

МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ РОССИЙСКОЙ ФЕДЕРАЦИИ
Федеральное государственное автономное образовательное учреждение
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«КРЫМСКИЙ ФЕДЕРАЛЬНЫЙ УНИВЕРСИТЕТ им. В. И. ВЕРНАДСКОГО»
ФИЗИКО-ТЕХНИЧЕСКИЙ ИНСТИТУТ
Кафедра компьютерной инженерии и моделирования

Web and Email Servers

Отчет по лабораторной работе № 1
по дисциплине «Компьютерные сети»
студента 2 курса группы ИВТ-б-о-202(1)
Шор Константина Александровича

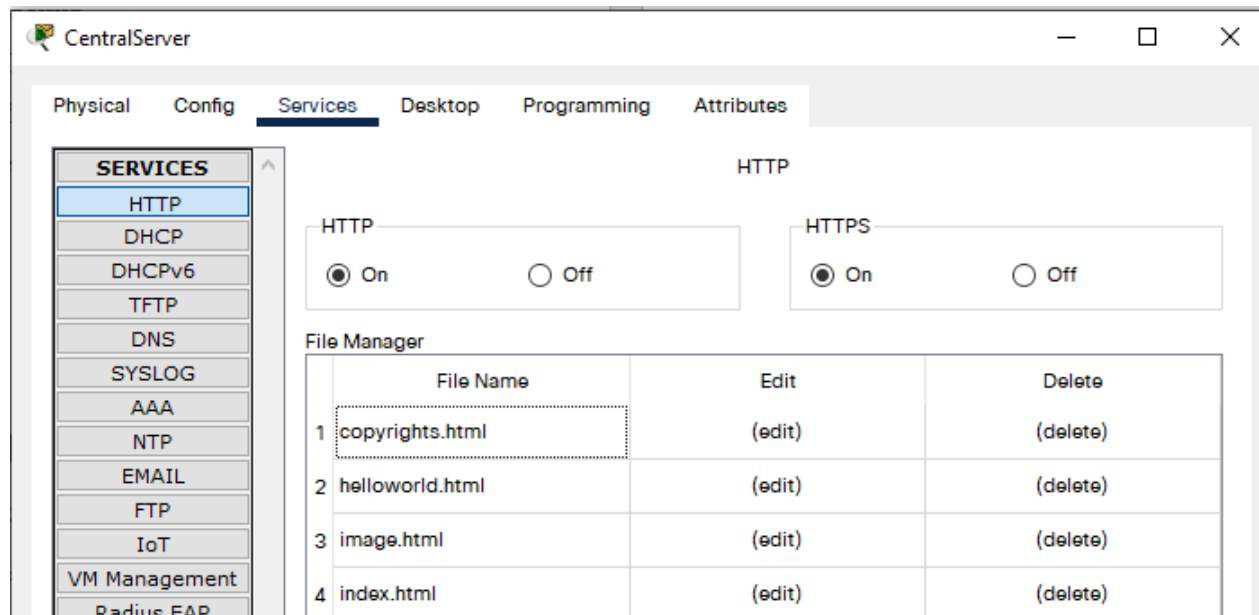
Направления подготовки 09.03.01 «Информатика и вычислительная техника»

Симферополь, 2022

Part 1: Configure and Verify Web Services

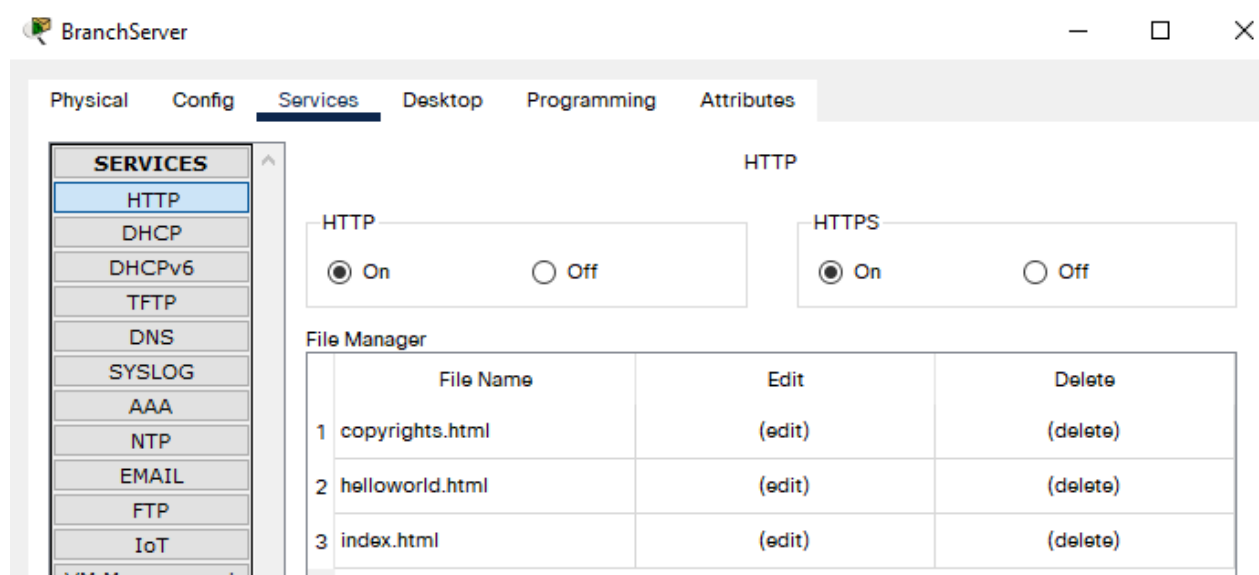
Step 1: Configure web services on CentralServer and BranchServer.

