

## **Scenario**

The Arch Global Research Company is small company that is developing high-speed wireless products. The main office occupies two buildings. One building is for the Administration Group. The other building is for two groups of employees, Sales and Marketing Group, and the Research and Development Group. The Arch Global Research Company also has a Sales Branch Office. The company is implementing a wired network that should support 100% growth over the next five to ten years. A logical diagram has been provided though not completed. The task is to design, implement and fully document the Arch Global Research Company network. In addition to a final report, the company would like to see a functioning prototype or simulation of the network, before it is fully implemented, in order to verify that it will meet the company's needs.

## **Requirements**

The Arch Global Research Company has provided a partially completed logical diagram of the required network. The company may also provide networking equipment for demonstration and test.

### **Arch Global Research Company Requirements**

- 14 employees in the Research and Development (R & D) group
  - 28 employees in the Sales and Marketing (S & M) group.
  - 7 employees in the Administration group.
  - 28 employees in the remote sales office.
  - Use public class C 204.15.X.0/24 (X is registration number) provided to your group for internal addressing.
  - Use effective VLSM scheme for IP addressing.
  - Expect 100% growth of current IP requirements when determining size of subnets.
  - All networking devices must have IP addresses.
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- Implement above network and routing in Packet Tracer
  - Perform basic configuration tasks on each router
  - Configure and activate Ethernet interfaces
  - Include Output of show ip route command, show ip protocol command and show ip interface brief command.

## Partially completed logical diagram

