

# **Cisco – Troubleshooting OSPF**

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# Troubleshooting OSPF

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**Interactive:** This document offers customized analysis of your Cisco device.

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## **Introduction**

### **Before You Begin**

Conventions

Prerequisites

Components Used

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#### **Troubleshooting the OSPF Routing Table**

#### **Troubleshooting OSPF Init State**

#### **Troubleshooting OSPF MTU**

#### **Troubleshooting OSPF Corrupt Packets**

#### **Troubleshooting OSPF Two-Way State**

#### **Troubleshooting OSPF Links**

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#### **Troubleshooting Access Lists**

#### **Troubleshooting OSPF NBMA Networks**

#### **Related Information**

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## **Introduction**

This document provides troubleshooting information for common problems with Open Shortest Path First (OSPF). To see more information, or to go to the next flowchart, click the command boxes in red.

## **Before You Begin**

### **Conventions**

For more information on document conventions, see the Cisco Technical Tips Conventions.

### **Prerequisites**

There are no specific prerequisites for this document.

## Components Used

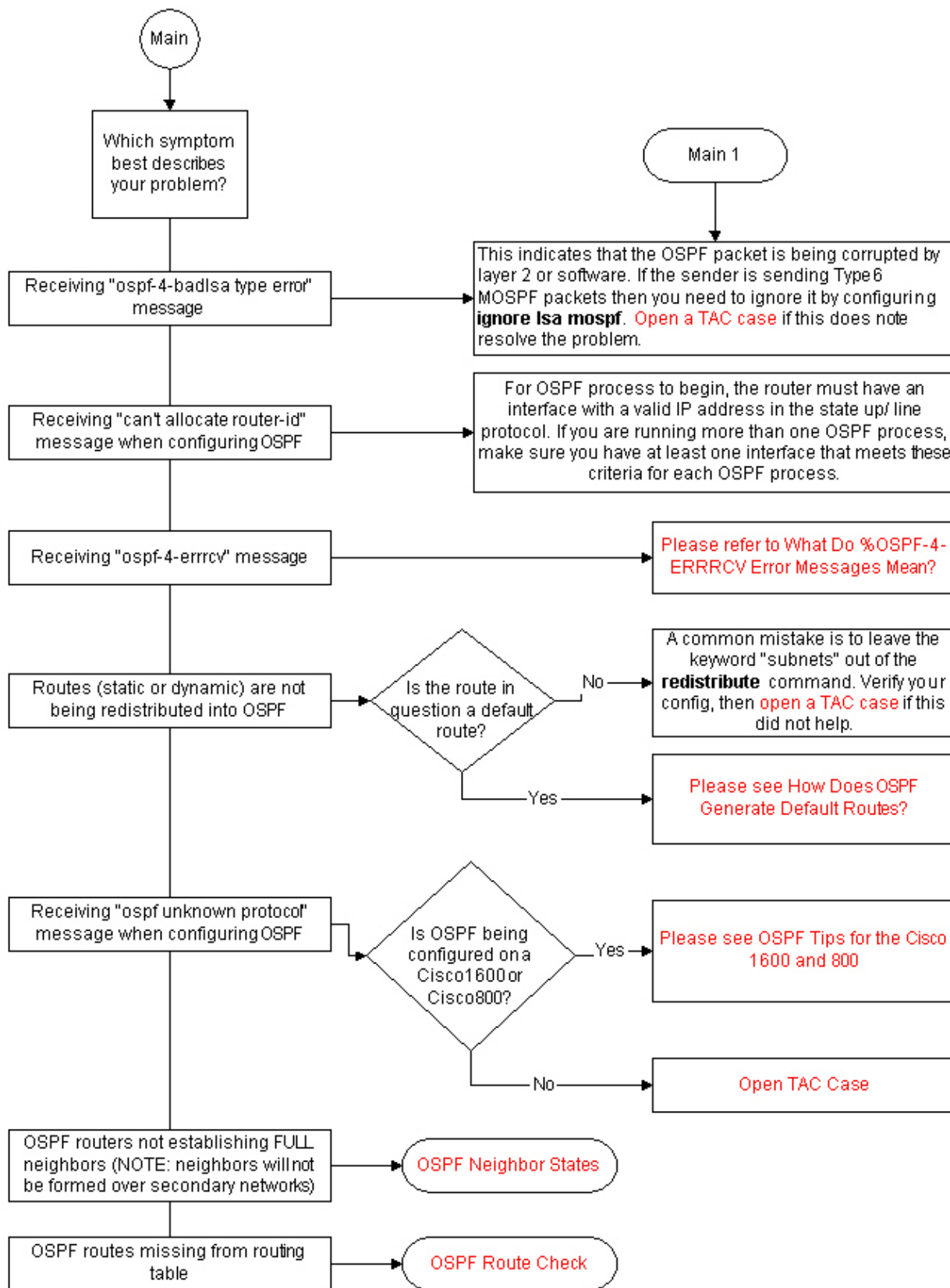
This document is not restricted to specific software and hardware versions.

The information presented in this document was created from devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If you are working in a live network, ensure that you understand the potential impact of any command before using it.

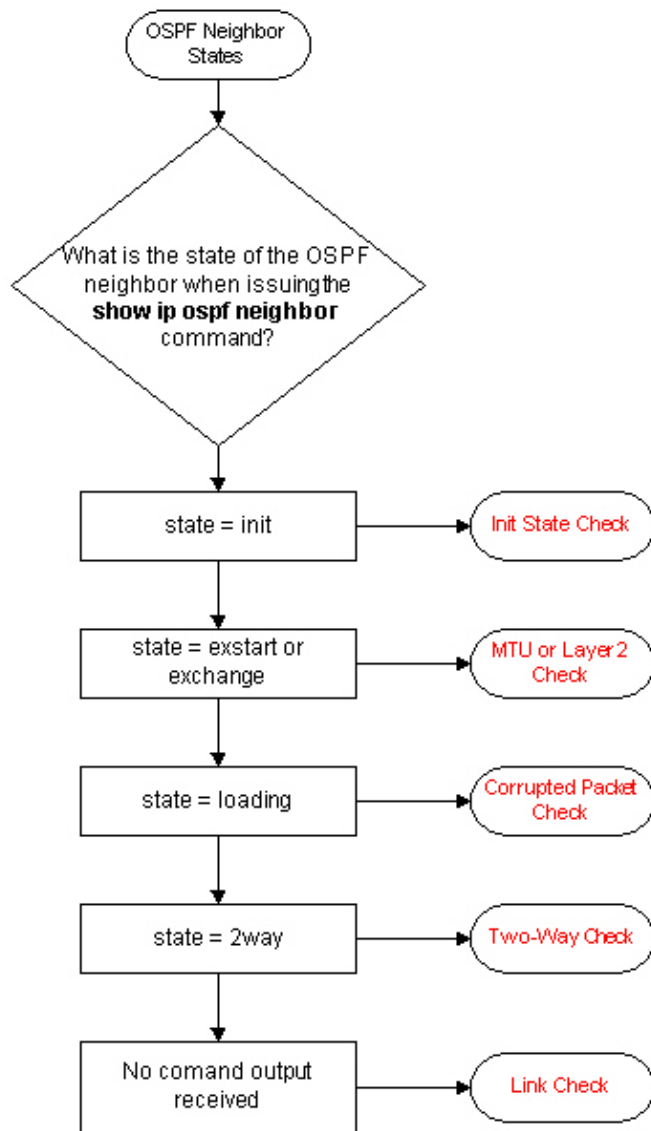
## Main Troubleshooting Flowchart

If you have the output of a **show ip ospf neighbor**, **show ip ospf neighbor**, or **show tech-support** command from your Cisco device, you can use to display potential issues and fixes. To use, you must be a registered customer, be logged in, and have JavaScript enabled.

