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SIMULATION OF TCP CLIENT SERVER MODEL FOR MAIL TRANSFER APPLICATION

Aim:

To study the simulation of client server model for mail transfer application using TCP, in CISCO PACKET TRACER simulator .

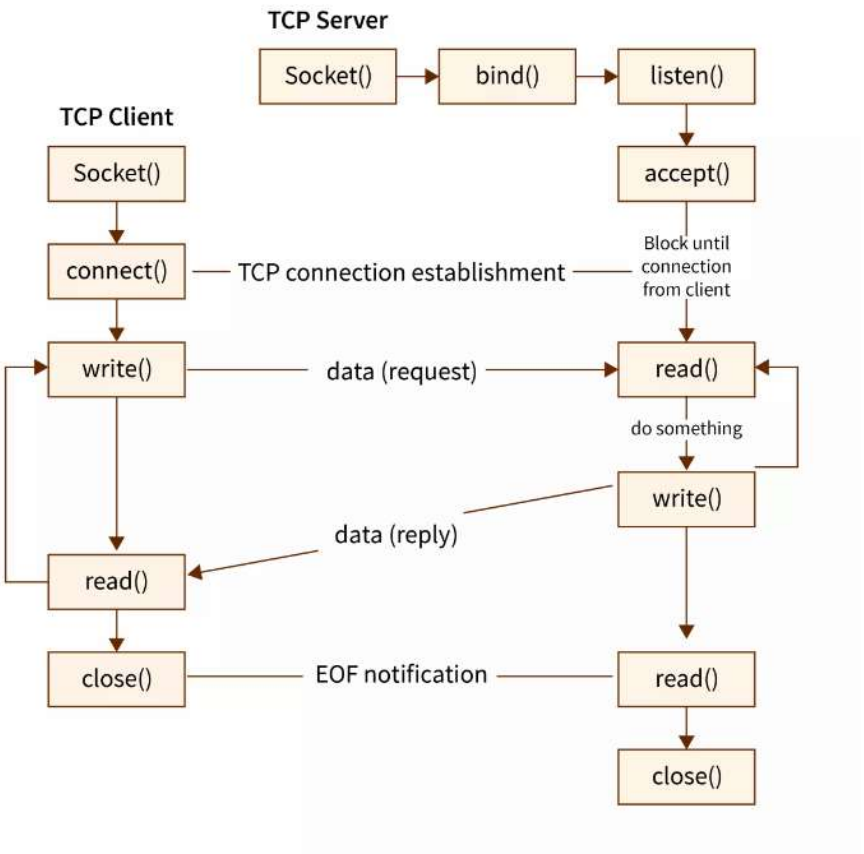
Theory:

- Sockets in computer networks are used for allowing the transmission of information between two processes of the same machines or different machines in the network.
- The socket is the combination of IP address and software port number used for communication between multiple processes.

Socket Programming in TCP

TCP stands for Transmission Control Protocol. TCP is a reliable connection-oriented protocol of the transport layer. TCP establishes the connection before data transmission. Steps for TCP socket programming for establishing TCP socket at the client-side:

