Chapter 10

Physical Security



Episode Physical Security Overview

title:

Objective: Overview



Episode Physical Security

title:

Objective: 2.7 Explain the importance of physical security controls.



Physical Security

- IT services rely on underlying hardware
 - On-premises
 - Cloud
- Local access to IT systems is a security risk
 - Encrypt data at rest



Personnel

- Guards
- Badges
- Visitor logs
- Robot sentries
- Reception



Facility Security

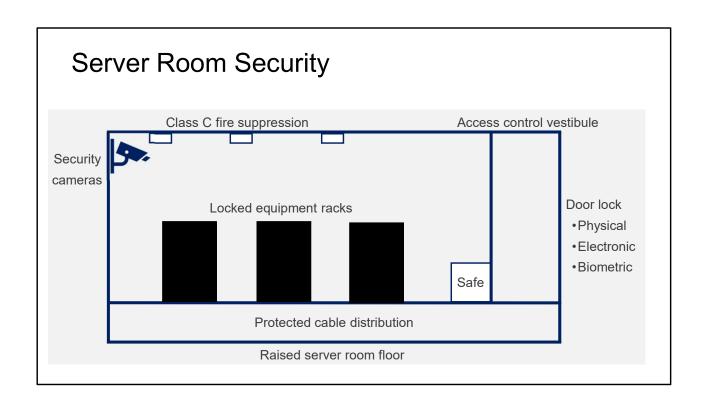
- Location
 - Undisclosed address
 - Protection from natural disasters
- Signage
- Fencing
 - Height
 - Periodic inspection



Facility Security

- Bollards/barricades
- Industrial camouflage
- Motion detection
 - Lighting
 - Alarm systems







Quick Review

- Encrypt data at rest
- Personnel and facility security protect equipment
- Air-gapped networks are physically disconnected from other networks



Episode Keylogger Demo

title:

Objective: 2.2 Given a scenario, analyze potential indicators to

determine the type of attack.



Episode Environmental Controls

title:

Objective: 2.7 Explain the importance of physical security controls.



Server Room Airflow Management

- Keep incoming cool air separated from outgoing warmer air
- Draw in cool air to equipment
- Draw hot air from equipment out



Server Room Airflow Management

- Containment panels/curtains
 - Prevent cool and warm air from mixing
- Blanking panels
 - Fill empty rack slots to optimize airflow



Hot and Cold Aisles Equipment rack Equipment rack Warm exhaust air Raised floor with perforated floor tiles Cool air



Environmental Monitoring

- Sensors
 - Temperature
 - Pressure
 - Humidity
 - Noise
 - Proximity
- Monitoring software



Quick Review

- Hot and cold aisles keep warm and cool air separate
- Cool air is fed into the equipment
- Warm exhaust air is drawn away from the equipment

