WHAT IS GOING ON WITH DATA SECURITY?... AND...

CAN YOU ENSURE YOU ARE SECURE?

WHO AM I, AND WHY AM I HERE?

- JEREMY STEPAN
- OWNER OF RESURGENCE IT, AN SCV BASED IT MANAGED SERVICE PROVIDER
- Have worked in all aspects of IT
 - Desktop, Servers, Data center, Wireless, Phone Systems, Cloud, Email, Network Security...
- I'M HERE TO EDUCATE AND OFFER INFORMATION TO HELP YOUR BUSINESSES COMPETE IN AERO SPACE AND COMPLY WITH NIST AND DFARS STANDARDS.

KEY POINTS

- WE HEAR OF THE LARGE COMPANY BREACHES, DO THE SMB'S HAVE THE SAME RISK?
- THERE ARE CHALLENGES WE CAN'T IGNORE
- HOW DID WE GET HERE, AND WHAT DOES THE FUTURE HOLD?
- Can you REALLY ensure you are secure?
- WHAT SHOULD YOU BE DOING TO BE SECURE?
- How can Resurgence IT help?

KEY POINTS

- WHAT IS NIST 800-171 AND DFARS 7012 AND HOW DO YOU INTERPRET WHAT THEY MEAN?
- THERE ARE CHALLENGES YOU FACE WITH THESE NEW REQUIREMENTS
- WE HEAR OF THE LARGE COMPANY BREACHES, DO THE SMB'S HAVE THE SAME RISK?
- What should you confirm your business IT solution has?
- How can Resurgence IT Help?

WHAT IS NIST 800-171 AND DFARS 7012?

- NIST is the National Institute of Standards and Technology
- DFARS is the Defense Federal Acquisition Regulation Supplement.
- NIST 800-171 purpose is to provide both Federal and Non-Federal organizations with a standard of best practices to protect Controlled Unclassified Information or CUI
- DFARS 7012 IS TITLED: SAFEGUARDING COVERED DEFENSE INFORMATION AND CYBER INCIDENT REPORTING
- DFARS 7012 IS AN ADDENDED SET OF IT REQUIREMENTS FOR GOVERNMENT CONTRACTORS.
 IT CONTAINS A MANDATE TO ABIDE BY THE STANDARDS OF NIST 800-171 BY DECEMBER 31, 2017

HOW DO YOU INTERPRET NIST 800-171 AND DFARS 7012?

- Have you read the articles?
- 800-171 is 80 pages with 14 Security Requirement Families you are responsible for
- SOME OF THE "FAMILIES" INCLUDE: ASSESSING, SECURITY, TRAINING STAFF, PROTECTION, AND MAINTENANCE...
- ...AND REPORT ON ANY INCIDENT WHEN YOU FAIL!!
- 84 MOSTLY-TECHNICAL TERMS DEFINED IN THE GLOSSARY!
- You can classify your business in 1 of 3 status's according to the standards:
 - YOU ARE CURRENTLY PROTECTED
 - YOU HAVE DEFICIENCIES AND WILL IMPLEMENT NEW SOLUTIONS TO BECOME PROTECTED
 - You use alternative methods from those prescribed and are able to prove you are protected

THE QUESTIONS YOU SHOULD BE ASKING ARE:

- DO YOU HAVE THE ABILITY TO INTERPRET THE REQUIREMENTS?
- WILL YOU THEN BE ABLE TO ASSESS YOUR ENVIRONMENT APPROPRIATELY?
- DO YOU KNOW THE RIGHT TEAM TO REMEDIATE THE NECESSARY CHANGES?
- How much will this cost your business?

THERE ARE CHALLENGES YOU FACE WITH THESE NEW REQUIREMENTS:

- Assessment must be completed ASAP
 - A TRUSTED PARTNER CAN HELP ACCOMPLISH THIS...
- REMEDIATION CAN BE TIME CONSUMING
 - A TRUSTED PARTNER CAN HELP YOU STAY FOCUSED ON YOUR BUSINESS...
- REMEDIATION CAN BE COSTLY
 - A TRUSTED PARTNER PROVIDES COST-EFFECTIVE, RESULTS-DRIVEN SOLUTIONS...
- ONGOING VALIDATION MUST BE PART OF THE SOLUTION
 - A TRUSTED PARTNER IS ALWAYS THINKING DOWN THE ROAD FOR YOUR BUSINESS...

SHOULD YOU BE CONCERNED AS AN SMB?

- Let's Check some facts:
- SMB CYBER ATTACKS GREW TO 43% OF ALL BUSINESS ATTACKS IN 2015 Symantec Internet Security Threat Report 2016
- RANSOMWARE-INFECTED EMAILS INCREASED 6000% FROM 2015 TO 2016 IBM SECURITY STUDY
- 40% OF SPAM MESSAGES IN 2016 CONTAINED RANSOMWARE IBM SECURITY STUDY
- 70% OF BUSINESSES IN 2016 PAID THE RANSOM IBM SECURITY STUDY
- 50% PAID MORE THAN \$10,000 IBM SECURITY STUDY
- BUSINESS DOWNTIME TYPICALLY 2 DAYS INTERMEDIA AND ABERDEEN GROUP
- DO YOU KNOW WHERE THE TARGET BREACH CAME FROM?

