Configure Nexus 5500 Compliance with FC-PI-4 at 8G FC Speed

Contents

Introduction

This document describes how to figure Nexus 5500 switches to meet compliance for FC-PI-4 at 8G FC Speed.

Symptoms

Nexus 5500 is not compliant with FC-PI-4 at 8G FC speed (Cisco Bug ID <u>CSCtx52991</u>).

Cause / Problem Description

The FC fill-word is speed dependent. For 1GFC, 2GFC, and 4GFC the fill word is IDLE. For 8GFC the fill-

5.8 Frame scrambling and emission lowering protocol

8GFC shall use the frame scrambling as stated in FC-FS-2 AM1 (reference [5]) and emission lowering prot

HP requests for change to comply with Standard.

More info about fill words:

Fill word: what they are and what interop issues there are at 8Gb

Conditions / Environment

This problem is only seen with Nexus 55xx switches, not in Nexus 50x0 switches.

Solution

This is HW limitation with 55xx switches. This is due to strict enforcement of ELP (by using ARBff on the link). The bugs tracking this issue for N5K and UCS respectively are:

1/23/2013: - dakester

5K / UCS FI supports ARBFF and IDLE

http://bug/CSCtx52991 Fixed in 7.0(0)N1(1) and 6.0(2)N2(1) and 5.2(1)N1(5)

and

http://bug/CSCud93958 Fixed in 2.2(1b) and 2.1(2a)

The new configuration command is N5K(config-if)# switchport fill-pattern arbff speed 8000

To show the configured 8G fill word:

N5K# show port internal info interface fc1/13 | i fill admin port fill-pattern 8g (ARBFF)

To show the actual fill 8G word:

5548-TOP# show hardware internal fc-mac 1 port 32 port-info | i Fill Fill word for 8g Speed : 0x0

(Above interface was not up)

Fill Patterns in Hex ARB 94FFFF IDLE 95B5B5

Cisco Bug ID CSCut87856



Nexus 5000 - Need to change new product default 8G fill-pattern to ARBFF

Cisco Bug ID CSCut88036



Nexus 6000 - Need to change new product default 8G fill-pattern to ARBFF