Outcomes

Upon the completion of this session, the learner will be able to

- ★ Understand the need for fault tolerant networks.
- ★ Understand the need for scalable networks.
- ★ Understand Quality of Service (QoS).
- ★ Know the importance of security in computer networks.

Basic characteristics of computer network

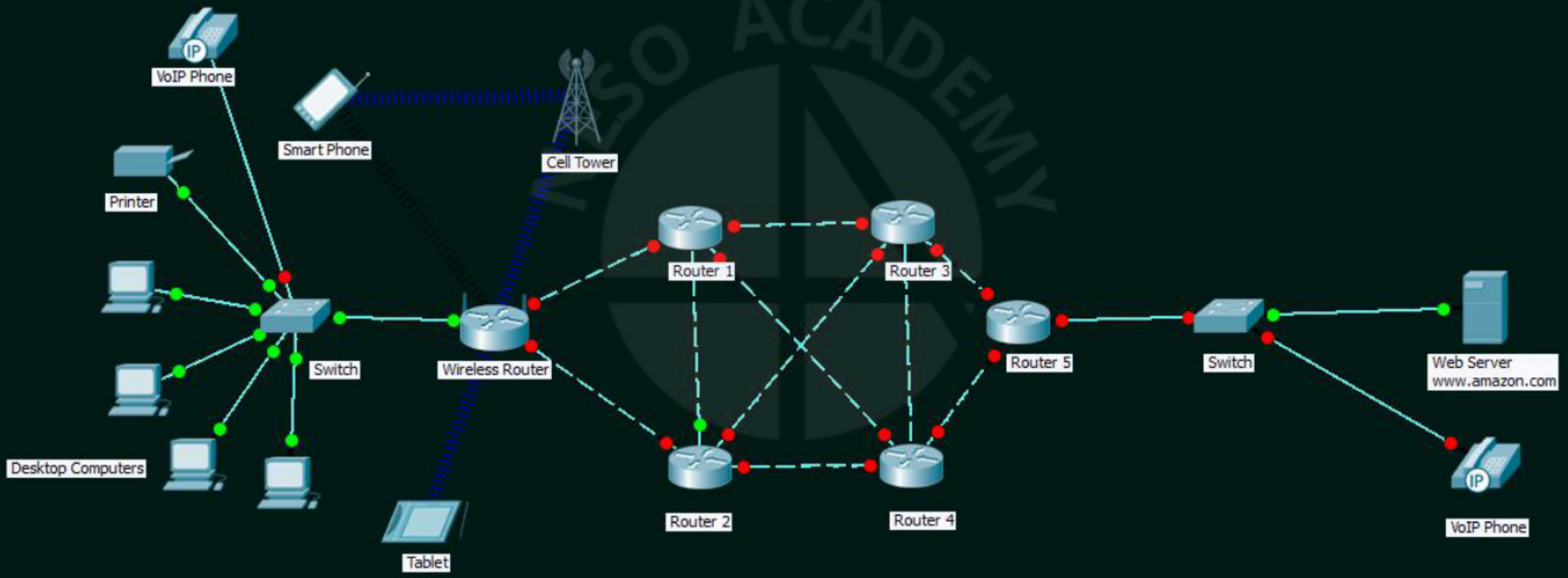
- ★ Fault Tolerance
- ★ Scalability
- ★ Quality of Service (QoS)
- ★ Security

Fault Tolerance

The ability to :

