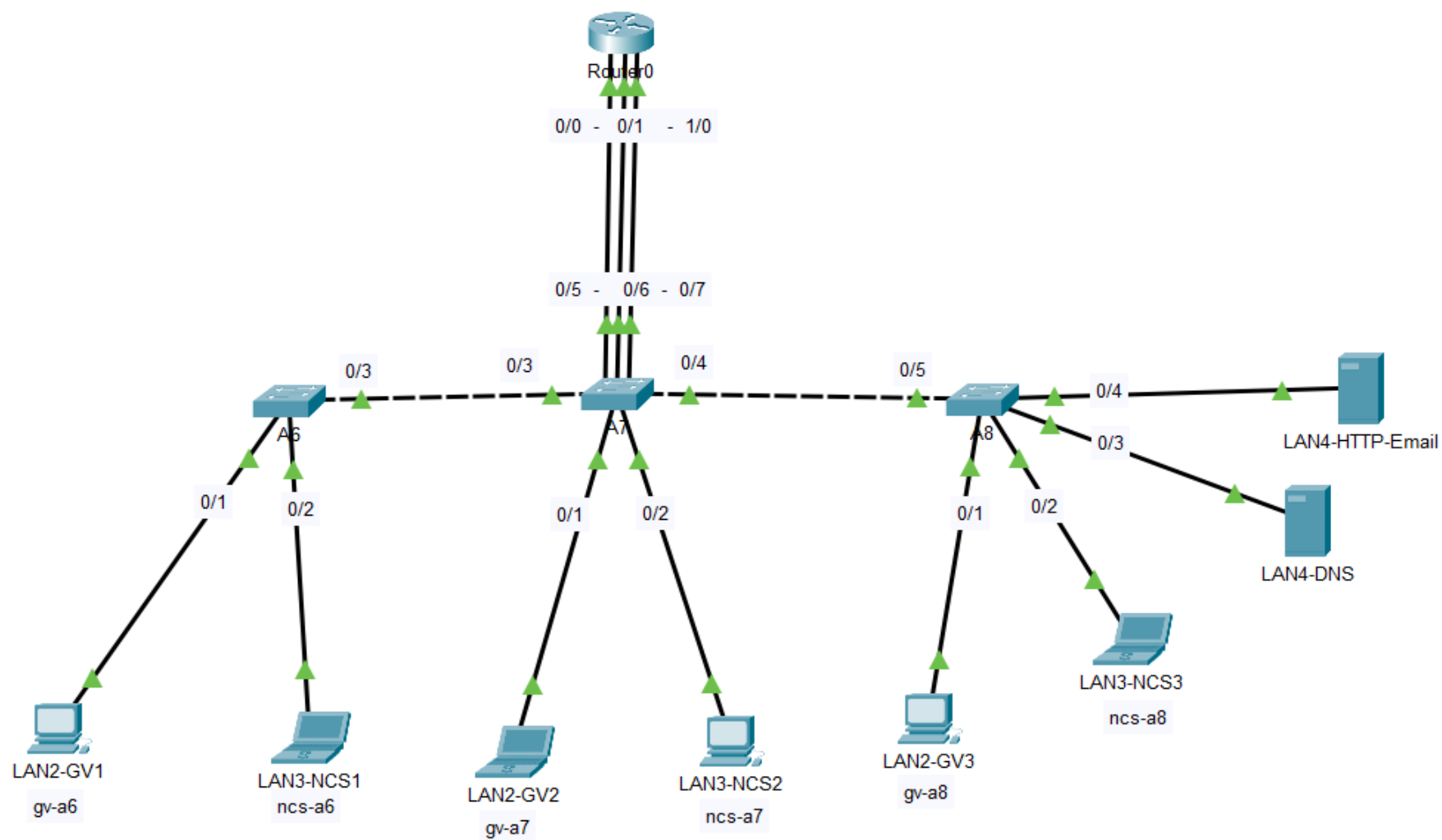


## HƯỚNG DẪN THỰC HÀNH CHƯƠNG 6



Mục tiêu:

