# TestOut<sup>®</sup>

TestOut Security Pro - English 6.0.x

COURSE OUTLINE

# **TestOut Security Pro Outline - English 6.0.0**

™ Videos: 142 (14:33:02)

□ Demonstrations: 109 (12:43:48)

Simulations: 78☐ Fact Sheets: 135

#### **CONTENTS:**

### 1.0 INTRODUCTION

#### 1.1 Security Overview

- 1.1.1 The Security Landscape (3:50)
- 1.1.2 Security Concepts (4:14)
- 1.1.4 Practice Questions

#### 1.2 Using the Simulator

- ☐ 1.2.1 Using the Simulator (5:28)
- 1.2.2 Configure a Security Appliance
- 1.2.3 Install a Security Appliance

## 2.0 **SECURITY BASICS**

#### 2.1 Understanding Attacks

- 2.1.2 Threat Agents Overview

#### 2.2 Defense Planning

- **№** 2.2.2 User Education (2:33)
- □ 2.2.3 Defense Planning Facts

#### 2.3 Access Control

- 2.3.2 Authentication, Authorization, and Accounting (4:29)
- 2.3.3 Access Control Best Practices

#### 2.4 Cryptography Basics

- 2.4.2 Cryptography Facts
- 2.4.3 Practice Questions

#### 2.5 Network Monitoring

- 2.5.2 Network Monitoring Facts

#### 2.6 Incident Response

- ☐ 2.6.4 Creating a Forensic Drive Image (10:02)
- □ 2.6.5 Incident Response Facts
- 2.6.6 Forensic Investigation Facts
- 2.6.7 Practice Questions

### 3.0 POLICIES, PROCEDURES, AND AWARENESS

#### 3.1 Security Policies

- 3.1.1 Security Policies (11:50)

- 3.1.6 Data Retention Policies (4:54)
- 3.1.8 Practice Questions

#### 3.2 Risk Management

- 3.2.1 Risk Management (3:05)

 ■ 3.2.3 Risk Management Facts

 3.2.4 Practice Questions

 3.3 Business Continuity

 3.3.1 Business Continuity Planning (2:29)
 3.3.2 Business Continuity Facts

#### 3.4 Manageable Network Plan

3.3.3 Practice Questions

- 3.4.1 Manageable Network Plan (8:40)
- 3.4.2 Manageable Network Plan 2 (6:54)
- 3.4.4 Practice Questions

#### 3.5 Social Engineering

- ☐ 3.5.4 Investigating a Social Engineering Attack (8:07)
- 3.5.5 Respond to Social Engineering

#### 3.6 App Development and Deployment

- 3.6.4 Version Control Management (4:14)
- 3.6.5 Practice Questions

#### 3.7 Employee Management

- 3.7.1 Employment Practices (8:12)

#### 3.8 Mobile Devices

- 3.8.1 Mobile Device Management (10:20)

#### 3.9 Third-Party Integration

■ 3.9.1 Third-Party Integration Security Issues (7:47)

- 3.9.3 Practice Questions

#### 4.0 PHYSICAL

#### 4.1 Physical Threats

- **№** 4.1.1 Physical Security (11:25)

- 4.1.4 Implement Physical Security

#### 4.2 Device Protection

- 4.2.4 Practice Questions

#### 4.3 Network Infrastructure Protection

- 4.3.2 Physical Network Protection Facts
- 4.3.3 Practice Questions

#### **4.4 Environmental Controls**

- 4.4.4 Fire Protection Facts

## **5.0 PERIMETER**

#### 5.1 Recon and Denial

- **№** 5.1.1 Reconnaissance (6:41)

- **№** 5.1.4 Denial of Service (DoS) (4:45)

#### 5.2 Spoofing and Poisoning

**■** 5.2.5 DNS Attacks (6:09) 5.2.8 Prevent Zone Transfers 5.2.9 Practice Questions 5.3 Security Appliances 5.3.1 Security Solutions (4:46) **№** 5.3.2 Security Zones (4:34) 

- 5.3.4 All-In-One Security Appliances (3:10)
- ☐ 5.3.6 Configuring Network Security Appliance Access (5:40)
- 5.3.7 Configure Network Security Appliance Access

#### 5.4 Demilitarized Zones (DMZ)

- 5.4.1 Demilitarized Zones (6:49)

#### 5.5 Firewalls

- 5.5.1 Firewalls (6:24)
- 5.5.2 Firewall Facts

- √ 5.5.5 Practice Questions

#### 5.6 Network Address Translation (NAT)

- □ 5.6.3 Configuring NAT on an NSA (4:13)
- 5.6.4 NAT Facts
- 5.6.5 Practice Questions