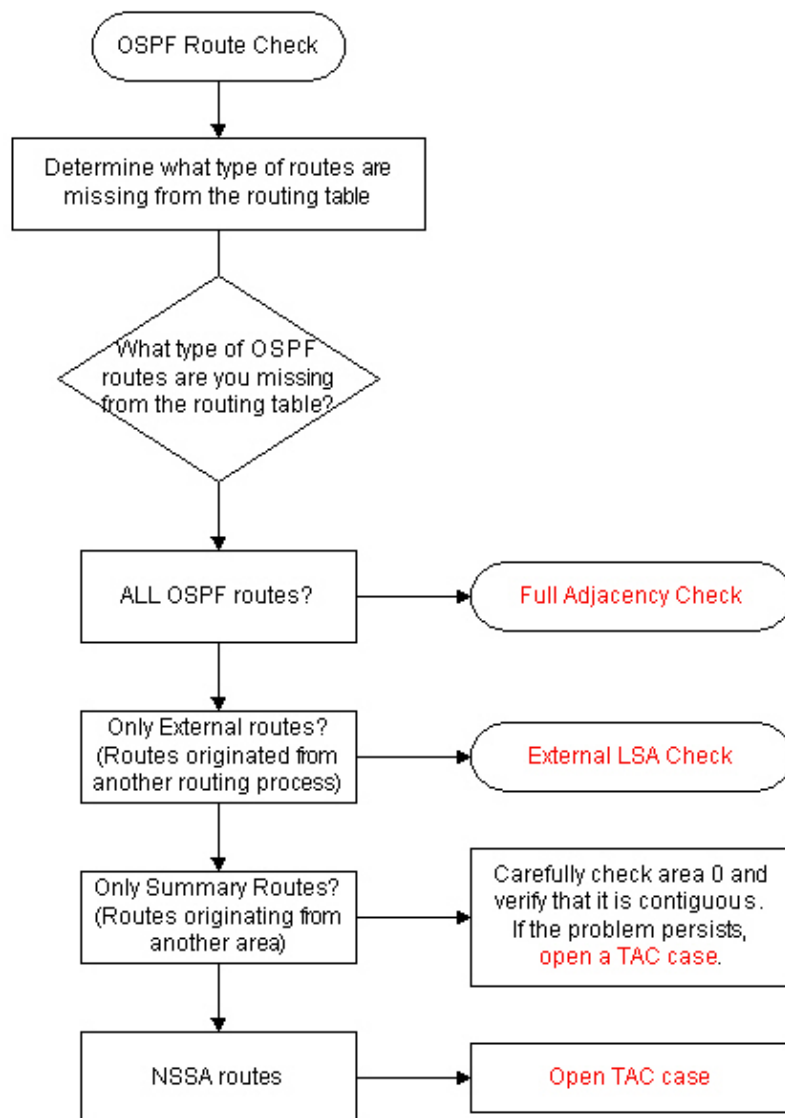
You can use Output Interpreter to display potential issues and fixes. To use Output Interpreter, you must be a registered customer, be logged in, and have JavaScript enabled.



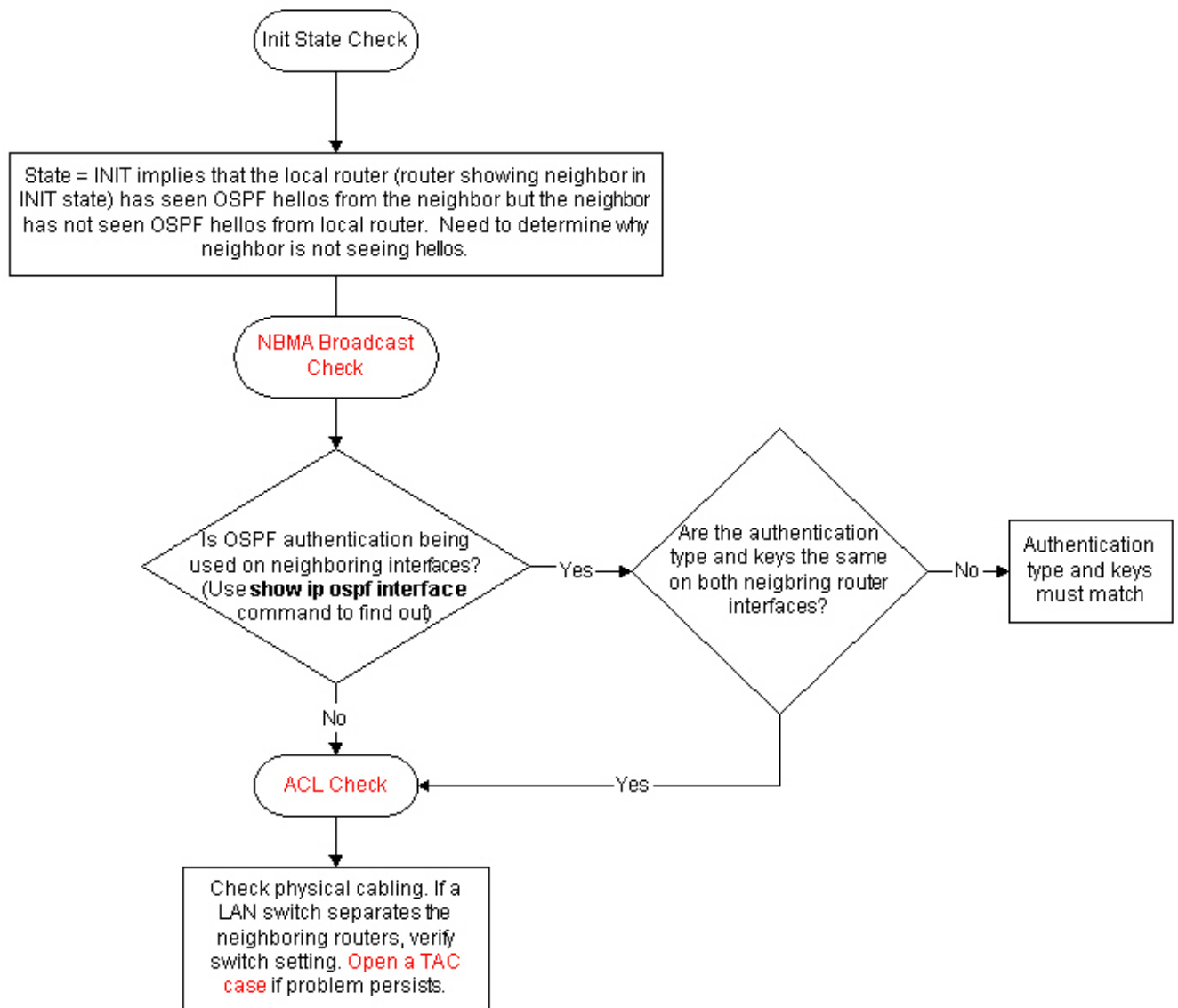
## Troubleshooting OSPF Neighbor States



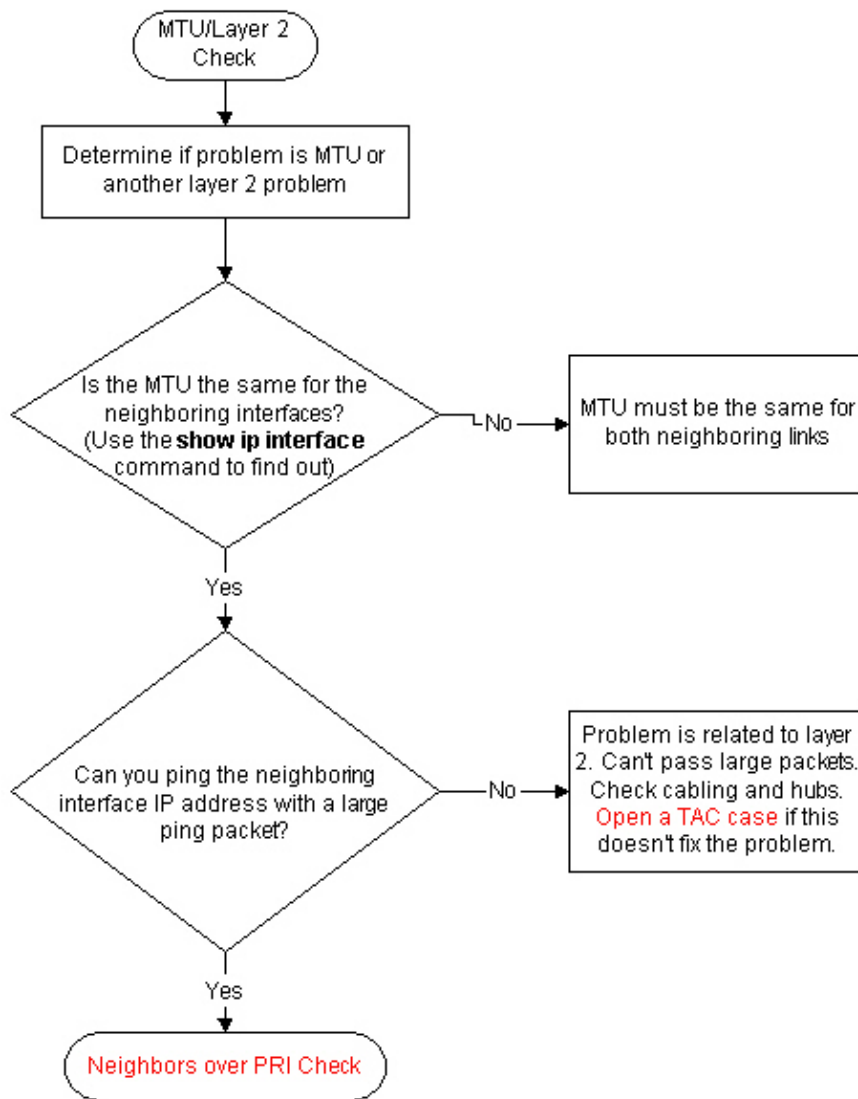
## Troubleshooting the OSPF Routing Table



