

Cybersecurity Risk Management Framework











6 Stéps

To Building an effective Risk Management

Framework



The 6 Steps

- 1. Categorize
- 2. Selecting Security Controls
- 3. Implementation
- 4. Assess Controls
- 5. Authorize
- 6. Continuous Monitoring



Step 1: Categorize

- Risk Executive (Function)
- Senior Leadership Buy-in & Support
- Organizational Support
- FIPS 199 as a Categorical Roadmap
- Info Types, Systems & Controls



Categorization Road mapping Tools: FIPS 199

Defining Security Objectives

- Confidentiality
- Integrity
- Availability

- High
- Moderate
- Low



Step 2: Security Controls Selection

Establishing Controls for

- Authorized & Unauthorized Devices
- Authorized & Unauthorized Software
- Secure Configs for all Devices in Environment
- Continuous Vuln Testing & Remediation
- Controlled Use of Admin Privileges
- Maint, Monitoring and Analysis of Audit Logs
- Email & Web Browser Protections
- Malware Defenses
- Control & Limitation of Network Ports
- Data Recovery Capabilities
- Secure configurations of Network Devices (Firewalls, Router & Switches)
- Perimeter & Boundary Defenses
- Data Protection



- Controlled Access Permissions Based
- Wireless Access Control
- Account Monitoring & Control
- · Security Skills Assessment
- Security Training & Best Practices
- Application Software Security
- Physical Security
- Incident Response
- Incident Management
- Penetration Testing
- Establishment of "Red Team"
- Red Team Exercises
- Middleware, Cloud & Vendor Security Postures



Step 3: Implementation

5 Steps to Robust Implementation

- Step 1 Identify
- Step 2 Protect
- Step 3 Detect
- Step 4 Respond
- Step 5 Recover





Step 4: Assess Controls

If it can't be measured, it doesn't exist.....





Step 5: Authorize

NIST's Definition

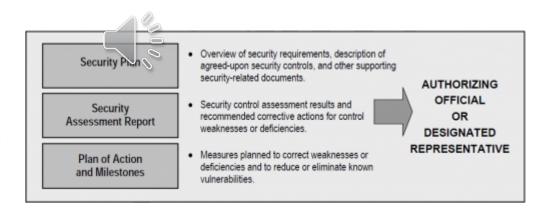
Authorize information system operation based upon a determination of the risk to organizational operations and assets, individuals, other organizations and the Nation resulting from the operation of the information system and the decision that this risk is acceptable



The Authorization Process

Assembling the Authorization Package







Obtaining Authorization









Active Monitoring, Engagement and Adjustment

The question is not "if" our company will be breached, or even when. It has already happened. The real questions are: is our organization aware of it, and how well are we protected for the future?



Accounting for changes in Personnel





Accounting for changes to the hardware/software/firmware





Accounting for changes to the environment





Conclusions & Recommendations

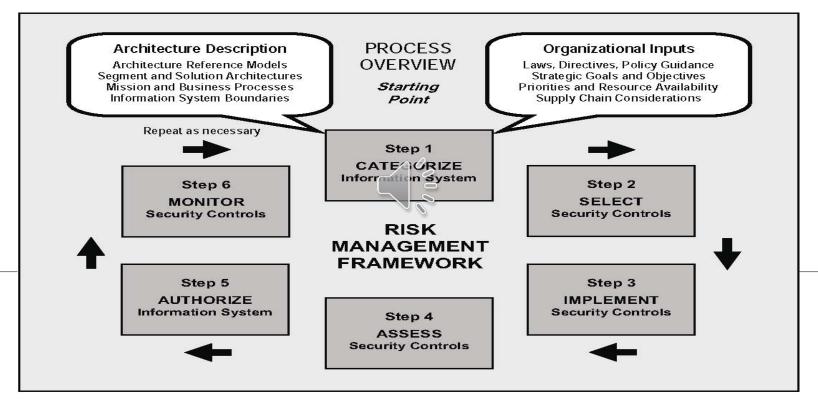


FIGURE 2-2: RISK MANAGEMENT FRAMEWORK





Meeting the requirements, head-on Q&A Session



Thank You for your time.