## 5.7 Virtual Private Networks (VPN) 5.7.1 Virtual Private Networks (VPNs) (7:03) 5.7.4 Configure a Remote Access VPN 5.7.5 Configure a VPN Connection iPad **■** 5.7.6 VPN Facts 5.7.8 Practice Questions **5.8 Web Threat Protection**

- 5.8.5 Practice Questions

#### **5.9 Network Access Protection**

- 5.9.1 Network Access Protection (6:34)
- □ 5.9.2 Implementing NAC with DHCP Enforcement (14:04)
- 5.9.3 NAP Facts

#### 5.10 Wireless Overview

- 5.10.1 Wireless Networking Overview (5:58)
- 5.10.2 Wireless Antenna Types (5:01)
- 5.10.4 Wireless Encryption (5:52)

#### **5.11 Wireless Attacks**

- 5.11.1 Wireless Attacks (6:21)
- 5.11.2 Wireless Attack Facts

- 5.11.6 Practice Questions

#### 5.12 Wireless Defenses

- **№** 5.12.1 Wireless Security Considerations (7:45)
- 5.12.2 Wireless Authentication (5:23)
- ☐ 5.12.4 Hardening a Wireless Access Point (6:39)
- 5.12.5 Harden a Wireless Network
- § 5.12.6 Configure WIPS

#### 6.0 **NETWORK**

#### **6.1 Network Threats**

#### 6.2 Network Device Vulnerabilities

- **№** 6.2.1 Device Vulnerabilities (6:55)
- ☐ 6.2.3 Searching defaultpasswords.com (2:18)
- ☐ 6.2.4 Securing a Switch (2:56)
- 6.2.6 Practice Questions

#### **6.3 Network Applications**

- □ 6.3.2 Configuring Application Control Software (7:46)
- 6.3.4 Practice Questions

#### 6.4 Switch Attacks

- **№** 6.4.1 Switch Attacks (5:42)
- 6.4.3 Practice Questions

#### 6.5 Switch Security

- ☐ 6.5.4 Hardening a Switch (10:37)

- 6.5.7 Secure Access to a Switch 2

#### 6.6 Using VLANs

- **№** 6.6.1 VLAN Overview (4:07)
- ☐ 6.6.2 Configuring VLANs from the CLI (4:39)

- ☐ 6.6.5 Configuring VLANs (3:09)

#### 6.7 Router Security

- **№** 6.7.1 Router Security (7:03)
- **№** 6.7.2 Router ACLs (2:48)
- ☐ 6.7.4 Configuring ACLs (7:10)

- 6.7.8 Practice Questions

#### 6.8 Intrusion Detection and Prevention

- ☐ 6.8.4 Implementing Intrusion Monitoring (9:17)
- ☐ 6.8.5 Implementing Intrusion Prevention (5:58)

#### **6.9 Vulnerability Assessment**

- 6.9.3 Scanning a Network with Nessus (7:26)
- ☐ 6.9.4 Scanning a Network with Retina (7:16)
- 6.9.5 Scan for Vulnerabilities 1
- 6.9.6 Scan for Vulnerabilities 2

- 6.9.7 Scan for Vulnerabilities 3
- 6.9.8 Scan for Vulnerabilities 4
- ☐ 6.9.9 Performing Port and Ping Scans (4:57)

#### 6.10 Protocol Analyzers

- ☐ 6.10.3 Analyzing Network Traffic (13:19)

#### **6.11 Remote Access**

- ☐ 6.11.3 Configuring a RADIUS Solution (9:46)

#### **6.12 Network Authentication**

- ☐ 6.12.5 Controlling the Authentication Method (6:45)
- 6.12.6 Configure Kerberos Policy Settings
- ☐ 6.12.7 Credential Management (4:26)

#### 6.13 Penetration Testing

- ☐ 6.13.3 Exploring Penetration Testing Tools (11:47)

#### 6.14 Virtual Networking

- ☐ 6.14.3 Configuring Virtual Network Devices (3:13)

- 6.14.6 Create Virtual Switches

#### 6.15 Software-Defined Networking (SDN)

#### 6.16 Cloud Services

### 7.0 HOST

#### 7.1 Malware

- 1.1.1 Malware (10:59)

- ☐ 7.1.4 Implementing Malware Protections (6:17)
- ¬ 7.1.5 Using Windows Defender (7:18)
- 7.1.6 Configure Windows Defender
- 7.1.7 Practice Questions

