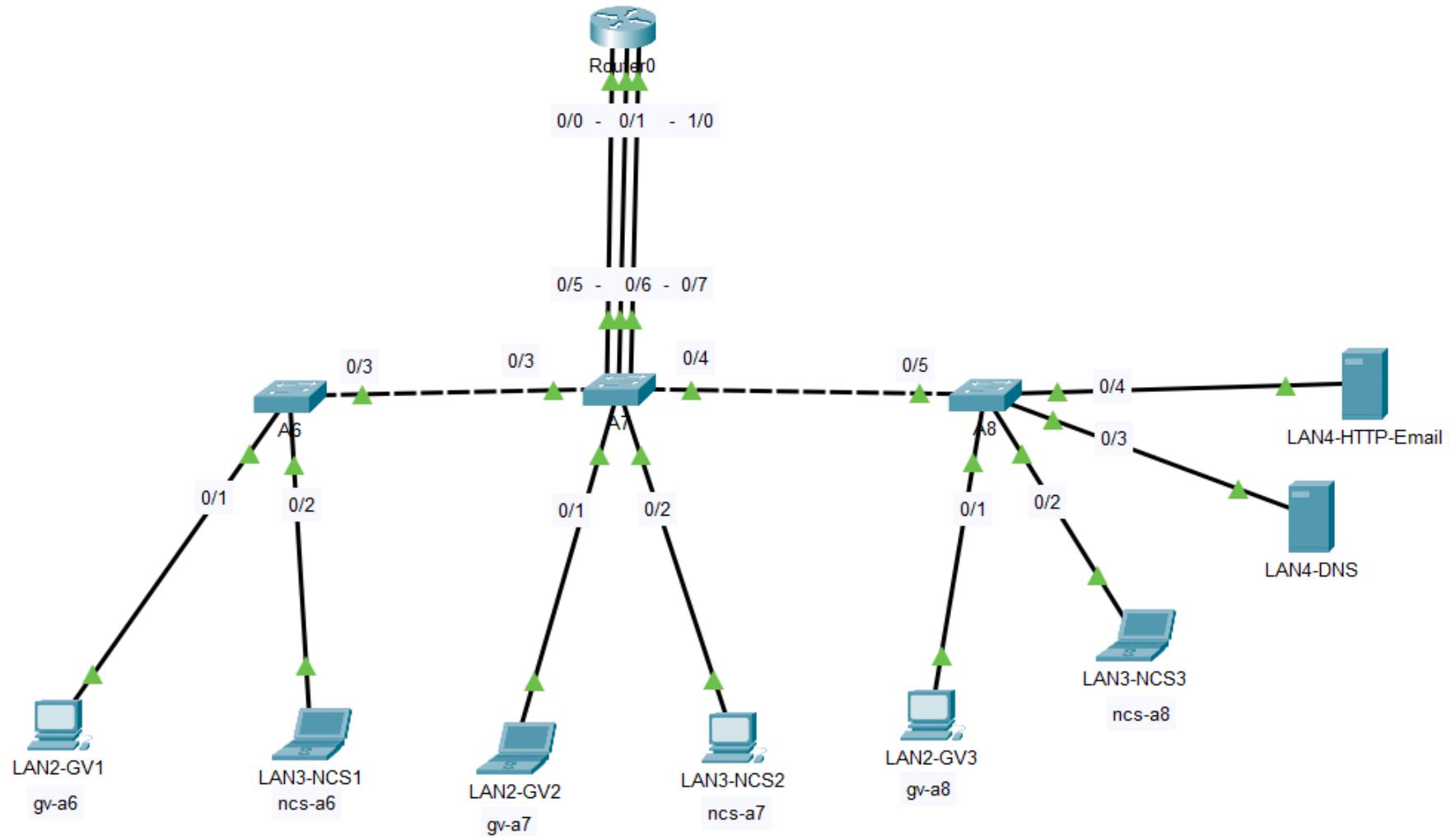


## HƯỚNG DẪN THỰC HÀNH CHƯƠNG 6



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:FE9:5A54

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

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

IP Configuration

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						
<input type="button" value="Add"/>		<input type="button" value="Save"/>	<input type="button" value="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:

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

EMAIL

SMTP Service      POP3 Service

ON       OFF       ON       OFF

Domain Name: lib.utc.edu.vn      Set

User Setup

User: gv-a6      Password: pg6

gv-a6  
gv-a7  
ncs-a6  
ncs-a7

Cáu hình config mail trên 1 máy PC (Các máy khác cấu hình tương tự)

User Information

Your Name: NCS-A6

Email Address: ncs-a6@lib.utc.edu.vn

Server Information

Incoming Mail Server: MAIL LIB UTC EDU VN

Outgoing Mail Server: MAIL LIB UTC EDU VN

Logon Information

User Name: ncs-a6

Password: \*\*\*