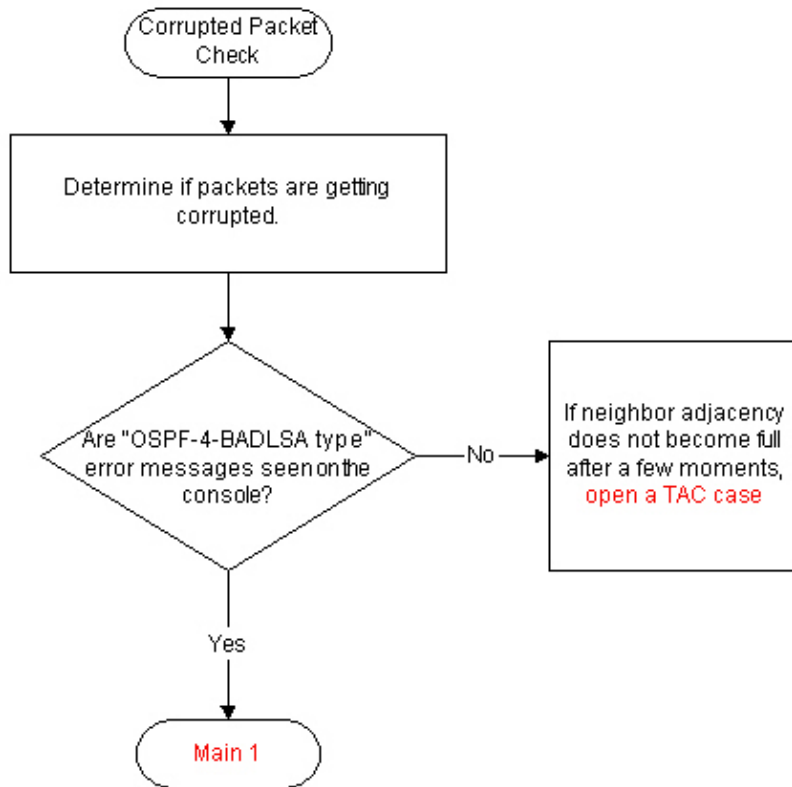
## Troubleshooting OSPF Init State



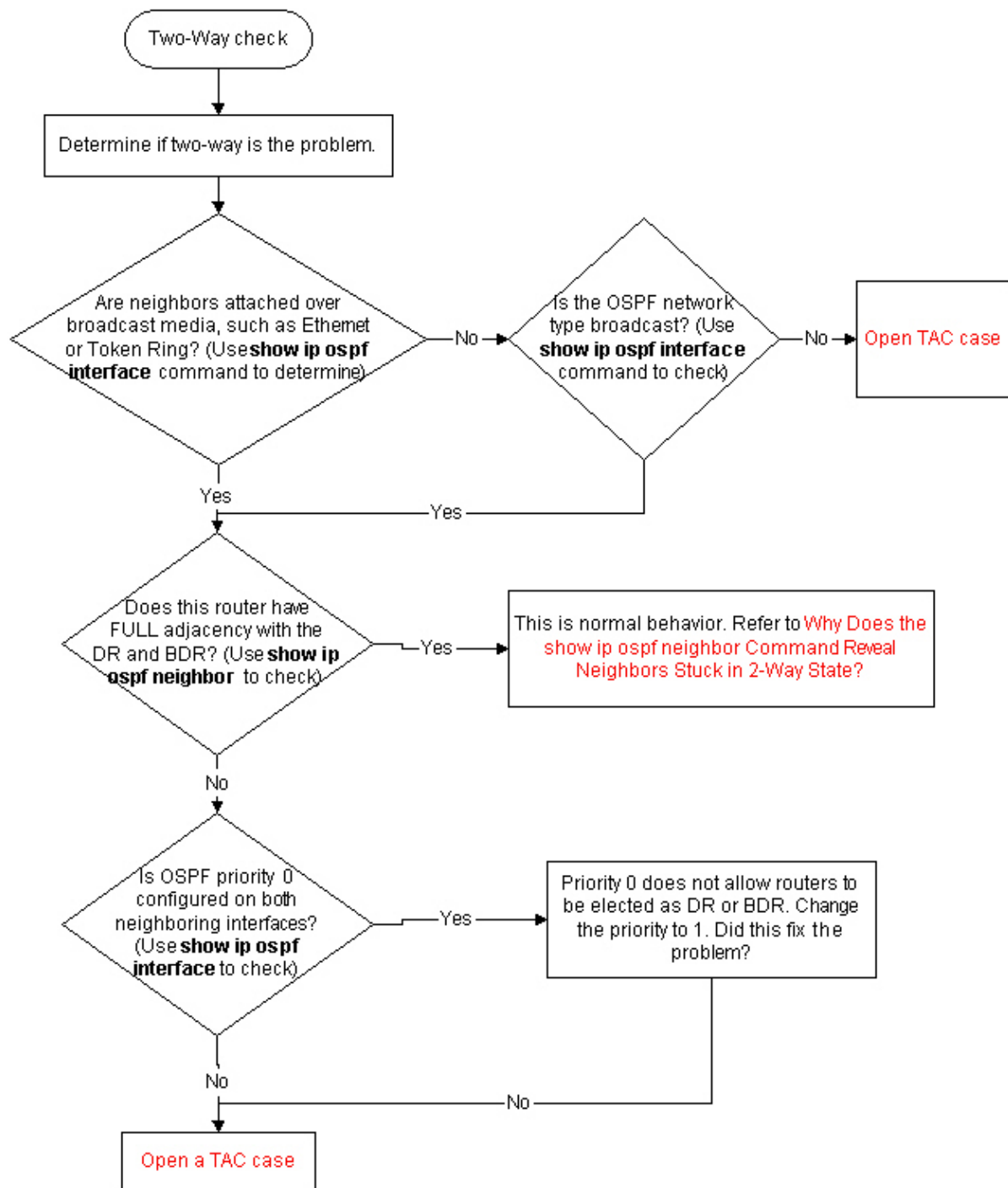
## Troubleshooting OSPF MTU



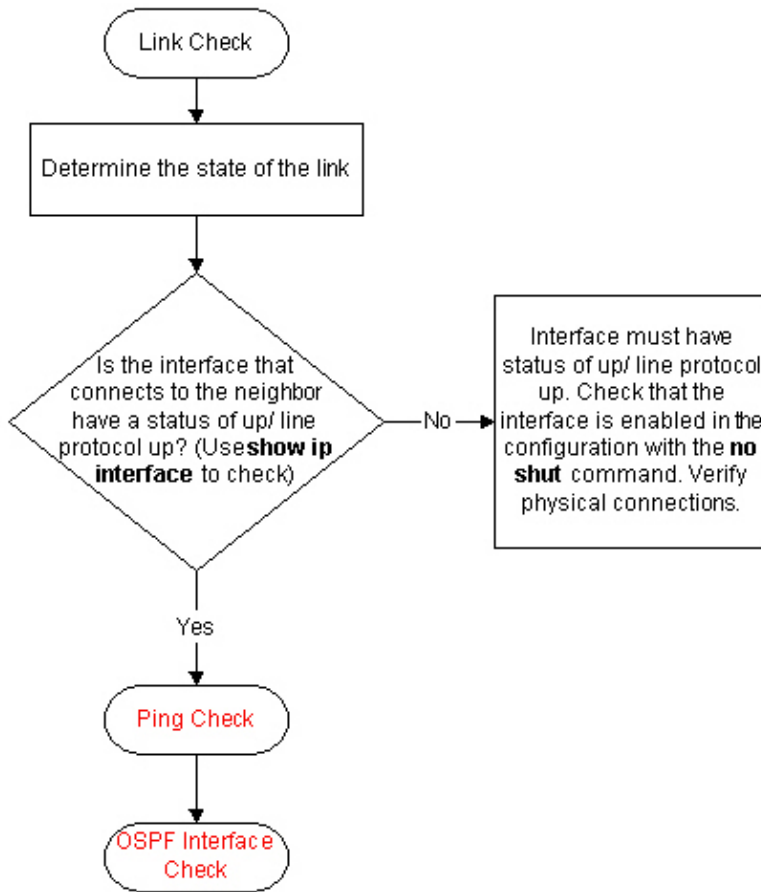
