

Project 3

1. Step 1 – Organizational Boundaries

- a. Find an organization.
- b. Describe the background of that organization
 - i. Purpose
 - ii. Organizational structure
 - iii. Network system description
 - iv. Diagram of the organization (LAN, WAN, intranet, extranet, internet)
- c. Can be real or unreal. Create a network.

2. Step 2 – Organizational Threats

- a. Internal Threats
- b. External Threats
- c. Threat Intelligence
 - i. OPM Breach
 - ii. OPM vs Your Organization
 1. Differences
 2. Similarities

3. Step 3 – Scanning the Network

- a. Network Monitoring Tools **(SAR)**
 - i. MBSA (Summarize Findings)
 - ii. OpenVAS (Summarize Findings)
- b. TCP/IP Model **(SAR & RAR)**
 - i. Definition of TCP/IP Model (Suite of Protocols)

4. Step 4 – Identifying Security Issues

- a. Password Management
- b. Identity Management
- c. Cain & Abel

5. Step 5 – Firewalls and Encryption (SAR)

- a. Role
 - i. Confidentiality
 - ii. Integrity
 - iii. Availability

6. Step 6 – Threat Identification (SAR)

- a. Cyber Attacks
 - b. Remediation & Mitigation Techniques
 - i. Access Control
 - ii. Database Transaction
 - iii. Firewall Log Files
 - iv. Encryption
 - 1. Purpose
 - 2. Function
- 7. Step 7 – Wireshark Network Analysis (SAR)**
- a. Results
- 8. Step 8 – Suspicious Activity (SAR)**
- a. Results
 - i. Real-time Detection
 - b. Firewall State
 - c. Recommendations for Remediation
- 9. Step 9 – Risk and Remediation (RAR)**
- a. Risk (NIST, 2012)
 - b. Remediation
 - c. Security Exploitation
 - d. Threats/Vulnerabilities
 - i. Likelihood of occurring
 - ii. Impact to organization

Project 3 Deliverables

Security Assessment Report (SAR)

- I. Title Page
- II. Abstract
- III. Purpose
- IV. Organization
- V. Scope
- VI. Methodology
- VII. Data
- VIII. Results
- IX. Findings
- X. Conclusion
- XI. References

Risk Assessment Report (RAR)

- I. Title Page
- II. Abstract
- III. Threats
- IV. Vulnerabilities
- V. Likelihood of Exploitation
- VI. Impact from Exploitation
- VII. Remediation
 - a. Cost/Benefit Analysis
- VIII. Plan of Actions & Milestones
 - a. Creation
 - b. Monitoring
 - c. Closing

- IX. Conclusion
- X. References

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