

# Solution

## Current Network

Sam's Scoops device list					
Department	Computers	Mobiles/Tabl ets	Others	Security importance/ prioritization	Handles sensitive data
Office	10			2	
Servers	3			1	•
Employees' devices		15		3	
Finance	4			1	•
IoT			20	2	

### Security importance/prioritization

1= Most important/Priority

2= Important/Mild priority

3= Less critical/No priority

## Network Segmentation

Sam's Scoops' network would benefit from Network segmentation. Different devices used by Sam's Scoops will have to be on a different network independent of other devices depending on the importance and access to sensitive data. The network can be segmented into parts such as demilitarized zone, public access, private network etc.

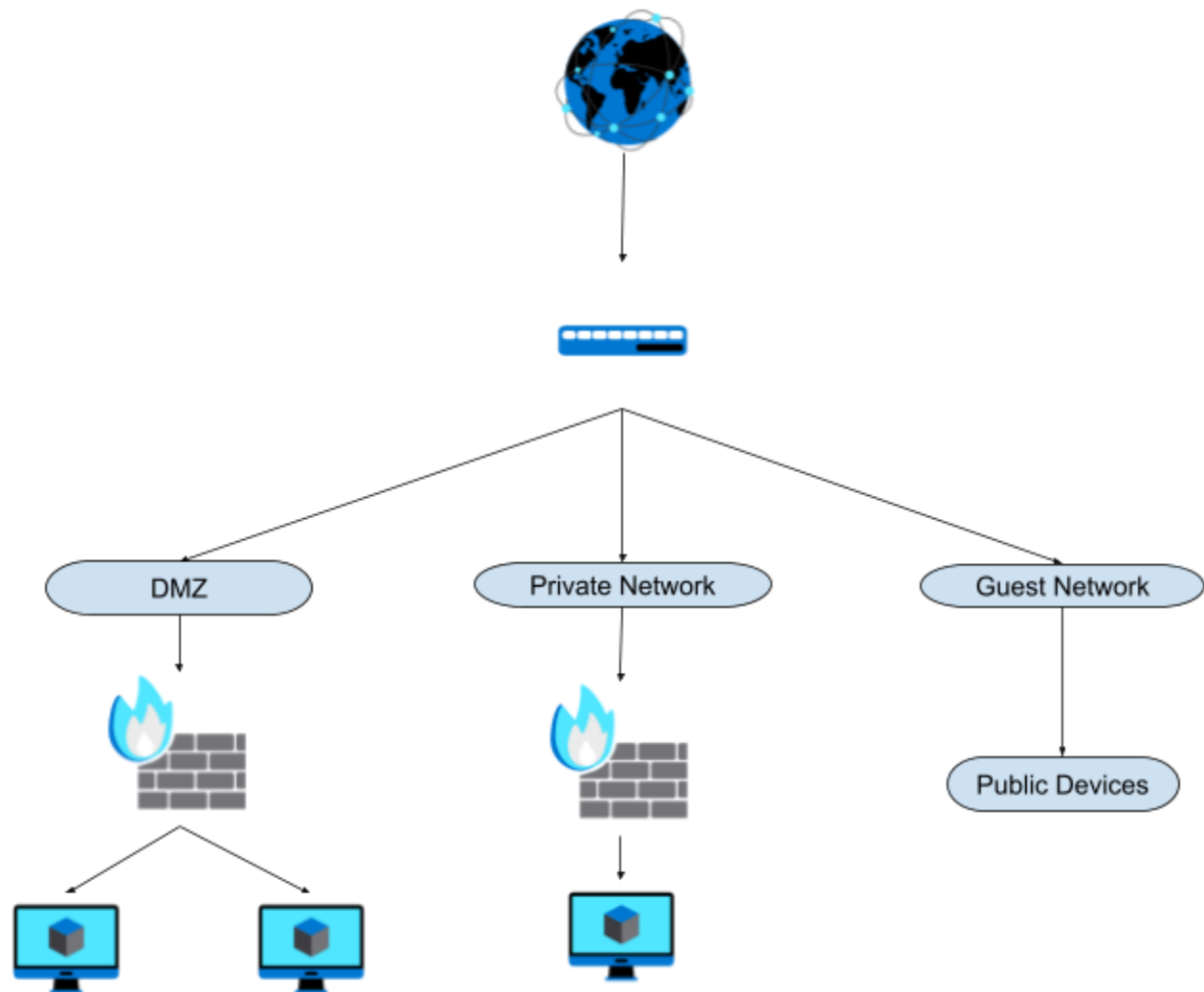
- **DMZ Zone:** This zone would include devices with the access to sensitive information that is most important and critical to business operations of Sam's Scoops. The security of these devices are of utmost priority as any unauthorized access or loss of information of sensitive data could be fatal to the company. These devices would need to be protected at all times with different measures.
  - Included devices:
    - Servers
    - Workstation from Finance department

- Hardware/Software requirements:
  - IDPS
  - Firewall
- **Private Zone:** This zone of the company's network would only include devices that are used by company's staff or for company's day-to-day operations. The devices in this zone can communicate with each other.
  - Included devices:
    - Office Computers
    - IoT devices (printers, security cameras and smart tvs)
  - Hardware/Software requirements:
    - Router
    - Switch
    - Private access
    - Endpoint security
- **Public Zone:** This zone of company's network will include devices used by employees or customers for personal usage. This zone has the least access to company's network.
  - Included devices;
    - Employees' Smartphones/Tablets
    - Customers' devices
  - Hardware/Software requirements:
    - Guest access
    - Router with Wifi

## Network Segment Plan:

Sam's Scoops Network Segmentation						
Department	Computers	Mobiles /Tablets	Others	Network Zone	Security importance/ prioritization	Handles sensitive data
Office	10			Private	2	
Servers	3			DMZ	1	•
Employees' devices		15		Public	3	
Finance	4			DMZ	1	•

IoT			20	Private	2	
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## Benefits:

- Granular control over network
- More secure
- Better network performance
- Easier to diagnose problems
- Each network is independent of the other

## Drawbacks:

- Increased cost
- Increased admin overload
- Might require technical support

## Summary:

Network segmentation is great way for an organization to divide the network into different zones according to the access or privileges required by devices on a network.