#### 7.2 Password Attacks

- 7.2.1 Password Attacks (6:28)
- ☐ 7.2.3 Using Rainbow Tables (13:13)
- ☐ 7.2.4 Capturing Passwords (3:33)
- 7.2.5 Practice Questions

#### 7.3 Windows System Hardening

- ☐ 7.3.3 Hardening an Operating System (6:49)
- ☐ 7.3.4 Managing Automatic Updates (4:42)
- 7.3.5 Configure Automatic Updates
- ☐ 7.3.6 Configuring Windows Firewall (6:13)
- 7.3.7 Configure Windows Firewall

¬ 7.3.8 Configuring Windows Firewall Advanced Features (10:47) 7.3.9 Practice Questions 7.4 Hardening Enforcement ☐ 7.4.2 Using Security Templates and Group Policy (8:02) ☐ 7.4.3 Configuring GPOs to Enforce Security (11:31) 7.4.5 Manage Services with Group Policy 7.4.6 Practice Questions 7.5 File Server Security 7.5.1 File Server Security (7:42) ☐ 7.5.4 Configuring NTFS Permissions (11:14) 7.6 Linux Host Security 1.6.1 Linux Host Security (14:44) ☐ 7.6.2 Removing Unnecessary Services and Scanning Ports (10:28) √ 7.6.4 Practice Questions 7.7 Embedded Systems 1.7.1 SCADA and ICS Systems (5:52) 7.7.2 IoT Device Security (4:40) 7.7.4 Practice Questions 7.8 Log Management **™** 7.8.1 Log Management (5:06) **■** 7.8.2 Log Facts ☐ 7.8.3 Logging Events with Event Viewer (5:15) 1.8.4 Windows Event Subscriptions (7:15) ☐ 7.8.5 Configuring Source-Initiated Subscriptions (5:26) ☐ 7.8.6 Configuring Remote Logging on Linux (8:30) 

#### 7.9 Audits

- 1.9.1 Audits (4:12)
- ☐ 7.9.3 Auditing the Windows Security Log (9:12)
- 7.9.4 Configure Advanced Audit Policy
- ☐ 7.9.5 Auditing Device Logs (1:50)
- § 7.9.6 Enable Device Logs

#### **7.10 Email**

- 7.10.1 Email Security (6:29)
- ☐ 7.10.3 Protecting a Client from Spam (5:49)
- ☐ 7.10.4 Securing an Email Server (2:51)
- 7.10.5 Configure Email Filters
- ¬ 7.10.6 Securing Email on iPad (5:22)
- 7.10.7 Secure Email on iPad
- 7.10.8 Practice Questions

#### 7.11 BYOD Security

- **№** 7.11.1 BYOD Security Issues (10:20)
- ☐ 7.11.3 Securing Mobile Devices (7:19)
- 7.11.4 Secure an iPad

#### 7.12 Mobile Device Management

- 7.12.2 Mobile Application Security (6:56)
- ☐ 7.12.4 Enforcing Security Policies on Mobile Devices (6:41)
- ☐ 7.12.5 Enrolling Devices and Performing a Remote Wipe (7:03)
- ☐ 7.12.7 Creating a Guest Network for BYOD (6:03)
- 7.12.8 Create a Guest Network for BYOD
- 7.12.9 Practice Questions

#### 7.13 Host Virtualization

- ☐ 7.13.4 Creating Virtual Machines (6:51)
- ¬ 7.13.5 Managing Virtual Machines (5:22)
- 7.13.6 Create Virtual Machines
- ☐ 7.13.7 Adding Virtual Network Adapters (3:07)
- 7.13.8 Practice Questions

#### 8.0 APPLICATION

#### **8.1 Access Control Models**

- 8.1.1 Access Control Models (4:59)
- 8.1.2 Access Control Facts
- 8.1.3 Access Control Model Facts
- ☐ 8.1.4 Implementing Discretionary Access Control (14:54)
- 8.1.5 Trusts and Transitive Access (4:55)
- 8.1.6 Trusts and Transitive Access Facts

#### 8.2 Authentication

- 8.2.1 Authentication (6:52)
- **B.** 8.2.2 Authentication Methods (4:08)
- 8.2.3 Authentication Facts
- □ 8.2.4 Using a Biometric Scanner (2:47)
- □ 8.2.5 Using Single Sign-on (4:23)
- 8.2.6 Single Sign-on Facts
- 8.2.7 Practice Questions

#### 8.3 Authorization

- **№** 8.3.1 Authorization (3:45)
- 8.3.2 Cumulative Access (6:21)
- 8.3.3 Authorization Facts
- □ 8.3.4 Examining the Access Token (9:15)

