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PES2UG20CS130  
CN-Lab Week-2 (Continuation)

Task 1: Configure a simple network topology with DNS and web server functioning.

PC0:

IP ADDRESS: 10.10.1.1  
GATEWAY: 10.10.1.2  
DNS SERVER: 192.168.1.2

ROUTER 1:

Fast Ethernet 0: 10.10.1.2  
Fast Ethernet 1: 10.10.2.1

ROUTER 2:

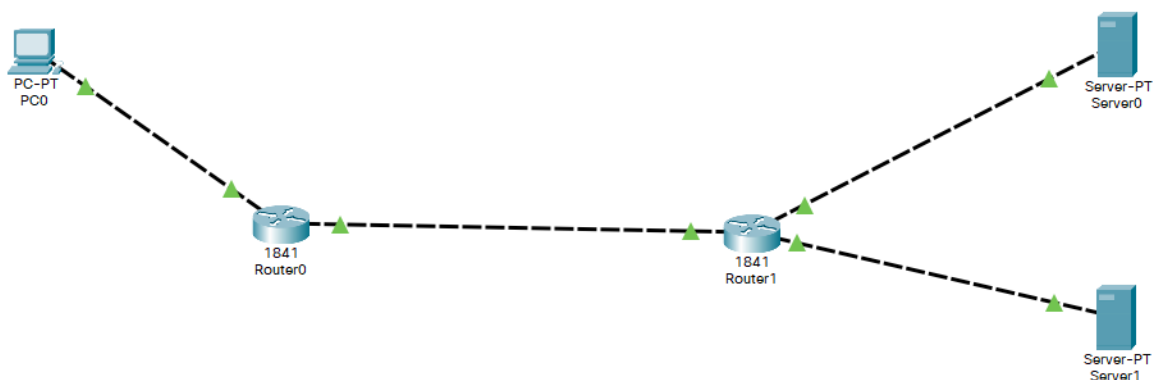
Fast Ethernet 0: 10.10.2.2  
Fast Ethernet 1: 192.168.1.1  
Ethernet 0: 192.168.2.1

DNS SERVER:

IP ADDRESS: 192.168.1.2  
DEFAULT GATEWAY: 192.168.1.1

WEB SERVER:

IP ADDRESS: 192.168.2.2  
DEFAULT GATEWAY: 192.168.2.1



## Setting up Routing:

Router0

Physical

Config

CLI

Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

FastEthernet0/0

FastEthernet0/1

Static Routes

Network

Mask

Next Hop

Add

Network Address

192.168.1.0/24 via 10.10.2.2

192.168.2.0/24 via 10.10.2.2

Remove

Equivalent IOS Commands

Router(config)#interface FastEthernet0/1  
Router(config-if)#ip address 10.10.2.1 255.255.255.0  
Router(config-if)#ip address 10.10.2.1 255.255.255.0  
Router(config-if)#  
Router(config)#  
Router(config)#ip route 192.168.1.0 255.255.255.0 10.10.2.2  
Router(config)#ip route 192.168.2.0 255.255.255.0 10.10.2.2  
Router(config)#  
Router(config)#  
Router(config)#

Top

Router1

Physical

Config

CLI

Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

FastEthernet0/0

FastEthernet0/1

Ethernet0/1/0

Static Routes

Network

Mask

Next Hop

Add

Network Address

10.10.1.0/24 via 10.10.2.1

Remove

Equivalent IOS Commands

Router(config)#interface Ethernet0/1/0  
Router(config-if)#  
Router(config-if)#exit  
Router(config)#interface FastEthernet0/0  
Router(config-if)#  
Router(config-if)#exit  
Router(config)#interface Ethernet0/1/0  
Router(config-if)#  
Router(config-if)#exit  
Router(config)#  
Router(config)#

