

Networking

Networked Devices



Networked Devices

- VoIP phone – Voice over IP Phones
 - Uses internet protocol rather than analog phone line
 - Each device has a computer in it
- Printer – Network printers, not personal printers
 - Can be accessed by anyone on the network



Networked Devices

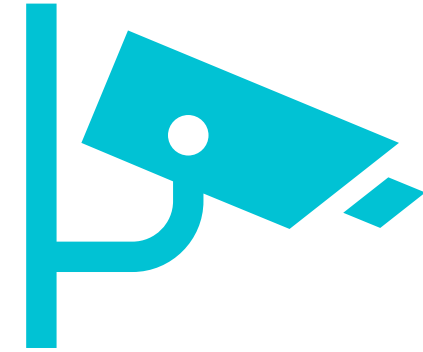
- Physical Access Control Devices
 - Smart cards or badges
 - Must be scanned to open a door
 - Biometric scanners
 - Person must use biometrics to open a door
 - Fingerprints are a common biometric
 - Keypads
 - Person must know the passcode to open the door



A keypad that requires a pin to open a door

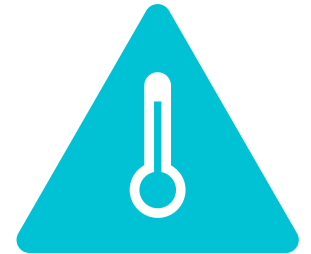


Networked Devices



- Cameras – Video surveillance
 - Also, audio surveillance
 - Connect to a network and can be accessed remotely

- HVAC Sensors – Heating, Venting, and Air Conditioning
 - User can control temperature settings remotely
 - Can be hooked up to fire prevention system



Networked Devices

- IoT Devices
 - Smart Refrigerators
 - Refrigerators that are connected to the network and can be controlled remotely to order food, set temperature, etc...
 - Smart Speakers
 - Speakers that are connected to the network and can be controlled remotely
 - Smart Thermostats
 - Controlled remotely with the ability to set the temperature
 - Smart Doorbells
 - Doorbells that are connected remotely, typically with a camera attached to them



Smart doorbells typically come with cameras attached to them



Networked Devices

- SCADA – Supervisory Control and Data Acquisition
 - Sometimes referred to as ICS
 - Industrial Control Systems
 - Power distribution for systems connected
 - System of sensors and controllers
 - Can be accessed from a central location



Controlling multiple components
from a remote location

