

# THE DEFINITIVE SECURITY CONTROLS MASTER GUIDE

*A strategic breakdown of Categories, Functions, and Exam Arbitration Rules*

## PART 1: THE CATEGORIES (What is the mechanism?)

<b>Managerial</b> (Administrative)	<i>The Noun: High-level risk management &amp; governance</i> Driven by executives, HR, or Legal to manage organizational liability and overall business posture.	<ul style="list-style-type: none"><li>• Policies (AUP, Data Retention)</li><li>• Risk Assessments</li><li>• Background Checks</li><li>• Separation of Duties (SoD)</li></ul>
<b>Operational</b>	<i>The Verb: Tactical, human-driven daily processes</i> The day-to-day routine tasks performed by IT, SecOps, or physical security staff to maintain hygiene.	<ul style="list-style-type: none"><li>• Security Awareness Training</li><li>• Manual Log Reviews</li><li>• Threat Hunting</li><li>• Media Sanitization</li></ul>
<b>Technical</b> (Logical)	<i>The Code: Automated solutions in silicon/software</i> Controls enforced by operating systems, network hardware, and applications.	<ul style="list-style-type: none"><li>• Firewalls / ACLs</li><li>• Encryption (AES, RSA)</li><li>• Multi-Factor Authentication (MFA)</li><li>• Active Directory GPOs</li></ul>
<b>Physical</b>	<i>The Object: Tangible, real-world barriers</i> Environmental controls you can touch, install, or physically bypass.	<ul style="list-style-type: none"><li>• Fences, Mantraps, Bollards</li><li>• Biometric Locks &amp; Badges</li><li>• HVAC &amp; Fire Suppression</li><li>• Server Racks &amp; Cable Ramps</li></ul>

## PART 2: THE FUNCTIONS (What is the primary intent?)

<b>Preventive</b> (Before / During)	Actively blocks the attack or violation from succeeding. The primary defense layer.	Firewall dropping a packet, OS locking an account after 3 fails, Mantrap stopping tailgating.
<b>Detective</b> (During / After)	Identifies and records an anomaly, but does not actively stop the execution.	CCTV cameras recording, SIEM dashboards, IDS logs, motion sensors.
<b>Corrective</b> (After)		

	Restores the system or environment to a known-good, secure state after damage is done.	Restoring data from a backup, re-imaging a compromised laptop, deploying a software patch.
<b>Deterrent</b> (Before)	Relies on human psychology and fear of consequence to discourage an attack.	"Guard Dog" signs, SSH warning banners, visible unarmed security guards.
<b>Compensating</b> (The Workaround)	The "duct tape" deployed when the ideal primary control is technically or financially impossible.	Putting an unpatchable legacy Windows XP system on an air-gapped, isolated VLAN.
<b>Directive</b> (The Mandate)	A strict rule, contract, or standard operating procedure that dictates human behavior.	Acceptable Use Policy (AUP), HIPAA compliance frameworks, signed employee contracts.

## PART 3: THE EXAM ARBITRATION FRAMEWORK

### 1. The Noun vs. Verb Test (Directive vs. Operational)

Is the scenario about the *document* mandating the behavior? → **Directive** (e.g., The written AUP)

Is the scenario about the *human beings* actually doing the work? → **Operational** (e.g., Helpdesk running a phishing drill)

### 2. The Altitude of Risk Test (Managerial vs. Operational)

Is this mitigating high-level corporate/HR liability? → **Managerial** (e.g., HR background checks)

Is this a tactical SecOps/IT process to maintain daily hygiene? → **Operational** (e.g., Admin reviewing firewall logs)

### 3. The "Mindless Robot" Test (Preventive vs. Deterrent)

*Imagine the attacker is an automated script that cannot feel fear or read warnings.*

Does the control still physically/logically stop the script? → **Preventive** (e.g., Dropped IP, locked door)

Does the script ignore it and keep going? → **Deterrent** (e.g., Warning banner, fake camera)

### 4. The "State Change" Test (Detective vs. Corrective)

Does the control just make noise, flash a light, or write a log? → **Detective** (e.g., SIEM alert)

Does the control actively alter the environment to fix the broken thing? → **Corrective** (e.g., Re-imaging a drive)

### 5. The "Apology" Test (Compensating)

Is this the permanent, best-practice way to secure the system? → **Standard Function**

Are you apologizing to the auditor because you couldn't do it the right way? → **Compensating**