## Troubleshooting OSPF Corrupt Packets



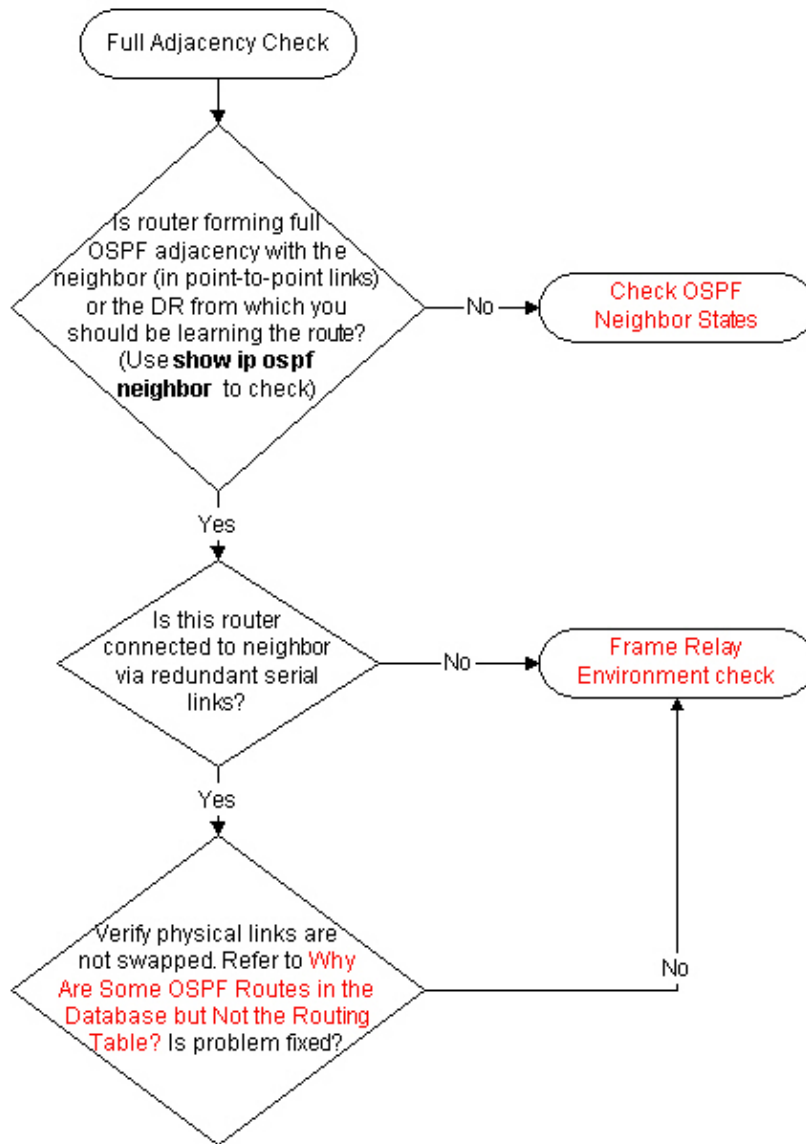
## Troubleshooting OSPF Two-Way State



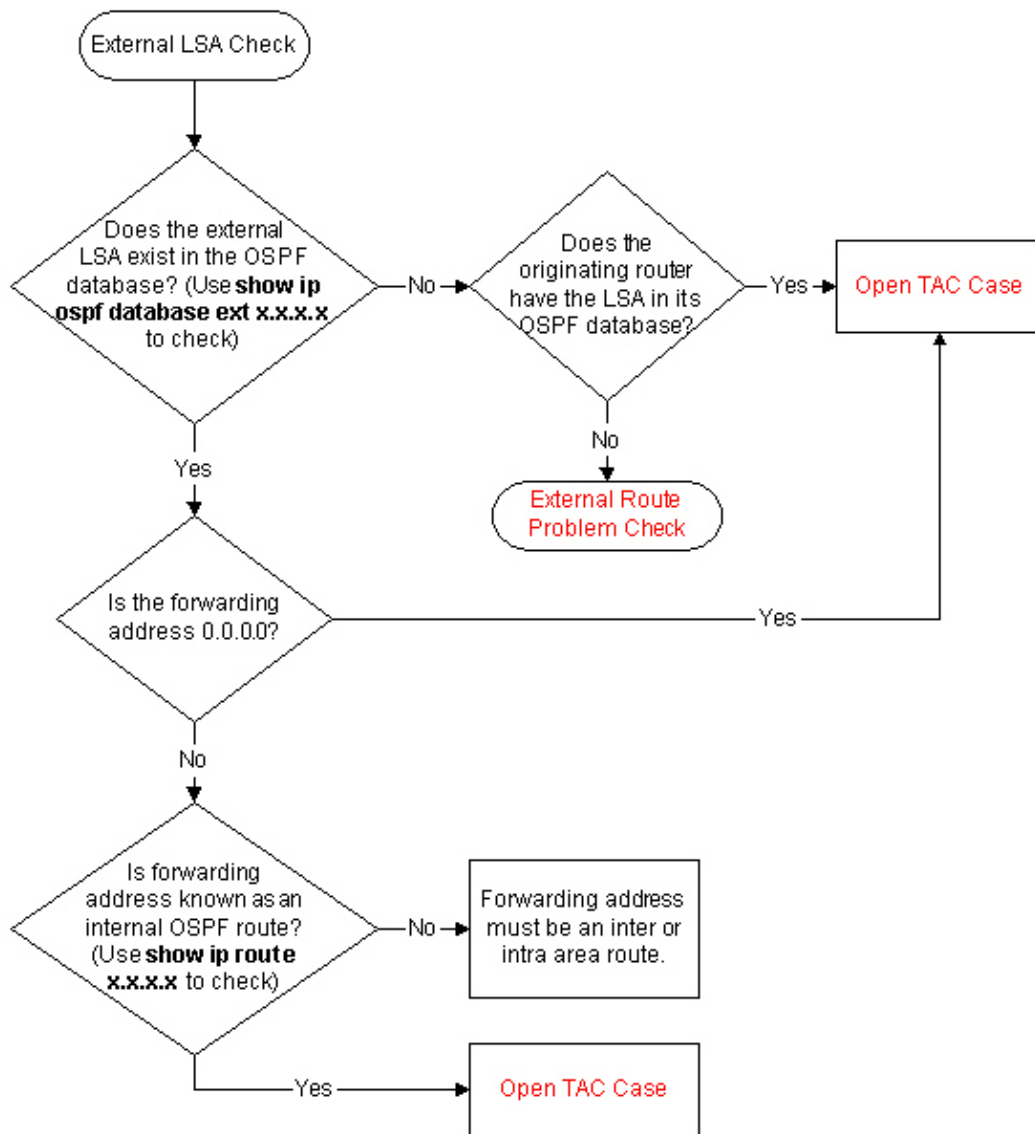
