

# EIGRP

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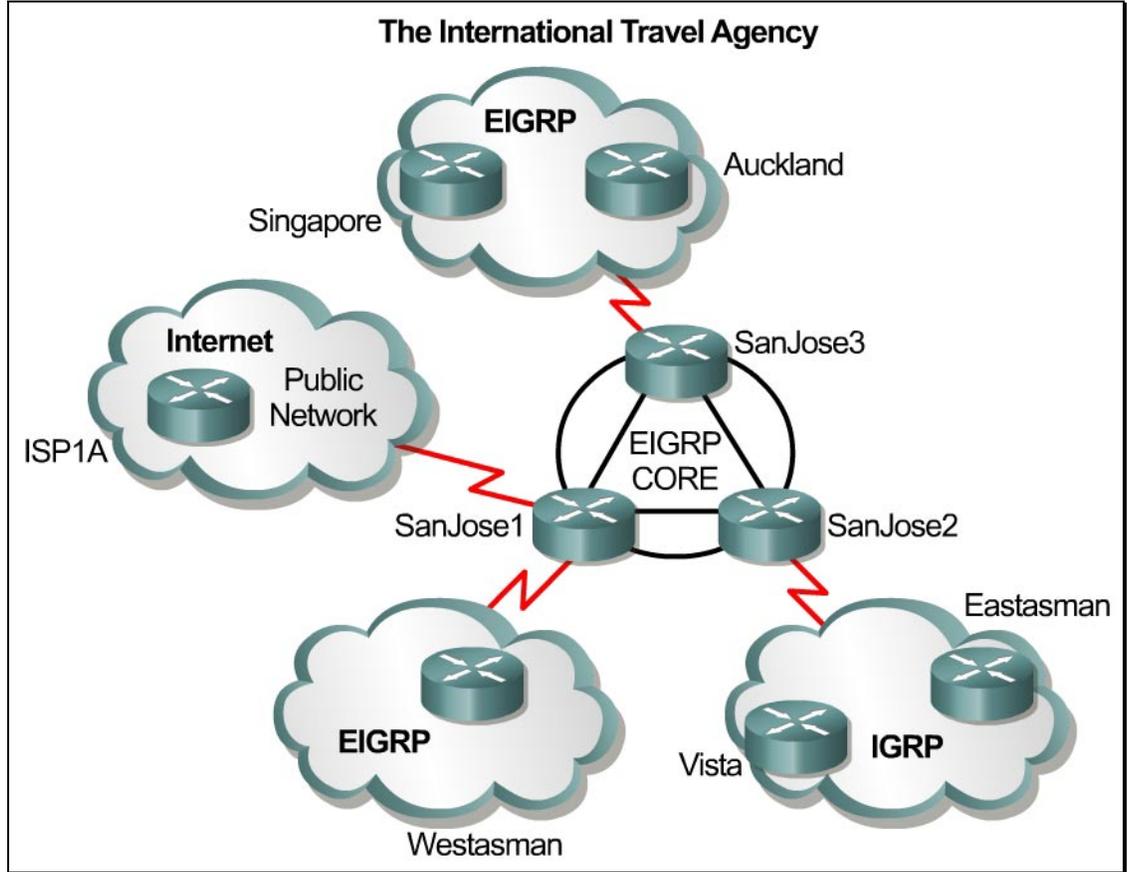
**Cisco Networking Academy Program**

**CCNP 1: Advanced Routing v3.0**

# Instructions

Plan, design and implement the complex International Travel Agency EIGRP network shown in the diagram and description below. Implement the design on the lab set of routers. Verify that all configurations are operational and functioning according to the guidelines.

# Scenario



The responsibilities of the network engineer with International Travel Agency include creating and maintaining the San Jose campus network, connectivity to all regional headquarters, and Internet access via one or more service providers. The San Jose campus network must maintain 99.9% availability, while supporting 99% availability to regional headquarters. The network will be based on and must meet the following requirements:

1. The San Jose core routers must run EIGRP.
2. The network has been allocated one Class B license.
3. Use VLSM on all serial interfaces as may be appropriate.
4. This network will have three branches. The regional headquarters in Singapore and Auckland will run EIGRP. The Westasman branch office will run EIGRP. The Vista and Eastasman branch offices will run IGRP.
5. Summarize all routes from each area into the core. Plan for approximately 30 networks in each area with exception of the core, which is exactly as shown in the diagram.
6. Redistribute routing information between EIGRP and the IGRP network.
7. In Westasman, implement EZ IP on the router for users.

8. In the IGRP cloud of Vista and Eastasman, configure a DHCP server for a LAN segment. Use an IP helper address so that a workstation on another segment in that area can obtain an IP address from the DHCP server.
9. Configure Internet connectivity through a static route.
10. Document the configuration and any difficulties that were encountered.
11. What were the implementation issues or limitations?
12. List two suggestions for improving this network configuration and design.