

Network Administration HW3

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1 Reference

1.1 1+1=1!

- (a) <https://www.youtube.com/watch?v=cjCVyKYYHRs>
- (b)
 - 1. <https://www.youtube.com/watch?v=cjCVyKYYHRs>
 - 2. https://www.cisco.com/c/en/us/td/docs/ios/12_2/interface/command/reference/finter_r/irfinter.html
 - 3. Packet Tracer Tutorial 1

1.2 CISCO Packet Tracer

- 1. [How to disable DNS name translation when a wrong command has been entered](#)
- 2. [NASA Lab:Cisco Basic Commands](#)
- 3. [Chapter: Configuring Access and Trunk Interfaces](#)
- 4. <http://www.james-tw.com/cisco/cisco-she-ding-yuan-duan-lian-xian-telnet-ssh>

1.3 CSIE Crime Tracer

- 1. [find switch port from knowing only ip or mac address](#)

1.4 Network Administration Part 2

- 1. <https://www.iana.org/assignments/bootp-dhcp-parameters/bootp-dhcp-parameters.xhtml>
- 2. [command-line-to-list-dns-server](#)
- 3. https://doc.pfsense.org/index.php/Firewall_Rule_Processing_Order
- 4. [Virtualbox virtual machine vlan 設定](#)

2 Problem

2.1 1+1=1!

- (a) First advantage is if one physical interface fail, the other will still remain available. Second, link aggregation can give you a greater bandwidth.

(b)

```
# Do these commands in two switch
enable
config terminal
interface range fa0/6-7
channel-group 1 mode active
```

2.2 CISCO Packet Tracer

- (a) Set the hostname:

```
hostname CiscoLab
```

- (b) Disable domain name lookup

```
no ip domain-lookup
```

- (c) Set password and encrypt it:

```
enable password CISCO
service password-encryption
```

- (d) Create VLANs 10, 20, 99

```
vlan 10
vlan 20
vlan 99
```

- (e) Assign VLANs.

```
interface fa0/1
switchport access vlan 10
interface fa0/2
switchport access vlan 10
interface fa0/3
switchport access vlan 20
interface fa0/4
switchport access vlan 20
```

- (f) Assign VLAN99 to Admin and create telnet vty.

```
interface fa0/5
switchport access vlan 99
# Go into interface vlan99
interface vlan99
ip address 192.168.99.1 255.255.255.0
no shutdown
exit
line vty 0 4
password cisco
login
exit
service password-encryption
write memory
```

2.3 CSIE Crime Tracer

First, login to core switch to ping 140.112.29.197 and use "show arp" to get 140.112.29.197's mac address:

```
Core Switch> ping 140.112.29.197
Core Switch> show arp
```

Second, login to core switch and use "show mac-address-table" to find out local switch's port to 140.112.29.197's mac address.

```
Core Switch> show mac-address-table
```

Third, login to switch's neighbor and check mac address table to find out local switch's port to 140.112.29.197's mac address.

```
Switch> show mac-address-table
```

Fourth, repeat third step until reach the edge switch.

Fifth, login to the edge switch, check mac address table and get the port used by 140.112.29.197.