



Answer Sheet
Hands On - H02

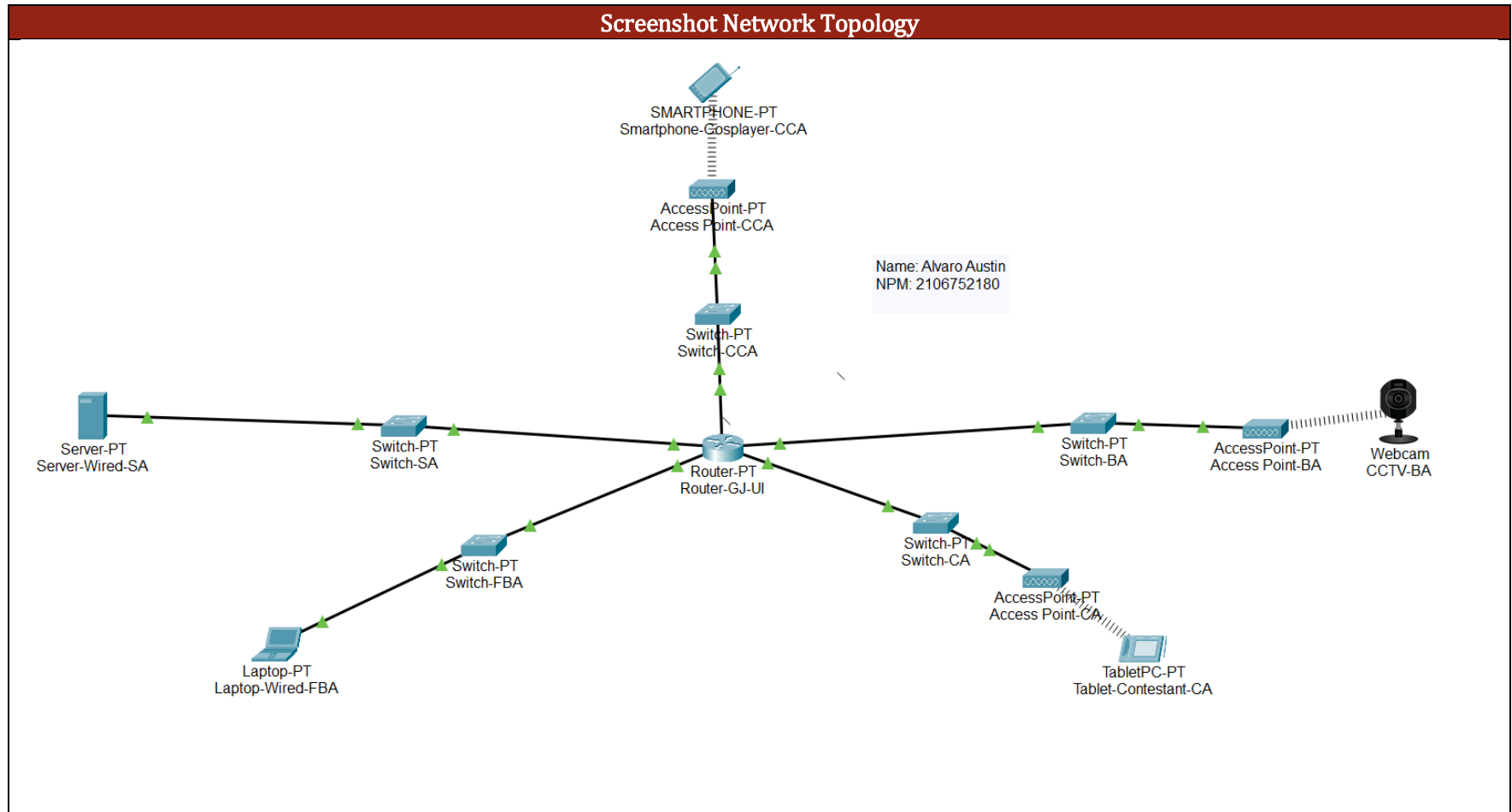
IP Addressing Methods

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[50 Point] Allocation IP Address

Subnet	Network Address	Broadcast Address	Subnet Mask	Maximum Number of Device	First Available IP Address	Last Available IP Address	Default Gateway
BA	10.180.12.0	10.180.12.255	255.255.255.0 (/24)	253	10.180.12.2	10.180.12.254	10.180.12.1
CCA	10.180.13.0	10.180.13.127	255.255.255.128 (/25)	125	10.180.13.2	10.180.13.126	10.180.13.1
FBA	10.180.13.128	10.180.13.191	255.255.255.192 (/26)	61	10.180.13.130	10.180.13.190	10.180.13.129
CA	10.180.13.192	10.180.13.255	255.255.255.192 (/26)	61	10.181.13.194	10.180.13.254	10.181.13.193
SA	10.180.14.0	10.180.14.15	255.255.255.240 (/28)	13	10.180.14.2	10.180.14.14	10.180.14.1

