**IFT 466 Advanced Computer Networks**

**Lab 2  
EIGRP – Show Commands**

After you complete each step, put a ‘√’ or ‘x’ in the completed box

**Objectives**Gain an understanding of the troubleshooting commands used in EIGRP.

****Open the packet tracer file you saved from Lab 1  
  
  
 ✓

You will now execute a series of show and debug commands on the topology. For each command, you must list the following and relate it to results displayed on your topology.

* Type of data displayed
* How this command would help with the troubleshooting process.

1. Show ip route

|  |  |
| --- | --- |
| **Displays the following data**   1. Multiple different codes are displayed. 2. Gateway connection report 3. Code C 4. Code L 5. Code D 6. It displays the medium of connection between router to router (or) router to switch. | **Help troubleshoot**   1. They hep you determine the connection type. 2. Will help with which gateway is connected to the network? 3. Will help with directly connected devices and networks. 4. Will help identifying local connections to a network. 5. Helps determine the route network, here EIGRP connection. 6. It mentions the connectivity method(Directly/Variably) also the ports used and their IP addresses. |

A picture containing calendar

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1. Show ip eigrp neighbors

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| **Displays the following data**   1. Display about connected neighbors. 2. It displays about IP address, interface, hold uptime, SRTT, RTO, Q Cnt and Seq number. | **Help troubleshoot**   1. Helps determine which processes are connected. 2. It helps determine the different parameters of a network. |

Graphical user interface, text, application, Word

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1. Show ip eigrp topology

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| --- | --- |
| **Displays the following data**   1. Display about topology table and AS number. 2. Multiple different codes are displayed. 3. Displays all connected networks and interfaces. | **Help troubleshoot**   1. Helps determine the ID and AS number of the connection. 2. They help you determine the topology status. 3. It help to determine the interface connection with in the network. |

Text

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1. Show ip eigrp interfaces

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| --- | --- |
| **Displays the following data**   1. Displays all interfaces connected as EIGRP. 2. Displays interfaces, peers, Xmit Queue, Mean SRTT, Pacing time, Multicast flow timer and Pending routes. | **Help troubleshoot**   1. Helps determine all the interfaces connected. 2. Helps determine the interfaces and all of these parameters for better understanding. |

Graphical user interface

Description automatically generated with medium confidence

5. Show ip protocols

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| **Displays the following data**   1. Displays information about protocols.      1. Display about update filter lists. 2. Displays networks that are being routed. 3. Displays routing information sources. | **Help troubleshoot**   1. Helps determine the routing protocols used. 2. Helps determine if the update filter list is set or not for all the interfaces. 3. Helps determine the routing network. 4. Helps determine the routing information sources, includes gateway, distance and last update. |

Text

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1. **show ip eigrp neighbors detail**

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| **Displays the following data**   1. Invalid Command | **Help troubleshoot**   1. Invalid Command |

**Graphical user interface, text

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**7. show ip eigrp traffic**

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| **Displays the following data**   1. Displaying EIGRP traffic statistics 2. Displaying the sent and received packets to verify network working. | **Help troubleshoot**   1. Will help to verify if the network traffic is working or not. 2. Will help to observe the traffic pings with in the network. |

Text

Description automatically generated8. debug eigrp packet

|  |  |
| --- | --- |
| **Displays the following data**   1. Displays the packets sent and received from different interfaces. 2. Displays different parameters like update, request, query, reply, hello, ack. | **Help troubleshoot**   1. Will help troubleshooting packets ping in the network. 2. Will help to analyzing if all the interfaces are active by analyzing these parameters. |

Text

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