

BRYANT CCNA SEC7: Switches, Gateways, Telnet, SS#

SEC 7.1 Intro to SVIs

L2 switches don't perform routing, but still need an IP address for remote connections. That IP address will be configured on the switches remote management interface, which does not physically exist.

To enable this interface, configure vlan 1:

```
# conf t
(config)# int vlan 1
(config-if)# ip address 10.1.1.2 255.255.255.0
(config-if)# no shut
# exit
(config)# ip default-gateway 10.1.1.1
```

SEC 7.2 Creating a non-default SVI

To create an SVI in a different VLAN, there must be a port on that switch with that VLAN which is up and enabled!

SEC 7.3 Telnet Lab Begins

To telnet to your switch, make sure the SVI is configured, and configure a password for vty lines.

```
[swl(config)# line vty 0 4
swl(config-if)# password cisco
```

Telnet will enter User Exec mode. To enter enable mode, an enable secret/password is required. You will not be able to enter privileged exec without a password.

To use a username/password db:

```
[ (config)# line vty 0 4
(config-line)# no password cisco
(config-line)# login local
```

To set a default privilege level:

```
[ (config-line)# privilege level 15
```

Telnet sends both data and passwords in clear text. It is not recommended to use telnet across a WAN.

SEC 7.5 Auto negotiation

By default Cisco switch ports are set to auto negotiate port speed and duplex with the connected partner.

The highest speed supported by both is used, and full duplex is preferred.

Autonegotiation works so well now it is used by default, but a long time ago it worked very poorly and was not recommended.

Do NOT mix auto negotiation with manually configured devices.

- leads to duplex mismatch
- very poor connection
- hard to spot

SEC 7.6 Slashes, Console Ports, and Descriptions

2545 console port connectors need a rollover cable. Most laptops don't have a DB-9 port so some type of USB adapter will be needed.

SEC 7.7 Description (And Interface Range)

If ports are performing a specific task, or lead to a particularly sensitive host, it's a good idea to note that on the port config with a description.

Interface Range - change settings on multiple interfaces

Example: Set a range of ports administratively down and set a Description.

```
(config)# int range fast 0/12-24
(config-if-range)# description RESERVED - SEE CHR15
BEFORE OPENING THIS PORT
(config-if-range)# shut
```