Contents

Introduction

Prerequisites

Requirements

Components Used

Problem

Brief About OSPF LSA Generation for type 3 LSA

Solution

Introduction

This document describes about the OSPF Error Message "%OSPF-4-CONFLICTING_LSAID". LSA origination prevented by existing LSA with same LSID but a different mask Existing Type 3 LSA: LSID.

Contributed by Kiran Kumar Huded, Cisco TAC Engineer.

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

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

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

Note: This document applies to all Cisco routers and switches that run Cisco IOS.

Problem

OSPF Error Message "%OSPF-4-CONFLICTING_LSAID". LSA origination is prevented by existing LSA with same LSID but a different mask Existing Type 3 LSA: LSID.

Brief About OSPF LSA Generation for type 3 LSA

For example:

If Network 192.168.1.0/24 is redistributed into the OSPF, OSPF process will generates LSA for Network 192.168.1.0/24 using the network-id 192.168.1.0.

Then, when 192.168.1.0/25 is redistributed, the OSPF cannot pick the network-id as the LSA ID because its already being used by 192.168.1.0/24,

Hence 192.168.1.0/25 being more specific, it will Pick the Broadcast address of the network which is 192.168.1.127.

Problem Situation:

The OSPF LSA ID Conflicts occurs when OSPF is trying to originate LSA ID for the more specific network (suppose to choose broadcast address) and the LSA ID/Broadcast id is already present in the OSPF topology or

OSPF is trying to generate LSA ID for a host route /32 which is equal to either the Network id or the broadcast of already present LSA ID in the OSPF Topology:

For example:

For Network 192.168.1.2/31, OSPF Assigns LSA-ID as 192.168.1.2, if you try to redistribute a route 192.168.1.2/32 into OSPF, the OSPF fails to generate LSA-ID as the 192.168.1.2 is already present in the OSPF Topology Table.

Hence OSPF generates the Error Message: "%OSPF-4-CONFLICTING_LSAID: LSA origination prevented by existing LSA with same LSID but a different mask Existing Type 3 LSA: LSID".

When you try to redistribute 192.168.0.2/32 into the table, you see:

Solution

The Solution for the this scenario is careful redistribution of the routes. When redistributing routes (/32 specifically), ensure that it does not conflict with any of the existing LSA ID.