## Troubleshooting OSPF Links



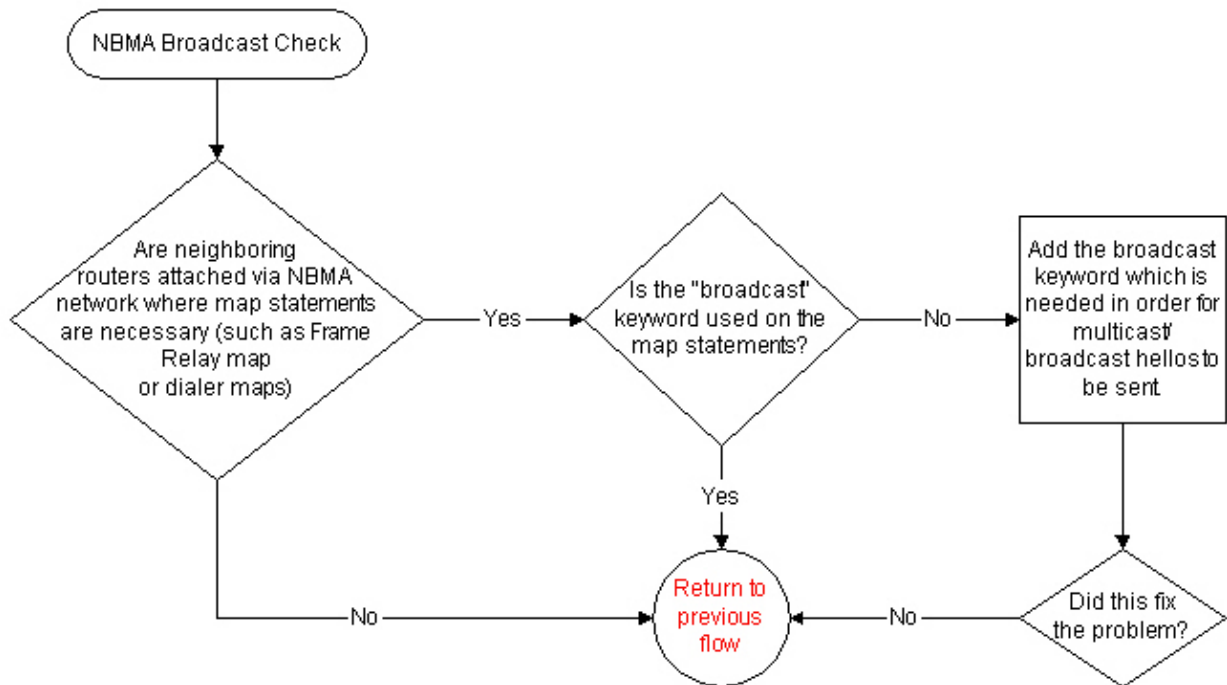
## Troubleshooting Full Adjacency



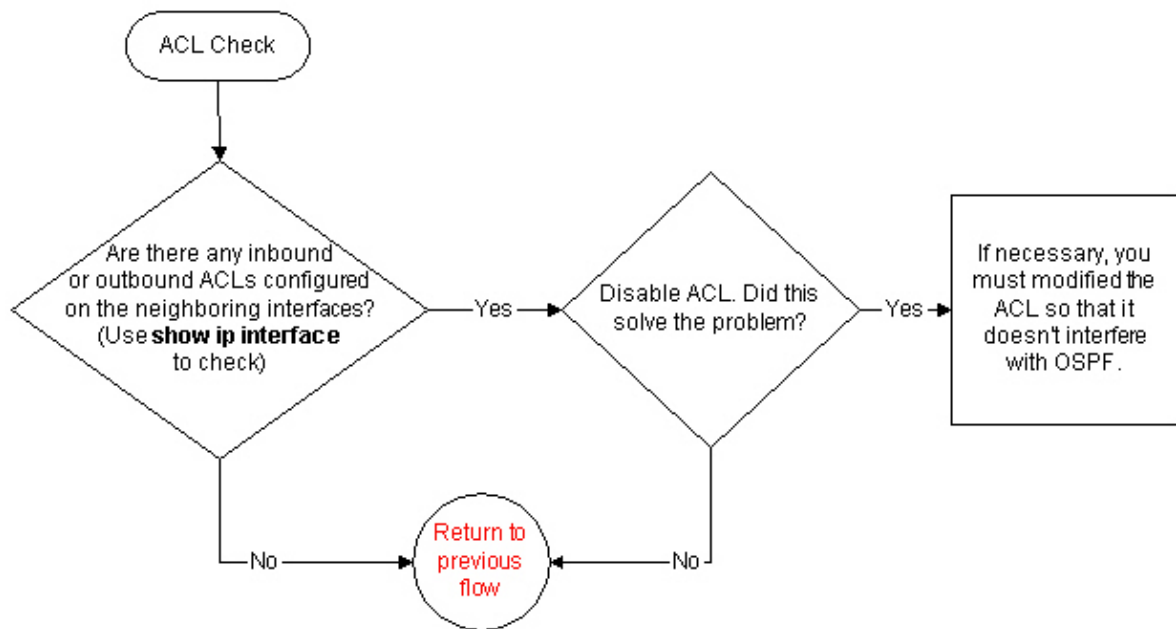
## Troubleshooting External Link–State Advertisements



