

Cisco – Troubleshooting EIGRP

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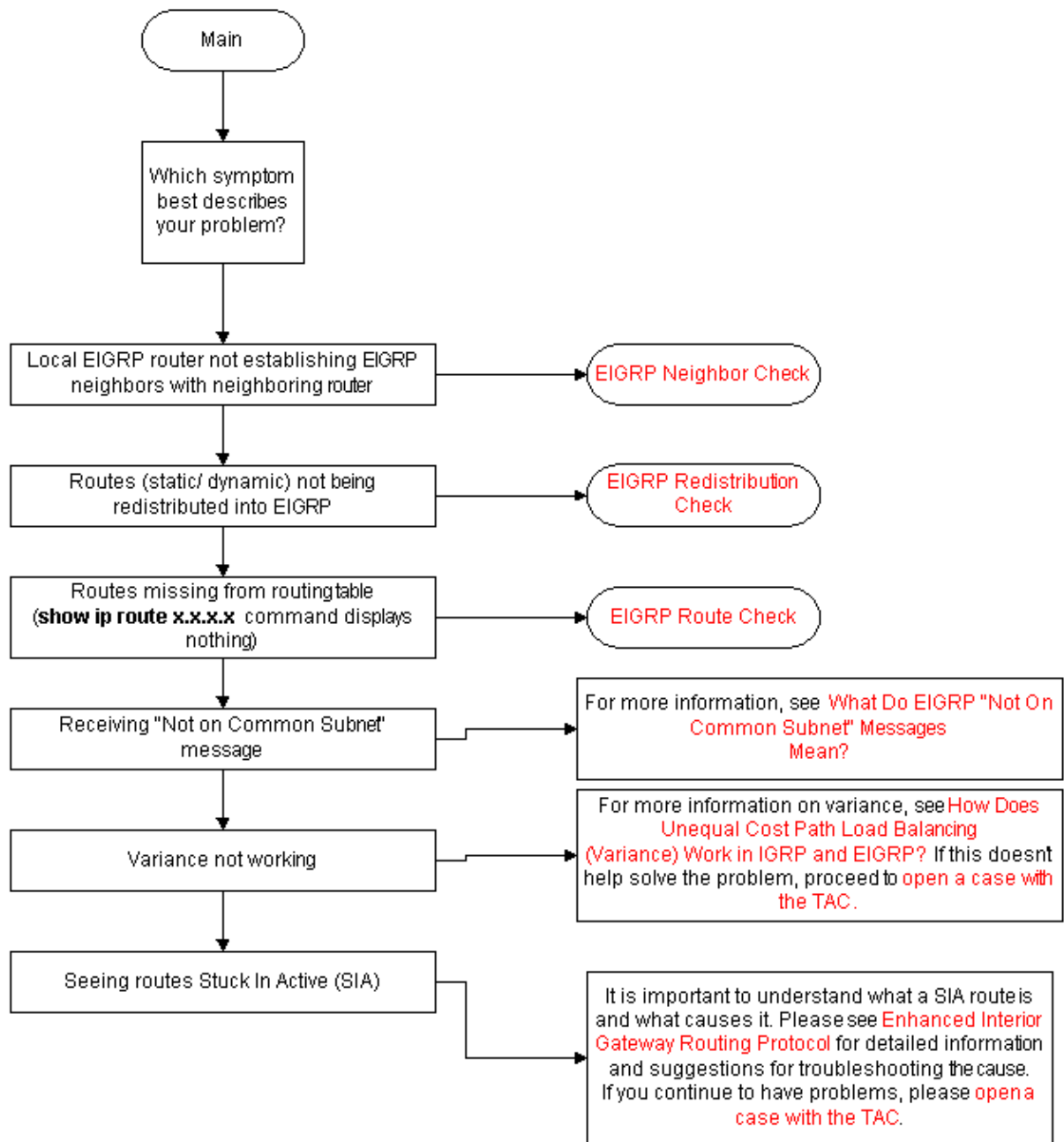
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Introduction

This document provides troubleshooting information for common problems with Enhanced Interior Gateway Routing Protocol (EIGRP). To see more information, or to go to the next flowchart, click the command boxes in red.

Troubleshooting Flowchart



Tools Information

For additional resources, refer to Cisco [TAC Tools for Routing Protocol Technologies](#).