1. Continue working despite failures
2. Ensure no loss of service

An example computer network



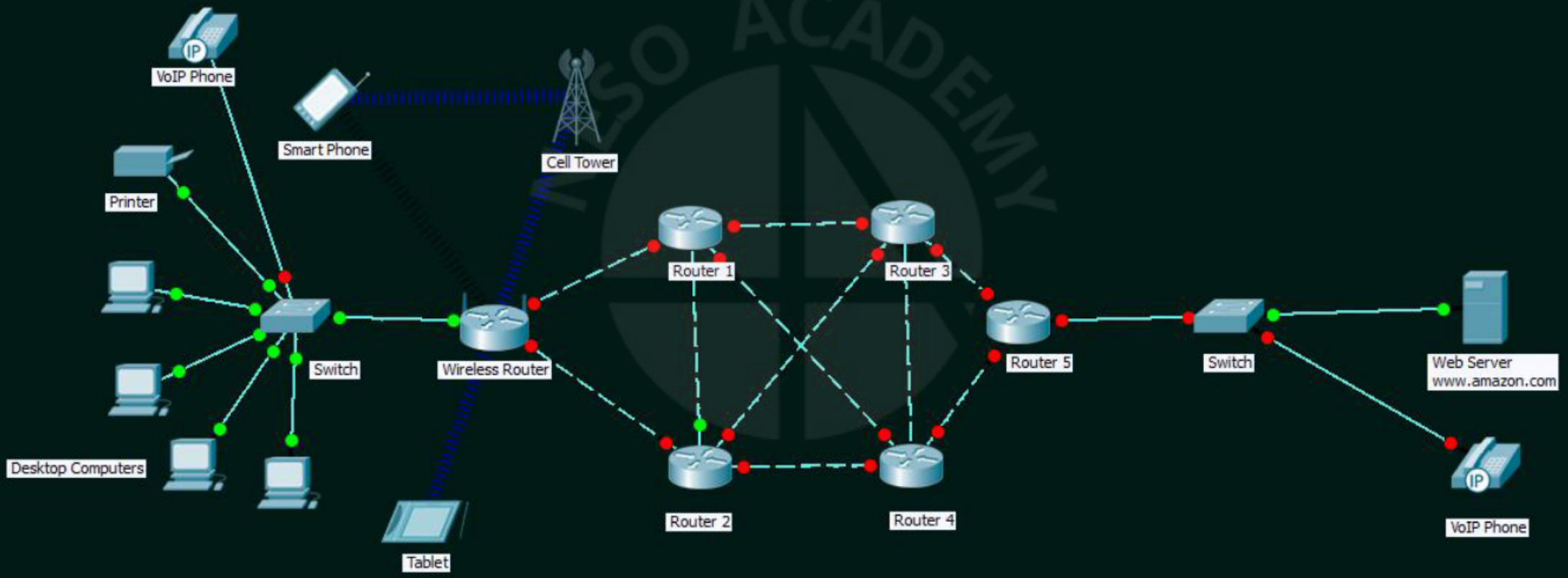
Scalability

The ability to :

1. Grow based on the needs
2. Have good performance after growth

Scalable Network – The Internet

An example computer network

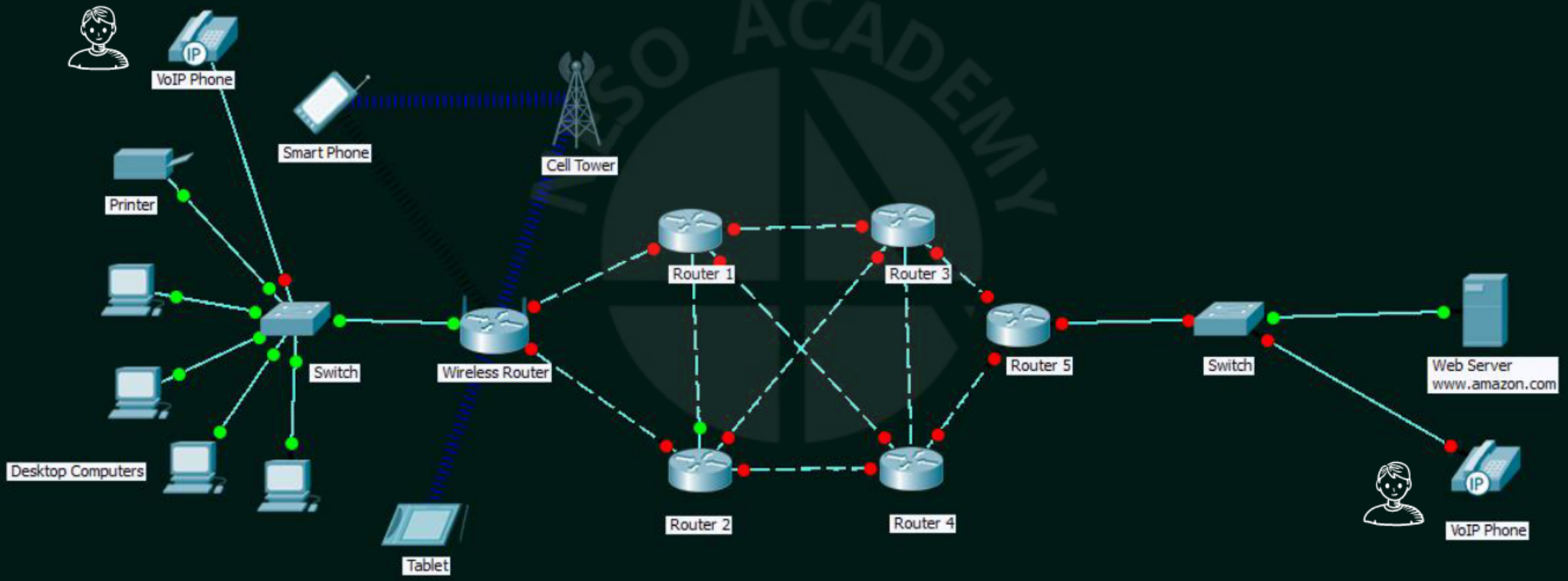


Quality of Service (QoS)