[50 Point] Implementation IP Addressing Methods and DHCP on Packet Tracer



Screenshot CLI Router Configuration

BA

```
Router(config)#interface GigabitEthernet 5/0
Router(config-if)#ip address 10.180.12.1 255.255.255.0
Router(config-if)#no shut

Router(config-if)#exit
Router(config)#ip dhcp pool BA
Router(dhcp-config)#network 10.180.12.0 255.255.255.0
Router(dhcp-config)#default-router 10.180.12.1
Router(dhcp-config)#exit
Router(config)#interface GigabitEthernet5/0
Router(config-if)#ip dhcp excluded-address 10.180.12.1
%LINK-5-CHANGED: Interface GigabitEthernet5/0, changed state
to up
|
```

CCA

```
Router(config)#interface GigabitEthernet 6/0
Router(config-if)#ip address 10.180.13.1 255.255.255.128
Router(config-if)#no shut

Router(config-if)#exit
Router(config)#ip dhcp pool CCA
Router(dhcp-config)#network 10.180.13.0 255.255.255.128
Router(dhcp-config)#default-router 10.180.13.1
Router(dhcp-config)#exit
Router(config)#interface GigabitEthernet6/0
Router(config-if)#ip dhcp excluded-address 10.180.13.1
%LINK-5-CHANGED: Interface GigabitEthernet6/0, changed state
to up
|
```

FBA

```
Router(config)#interface GigabitEthernet 7/0
Router(config-if)#ip address 10.180.13.129 255.255.255.192
Router(config-if)#no shut

Router(config-if)#exit
Router(config)#ip dhcp pool FBA
Router(dhcp-config)#network 10.180.13.128 255.255.255.192
Router(dhcp-config)#default-router 10.180.13.129
Router(dhcp-config)#exit
Router(config)#interface GigabitEthernet7/0
Router(config-if)#ip dhcp excluded-address 10.180.13.129
%LINK-5-CHANGED: Interface GigabitEthernet7/0, changed state
to up
```

CA

```
Router(config)#interface GigabitEthernet 8/0
Router(config-if)#ip address 10.181.13.193 255.255.255.192
Router(config-if)#no shut

Router(config-if)#exit
Router(config)#ip dhcp pool CA
Router(dhcp-config)#network 10.181.13.192 255.255.255.192
Router(dhcp-config)#default-router 10.181.13.193
Router(dhcp-config)#exit
Router(config)#interface GigabitEthernet8/0
Router(config-if)#ip dhcp excluded-address 10.181.13.193
%LINK-5-CHANGED: Interface GigabitEthernet8/0, changed state
to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface
GigabitEthernet8/0, changed state to up
```

SA

```
Router(config)#interface GigabitEthernet 9/0
Router(config-if)#ip address 10.180.14.1 255.255.255.240
Router(config-if)#no shut

Router(config-if)#exit
Router(config)#ip dhcp pool SA
Router(dhcp-config)#network 10.180.14.0 255.255.255.240
Router(dhcp-config)#default-router 10.180.14.1
Router(dhcp-config)#exit
Router(config)#interface GigabitEthernet9/0
Router(config-if)#ip dhcp excluded-address 10.180.14.1
%LINK-5-CHANGED: Interface GigabitEthernet9/0, changed state
to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface
GigabitEthernet9/0, changed state to up
|
```

Screenshot End Devices IP Configuration from Staff Area Sub-Network

Server-Wired-1-SA

The screenshot shows a window titled "Server-Wired-SA" with a tabbed interface. The "Desktop" tab is selected, and the "IP Configuration" sub-tab is active. The "IP Configuration" section shows the "DHCP" radio button selected, with a status message "DHCP request successful." Below this, the IPv4 configuration fields are filled: IPv4 Address (10.180.14.4), Subnet Mask (255.255.255.240), Default Gateway (10.180.14.1), and DNS Server (0.0.0.0). The "IPv6 Configuration" section shows the "Static" radio button selected, with fields for IPv6 Address, Link Local Address (FE80::201:63FF:FED1:5912), Default Gateway, and DNS Server. The "802.1X" section shows the "Use 802.1X Security" checkbox unchecked, with fields for Authentication (MD5) and Username. A "Top" button is at the bottom left.

Server-Wired-SA

Physical Config Services **Desktop** Programming Attributes

IP Configuration X

IP Configuration

☒ DHCP ☐ Static DHCP request successful.

IPv4 Address 10.180.14.4

Subnet Mask 255.255.255.240

Default Gateway 10.180.14.1

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::201:63FF:FED1:5912

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

☐ Top

Screenshot End Devices IP Configuration from Food & Beverage Area Sub-Network

Laptop-Wired-FBA

The screenshot shows a configuration window titled "Laptop-Wired-FBA" with tabs for Physical, Config, Desktop, Programming, and Attributes. The "Desktop" tab is active, and the "IP Configuration" section is expanded. The interface is set to "GigabitEthernet0".