Related Information

- [IP Routing Top Issues](#)
- [EIGRP Support Page](#)

- [More EIGRP Technical Tips](#)
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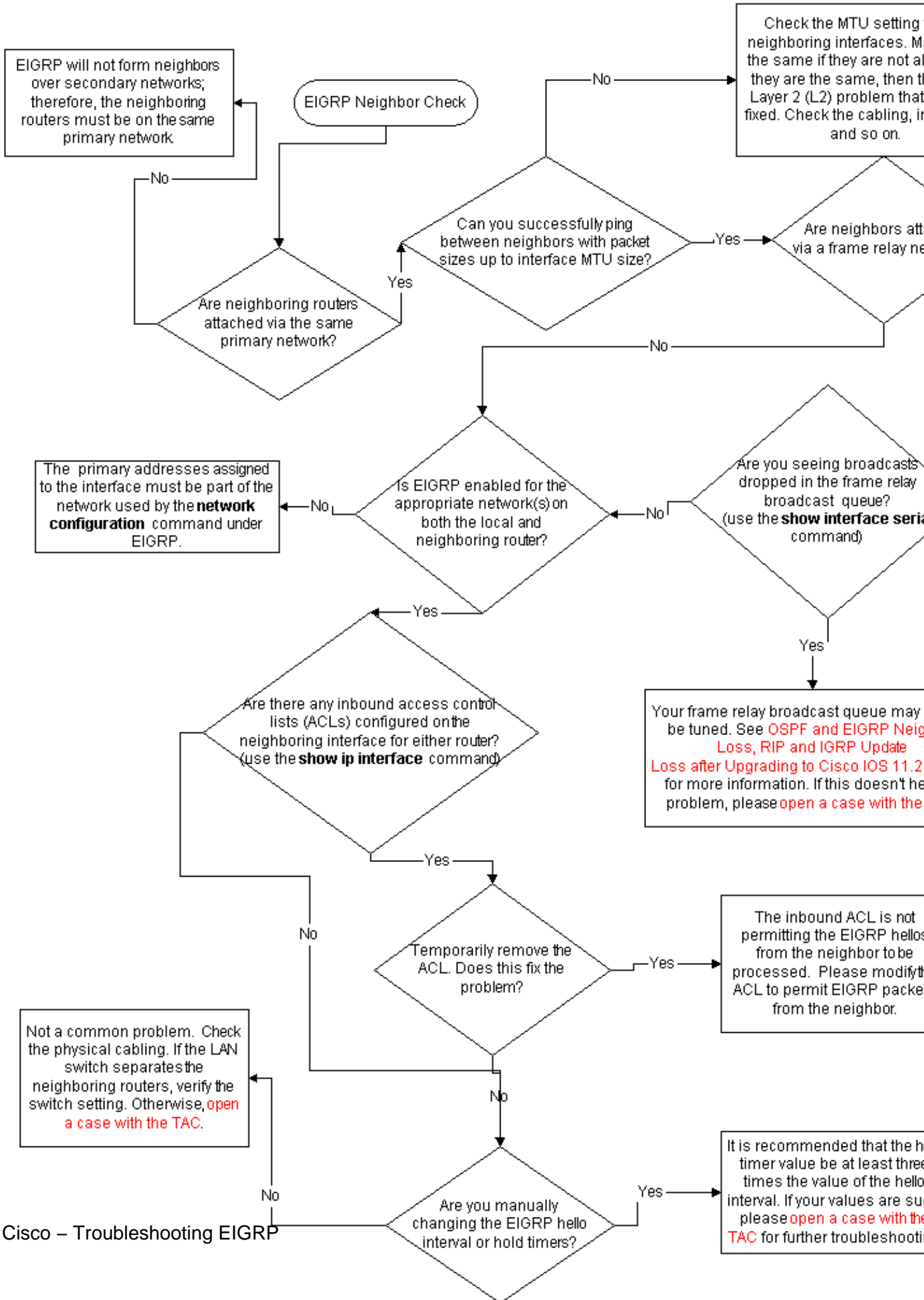
