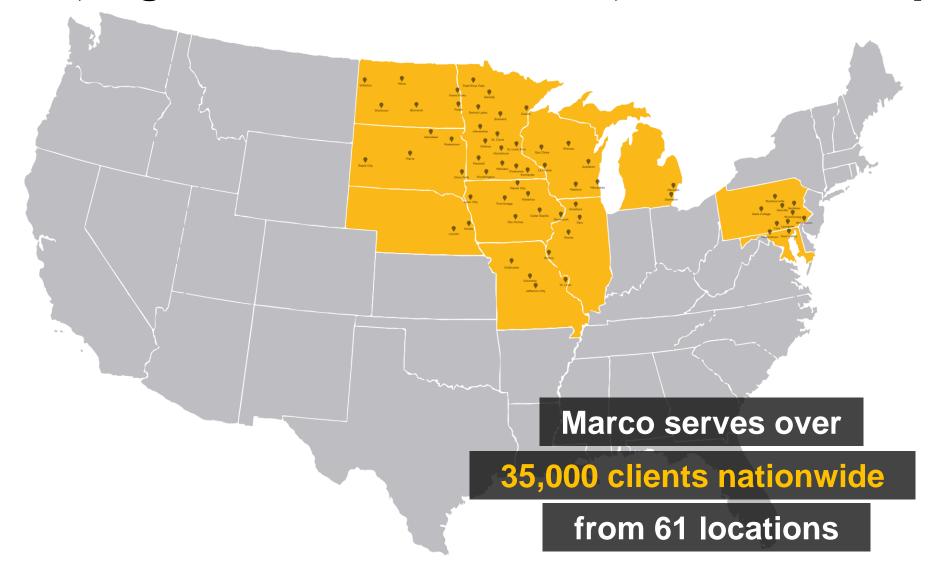
2002

Audio/Video Systems 2012

Client Services Center with 24/7 Support 2015

Acquired by Norwest Equity Partners

Local, regional and national sales, service and support





Mike Burgard, CISSP Chief Information Security Officer

- CISO @ Marco, November 2018
- Solution Architect @ Marco since 2016
- IT Manager/CISO @ Fishback
 Financial Corp 2013-2016
- Enterprise Engineer/Architect
- Law Enforcement since 2004
- IT in K12 and MFG in 1999-2005







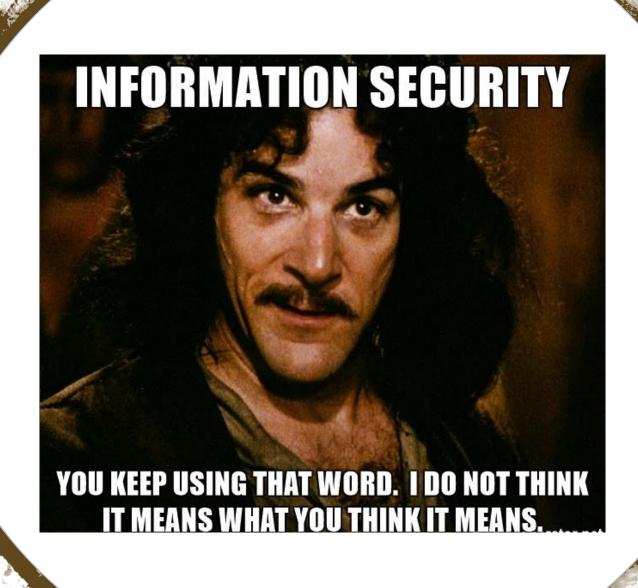












CYBER SECURITY – WE ARE AT WAR!

