

A new social media app named “We Chat” is planning to open multiple offices in Bangladesh. They hire your group as network engineer to help them build a network system to connect all the offices. Below are the requirement list you need to follow to build the network.

- 1) These are the number of host each office has,
 - *) Dhaka (1240)
 - *) Ctg (546)
 - *) Sylhet (240)
 - *) Khulna (327)
 - *) Rajshahi (915)
 - *) Rangpur (98)they are also planning to at least double the number of host in each offices next year. So you guys have to keep in mind at the time of assigning ip addresses.
- 2) Khulna-Rajshahi and Rajshahi- Rangpur should be connected with each other manually.
- 3) Sylhet and Ctg should be connected with each other without human intervention.
- 4) Dhaka should works as a connecter between these two groups. Moreover works as a receiver of packets delivered to unknown ip addresses.
- 5) Rangpur and Sylhet must have a connection between them and this connection should only work if Dhaka router stops working. Otherwise, every packet from Rangpur- Sylhet should travel via Dhaka.
- 6) While assigning ip addresses to Dhaka, you need to create a Server named “Amar Iccha” which will assign ip addresses to host devices dynamically.
- 7) A webserver named “AmraSylheti.com” should be connected with Sylhet server. And display “Welcome to sylhet” if anyone tries to access it’s web page.
- 8) You need to show at least two end devices for each network.

Deliverables

- The network mentioned above should be implemented in packet tracer, with necessary devices and full configuration.
- After completion you should be able to test the conditions imposed.
- As hardcopies, you will have to submit the followings:
 - o Network topology diagram with proper labels
 - o The configurations of all the routers that you have implemented.
 - o VLSM/Network address table.
 - o IP address table