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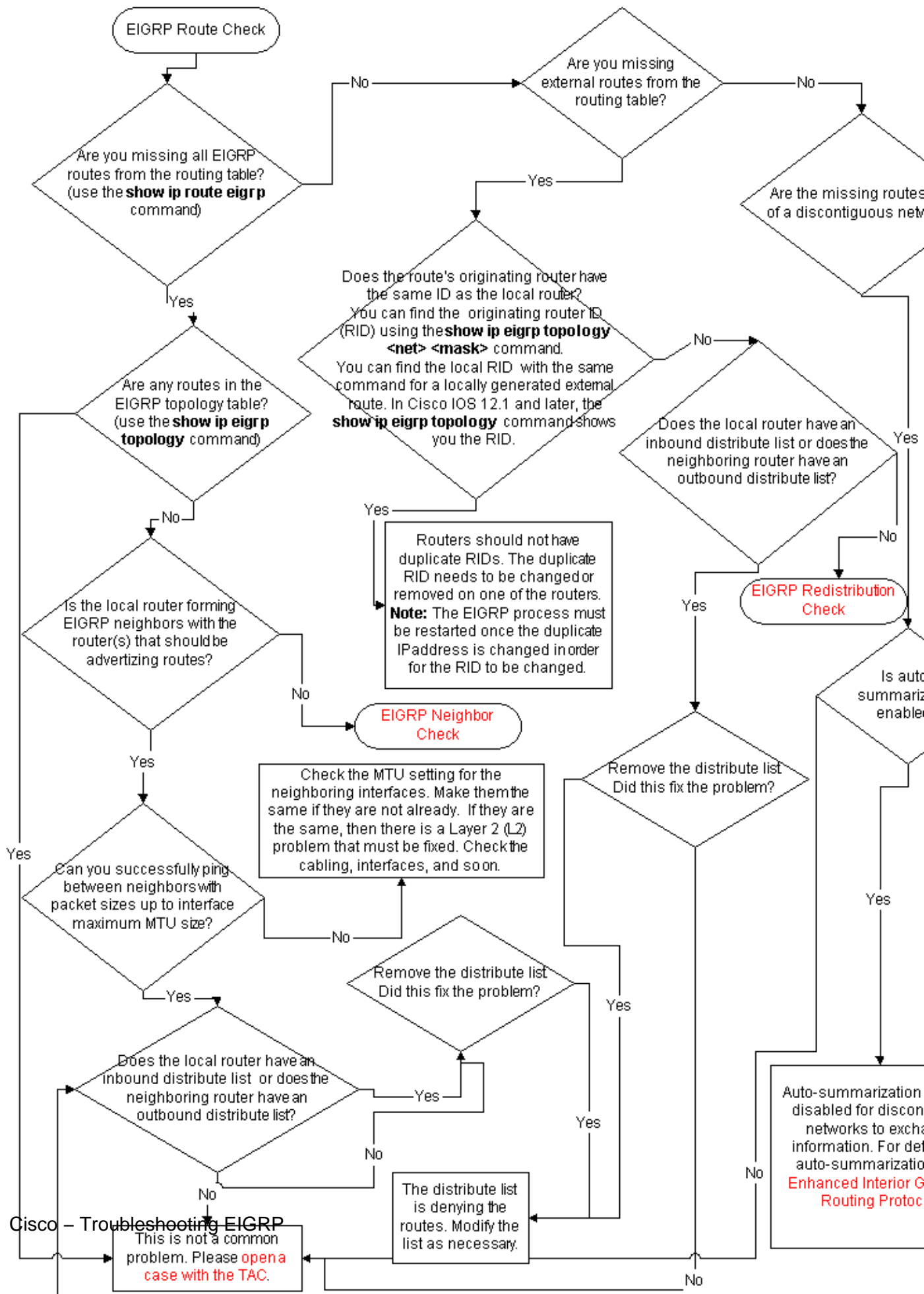
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Troubleshooting Flowchart



