

DNS & WEB SERVER CONFIGURATION

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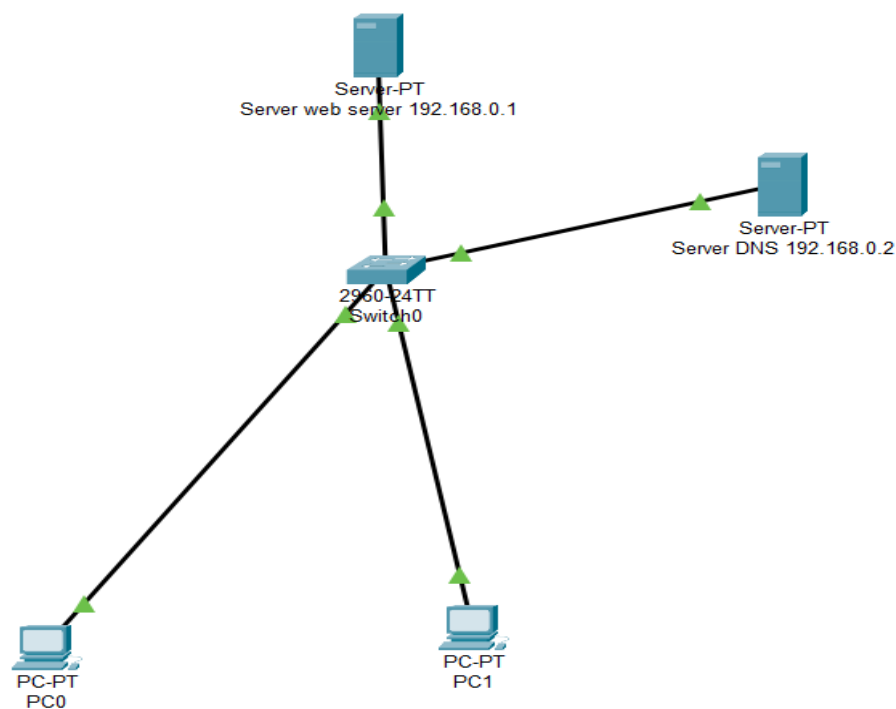
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Abstract

This project explores the configuration of essential network services, specifically a web server and a DHCP server, within a simulated network environment using Cisco Packet Tracer. The primary objective is to demonstrate the practical implementation of these services and their interaction. The configuration of the web server includes setting up a basic website with HTML content and making it accessible via HTTP. The DHCP server configuration involves defining an IP address pool, subnet mask, default gateway, and DNS server address for automatic client IP address assignment. This abstract highlights the key steps involved in configuring both servers, including IP addressing, service activation, and client connectivity testing. The successful implementation of this project provides a hands-on understanding of network service deployment and the fundamental principles of client-server communication.

Steps:



