# 98-367: Security Fundamentals

This document shows where changes to Exam 98-367 have been made to include updates for Windows 10 as well as security and threat terms. These changes are effective as of June 23, 2016.

#### 1. Understand security layers (25–30%)

1.1. Understand core security principles

Confidentiality; integrity; availability; how threat and risk impact principles; principle of least privilege; social engineering; attack surface analysis; threat modelling

1.2. Understand physical security

Site security; computer security; removable devices and drives; access control; mobile device security; disable Log On Locally; keyloggers

1.3. Understand Internet security

Browser security settings; zones; secure websites

1.4. Understand wireless security

Advantages and disadvantages of specific security types; keys; service set identifiers (SSIDs); MAC filters

### 2. Understand operating system security (30-35%)

2.1. Understand user authentication

Multifactor authentication; physical and virtual smart cards; Remote Authentication Dial-In User Service (RADIUS); Public Key Infrastructure (PKI); understand the certificate chain; biometrics; Kerberos and time skew; use Run As to perform administrative tasks; password reset procedures

2.2. Understand permissions

File system permissions; share permissions; registry; Active Directory; NT file system (NTFS) versus file allocation table (FAT); enable or disable inheritance; behavior when moving or copying files within the same disk or on another disk; multiple groups with different permissions; basic permissions and advanced permissions; take ownership; delegation; inheritance

2.3. Understand password policies

Password complexity; account lockout; password length; password history; time between password changes; enforce by using Group Policies; common attack methods; password reset procedures; protect domain user account passwords

2.4. Understand audit policies

Types of auditing; what can be audited; enable auditing; what to audit for specific purposes; where to save audit information; how to secure audit information

2.5. Understand encryption

Encrypting file system (EFS); how EFS-encrypted folders impact moving/copying files; BitLocker (To Go); TPM; software-based encryption; MAIL encryption and signing and other uses; virtual private network (VPN); public key/private key; encryption algorithms; certificate properties; certificate services; PKI/certificate services infrastructure; token devices; lock down devices to run only trusted applications

2.6. Understand malware

Buffer overflow; viruses, polymorphic viruses; worms; Trojan horses; spyware; ransomware; adware; rootkits; backdoors; zero day attacks

#### 3. Understand network security (20-25%)

3.1. Understand dedicated firewalls

Types of hardware firewalls and their characteristics; when to use a hardware firewall instead of a software firewall; SCMs and UTMs; stateful vs. stateless firewall inspection; Security Compliance Manager; security baselines

3.2. Understand Network Access Protection (NAP)

Purpose of NAP; requirements for NAP

3.3. Understand network isolation

Virtual local area networks (VLANs); Routing; honeypot; perimeter networks; network address translation (NAT); VPN; IPsec; server and domain isolation

3.4. Understand protocol security

Protocol spoofing; IPsec; tunnelling; DNSsec; network sniffing; denial-of-service (DoS) attacks; common attack methods

## 4. Understand security software (15–20%)

4.1. Understand client protection

Antivirus; protect against unwanted software installations; User Account Control (UAC); keep client operating system and software updated; encrypt offline folders; software restriction policies; principle of least privilege

4.2. Understand email protection

Antispam, antivirus, spoofing, phishing, and pharming; client vs. server protection; Sender Policy Framework (SPF) records; PTR records

4.3. Understand server protection

Separation of services; hardening; keep servers updated; secure dynamic Domain Name System (DNS) updates; disable unsecure authentication protocols; Read-Only Domain Controllers (RODC); separate management VLAN; Microsoft Baseline Security Analyzer (MBSA)