Top

## Setting up DNS Server:

Server0

Physical

Config

Services

Desktop

Programming

Attributes

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

IoT

VM Management

Radius EAP

DNS

DNS Service

On

Off

Resource Records

Name

Type

A Record

Address

Add

Save

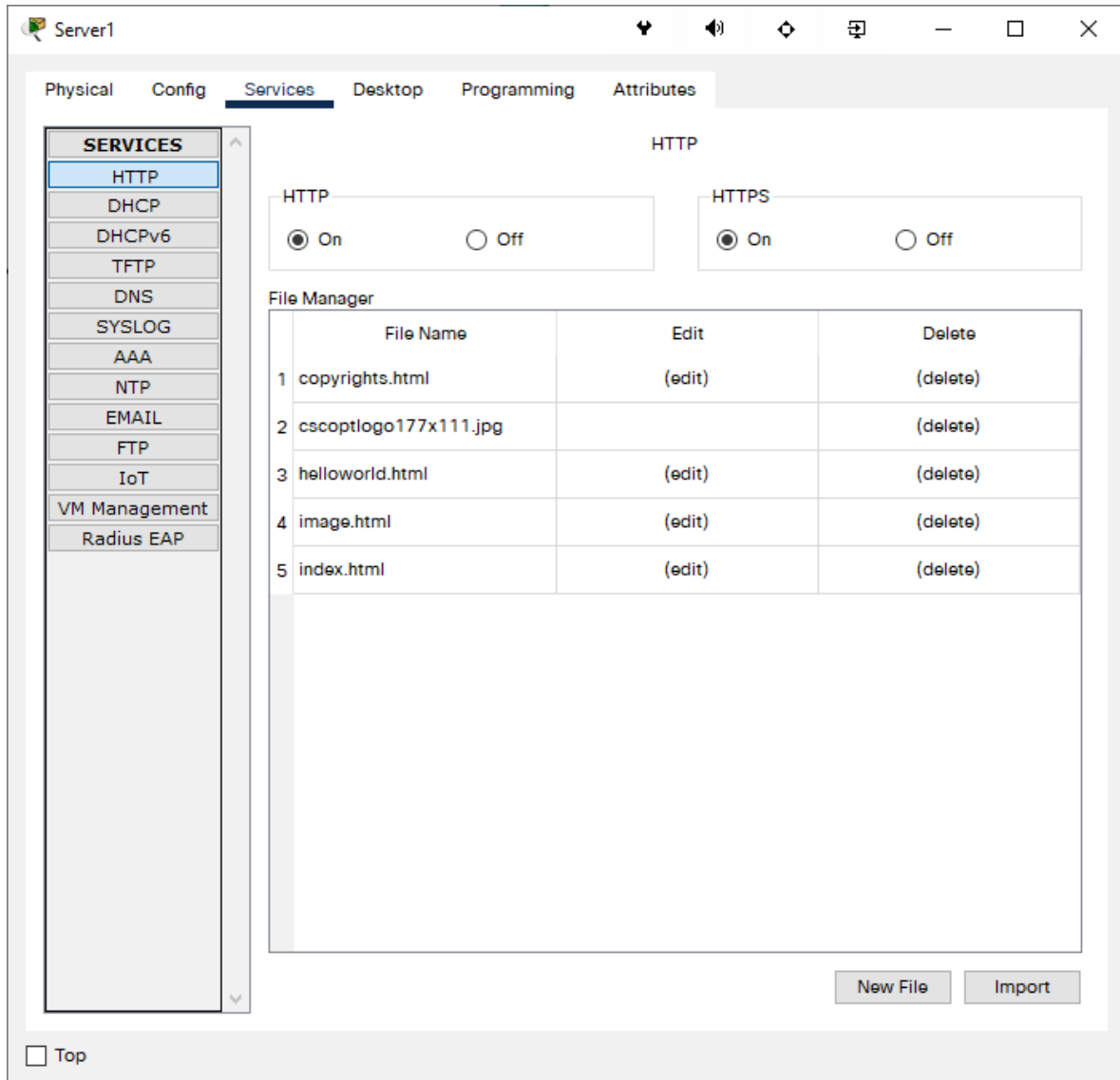
Remove

No.	Name	Type	Detail
0	google.com	A Record	192.168.2.2

DNS Cache

Top

## Setting up Web Server:



The screenshot shows the 'Server1' configuration window with the 'Services' tab selected. The left sidebar lists various services, with 'HTTP' highlighted. The main area shows the 'HTTP' configuration, including 'HTTP' and 'HTTPS' status toggles, both set to 'On'. Below this is a 'File Manager' table listing files and their actions.

**SERVICES**

- HTTP
- DHCP
- DHCPv6
- TFTP
- DNS
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP
- IoT
- VM Management
- Radius EAP