- Click CentralServer and click the Config tab > HTTP.
- Click On to enable HTTP and HTTP Secure (HTTPS).
- Optional. Personalize the HTML code.
- Repeat Step1a – 1c on BranchServer.



The screenshot shows the CentralServer configuration window with the 'Services' tab selected. The 'HTTP' service is enabled (radio button selected). The 'HTTPS' service is also enabled (radio button selected). The 'File Manager' table lists four files: copyrights.html, helloworld.html, image.html, and index.html. The 'copyrights.html' file is highlighted with a dotted border.

	File Name	Edit	Delete
1	copyrights.html	(edit)	(delete)
2	helloworld.html	(edit)	(delete)
3	image.html	(edit)	(delete)
4	index.html	(edit)	(delete)



The screenshot shows the BranchServer configuration window with the 'Services' tab selected. The 'HTTP' service is enabled (radio button selected). The 'HTTPS' service is also enabled (radio button selected). The 'File Manager' table lists three files: copyrights.html, helloworld.html, and index.html.

	File Name	Edit	Delete
1	copyrights.html	(edit)	(delete)
2	helloworld.html	(edit)	(delete)
3	index.html	(edit)	(delete)

Step 2: Verify the web servers by accessing the web pages.

There are many endpoint devices in this network, but for the purposes of this step, use PC3.

- Click PC3 and click the **Desktop** tab > **Web Browser**.
- In the URL box, enter **10.10.10.2** as the IP address and click **Go**. The **CentralServer** website displays.
- In the URL box, enter **64.100.200.1** as the IP address and click **Go**. The **BranchServer** website displays.
- In the URL box, enter **centralserver.pt.pka** and click **Go**. The **CentralServer** website displays.
- In the URL box, enter **branchserver.pt.pka** and click **Go**. The **BranchServer** website displays.
- What protocol is translating the **centralserver.pt.pka** and **branchserver.pt.pka** names to IP addresses?



f. DNS

Part 2: Configure and Verify Email Services on Servers

Step 1: Configure CentralServer to send (SMTP) and receive (POP3) Email.

- Click CentralServer, and then select the Config tab followed by the EMAIL button.
- Click On to enable the SMTP and POP3.
- Set the domain name to **centralserver.pt.pka** and click **Set**.
- Create a user named **central-user** with password **cisco**. Click **+** to add the user.

The screenshot shows the CentralServer configuration window. The 'Services' tab is active, and the 'EMAIL' option is selected in the left-hand 'SERVICES' list. The main area is titled 'EMAIL' and contains two sections: 'SMTP Service' and 'POP3 Service'. Both sections have a radio button set to 'ON'. Below these, the 'Domain Name' is set to 'centralserver.pt.pka', and a 'Set' button is visible. Under the 'User Setup' section, the 'User' field is 'central-user' and the 'Password' field is 'cisco'. A list below shows 'central-user' as the added user.

Step 2: Configure BranchServer to send (SMTP) and receive (POP3) Email.

- Click BranchServer and click the Config tab > EMAIL.
- Click On to enable SMTP and POP3.
- Set the domain name to **branchserver.pt.pka** and click **Set**.
- Create a user named **branch-user** with password **cisco**. Click **+** to add the user.

