

# IT Security Policy Framework








## Mapping to the Seven Domains

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*Because security without documentation is just expensive paranoia* 

# The Seven Domains Overview

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1. User Domain 
2. Workstation Domain 
3. LAN Domain 
4. LAN-to-WAN Domain 
5. WAN Domain 
6. Remote Access Domain 
7. System/Application Domain 

 "I know all seven domains!"

 \*Forgets which domain the printer belongs to\*

# Domain 1: User Domain

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## Policy Framework Mapping

### Key Policies:

- Acceptable Use Policy (AUP)
- Password Policy
- Security Awareness Training
- Incident Reporting



## Case Study: Phishing Nightmare at MegaCorp

Employee clicked malicious email → Compromised credentials → \$2.4M data breach

*Solution:* Implemented mandatory phishing simulation training + strict email filtering policies



User: "My password is 'password123'"



IT Security: "That's not secure!"



User: "Fine, 'Password123!'"



IT Security: \*internal screaming\*

## Domain 2: Workstation Domain

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### Policy Framework Mapping

#### Key Policies:

- Endpoint Security Policy
- Software Installation Policy
- Patch Management Policy
- Device Configuration Standards

## Case Study: The USB Stick Disaster

Finance employee found USB in parking lot → Plugged into work computer →  
Ransomware infected entire finance network

*Solution:* USB port blocking policy + employee education on social engineering

 "Found this USB in the parking lot!"

 \*Immediately plugs it in\*

 **RANSOMWARE DEPLOYED**

 "Why is everything encrypted?"

## **Domain 3: LAN Domain**

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### **Policy Framework Mapping**

#### **Key Policies:**

- Network Segmentation Policy
- VLAN Management Policy
- Switch Configuration Standards
- Network Access Control (NAC)



## Case Study: The Printer That Saw Everything

Unsecured network printer → Lateral movement → Access to financial systems

*Solution:* Network segmentation + IoT device isolation policies



Smart Printer: "I can scan, print, fax, AND spy on your network!"



Network Admin: "Wait, what was that last part?"



Smart Printer: "...make copies?"



Network Admin: "Suspicious..."



## Domain 4: LAN-to-WAN Domain

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### Policy Framework Mapping

#### Key Policies:

- Firewall Management Policy
- DMZ Configuration Policy
- Intrusion Detection/Prevention Policy
- Traffic Monitoring Policy

## Case Study: The Misconfigured Firewall

"Any-Any-Allow" rule left active → Direct internet access to internal servers → SQL injection attack

*Solution:* Firewall rule review policy + change management procedures

 Firewall: "SHALL NOT PASS!"

 Hacker: "What about through port 80?"

 Firewall: "Oh, that's fine, come on through!"

 Network Admin: "I may have misconfigured something..."

## Domain 5: WAN Domain

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### Policy Framework Mapping

#### Key Policies:


- Internet Usage Policy
- Cloud Service Provider Policy
- Bandwidth Management Policy
- Third-Party Connection Policy

## Case Study: Shadow IT Strikes Back

Marketing team used unauthorized cloud storage → Sensitive data leaked via public sharing link

*Solution:* Cloud Access Security Broker (CASB) + approved cloud services policy

 "Let's just use this free cloud service!"

 \*Uploads entire customer database\*

 \*Link accidentally shared publicly\*

 "Company X leaks 50,000 customer records"

 "Oops..."

## Domain 6: Remote Access Domain

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### Policy Framework Mapping

#### Key Policies:

- VPN Access Policy
- Remote Work Policy
- Multi-Factor Authentication Policy
- Mobile Device Management (MDM)

## Case Study: Coffee Shop Catastrophe

Executive used public Wi-Fi for VPN → Man-in-the-middle attack → Credentials compromised

*Solution:* Always-on VPN policy + public Wi-Fi usage restrictions

 Working from coffee shop...

 "FreeWiFi" looks legit!

 No VPN needed, right?

 Hacker: "Thanks for the login credentials!"

 "Why is someone in Kazakhstan accessing our servers?"

## **Domain 7: System/Application Domain**

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### **Policy Framework Mapping**

#### **Key Policies:**

- Application Security Policy
- Database Security Policy
- Server Hardening Standards
- Backup and Recovery Policy



## Case Study: The Default Password Debacle

New application deployed with default admin credentials → Discovered by automated scanners → Complete system compromise

*Solution:* Secure deployment checklist + credential management policy



"Just deployed the new system!"



Password: admin/admin



"I'll change it later..."



\*Bot scans internet\*



"System compromised in 3... 2... 1..."



"Later never came..."