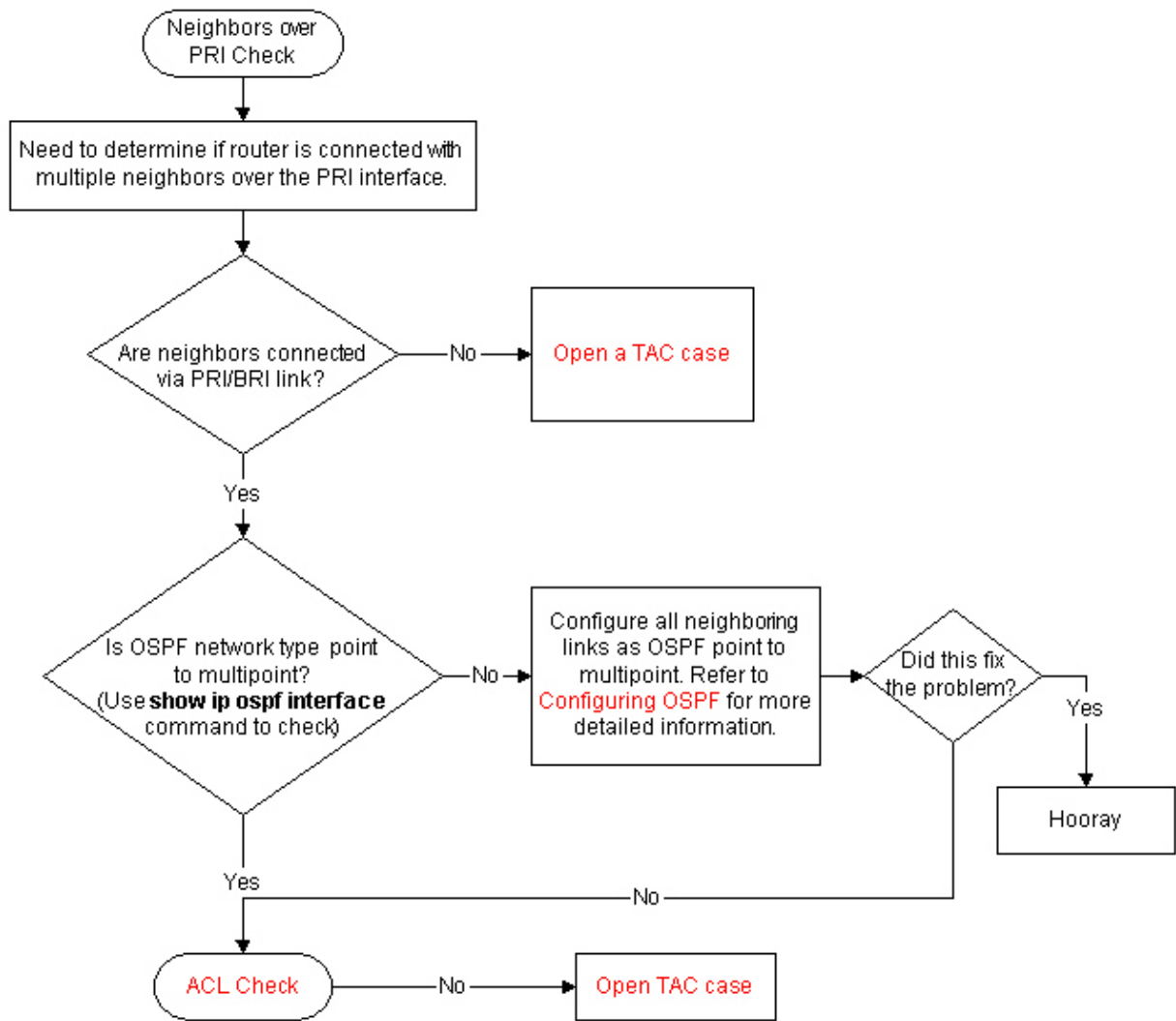
## Troubleshooting OSPF NBMA Networks



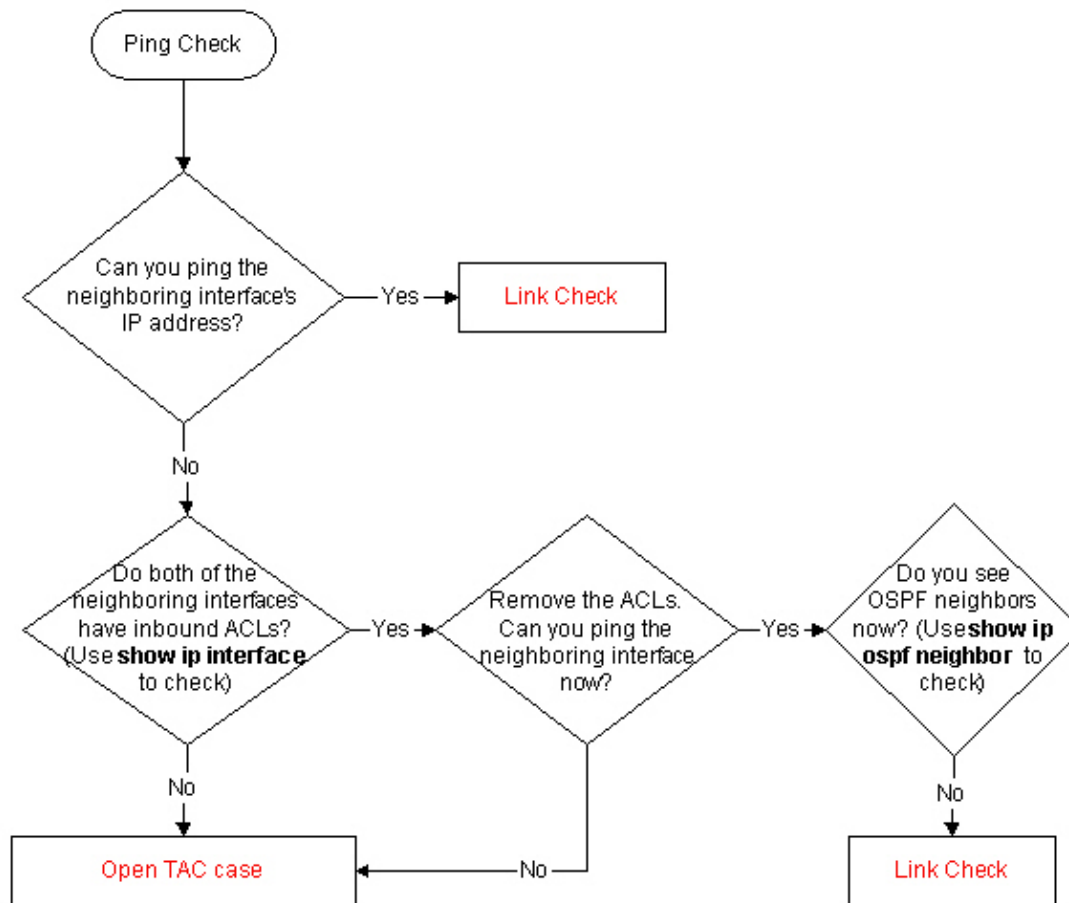
## Troubleshooting Access Lists



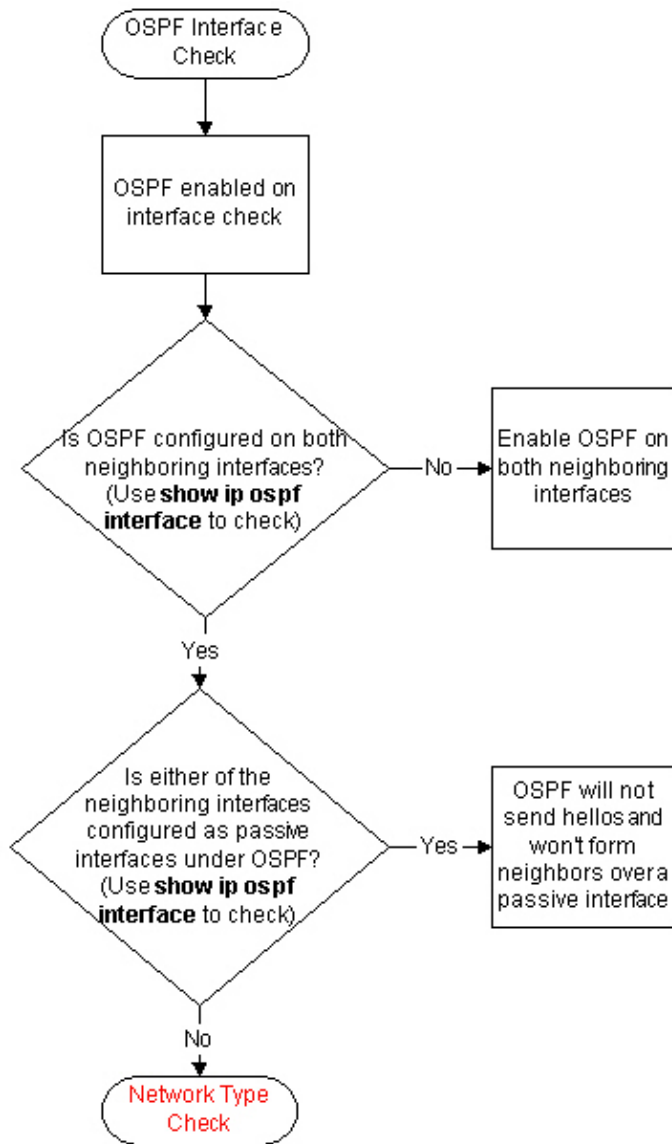
## Troubleshooting Neighbors over PRI



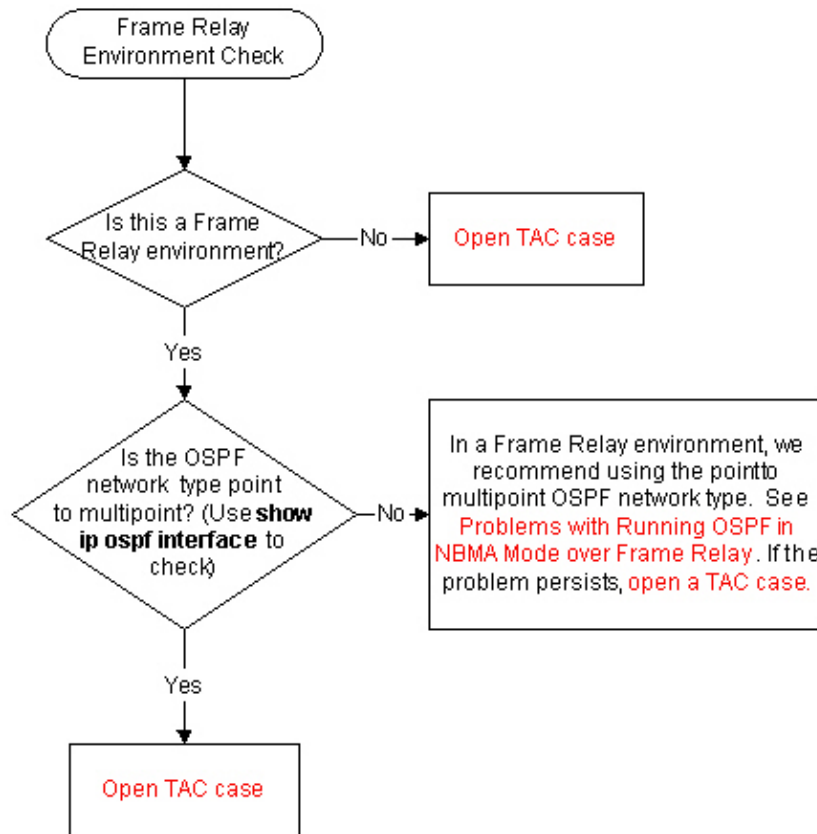