The screenshot shows the BranchServer configuration window. The 'Services' tab is active, and the 'EMAIL' option is selected in the left-hand 'SERVICES' list. The main area is titled 'EMAIL' and contains two sections: 'SMTP Service' and 'POP3 Service'. Both sections have a radio button set to 'ON'. Below these, the 'Domain Name' is set to 'branchserver.pt.pka', and a 'Set' button is visible. Under the 'User Setup' section, the 'User' field is 'branch-user' and the 'Password' field is 'cisco'. A list below shows 'branch-user' as the added user.

Step 3: Configure PC3 to use the CentralServer email service.

- a. Click PC3 and click the Desktop tab > E Mail.
- b. Enter the following values into their respective fields:
 - 1) Your Name: **Central User**
 - 2) Email Address: **central-user@centralserver.pt.pka**
 - 3) Incoming Mail Server: **10.10.10.2**
 - 4) Outgoing Mail Server: **10.10.10.2**
 - 5) User Name: **central-user**
 - 6) Password: **cisco**
- c. Click **Save**. The Mail Browser window displays.
- d. Click **Receive**. If everything has been set up correctly on both the client and server, the Mail Browser window displays the **Receive Mail Success** message confirmation.

Configure Mail

X

User Information

Your Name: Central User

Email Address: central-user@centralserver.pt.pka

Server Information

Incoming Mail Server: 10.10.10.2

Outgoing Mail Server: 10.10.10.2

Logon Information

User Name: central-user

Password: ●●●●●

Save

Clear

Reset

Receiving mail from POP3 Server 10.10.10.2
Receive Mail Success.

Step 4: Configure Sales to use the Email service of BranchServer.

- a. Click **Sales** and click the Desktop tab > E Mail.
- b. Enter the following values into their respective fields:
 - 1) Your Name: **Branch User**
 - 2) Email Address: **branch-user@branchserver.pt.pka**
 - 3) Incoming Mail Server: **172.16.0.3**
 - 4) Outgoing Mail Server: **172.16.0.3**
 - 5) User Name: **branch-user**
 - 6) Password: **cisco**
- c. Click **Save**. The Mail Browser window displays.
- d. Click **Receive**. If everything has been set up correctly on both the client and server, the Mail Browser window displays the **Receive Mail Success** message confirmation.
- e. The activity should be 100% complete. Do not close the Sales configuration window or the Mail Browser window.

The screenshot shows a window titled "Sales" with a tabbed interface. The "Desktop" tab is selected, and within it, the "Configure Mail" dialog is open. The dialog contains the following fields and values:

Section	Field	Value
User Information	Your Name:	Branch User
	Email Address	branch-user@branchserver.pt.pka
Server Information	Incoming Mail Server	172.16.0.3
	Outgoing Mail Server	172.16.0.3
Logon Information	User Name:	branch-user
	Password:	•••••

