

## Alexander the Great

Alexander the Great was a great conqueror from ancient era. His empire lasted from Greece through Persia to present day India. Now for this project we will imagine that he is still alive and hired your group to create a network system for his empire. There are five main cities in his empire and the number of administrative officers are listed beside them.

- 1) Macedonia (234)
- 2) Athens (512)
- 3) Alexandria (900)
- 4) Samarkand (72)
- 5) Punjab (1789)

While building the network you have remember the things listed below.

- Half of the networks should be created using dynamic routing.
- Secure connection should be established between Samarkand-Punjab pair and Macedonia-Athens's pair.
- There should also be a connection between Punjab and Athens which will come to effect if Alexandria gets down for some reason.
- **Macedonia** and **Samarkand** will have **two separate web servers**. The DNS server will be in Macedonia. If anyone types the URL "www.macedonia.gov" the web server located at Macedonia will handle the query and the user will see a webpage that says "Welcome to Macedonia!" Similarly, the web server located in Samarkand will handle requests for "www.samarkand.com" and return "The Pearl of the Eastern Muslim World" when visited through the URL.
- **Athens and Punjab** will use static IP addressing while the other zones' IP addresses will be assigned using DHCP and handled by their network's **DHCP server**.
- **Alexandria** and **Athens** will be communicating a lot, which is why they will require **Email** servers to be set up so that they can exchange mail among themselves. Make sure the email configurations are all set up for sending mail, receiving mail, and replying to mail.
- You must remember that default route cannot be used while exchanging any packets. Data will be delivered using static or dynamic routes only.
- You must be able to successfully ping from one zone to another after all the setups are properly completed.

### **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.

- you will have to submit the followings:
  - Network topology diagram with proper labels
  - The configuration commands of all the routers that you have implemented.
  - VLSM/Network address table.
  - IP address table