"Yet because this war lacks attention grabbing explosions and body bags, The American People remain largely unaware of the dangers"...WSJ

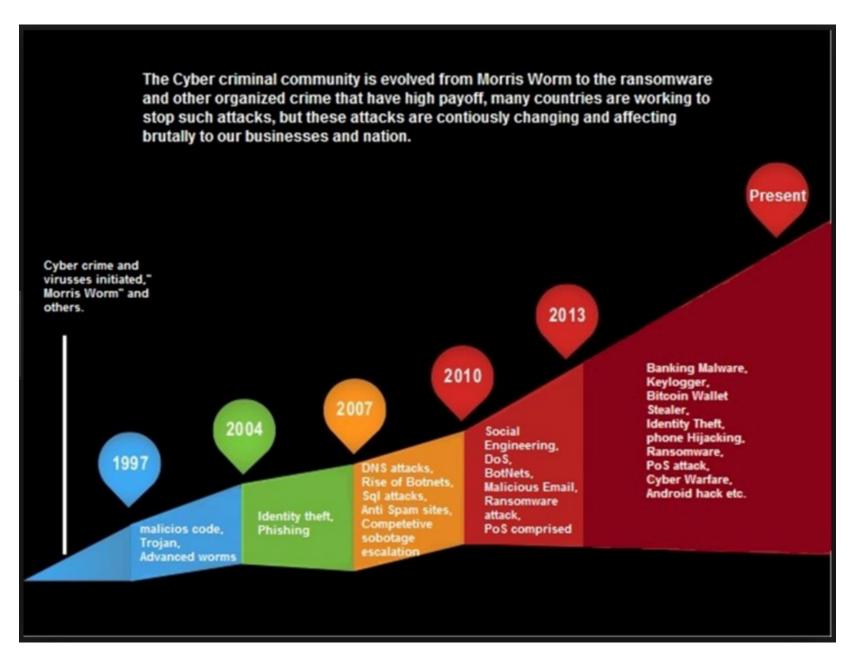
Unfortunately no one is listening!!!











When was the last time you had a virus that took down your organization?



MY PERSONAL COMPROMISE HISTORY

R





Do you look for this?

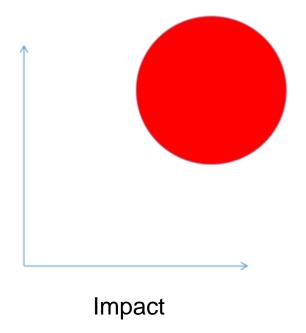




THE ONE THING YOUR ORGANIZATION NEEDS TO KNOW:

Top 5-7 Threats

Likelihood





False Sense of Security

- 1. Mindset: I'm behind the firewall
- 2. Passwords do not work
- 3. Lack of user awareness education

Use Open DNS

Set DNS servers to:

208.67.220.220

208.67.222.222

www.Opendns.com/setupguide/



WORST PASSWORDS OF 2016

- 1. 123456
- 2. password
- 3. 12345
- 4. 12345678
- 5. football
- 6. qwerty
- 7. 1234567890
- 8. 1234567
- 9. princess
- 10. 1234





HOW STRONG IS THIS PASSWORD?



Enter Password to Analyze

This site is for educational use. Due to limitations of the technology involved, the results cannot always be accurate.

Your password will not be sent over the internet.

Pass this individual password checker on to your users to see if their current passwords are strong enough!



CHECK ALL THE PASSWORDS IN YOUR ORGANIZATION





Social Engineering...

- 1. Mindset: Big happy family
- 2. System Takeover Bots
- 3. Ransomware
- 4. CATO –Small business's biggest threat
- 5. Invoice Redirect Fraud (BEC)



BYOD = Be Your Own IT

- 1. Mindset: It's my device
- 2. Apps help me do my work
- 3. Mixing work w/ personal/entertainment







Social Media Mindset

- 1. Privacy doesn't matter
- 2. Truth misunderstanding data value
- 3. Data aggregation and privacy loss issues.



Insider Threats



Mindset: My team is trustworthy...

Truth: "75% of employees admit to stealing from their employers..." WSJ

Alphabet, Google's parent company, recently <u>filed a lawsuit</u> against its former engineer Anthony Levandowski, who is now working with Uber. The company accused Levandowski of copying more than 14,000 internal files and taking them directly to his new employer.

https://www.tripwire.com/state-of-security/security-data-protection/insider-threats-main-security-threat-2017/

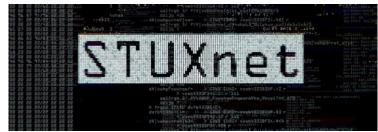


SONY make.believe

Nation States Sponsored & Cyber Warfare

Mindset: I'm not a target. It's not real – can't happen here.