## Troubleshooting Ping



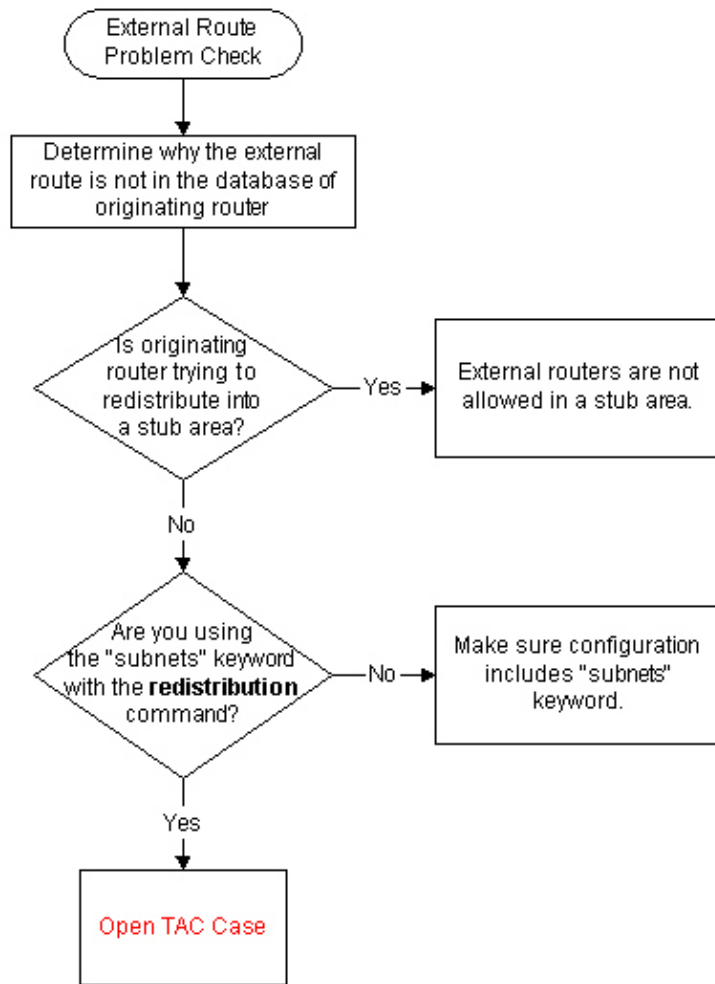
## Troubleshooting the OSPF Interface



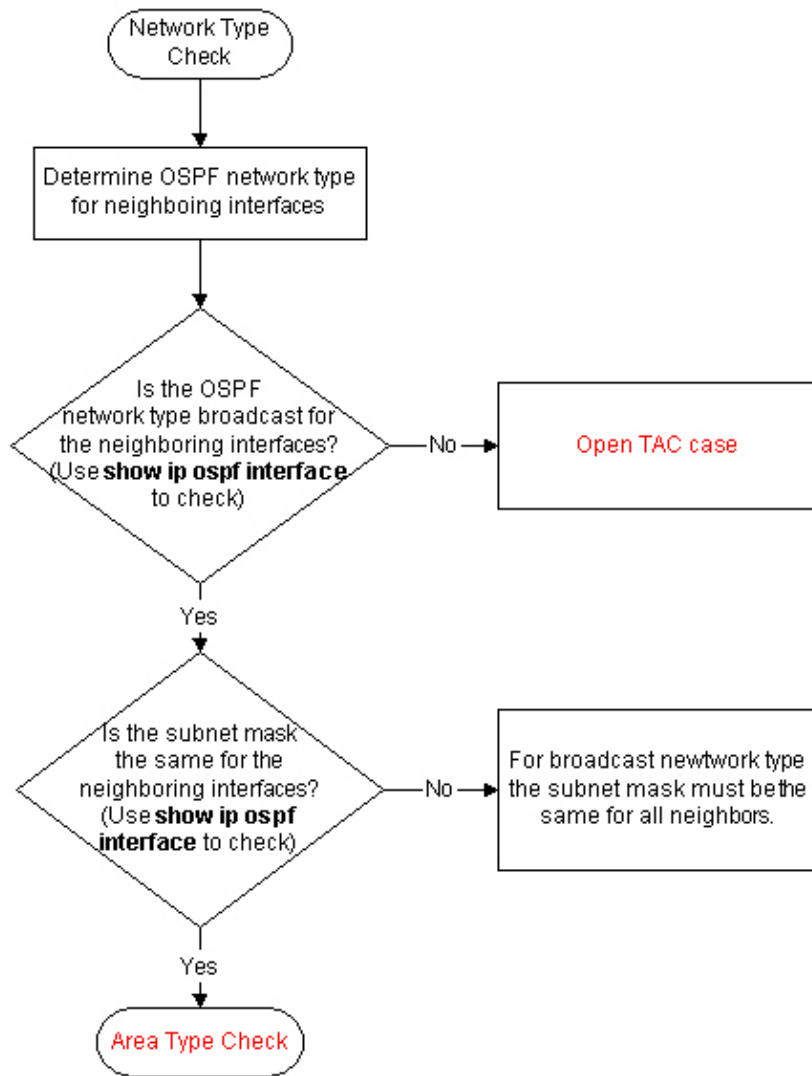
## Troubleshooting Frame Relay Environment



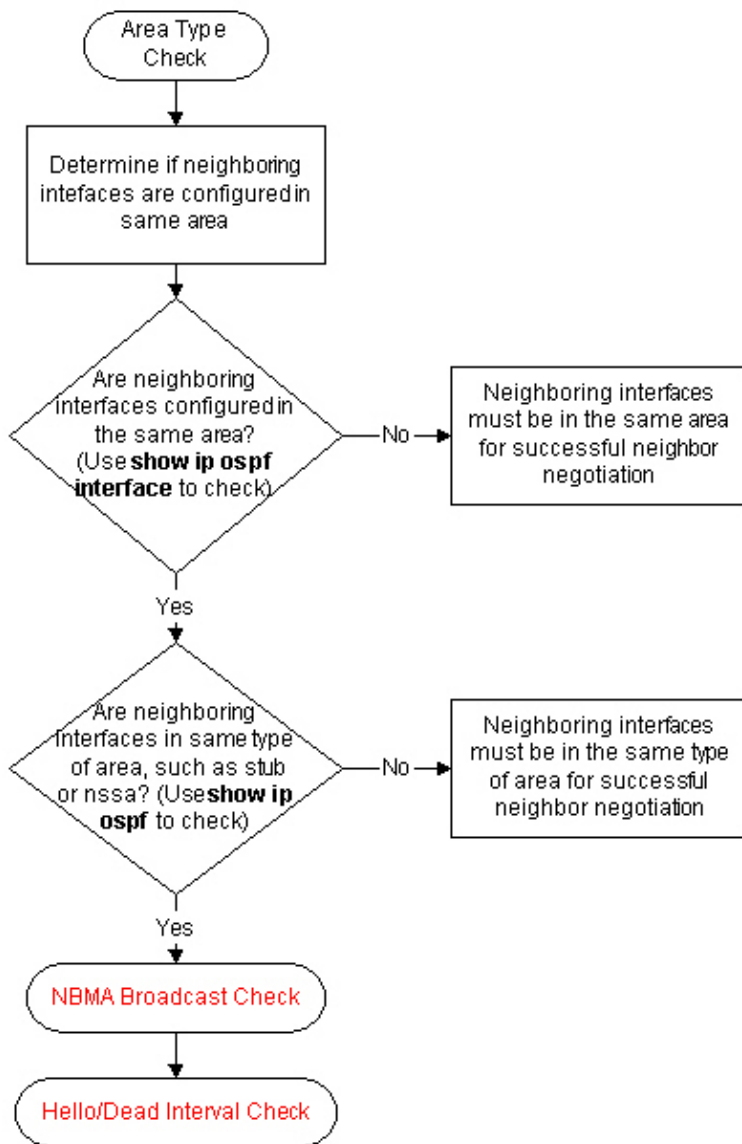
## Troubleshooting External Route Problems



