

The DIY Approach to Risk Assessments

Presented by:

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About Me

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12+ years of performing 3rd party Risk Assessments



#yanfosec
github.com/yanfosec





Agenda

- Common reasons for outsourcing
- Common Failures
- The DIY Approach
 - Talking about security
 - Improving IT
 - Covering basics
 - Advanced security considerations
- "Selling" your Risk Assessment
- QA / DIY Kit







Common Reasons to Outsource

- Risk Assessments are complicated
- Not sure how to do it
- Don't have time to do it
- Need help passing an audit
- Want and expert to confirm you are right
- Security is expensive and you want to make sure you need it
- Requested by the Board of Directors





Why So Many Fail...

- Scope vs. cost
 - Good and bad risk assessments look identical
 - You only get what you pay for (or less)
- Unreasonable expectations
 - How long does it take a new CISO to get up to speed?
 - 1 week = repeating what I am told
- Rarely worth the expense
 - Starting around \$30,000
 - Money spent on security would actually help...





DIY Risk Assessment

Talking about security

Improving IT

Basic security considerations

More advanced security considerations





Talking About Security

- Regular Governance Meetings = Ongoing Risk Management
- Policies All you need is:
 - AUP / Code of Conduct
 - Non Disclosure / Confidentiality
 - Access Management / Passwords
 - Data Classification
 - Incident Response
 - {Check Compliance Requirements}
- Awareness Training
 - Talk about your company, policies, and why people should care





Improving IT

- Document your network
- Clean up your AD
- Improve Password Management
 - Change passwords
 - Increase length / complexity
 - Consider a Password vault
- Patch your servers
- Identify where sensitive data lives
- Configuration Hardening Standards / Benchmarks





Basic Security Considerations

- Vulnerability Scanning
- 2FA Authentication for Remote Access
- Disk / Backup Tape Encryption
- Malware Protection
- Network Security / Guest segregation
- Email Filtering (Spam / Malware)
- Vendor Management
- Incident Response Plan





Advanced Considerations

- Penetration Testing / Code Review
- IDS / IPS
- AD Membership Monitoring
- Centralized Logging / SIEM
- Network Segmentation
- Network Authentication
- GRC Tools (there is still hope)
- NIST CSF Framework ← CSF Reference Tool





NIST CSF

- Framework for Improving Critical Infrastructure Cybersecurity was published by NIST on 2/12/2014
- Based on many standards, best practices, and guidelines
- Mapped to:
 - ISO 27001
 - NIST SP 800-53
 - COBIT 5
 - CCS CSC 4
 - ANSI/ISA-62443-2-1 and -3-3

PROTECT

DETECT

RESPOND

RECOVER





"Selling" Your Risk Assessment

- Ongoing Risk Management
- Governance Meeting Notes:
 - Current security issues
 - Emerging threats
 - 0-day vulnerabilities
 - Risk remediation / tracking
 - Decisions
- Risk Register
 - Risk acceptance is never permanent





DIY RA Toolkit Includes

- AD Analysis Power Shell Scripts audit.ps1
- Sample Governance Meeting Agenda
- Sample Risk Register
- NIST CSF Resources
- DIY Risk Assessment Checklist
- Sample Vendor Assessment Checklists

https://github.com/yanfosec/diy_ra_toolkit





- ▶ IT ASSET INVENTORY & ANALYSIS
- ▶ SOC 3 CERTIFIED PRIVATE CLOUD
- ► SOC 3 CERTIFIED COLOCATION FACILITIES
- ► ENTERPRISE NETWORK ARCHITECTURE
- ▶ INTRUSION PREVENTION & MULTI-FACTOR AUTHENTICATION



Does your security group need a meeting venue? We can help!

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Questions?