IP Configuration

Interface: GigabitEthernet0

☒ DHCP ☐ Static

IPv4 Address: 10.180.13.131

Subnet Mask: 255.255.255.192

Default Gateway: 10.180.13.129

DNS Server: 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address: /

Link Local Address: FE80::20D:BDFF:FE41:D30

Default Gateway:

DNS Server:

802.1X

☐ Use 802.1X Security

Authentication: MD5

☐ Top

Screenshot End Devices IP Configuration from Competition Area Sub-Network

Tablet-Contestant-CA

Tablet-Contestant-CA

Physical Config Desktop Programming Attributes

GLOBAL

Settings

Algorithm Settings

INTERFACE

Wireless0

3G/4G Cell1

Bluetooth

Wireless0

Port Status ☒ On

Bandwidth 24 Mbps

MAC Address 0001.C7C0.4AE9

SSID AP-CA

Authentication

☒ Disabled

☐ WEP

WEP Key

☐ WPA-PSK

☐ WPA2-PSK

PSK Pass Phrase

☐ WPA

☐ WPA2

User ID

☐ 802.1X

Method:

MD5

Password

User Name

Password

Encryption Type Disabled

IP Configuration

☒ DHCP

☐ Static

IPv4 Address 10.181.13.195

Subnet Mask 255.255.255.192

IPv6 Configuration

☐ Automatic

☒ Static

IPv6 Address /

Link Local Address: FE80::201:C7FF:FEC0:4AE9

☐ Top

GLOBAL
Settings
Algorithm Settings
INTERFACE
Wireless0
3G/4G Cell1
Bluetooth

Global Settings

Display Name **Tablet-Contestant-CA**

Interfaces Wireless0

Gateway/DNS IPv4

☒ DHCP

☐ Static

Default Gateway 10.181.13.193

DNS Server

Gateway/DNS IPv6

☐ Automatic

☒ Static

Default Gateway

DNS Server

Screenshot End Devices IP Configuration from Bazaar Area Sub-Network

CCTV-BA

GLOBAL

Settings

Algorithm Settings

Files

INTERFACE

Wireless0

Bluetooth

Wireless0

Port Status ☒ On

Bandwidth 18 Mbps

MAC Address 0001.969A.5D69

SSID AP-BA

Authentication

☒ Disabled

☐ WEP

WEP Key

☐ WPA-PSK

☐ WPA2-PSK

PSK Pass Phrase

☐ WPA

☐ WPA2

User ID

☐ 802.1X

Method:

Password

MD5

User Name

Password

Encryption Type

Disabled

IP Configuration

☒ DHCP

☐ Static

IPv4 Address 10.180.12.3

Subnet Mask 255.255.255.0

IPv6 Configuration

☐ Automatic

☒ Static

IPv6 Address /

Link Local Address: FE80::201:96FF:FE9A:5D69

CCTV-BA

SpecificationsPhysicalConfigAttributes

GLOBAL

Settings

Algorithm Settings

Files

INTERFACE

Wireless0

Bluetooth

Global Settings

Display NameCCTV-BA

Serial NumberPTT0810SAW0-

InterfacesWireless0

Gateway/DNS IPv4

☒ DHCP

☐ Static

Default Gateway10.180.12.1

DNS Server

Gateway/DNS IPv6

☐ Automatic

☒ Static

Default Gateway

DNS Server

IoT Server

☒ None

☐ Home Gateway

☐ Remote Server

Server Address

User Name

Password

Connect

☐ Top

Advanced

Screenshot End Devices IP Configuration from Cosplayer Contest Area Sub-Network

Smartphone-Cosplayer-CCA

Dibawah!!

GLOBAL

Settings

Algorithm Settings

INTERFACE

Wireless0

3G/4G Cell1

Bluetooth

Wireless0

Port Status

☒ On

Bandwidth

18 Mbps

MAC Address

000C.85C3.9A79

SSID

AP-CCA

Authentication

☒ Disabled☐ WEP

WEP Key

☐ WPA-PSK☐ WPA2-PSK

PSK Pass Phrase

☐ WPA☐ WPA2

User ID

Password

☐ 802.1X

Method:

MD5

User Name

Password

Encryption Type

Disabled

IP Configuration

☒ DHCP☐ Static

IPv4 Address

10.180.13.3

Subnet Mask

255.255.255.128

IPv6 Configuration

☐ Automatic☒ Static

IPv6 Address

Link Local Address: FE80::20C:85FF:FEC3:9A79

GLOBAL
Settings
Algorithm Settings
INTERFACE
Wireless0
3G/4G Cell1
Bluetooth

Global Settings

Display Name **Smartphone-Cosplayer-CCA**

Interfaces **Wireless0**

Gateway/DNS IPv4

☒ DHCP

☐ Static

Default Gateway **10.180.13.1**

DNS Server

Gateway/DNS IPv6

☐ Automatic

☒ Static

Default Gateway

DNS Server

Cellular Tethering

Bluetooth ☐ On