

Configuring Breakout

This chapter gives procedure to configure breakout.

- Understanding Breakout, on page 1
- Configure Breakout Controller Using CTC, on page 1

Understanding Breakout

Breakout is the concept of splitting the higher density port like 100G or 40G to multiple independent and logical ports i.e. 100G->10x10G or 100G->2x40G or 40G->4x10G.This is possible due to multilane architecture of the optics and cables. The standard R/S/I/P format is 4-tuple. 5-tuple interfaces are represented as - R/S/I/P/SP, where SP indicates the breakout port.

The Cisco NCS 4000 series supports the breakout feature. This feature is supported on the following cards:

- NCS4K-4H-OPW-QC2 card-Breakout enables a 40 Gigabit lane of the card to be split into four independent and logical 10 Gigabit Ethernet or OTU2/OTU2e ports. All the QSFP+ ports are break-out capable.
- NCS4K-2H10T-OP-KS card-Using breakout, each 100 Gig lane of NCS4K-2H10T-OP-K can be used by further breaking to 10 G ports. There is no breakout pluggable. 100 G SFP is used for the breakout. Using breakout, each lane of NCS4K-2H10T-OP-KS card can be used separately and as a physical 10G port.

Configure Breakout Controller Using CTC

Purpose	This task provisions the breakout controller for NCS4K-2H10T-OP-KS and NCS4K-4H-OPW-QC2, 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 node view, double-click the line card.

Step 2 Click the **Provisioning** > **Port Modules** tabs.

Step 3 Click **Lane Controllers**.

Step 4 In the Lane Controllers dialog box, perform the following steps to configure the breakout controller:

a) Select the port from the drop-down list.

b) Set the PortMode, framing type, and mapping type for the port selected.

c) Click **Apply**.

Stop. You have completed this procedure.