# **Policy Documentation Best Practices**

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## **Essential Documentation Components**

- **Purpose & Scope** - Why does this policy exist?
- **Roles & Responsibilities** - Who does what?
- **Compliance Requirements** - Legal/regulatory obligations
- **Implementation Guidelines** - How to actually do it
- **Monitoring & Enforcement** - Consequences and auditing



Policy Document: 247 pages



Employee: "TL;DR version?"



IT: "Don't click suspicious links"



Employee: "Got it!"



\*Immediately clicks phishing email\*

# Cross-Domain Policy Integration

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## The Domino Effect

- User clicks malicious link (**User Domain**)
- Workstation gets infected (**Workstation Domain**)
- Malware spreads through network (**LAN Domain**)
- Breaches firewall (**LAN-to-WAN Domain**)
- Exfiltrates data to internet (**WAN Domain**)
- Compromises VPN users (**Remote Access Domain**)
- Attacks critical applications (**System/Application Domain**)

 "It's just one small security gap..."

 \*Chain reaction begins\*

 "EVERYTHING IS ON FIRE!"

 "This is fine" dog meme energy

## Real-World Implementation Stats

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### Policy Effectiveness Metrics

- **95%** reduction in security incidents with proper user training
- **80%** fewer breaches with network segmentation
- **67%** faster incident response with documented procedures
- **45%** cost reduction through standardized policies



### **Success Story: TechStart Inc.**

Implemented comprehensive 7-domain policy framework → Zero major security incidents in 18 months → Achieved SOC 2 compliance → Won major enterprise contracts

## Common Policy Pitfalls

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### The "Swiss Cheese" Model

- Policies with gaps = Multiple failure points
- No regular updates = Outdated protections
- Poor documentation = Confused implementation
- Lack of training = User non-compliance

 Security Policy: "We have holes, but we're still cheese!"

 Threat Actor: "Perfect, I love cheese!"

 Security Policy: "Wait, that's not how this works..."

 Threat Actor: \*Already inside the network\*



# Implementation Roadmap

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## **Phase 1: Foundation (Months 1-3)**

- Document current state
- Identify critical gaps
- Develop core policies

## **Phase 2: Deployment (Months 4-6)**

- Roll out policies by domain
- Conduct training sessions
- Implement monitoring

### **Phase 3: Optimization (Months 7-12)**

- Regular reviews and updates
- Incident response testing
- Continuous improvement

# Success Metrics & KPIs

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## What to Measure

- **Incident Response Time:** < 4 hours to containment
- **Policy Compliance Rate:** > 95% adherence
- **Training Completion:** 100% of users annually
- **Vulnerability Remediation:** < 30 days for critical issues



"Our security metrics are improving!"



\*Shows beautiful dashboard\*



\*Major breach happens next day\*



"Metrics don't lie, but timing does..."

# Tools & Resources

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## Documentation Tools

- **Policy Templates:** NIST, ISO 27001 frameworks
- **Collaboration Platforms:** SharePoint, Confluence
- **Version Control:** Git for policy versioning
- **Training Platforms:** KnowBe4, SANS Security Awareness

## Monitoring & Compliance


- **SIEM Solutions:** Splunk, QRadar, ELK Stack
- **Vulnerability Scanners:** Nessus, OpenVAS
- **Compliance Tools:** Rapid7, Qualys VMDR

## Key Takeaways

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1. **Holistic Approach:** All seven domains are interconnected
2. **Living Documents:** Policies must evolve with threats
3. **User Education:** Technical controls + human awareness
4. **Regular Testing:** Policies are only as good as their implementation
5. **Continuous Improvement:** Security is a journey, not a destination

 "I've read all the security policies!"

 \*Stack of 500+ pages\*

 "I understand everything!"

 \*Gets phished 5 minutes later\*

 "Theory vs. Reality: The Eternal Struggle"

# Questions & Discussion

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## Think About

- Which domain poses the biggest risk in your organization?
- How do you ensure policy compliance without being the "security police"?
- What's your experience with cross-domain security incidents?

 "Any questions about IT security policies?"

 "Yeah, can we just not have them?"

 "That's... not how security works..."

 "But they're so complicated!"

 \*Breach statistics intensify\*

## Additional Resources

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### Standards & Frameworks

- NIST Cybersecurity Framework
- ISO 27001/27002
- COBIT 2019
- SANS Critical Security Controls

### Documentation Templates

- Policy template libraries
- Incident response playbooks
- Risk assessment matrices
- Compliance checklists

**Remember: Good documentation today prevents tomorrow's "How did this happen?" meetings! 🎯**