THERE ARE CHALLENGES IN THE AGE OF INFORMATION

- Everyone wants their data accessible anywhere at anytime.
 - EMAIL, MOBILE DEVICES, SHARED DATA...
- THERE IS RESISTANCE TO ADOPTING SECURITY BEST PRACTICES
 - SLOWS YOU DOWN, CREATES COMPLEXITY IN YOUR DAY TO DAY WORK...
- THE COST CAN BE SIGNIFICANT TO PROTECT YOUR INFORMATION
 - Prevention is almost always less than Recovery...
- MANY THINK "IT CAN'T HAPPEN TO ME, I'M A SMART USER"
 - THE MOST EXPERIENCED, VIGILANT, END-USERS HAVE BEEN FOOLED...

HOW DID WE GET HERE?

- First reported personal computer virus in 1981 infected Apple II Systems.
- 1987 was the first replicating virus which infected networks internationally
- 1990 NORTON ANTIVIRUS BEGINS RELEASING "ANTIVIRUS" SOFTWARE
- 90's saw virus's infect word documents, java files, Linux, through Shareware sites and Floppy drives
- 2000's brought more sophistication with SoBig, Slammer, and MyDoom which focused primarily on Trojan horse virus's
- 2010's have erupted with Phishing scams such as: help me I'm in Africa, UPS Tracking emails, and Banking Scam emails

WHAT DOES THE FUTURE HOLD?

 2015 SAW 1000 RANSOMWARE ATTACKS PER DAY, 2016 INCREASED TO 4000!! Computer Crime and Intellectual Property Section Through Barkly article

CAN YOU REALLY ENSURE YOU ARE SECURE?

- YES... HOWEVER...
 - IF YOU HAVE A COMPUTER YOU ARE VULNERABLE, SORRY, IT'S TRUE...
- YOU CAN AND SHOULD BE TAKING BASIC PRECAUTIONS
- YOU SHOULD CONSIDER MORE ADVANCED PRECAUTIONS
- Antivirus Software by itself is no longer enough!!

WHAT SHOULD YOU BE DOING TO BE SECURE?

- GET A PURCHASED ANTIVIRUS/ANTIMALWARE SOFTWARE. FREE DOESN'T CUT IT...
- Use secure business email only: Hosted Microsoft Exchange and Office 365
- YOU MUST ENABLE AN EMAIL SPAM FILTER AND KNOW HOW TO USE IT.
- Ensure your email spam filter has a URL Blocker and it's enabled
- SET A COMPLEX PASSWORD: MORE THAN 8 CHARACTERS, DON'T WRITE IT ON A STICKY NOTE @
- Train your staff to be alert: Software training to test your users acuity to phishing scams.
- Invest in multiple layers of protection: Desktop AV, Email AV, Firewall AV and Web Protection
- Annual Penetration testing and Security Audit
- PAY ATTENTION!!! ARE YOU REALLY EXPECTING A PACKAGE FROM UPS?
- YOU BETTER HAVE A SOLID DISASTER RECOVERY PLAN:
 - BACKUPS: FILE LEVEL, SERVER IMAGE, BOTH LOCAL AND IN THE CLOUD.
 - WHAT HAPPENS IF YOU GET INFECTED?

What should you confirm your business IT solution has?

- A PURCHASED ANTIVIRUS/ANTIMALWARE SOFTWARE. FREE DOESN'T CUT IT...
- Secure business email only: Hosted Microsoft Exchange or Office 365
- THE ABILITY TO SEND ENCRYPTED EMAIL
- THE ABILITY TO STORE, ACCESS FROM ANY DEVICE, AND TRANSFER YOUR DATA SECURELY
- Set a complex password: more than 8 characters, don't write it on a sticky note \odot
- TRAIN YOUR STAFF TO BE ALERT: SOFTWARE TRAINING TO TEST YOUR USERS ACUITY TO PHISHING SCAMS
- Invest in multiple layers of protection: Desktop AV, Email AV, Firewall AV and Web Protection
- Annual and monthly security testing
- YOU BETTER HAVE A SOLID DISASTER RECOVERY PLAN:
 - BACKUPS: FILE LEVEL, SERVER IMAGE, BOTH LOCAL AND IN THE CLOUD
 - WHAT HAPPENS IF YOU GET INFECTED?

WHAT IF YOU GET INFECTED?

- TURN OFF YOUR COMPUTER
- Call your IT support immediately
- RECALL THE LAST CLICK YOU MADE BEFORE THE INFECTION

HOW CAN RESURGENCE IT HELP?

- WE HAVE THE BASIC SOLUTIONS COVERED: MANAGED ANTIVIRUS, SECURE EMAIL, ENCRYPTED EMAIL, URL PROTECTION, BACKUP SOLUTIONS...
- WE HAVE THE ADVANCED SOLUTIONS COVERED: FIREWALLS, SECURITY AUDITS, PENETRATION TESTING
- HTTPS://RESURGENCEIT.COM/SECURITY-MANAGEMENT
- WE HAVE PARTNERSHIPS WITH INDUSTRY LEADING SECURITY AUDIT COMPANIES
- THE PRIMARY BEING PREVALENT HTTPS://WWW.PREVALENT.NET/DATUMSEC/
- CYBER SECURITY INSURANCE IS GROWING IN POPULARITY: A LOCAL PROVIDER, LBW
 INSURANCE IS THE MOST KNOWLEDGEABLE IN THIS ARENA http://www.lbwinsurance.com
- RESURGENCE IT CAN GIVE YOU A SECOND OPINION ON WHAT YOU ARE DOING

The most expensive computer virus of all times

MyDoom 538 5 billion

What would it cost your business if you lost your government contract?