

Lab 8

Cisco Systems Inc.

- One of the largest companies in the enterprise network section
 - makes up over 40% of the global enterprise network infrastructure market
- Holds almost half of the global ethernet switch market share
- Reached a record revenue of \$57 billion in 2023
- Provides different levels of certifications:
 - Cisco Certified Network Associate (CCNA)
 - Cisco Certified Network Professional (CCNP)
 - Cisco Certified Internetwork Expert (CCIE)
 - etc

Cisco IOS

- A widely used network operating system by Cisco devices
- Is entirely based on command-line interface (CLI)
- The features provided by IOS depends on the device it's running on
 - Routers, switches, access points, etc
- Many online resources are available

Cisco IOS Example

Disabling Domain Lookup:

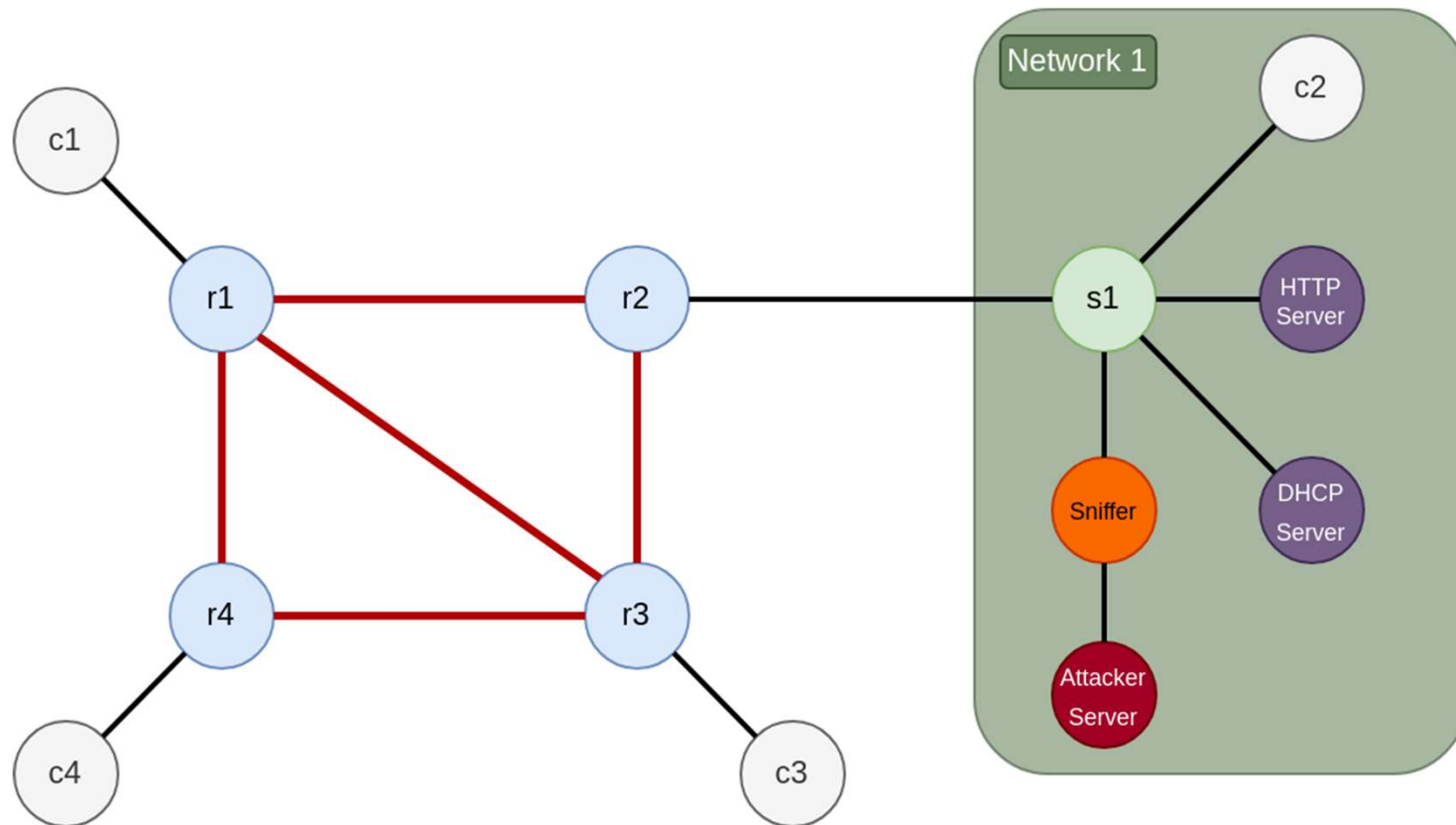
```
Router> enable
Router# configure terminal
Router(config)# no ip domain-lookup
Router(config)# end
%SYS-5-CONFIG_I: Configured from console by console
Router# copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
Router#
```

Packet Tracer

- An emulation tool to experiment with Cisco devices
- A free program built by Cisco as a learning platform
- It enables you to:
 - Create various devices: routers, switches, hosts, links, etc
 - Fully configure each device
 - Run various routing protocols
 - ...

All inside Packet Tracer!

Build a Simple AS Network



Build a Simple AS Network

- Create the topology
- Configure static routes and connect the network
- Show the impact of segment failure
- Attack the network
- Strengthen the network

Dest. Prefix	Next Hop
a.b.c.d/24	r.x.y.z.
...	...
...	...

Questions?