Truth: Nations are building up their economy using our innovation...including China, Russia, North Korea,... and security experts tell us to expect a significant attack in the next 10 years.





Physical Security Matters!



Mindset: It's all in the cloud or I am too small.

Truth: Physical access often bypasses many of the technologies in place to protect your data! Physical security does far more than just

protect IT.





What about the Cloud?



Mindset: It's all in the cloud so they have me covered.

Truth: Cloud services actually increase your business attack surface. Other considerations are a concern as on premise.

https://www.datacenterknowledge.com/microsoft/azureoutage-proves-hard-way-availability-zones-are-good-idea



FACT

Compliance...

Is taking over security – while we remain

Unresponsive....

These are two completely separate issues!

Compliance does not = security



HOW DOES SECURITY WORK?

We are spending more than ever on security – **How are they getting in**?



HOW SECURITY WORKS – HOME ANALOGY

Doors
Windows
Locks
Fence

Motion
Detection
Crime
Watch
Monitoring
Dog

Alarm

Dog Gun Police Insurance

Protect

Detect

Respond











THE BOTTOM LINE:

No one has it covered....

The FBI tells us – it takes an average of 14 months for companies to detect an intruder...

Most won't know until it is too late!



THE BOTTOM LINE:

Nearly every company has malware

- 2018 Cybercrime profits of \$1.5 trillion globally
- 2 billion records stolen
- Cost of breaches to exceed \$2 trillion by 2019 Forbes



CYBER SECURITY – SYSTEM

Passwords
Firewalls
Encryption
Physical Locks

IDS/IPS
Email/Web Security
Web App Firewall
Monitoring

DR Plan
Backup
Threat
Intelligence

Protect (80% of \$'s spent)

Detect

Respond



WHAT SHOULD WE DO?

- Expect they are in
- FIND them...
- Assessing risk continuously
- Test for vulnerabilities
- Watching for Symptoms of Compromise
- Detect them before it's too late...



A Sample of different security technologies

- Privileged Account Management
- Antivirus/Anti-malware
- Virtual Patching
- Sandboxing
- OpenDNS/Umbrella
- Web App Firewall (L7 Firewall)
- NGFW
- Single Sign on
- File monitoring & permission control
- PKI
- Email Security
- EMM/MDM
- Patching + 3rd Party Patching
- Secure Remote Access

- Backup Solutions!!!!
- Continuous Data Protection
- SIEM
- Multifactor Authentication → Adaptive Authentication
- Virtual Desktops
- Micro-Segmentation
- Network as a Sensor
- NetFlow/Sflow
- User Behavior Analytics
- Active Directory Health
- Data Loss Prevention
- Vulnerability Management
- Key Management



MANAGED IT SERVICES – SUPPORT SERVICES

Support Desk & Remote Support

- 24x7x365 monitoring of system alerts
- Support desk availability Monday Friday,
 7:00 a.m. to 5:00 p.m. CST, excluding
 holidays
- Microsoft Office
- Microsoft OS
- Network Connectivity
- Secure remote system control
- Third party software requires active support contract

- On-Site Support and Maintenance
- On-site support Monday Friday, 8:00 a.m. to 5:00 p.m. CST, excluding holidays, for issues that can't be resolved remotely
- Proactive on-site maintenance and health check regularly scheduled



MANAGED IT SERVICES – PROACTIVE SERVICES

Security/Updates

- Anti-virus software, including management/definition updates
- Automated Microsoft Patch Management
 - MS Office updates
 - OS Critical updates
 - OS Security updates
- Content filtering solution
- Security administration
- Spam filtering solution

- User administration
- Windows file sharing administration

Server Equipment Maintenance

& Monitoring

- Asset summary
- Drive space monitoring
- Event log monitoring
- Hardware performance
- Up-time reporting



STRATIGIC PARTNERS



Gold Midmarket Solution Provider Cloud Accelerate









Premier Partner



Master Collaboration Partner









Silver Solution Advisor















GOVERNMENT CONTRACTS



























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