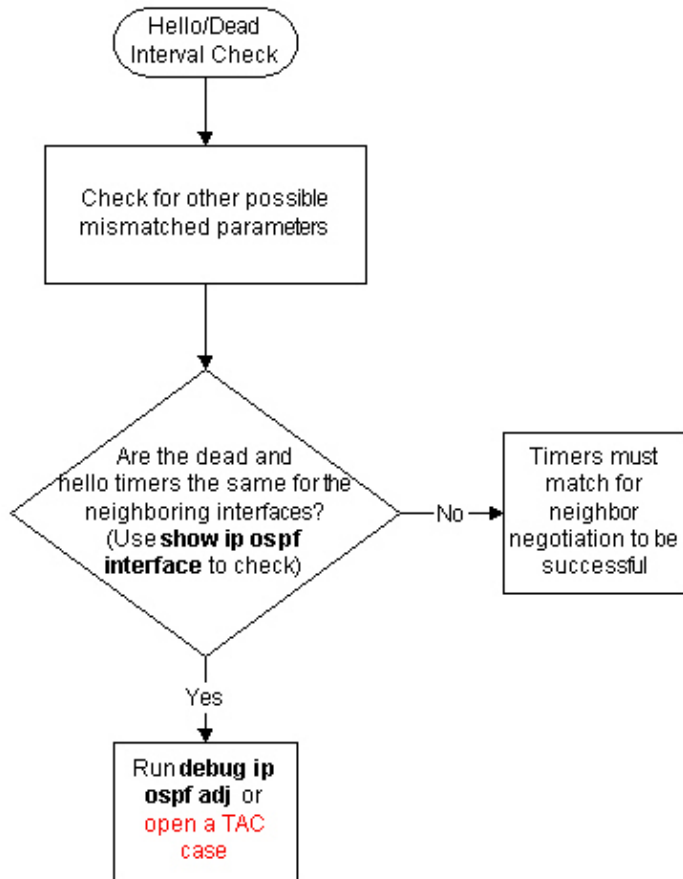
## Troubleshooting Network Type



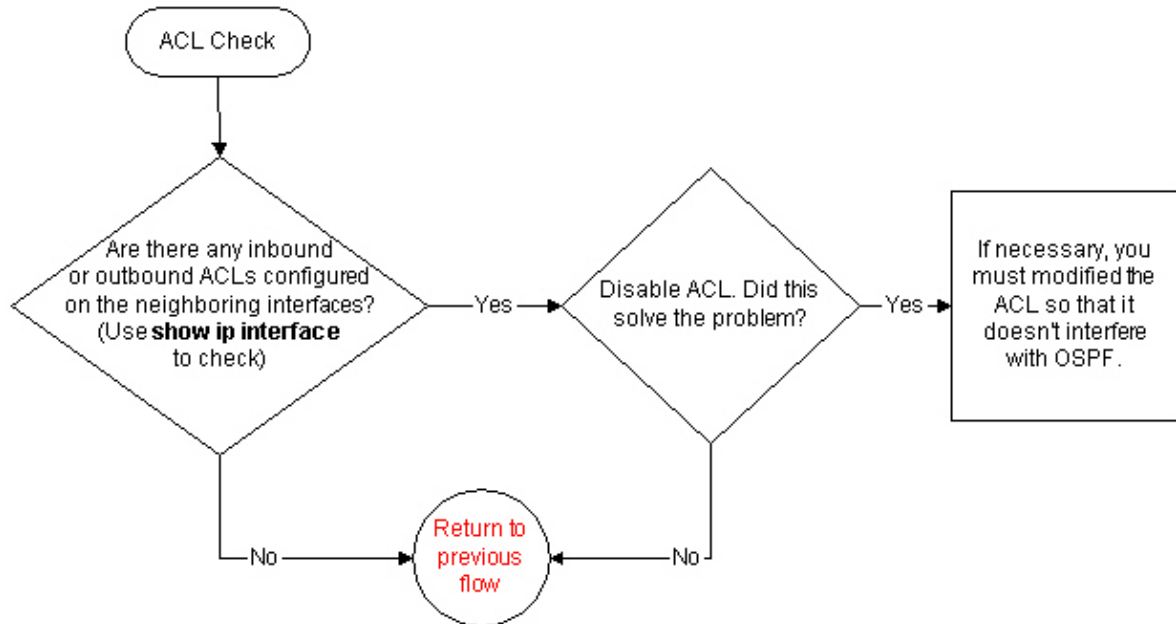
## Troubleshooting OSPF Area Type



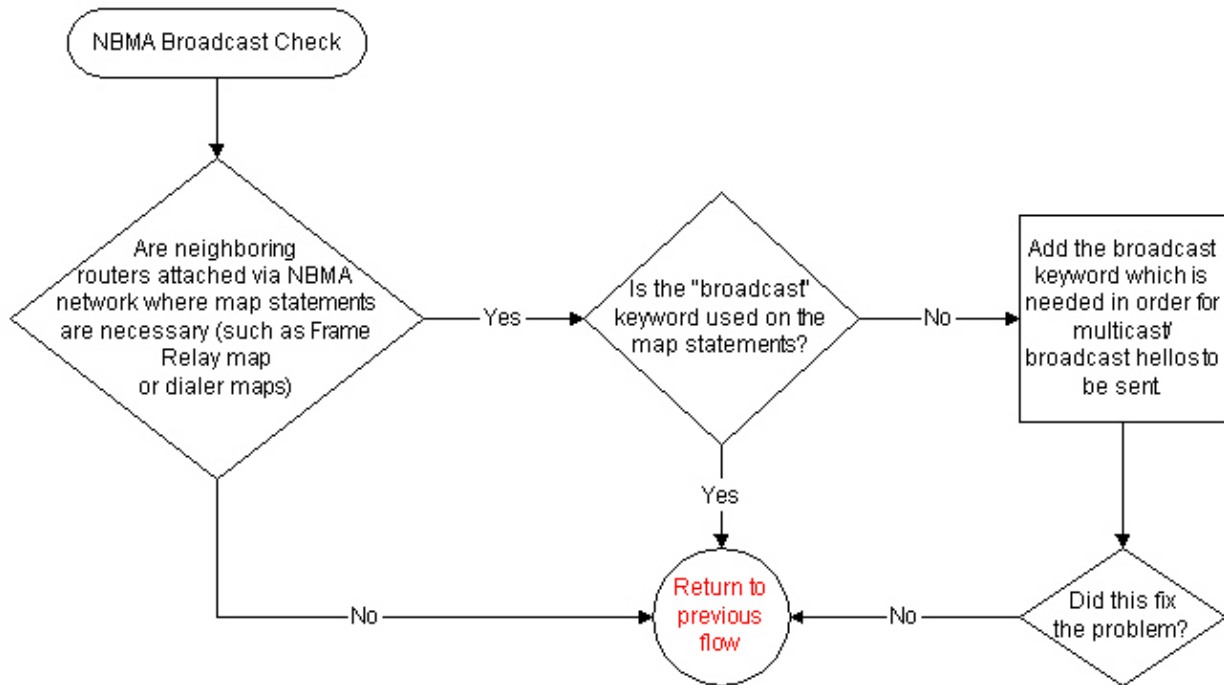
## Troubleshooting the Hello/Dead Interval



## Troubleshooting Access Lists



# Troubleshooting OSPF NBMA Networks



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## Related Information

- [OSPF Support Page](#)
- [Technical Support – Cisco Systems](#)

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