Step 2:configure the server

Server web server 192.168.0.1

Physical Config Services **Desktop** Programming Attributes

IP Configuration X

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 192.168.0.1

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::2E0:F9FF:FE9B:5445

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

Step 3:configure the dns server and switch on the dns service

Server DNS 192.168.0.2

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

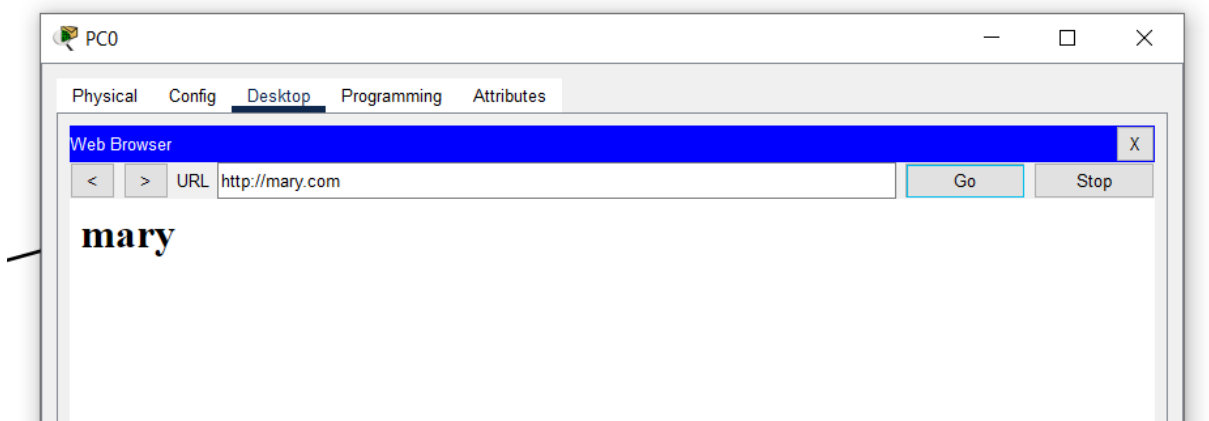
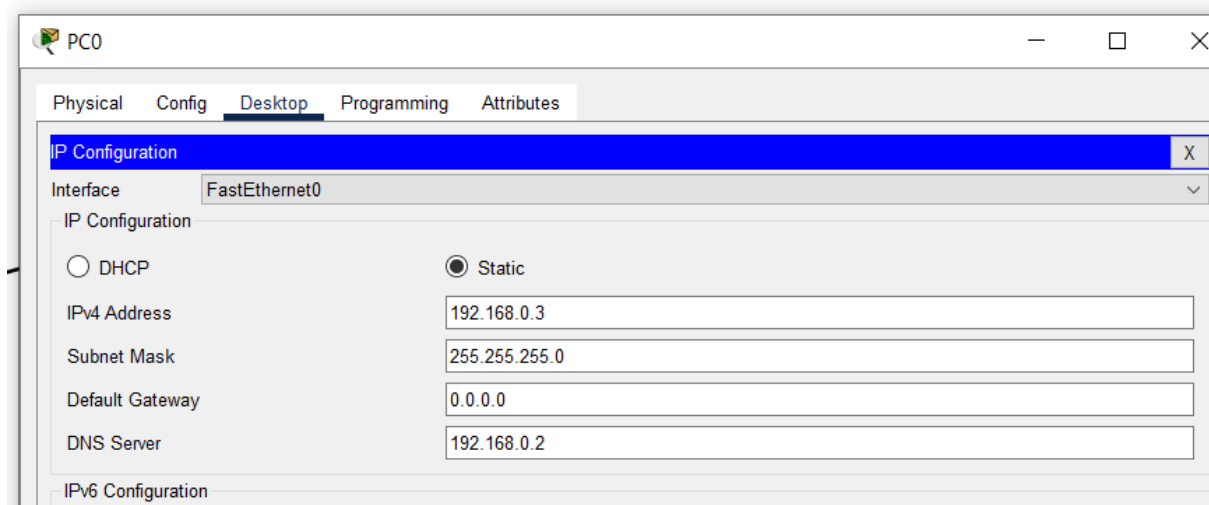
Name mary.com Type A Record

Address 192.168.0.1

Add Save Remove

No.	Name	Type	Detail
0	mary.com	A Record	192.168.0.1

Step4:now go to computer and give ip address of the computer and dns server ip address.Go to web browser in computer and search for the web page.



Significance

The configuration of web and DHCP servers is fundamental to modern networking. Web servers provide the platform for hosting websites and web applications, enabling information sharing and online services. Understanding their configuration is crucial for anyone involved in web development, network administration, or cybersecurity. DHCP servers automate IP address assignment, simplifying network management and preventing IP conflicts. This is essential in both small and large networks, ensuring seamless connectivity for numerous devices. Learning to configure these services in a simulated environment like Cisco Packet Tracer provides a safe and practical way to grasp core networking concepts, including IP addressing, DNS resolution, and client-server interaction. This knowledge is highly relevant in today's interconnected world, where web services and network efficiency are paramount. Mastering these skills is a valuable asset for aspiring network engineers and IT professionals.

Thank you

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