

# Animal Kingdom

You have to design a network for the animal kingdom, which is divided into four tribes named Cat, Dog, Elephant, and Lion respectively. Each tribe has a tribe chief and the chief of the Lion tribe is also the king of the animal kingdom.

Tribe	Population	Tribe Chief's Email
Lion	3	lionking@animals.com
Cat	800	catchief@animals.com
Dog	1200	dogchief@animals.com
Elephant	100	elephantchief@animals.com

## Requirements

- Each tribal chief (including the Lion king) will have a special computer that can be used to email the other tribal chiefs.
- There will be a single website ([www.animals.com](http://www.animals.com)) that says “Welcome to the Animal Kingdom!”.
- The Lion tribe will manage the necessary Web, DNS, Email, and DHCP servers, and these servers have to be configured manually.
- The Lion tribe will be directly connected to the Elephant tribe.
- The Elephant tribe will be directly connected to the Cat and the Dog tribes.
- The tribal chief's special computers and the Lion tribe's devices will use static IP addressing, while other devices will get their IP addresses from the DHCP server. Use the population of each tribe to design appropriately sized VLSM subnets.
- The Lion tribe will only use static routing.
- The other tribes will use dynamic routing with static routes only where necessary.

Showing two end devices per network (tribe) excluding the special computer is good enough (so for the Cat tribe, there is no need to actually show 800 end devices). You need to be able to ping each tribe from another after all the configurations are complete. You are

allowed to make any valid and necessary assumptions while designing the network infrastructure.

## Deliverables

- The network mentioned above should be implemented in Cisco Packet Tracer, with the necessary devices and full configuration.
- After completion, you should be able to test the conditions imposed, and all the end devices should be able to ping one another.
- You will have to submit the following:
  - Work Distribution among the group members [Who did which part]
  - The pkt/pka file
  - Picture of the Network topology diagram with proper labels [You have to show the network addresses using notes for each network]
  - A PDF containing
    - VLSM tree
    - IP address table
    - The configuration commands of all the routers you have implemented.