- Router cấp phát DHCP v4 cho các máy trong mạng LAN2
- Server DNS cấp phát DHCP v4 cho các máy trong mạng LAN3

Chia mạng thành 3 mạng con

		IPv4	IPv6
GV (40 hosts)	LAN2	69.251.31.0/26	2018:2809:0:5::/64
NCS (150 hosts)	LAN3	69.251.30.0/24	2018:2809:0:7::/64
Server (12 hosts)	LAN4	69.251.31.64/28	2018:2809:0:3::/64

- Cấu hình địa chỉ IP ở Router

Device Name: Router0					
Custom Device Model: 2811 IOS15					
Hostname: R-UTCLib					
Port	Link	VLAN	IP Address	IPv6 Address	MAC Address
FastEthernet0/0	Up	--	69.251.31.1/26	2018:2809:0:5::1/64	00E0.F94C.0701
FastEthernet0/1	Up	--	69.251.30.1/24	2018:2809:0:7::1/64	00E0.F94C.0702
FastEthernet1/0	Up	--	69.251.31.65/28	2018:2809:0:3::1/64	00D0.BC5B.4201
FastEthernet1/1	Down	--	<not set>	<not set>	00D0.BC5B.4202
Vlan1	Down	1	<not set>	<not set>	0002.17B0.3B95
Physical Location: Intercity > Home City > Corporate Office > Main Wiring Closet > Rack > Router0					

- Cấu hình địa chỉ IP trên ServerDNS và ServerHTTP-Email

IP Configuration X

IP Configuration

☐ DHCP

☒ Static

IPv4 Address 69.251.31.66

Subnet Mask 255.255.255.240

Default Gateway 69.251.31.65

DNS Server 69.251.31.66

IPv6 Configuration

☐ Automatic

☒ Static

IPv6 Address 2018:2809:0:3::2 / 64

Link Local Address FE80::20A:F3FF:FE89:5A54

Default Gateway 2018:2809:0:3::1

DNS Server 2018:2809:0:3::2

IP Configuration

☐ DHCP

☒ Static

IPv4 Address 69.251.31.67

Subnet Mask 255.255.255.240

Default Gateway 69.251.31.65

DNS Server 69.251.31.66

IPv6 Configuration

☐ Automatic

☒ Static

IPv6 Address 2018:2809:0:3::3 / 64

Link Local Address FE80::2E0:8FFF:FE6D:4B81

Default Gateway 2018:2809:0:3::1

DNS Server 2018:2809:0:3::2

## Cấu hình trên Switch

- Tại Switch A6

```
en
conf t
vlan 2
name GV-UTC
end
conf t
vlan 3
name NCS-UTC
end
conf t
int Fa 0/1
switchport mode access
switchport access vlan 2
end
conf t
int Fa 0/2
switchport mode access
```

```
switchport access vlan 3
end
show vlan brief
```

- Tại Switch A7

```
en
conf t
vlan 2
name GV-UTC
end
conf t
vlan 3
name NCS-UTC
end
conf t
vlan 4
name SER-UTC
end
conf t
int range Fa 0/1, Fa 0/5
```

```
switchport mode access
switchport access vlan 2
end
conf t
int range Fa 0/2, Fa 0/6
switchport mode access
switchport access vlan 3
end
conf t
int Fa 0/7
switchport mode access
switchport access vlan 4
end
show vlan brief
```

- Tại Switch A8

```
en
conf t
vlan 2
name GV-UTC
```

```
end
conf t
vlan 3
name NCS-UTC
end
conf t
vlan 4
name SER-UTC
end
conf t
int Fa 0/1
switchport mode access
switchport access vlan 2
end
conf t
int Fa 0/2
switchport mode access
switchport access vlan 3
end
```

```
conf t
int range Fa 0/3, Fa 0/4
switchport mode access
switchport access vlan 4
end
show vlan brief
```