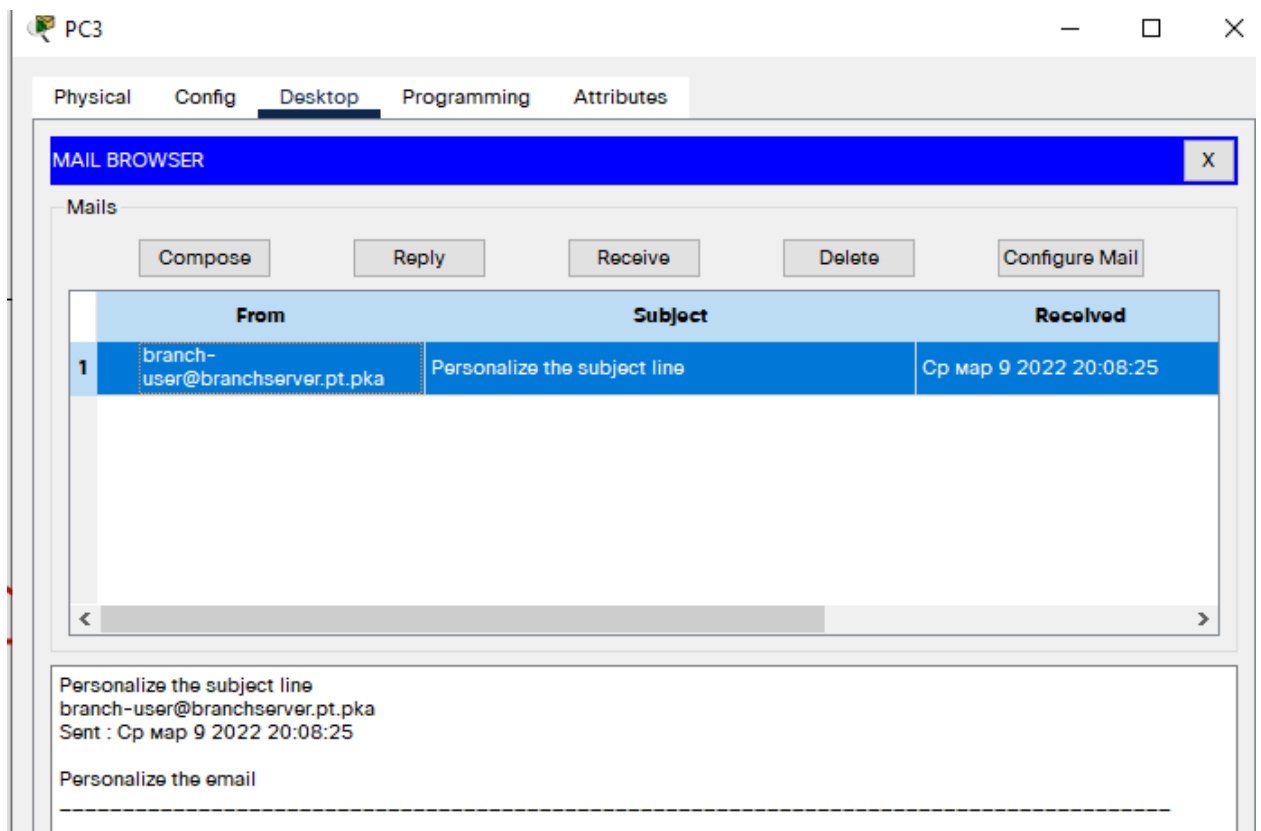
At the bottom of the dialog are three buttons: "Save", "Clear", and "Reset".

Receiving mail from POP3 Server 172.16.0.3
Receive Mail Success.

Step 5: Send an Email from the Sales client and the PC3 client.

- a. From the **Sales Mail Browser** window, click **Compose**.
- b. Enter the following values into their respective fields:
 - 1) To: **central-user@centralserver.pt.pka**
 - 2) Subject: *Personalize the subject line.*
 - 3) Email Body: *Personalize the email.*
- c. Click **Send**.
- d. Verify that PC3 received the email. Click **PC3**. If the Mail Browser window is closed, click **E Mail**.
- e. Click **Receive**. An email from Sales displays. Double-click the email.
- f. Click **Reply**, personalize a response, and click **Send**.
- g. Verify that **Sales** received the reply.

Sending mail to central-user@centralserver.pt.pka , with
subject : Personalize the subject line .. Mail Server:
172.16.0.3
Send Success.



Switch L3

```
D1(config)#ip route 0.0.0.0 0.0.0.0 10.255.255.245  
  
D2(config)#ip route 0.0.0.0 0.0.0.0 10.255.255.249
```

Маршрутизаторы

```
R2(config)#ip route 0.0.0.0 0.0.0.0 64.100.100.2  
  
R4(config)#ip route 0.0.0.0 0.0.0.0 64.100.150.2
```

Интернет

```
S    10.0.0.0/8 [1/0] via 64.100.100.1  
    64.0.0.0/8 is variably subnetted, 12 subnets, 3 masks  
D    64.100.8.0/24 [90/5376] via 64.104.222.2, 00:27:02, GigabitEthernet0/0  
C    64.100.100.0/30 is directly connected, Serial0/0/0  
C    64.100.100.1/32 is directly connected, Serial0/0/0  
L    64.100.100.2/32 is directly connected, Serial0/0/0  
C    64.100.150.0/30 is directly connected, Serial0/1/0  
C    64.100.150.1/32 is directly connected, Serial0/1/0  
L    64.100.150.2/32 is directly connected, Serial0/1/0  
S    64.100.200.0/30 is directly connected, Serial0/1/0  
C    64.104.222.0/30 is directly connected, GigabitEthernet0/0  
L    64.104.222.1/32 is directly connected, GigabitEthernet0/0  
C    64.104.223.0/30 is directly connected, GigabitEthernet0/1  
L    64.104.223.1/32 is directly connected, GigabitEthernet0/1  
D    128.107.0.0/16 [90/28416] via 64.104.222.2, 00:27:02, GigabitEthernet0/0  
    172.16.0.0/24 is subnetted, 1 subnets  
S    172.16.0.0/24 [1/0] via 64.100.150.1  
  
Tier3a(config)#
```