EIGRP Route Check

Are you missing all EIGRP routes from the routing table? (use the **show ip route eigrp** command)

Are you missing external routes from the routing table?

Are the missing routes of a discontinuous network?

Does the route's originating router have the same ID as the local router? You can find the originating router ID (RID) using the **show ip eigrp topology <net> <mask>** command. You can find the local RID with the same command for a locally generated external route. In Cisco IOS 12.1 and later, the **show ip eigrp topology** command shows you the RID.

Are any routes in the EIGRP topology table? (use the **show ip eigrp topology** command)

Does the local router have an inbound distribute list or does the neighboring router have an outbound distribute list?

Routers should not have duplicate RIDs. The duplicate RID needs to be changed or removed on one of the routers. **Note:** The EIGRP process must be restarted once the duplicate IP address is changed in order for the RID to be changed.

EIGRP Redistribution Check

Is the local router forming EIGRP neighbors with the router(s) that should be advertising routes?

EIGRP Neighbor Check

Check the MTU setting for the neighboring interfaces. Make them the same if they are not already. If they are the same, then there is a Layer 2 (L2) problem that must be fixed. Check the cabling, interfaces, and so on.

Remove the distribute list. Did this fix the problem?

Can you successfully ping between neighbors with packet sizes up to interface maximum MTU size?

Remove the distribute list. Did this fix the problem?

Does the local router have an inbound distribute list or does the neighboring router have an outbound distribute list?

Auto-summarization disabled for discontinuous networks to exchange information. For details see **Enhanced Interior Gateway Routing Protocol**

Cisco - Troubleshooting EIGRP
This is not a common problem. Please **open a case with the TAC.**

The distribute list is denying the routes. Modify the list as necessary.

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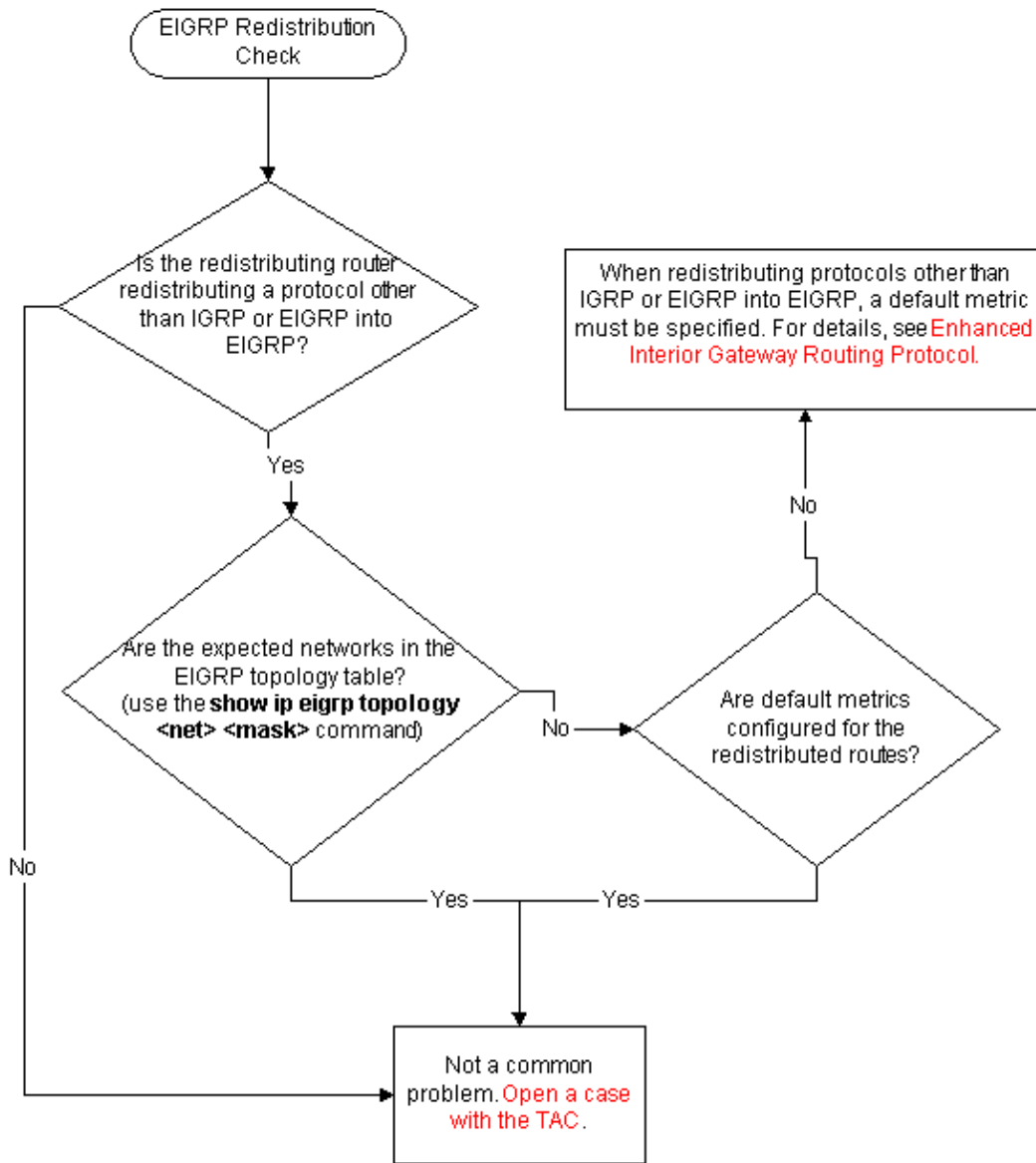
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