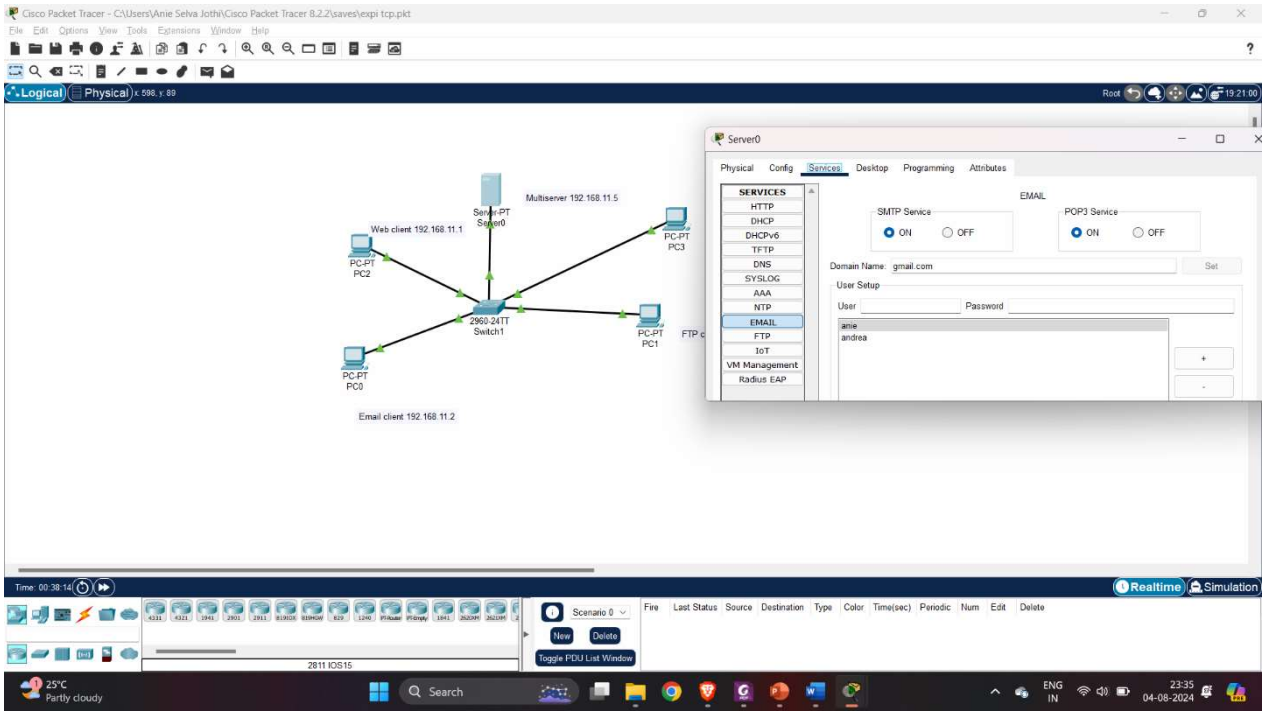
- The first step is to create a socket and use the socket() function to create a socket.
- Use the connect() function for connecting the socket to the server address.
- Transmit data between two communicating parties using read() and write() functions.
- After data transmission completion close the connection using close() function.

