

Configure LC Priority Shutdown

This chapter describes the procedure to configure the shutdown priority on line cards using CTC.

Table 1: Feature History

Feature Name	Release Information	Feature Description
LC Priority Shutdown	Cisco IOS XR Release 6.5.31	During insufficient power conditions on a chassis, you might want to shut down certain line cards when the power consumption of the chassis exceeds the maximum limit. The LC priority shutdown feature provides a deterministic way of powering down the line cards based on shutdown priorities assigned to the line cards. This leads to significant cost savings. Commands added: • power-mgmt progressive location rack-id • priority location line-card-location card-priority

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LC Priority Shutdown

The LC priority shutdown feature allows you to assign a priority to the line cards. The priority is used to determine the order in which the line cards must be shut down when the power consumption of the chassis exceeds the maximum limit. You can choose a priority from 0 to 19. If a priority is not set for a line card, a default value of 20 is set. The line card with the higher priority is shut down first. If the same priority is set for two or more cards, the line card in the higher slot number is shut down first.

In Release 6.5.31, this feature is not applicable during a chassis or line card reload.

This feature is not supported on fabric cards.

The following alarms are associated with this feature:

- **Total power draw nearing total power capacity,insert PEMS to avoid LC shutdown**-This alarm is raised when the chassis power consumption is greater than or equal to (the total power capacity – 100). Use the **show alarms brief system active** command to view this alarm.
- **Card shutdown by Progressive power-mgmt mode**- This transient condition is raised when the chassis power consumption is greater than or equal to the (total power capacity - 80). The line cards are shut down based on the priority assigned. Use the **show alarms brief system history** command to view this transient condition.

Configure LC Priority Shutdown

Purpose	This procedure enables you to enable and configure the shutdown priority on line cards using CTC.
Tools/Equipment	None
Prerequisite Procedures	"Login to CTC" in *System Setup and Software Installation Guide for Cisco NCS 4000 Series.*
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Procedure

Step 1 In the node view, click the **Provisioning** > **General** > **LC Priority Shutdown** tabs.

Step 2 To enable the feature, check the **Priority Shutdown** checkbox.

Step 3 Enter the priority for the line card in the **Priority** field.

You can choose a priority from 0 to 19. If the same priority is set for two cards, the card in the higher slot number is shut down first. By default, a priority of 20 is assigned to all the line cards when the feature is enabled.

Step 4 Click **Apply**.

Stop. You have completed this procedure.