



Physical Security

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Agenda

- What is physical security?
- Why does physical security matter?
- What are the risks of poor physical security?
- What are the different threats to physical security?
- What are some physical security countermeasures?
- Take a look at physical security in action



Learning Objectives

- Identify components of Physical Security Layer
- Identify security risks
- Describe potential solutions to mitigate the security risks

What is Physical Security?

- Physical security is the protection of hardware, software, networks, and data from physical threats
- How does this apply to cyber security?



Why Physical Security Matters

- If physical security is not up to par then the hardware, software, networks, and data belonging to the respective institution(s) are left vulnerable
- For example, if hardware is stolen or damaged, the data is stolen or damaged





Risks of Poor Physical Security

- Unauthorized access
- Data loss/corruption
- Hardware loss/corruption
- Loss of proprietary information
- General misuse of hardware, software, data, or networks



Physical Security Threats

- Criminal Acts
 - Theft, attacks, vandalism
- Accidental Acts
 - Spilled coffee, tripping over wires
- Environmental conditions
 - Humidity, extreme temperatures, lightning
- Natural occurrences
 - Tornado, earthquake, tsunami, flooding

Physical Security Countermeasures

- Interior walls and doors
- Locks/keys
- Exterior walls, fencing, gates
- Security guards
- Security dogs
- Fireproof construction materials
- Fire detection/suppression systems
- Access badges and ID cards
- Alarm systems
- Video surveillance
- Wiring closets
- Checklists



Physical Security in Action

- While we can get a relatively comprehensive list of physical security countermeasures, there are nearly countless ways to implement and improve physical security
- Not only should physical security be implemented from the beginning, but it should also be tested regularly and updated as often as feasible
- Violations should be addressed swiftly and seriously





Remember...

- There always should be more than one physical security countermeasure in place
- There are countless combinations of physical security countermeasures
- Inspections and regular checks of the system in place are necessary to maintaining an effective system



Additional Resources

- Protecting Physical Security Systems against Network Attacks
 - <https://www.trendmicro.com/vinfo/us/security/news/internet-of-things/protecting-physical-security-systems-against-network-attacks>
- Why Physical Security Is Just As Important As Online Security
 - <https://www.ittropolis.com/physical-security-just-important-online-security/>
- Physical Security Facts
 - <https://sites.google.com/a/pccare.vn/it/security-pages/physical-security-facts>



Activity



See the Physical Security handout and complete the activity