#### 8.4 Web Application Attacks

- 8.4.1 Web Application Attacks (2:39)
- 8.4.2 XSS and CSRF Attacks (9:41)
- 8.4.3 Injection Attacks (4:00)
- 8.4.4 Header Manipulation (4:18)
- 8.4.5 Zero Day Application Attacks (3:18)
- 8.4.6 Client-Side Attacks (3:19)
- 8.4.7 Web Application Attack Facts

8.5 Internet Browsers ■ 8.5.1 Web Browser Threats (8:01) □ 8.5.2 Configuring Browser Security and Plugins (12:09) □ 8.5.3 Clearing the Browser Cache (4:56) § 8.5.5 Configure IE Pop-up Blocker ■ 8.5.6 Internet Explorer Security Facts ☑ 8.5.7 Enforcing IE Settings Through GPO (3:31) 8.5.9 Configure IE Preferences in a GPO **8.6 Application Development**  8.6.1 Secure Coding Concepts (9:58) ■ 8.6.2 Application Hardening (7:53) ■ 8.6.3 Application Development Security Facts □ 8.6.4 Hardening Applications on Linux (3:33) □ 8.6.5 Implementing Application Whitelisting with AppLocker (7:23) ■ 8.6.6 Implement Application Whitelisting with AppLocker 8.6.8 Implement Data Execution Preventions (DEP) ■ 8.6.9 Hardening Applications Facts 8.6.10 NoSQL Security (4:22) ■ 8.6.11 NoSQL Security Facts 8.7 Active Directory Overview ■ 8.7.1 Active Directory Introduction (6:48) 8.7.2 Active Directory Structure (5:27) ■ 8.7.4 Active Directory Facts 8.8 Windows Domain Users and Groups □ 8.8.1 Creating User Accounts (5:10)

- ☐ 8.8.2 Managing User Account Properties (8:30)
- 8.8.3 Create User Accounts

- 8.8.4 Manage User Accounts
- □ 8.8.5 Managing Groups (4:58)
- § 8.8.6 Create a Group
- 8.8.7 Create Global Groups
- 8.8.8 User Account Management Facts

#### 8.9 Linux Users

- **№** 8.9.1 Linux User and Group Overview (11:00)
- □ 8.9.2 Managing Linux Users (8:40)
- 8.9.3 Linux User Commands and Files
- 8.9.4 Create a User Account
- 8.9.5 Rename a User Account
- § 8.9.6 Delete a User
- 8.9.7 Change Your Password
- 8.9.8 Change a User's Password
- 8.9.9 Lock and Unlock User Accounts

#### 8.10 Linux Groups

- 8.10.2 Linux Group Commands
- 8.10.4 Add Users to a Group
- 8.10.5 Remove a User from a Group

#### 8.11 Linux User Security

- 8.11.1 Linux User Security and Restrictions (7:14)
- □ 8.11.2 Configuring Linux User Security and Restrictions (7:51)
- 8.11.3 Linux User Security and Restriction Facts

#### 8.12 Group Policy Overview

- 8.12.1 Group Policy Overview (9:52)
- □ 8.12.2 Configuring Local Policies (11:28)
- ☑ 8.12.3 Creating and Linking Group Policy Objects (10:28)
- 8.12.4 Group Policy Facts
- 8.12.5 Create and Link a GPO
- 8.12.6 Practice Questions

#### 8.13 Hardening Authentication 1

- 8.13.1 Hardening Authentication (10:19)
- ☑ 8.13.2 Configuring User Account Restrictions (4:52)
- □ 8.13.4 Configuring Account Policies and UAC Settings (6:25)
- □ 8.13.6 Hardening User Accounts (7:40)
- 8.13.7 Restrict Local Accounts
- 8.13.8 Secure Default Accounts
- 8.13.10 Hardening Authentication Facts

#### 8.14 Hardening Authentication 2

- □ 8.14.1 Configuring Smart Card Authentication (5:37)
- § 8.14.2 Configure Smart Card Authentication
- 8.14.3 Smart Card Authentication Facts
- ☐ 8.14.4 Using Fine-Grained Password Policies (5:34)
- 8.14.5 Fine-Grained Password Policy Facts
- 8.14.6 Create a Fine-Grained Password Policy

#### 9.0 DATA

#### 9.1 Data Management

- 9.1.1 Information Classification (2:54)
- 9.1.2 Information Classification Facts
- ₱ 9.1.3 Data Destruction (8:43)
- □ 9.1.4 File Shredding and Hard Drive Wiping (9:35)
- 9.1.5 Data Destruction Facts