- Cấu hình trên Router

```
conf t
ip dhcp pool pool-GV
network 69.251.31.0 255.255.255.192
default-router 69.251.31.1
dns-server 69.251.31.66
end
show ip dhcp pool
```

### **Cấu hình Trunk**

- Tại Switch A6

```
en
conf t
int fa 0/3
```



```
switchport mode trunk
switchport trunk allowed vlan 2,3,4
end
```

- Tại Switch A7

```
en
conf t
int fa 0/3
switchport mode trunk
switchport trunk allowed vlan 2,3,4
end
en
conf t
int fa 0/4
switchport mode trunk
switchport trunk allowed vlan 2,3,4
end
```

- Tại Switch A8

```
en
conf t
```

```
int fa 0/5
```

```
switchport mode trunk
```

```
switchport trunk allowed vlan 2,3,4
```

```
end
```

## Cấu hình DHCP trên Server DNS

DHCP

Interface	FastEthernet0	Service	<input checked="" type="radio"/> On	<input type="radio"/> Off			
Pool Name	pool-NCS						
Default Gateway	69.251.30.1						
DNS Server	69.251.31.66						
Start IP Address :	69	251	30	2			
Subnet Mask:	255	255	255	0			
Maximum Number of Users :	15						
TFTP Server:	0.0.0.0						
WLC Address:	0.0.0.0						
Add		Save		Remove			
Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP Server	WLC Address
pool-NCS	69.251.3...	69.251.3...	69.251.3...	255.255...	15	0.0.0.0	0.0.0.0

## Cấu hình IP Helper Address trên Router

```
en
```

```
conf t
```

```
int fa 0/0
```

```
ip helper-address 69.251.31.66
```

exit

int fa 0/1

ip helper-address 69.251.31.66

exit

int fa 1/0

ip helper-address 69.251.31.66

## Cấu hình DNS, HTTP, Email

### Trên Server DNS

No.	Name	Type	Detail
0	lib.utc.edu.vn	SOA	ServerName:ns.lib.utc.edu.vn MailBox :dnsmaster@lib.utc.edu.vn Expiry :1209600 Refresh :10800 Retry :3600 MinTTL :86400
1	lib.utc.edu.vn	NS	ns.lib.utc.edu.vn
2	mail.lib.utc.edu.vn	A Record	69.251.31.67
3	mail.lib.utc.edu.vn	AAAA Record	2018:2809:0:3::3
4	ns.lib.utc.edu.vn	A Record	69.251.31.66
5	ns.lib.utc.edu.vn	AAAA Record	2018:2809:0:3::2
6	www.lib.utc.edu.vn	A Record	69.251.31.67
7	www.lib.utc.edu.vn	AAAA Record	2018:2809:0:3::3

## Trên server HTTP-Email

### HTTP

#### HTTP

☒ On☐ Off

#### HTTPS

☒ On☐ Off

### File Manager

	File Name	Edit	Delete
1	copyrights.html	(edit)	(delete)
2	cscoptlogo177x111.jpg		(delete)
3	helloworld.html	(edit)	(delete)
4	image.html	(edit)	(delete)
5	index.html	(edit)	(delete)
6	lib-utc.html	(edit)	(delete)

File Name: lib-utc.html

```
<html>
<h1>Welcome to UTC Library</h1>
</html>
```

EMAIL

SMTP Service

☒ ON ☐ OFF

POP3 Service

☒ ON ☐ OFF

Domain Name:

User Setup

User  Password

gv-a6

gv-a7

ncs-a6

ncs-a7

Cấu hình configure mail trên 1 máy PC (Các máy khác cấu hình tương tự)

User Information

Your Name:

Email Address

Server Information

Incoming Mail Server

Outgoing Mail Server

Logon Information

User Name:

Password: