Troubleshoot Unsupported Power Supplies on Catalyst 9200 and 9200L Switches

Contents

Introduction

Background Information

Problem

Solution

References

Introduction

This document describes how to identify and replace incompatible power supplies in Cisco Catalyst 9200 and 9200L switches.

Background Information

There are various models of Cisco Catalyst 9200 and 9200L switches. These models can be classified into three major categories:

(a) Non-Power over Ethernet (non-PoE) models with any number of ports support only 125 W power supplies in either of the two slots. These models can be identified by the "T" in their model name.

(b) 24-port PoE models support only 600 W power supplies in either of the two slots. These models can be identified by "24P" in their model name.

(c) 48-port PoE models support only 1000 W (1KW) power supplies in either of the two slots. These models can be identified by "48P" in their model name.

In other words, each Catalyst 9200 or Catalyst 9200L switch supports power supplies of only one wattage value.

Problem

Each of these three categories of Catalyst 9200 and 9200L switches support power supply of a unique wattage value. If an unsupported power supply is accidentally inserted, the switch generates a syslog message similar to this example:

```
%PLATFORM_FEP-1-FRU_PS_INCOMPATIBLE: Switch 1: power supply A is incompatible and will be turned off
```

Solution

It is possible that a user can accidently mix and match power supplies meant for these three categories of C9200/C9200L switches. As Catalyst 9200 and 9200L switches do not allow interchangeable use of power supplies of more than one wattage in either of their two slots, the switch generates the incompatibility syslog message. This syslog identifies the switch number (if in stack) and the power supply slot (A or B) that contains the incompatible power supply. Remove it and replace it with a supported power supply.

For quick reference, here is the power supply compatibility matrix for Catalyst 9200 and Catalyst 9200L switches.

Catalyst 9200 Series Switches	**Supported Power Supply Model**	**Comments**
C9200-24T, C9200-48T	PWR-C6-125WAC or PWR-C5-125WAC	These two C5 and C6 variants have no functional difference. They can be mixed & matched in slots A & B
C9200-24P, C9200-24PB, C9200-24PXG	PWR-C6-600WAC or PWR-C5-600WAC	These two C5 and C6 variants have no functional difference. They can be mixed & matched in slots A & B
C9200-48P, C9200-48PB, C9200-48PXG	PWR-C6-1KWAC or PWR-C5-1KWAC	These two C5 and C6 variants have no functional difference. They can be mixed & matched in slots A & B
Catalyst 9200L Series Switches		
C9200L-24T-4G, C9200L-48T-4G, C9200L-24T-4X, C9200L-48T-4X	PWR-C5-125WAC	C6 variant is not supported in C9200L. This is the only power supply that can be used in slots A and B
C9200L-24P-4G, C9200L-24P-4X, C9200L-24PXG-4X, C9200L-24PXG-2Y	PWR-C5-600WAC	C6 variant is not supported in C9200L. This is the only power supply that can be used in slots A and B
C9200L-48P-4G, C9200L-48P-4X, C9200L-48PXG-4X, C9200L-48PXG-2Y	PWR-C5-1KWAC	C6 variant is not supported in C9200L. This is the only power supply that can be used in slots A and B

References

Catalyst 9200 Data Sheet