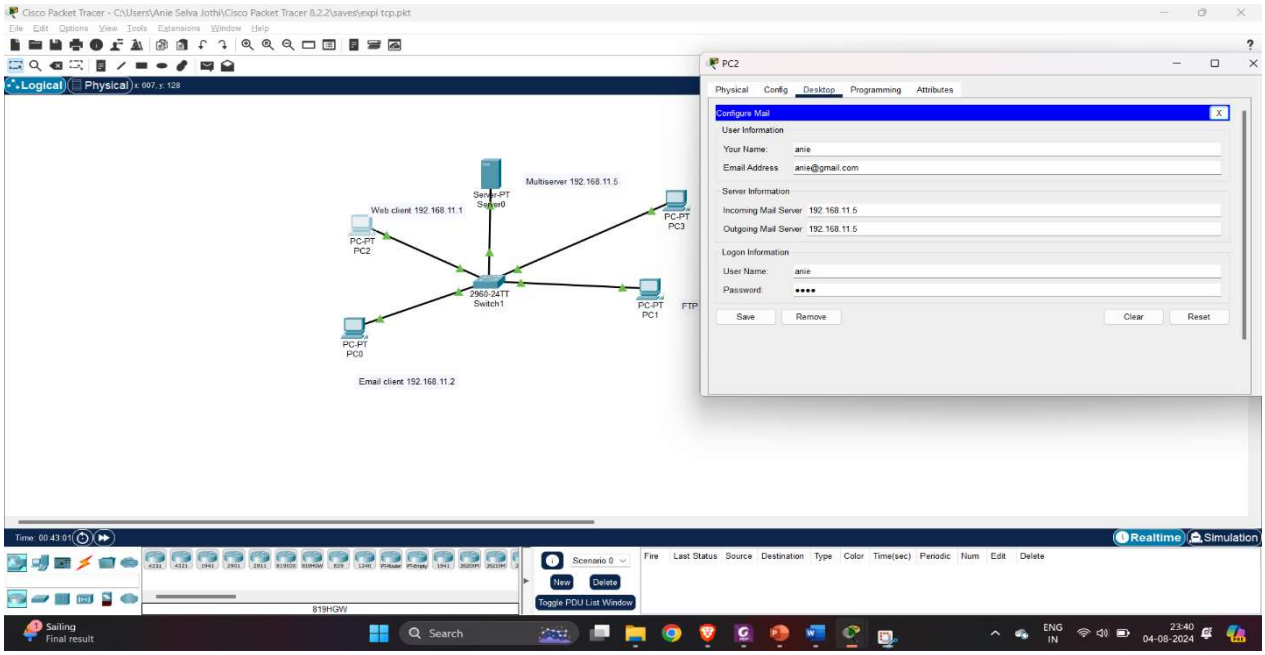


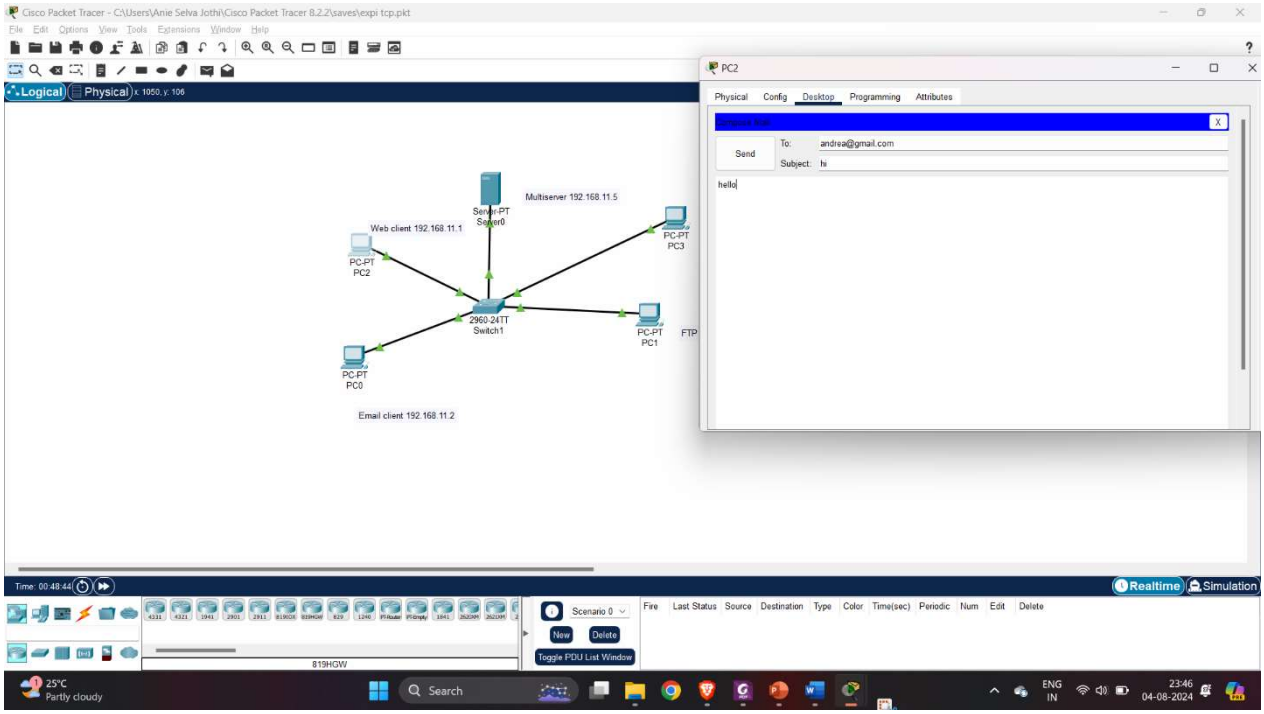
Procedure:

- Go to the multiserver-→desktop-→services→EMAIL→ SMTP, POP3 is ON→domain name-→ gmail.com-→ add mail id password.
- Go to the web client-→ Desktop-→ Email-→Configure the mail id and server.
- Go to the Email client-→ Desktop-→ Email-→Configure the mail id and server.
- Compose the mail and send from web client--→ receive from email client

Simulation of Output:







Result:

Thus the client server model for mail transfer application using TCP, was successfully simulated in CISCO PACKET TRACER simulator**.**