The ability to :

1. Set Priorities
2. Manage data traffic to reduce data loss, delay etc.,

An example computer network



Quality of Service (QoS)

The ability to :

1. Set Priorities
2. Manage data traffic to reduce data loss, delay etc.,

Security

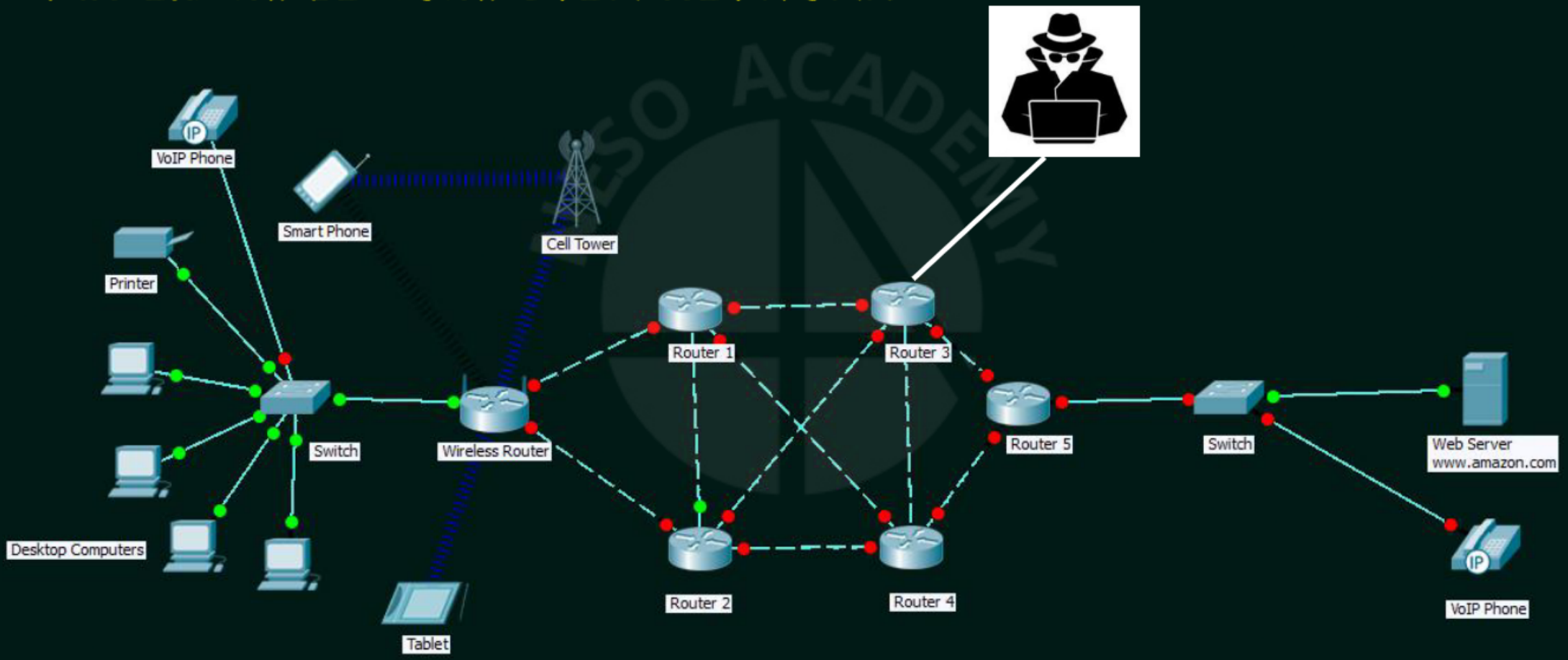
The ability to prevent:

- ★ Unauthorized access
- ★ Misuse
- ★ Forgery

The ability to provide:

- ★ Confidentiality
- ★ Integrity
- ★ Availability

An example computer network



Security

The ability to prevent:

- ★ Unauthorized access
- ★ Misuse
- ★ Forgery

The ability to provide:

- ★ Confidentiality
- ★ Integrity
- ★ Availability

Basic characteristics of computer network

- ★ Fault Tolerance
- ★ Scalability
- ★ Quality of Service (QoS)
- ★ Security