#### 9.2 Advanced Cryptography

- 9.2.2 Advanced Cryptography Facts
- 9.2.3 Cryptography Algorithms (2:58)
- 9.2.4 Cryptography Algorithms Facts

#### 9.3 Cryptography Implementations

9.3.3 Cryptographic Implementation Facts 9.3.4 Practice Questions 9.4 Cryptographic Attacks 9.4.2 Cryptographic Attack Facts 9.5 Symmetric Encryption 9.5.1 Symmetric Encryption (4:18) □ 9.5.3 Cracking a Symmetric Encryption Key (4:47) 9.6 Asymmetric Encryption 9.6.2 Asymmetric Encryption Facts 9.6.3 Practice Questions 9.7 File Encryption 9.7.3 Encrypt Files with EFS **№** 9.7.4 PGP and GPG (4:22) □ 9.7.5 Encrypting Files with GPG (5:46) 9.7.6 BitLocker and Database Encryption (4:39) 9.7.8 Configure BitLocker with a TPM 9.8 Public Key Infrastructure (PKI) 9.8.1 Certificates (7:04) □ 9.8.2 Managing Certificates (10:34) 9.8.3 Manage Certificates 9.8.5 CA Implementation (5:34) □ 9.8.6 Configuring a Subordinate CA (10:08)

9.8.7 PKI Management Facts

9.8.8 Practice Questions

#### 9.9 Hashing

- 9.9.1 Hashing (4:06)
- 9.9.2 Hashing Algorithms (2:08)
- 9.9.3 Hashing Facts
- 9.9.4 Using Hashes (5:05)

#### 9.10 Data Transmission Security

- 9.10.1 Secure Protocols (6:22)
- 9.10.3 Secure Protocol Facts
- 9.10.5 Allow SSL Connections
- 9.10.6 IPsec (4:49)
- 9.10.7 IPsec Facts
- □ 9.10.8 Requiring IPsec for Communications (11:39)

#### 9.11 Data Loss Prevention (DLP)

- 9.11.1 Data Loss Prevention (DLP) (3:47)

#### 9.12 Redundancy

- **11.** 9.12.1 Redundancy (3:23)

- **№** 9.12.4 RAID (4:38)
- ☐ 9.12.5 Implementing RAID (7:18)
- 9.12.6 RAID Facts
- 9.12.7 Configure Fault-Tolerant Volumes
- **№** 9.12.8 Clustering (7:06)
- 9.12.9 Clustering Facts

#### 9.13 Backup and Restore

- 9.13.2 Backup and Restore Facts
- 9.13.3 Backup Management Facts
- □ 9.13.4 Backing Up Workstations (7:55)
- 9.13.5 Back Up a Workstation

- 9.13.6 Restoring Workstation Data from Backup (4:04)
   9.13.7 Backing Up a Domain Controller (2:45)
   9.13.8 Back Up a Domain Controller
   9.13.9 Restoring Server Data from Backup (3:00)
- 9.14 Cloud Storage
  - ₱ 9.14.1 Cloud Storage Security (2:44)
  - 9.14.2 Cloud Storage Security Facts
  - 9.14.3 Practice Questions

#### **A.0 SECURITY PRO PRACTICE EXAMS**

#### A.1 Preparing for Certification

- - A.1.3 How to take the Certification Exam
  - A.1.4 Certification FAQs
- A.2 Security Pro Domain 1: Access Control and Identity Management
- A.3 Security Pro Domain 2: Policies, Procedures, Awareness
- A.4 Security Pro Domain 3: Physical Security
- A.6 Security Pro Domain 5: Network Defenses
- A.7 Security Pro Domain 6: Host Defenses
- A.8 Security Pro Domain 7: Application Defenses
- A.9 Security Pro Domain 8: Data Defenses
- A.10 Security Pro Domain 9: Audits and Assessments
- A.11 Security Pro Certification Practice Exam

#### **B.0 COMPTIA SECURITY+ PRACTICE EXAMS**

#### **B.1 Preparing for Certification**

- B.1.2 Security+ Exam Objectives by Course Section
- B.1.3 Exam FAQs
- B.1.5 Exam-taking Hints and Tips
- B.1.6 Why Certify?
- B.2 CompTIA Security+ Domain 1: Threats, Attacks and Vulnerabilities, All Questions
- ☑ B.3 CompTIA Security+ Domain 2: Technologies and Tools, All Questions

- ☑ B.7 CompTIA Security+ Domain 6: Cryptography and PKI, All Questions
- ☑ B.8 CompTIA Security+ Certification Practice Exam