**HTTP**

HTTP: ☒ On ☐ Off

HTTPS: ☒ On ☐ Off

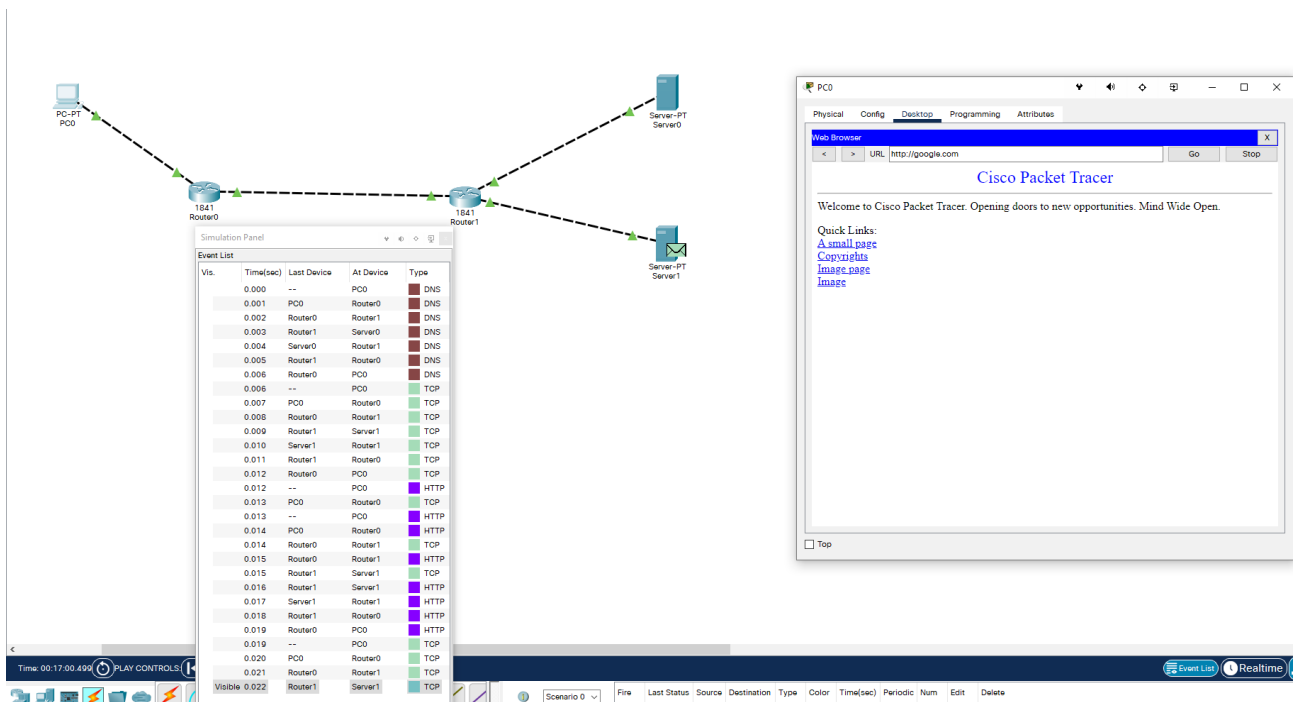
**File Manager**

	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)

☐ Top

New File Import

## Client to server simulation:



## Topology 2

### PC0:

IP ADDRESS: 1.1.1.2  
GATEWAY: 1.1.1.1  
DNS SERVER: 10.10.1.1

### PC1:

IP ADDRESS: 1.1.1.3  
GATEWAY: 1.1.1.1  
DNS SERVER: 10.10.1.1

### PC2:

IP ADDRESS: 6.6.6.2  
GATEWAY: 6.6.6.1  
DNS SERVER: 10.10.1.1

### PC3:

IP ADDRESS: 2.2.2.2  
GATEWAY: 2.2.2.1  
DNS SERVER: 10.10.1.1

### PC3:

IP ADDRESS: 2.2.2.3  
GATEWAY: 2.2.2.1  
DNS SERVER: 10.10.1.1

### ROUTER 0:

Fast Ethernet 0: 1.1.1.1  
Fast Ethernet 1: 3.3.3.2  
Ethernet 0: 10.10.1.2

### ROUTER 1:

Fast Ethernet 0: 3.3.3.1  
Fast Ethernet 1: 5.5.5.1  
Ethernet 0: 2.2.2.1

### ROUTER 2:

Fast Ethernet 0: 5.5.5.2  
Fast Ethernet 1: 6.6.6.2

### DNS SERVER:

IP ADDRESS: 10.10.1.1  
DEFAULT GATEWAY: 10.10.1.2

### WEB SERVER:

IP ADDRESS: 10.10.2.1  
DEFAULT GATEWAY: 10.10.1.2

## DNS and Web Server Services:

The screenshot shows the 'DNS Server' configuration window. The 'Services' tab is selected, displaying a list of services on the left and configuration options on the right. The 'DNS' service is highlighted in the list. The configuration area shows 'DNS Service' is turned 'On'. Under 'Resource Records', there is a table with two entries:

No.	Name	Type	Detail
0	google.com	A Record	10.10.2.1
1	mythreya.com	A Record	10.10.2.1

Below the table is a 'DNS Cache' button. The window also features a 'Top' button at the bottom left.

The screenshot shows the 'Web Server' configuration window. The 'Services' tab is selected, displaying a list of services on the left and configuration options on the right. The 'HTTP' service is highlighted in the list. The configuration area shows 'HTTP' and 'HTTPS' services, both with 'On' radio buttons selected. Below this is a 'File Manager' table:

	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)

At the bottom right of the configuration area are 'New File' and 'Import' buttons. The window also features a 'Top' button at the bottom left.

## Client to server simulation:

