



Cabling a Multi-Chassis Configuration

This appendix provides an overview of the Cisco NCS 6000 Multi-Chassis system and describes how to physically cable the fabric planes between each LCC and FCC in the system.

The Cisco NCS 6000 Multi-Chassis system currently supports these multi-chassis configurations:

- 2+1—Two LCCs + one FCC (with six or twelve FCs)
- 2+2—Two LCCs + two FCC (with six or twelve FCs in each FCC)
- 4+2—Four LCCs + two FCCs (with six or twelve FCs in each FCC)
- 8+2—Eight LCCs + two FCCs (with twelve FCs in each FCC)

The Cisco NCS 6000 Multi-Chassis system with ECP currently supports these multi-chassis configurations:

- 2+1—Two LCCs + one FCC (with six or twelve FCs)
- 4+1—Four LCCs + one FCC (with six or twelve FCs)

The control plane cabling connections with ECP for the above mentioned configurations are explained in the sections "[Cabling the Control Plane for a 2+1 Multi-Chassis System with ECP, on page 13](#)" and "[Cabling the Control Plane for a 4+1 Multi-Chassis System with ECP, on page 15](#)". Cabling the fabric and other software configurations remain the same as the basic multi-chassis setup.

- [About the Cisco NCS 6000 Multi-Chassis System, on page 1](#)
- [Prerequisites, on page 3](#)
- [Cabling Requirements, on page 3](#)
- [Required Tools and Equipment, on page 6](#)
- [Cabling Overview , on page 7](#)
- [Cabling the Ethernet Control Plane Network , on page 9](#)
- [Cabling the Fabric, on page 17](#)

About the Cisco NCS 6000 Multi-Chassis System

This section provides an overview of the Cisco NCS 6000 Multi-Chassis system and describes what is required to interconnect the system components. The Cisco NCS 6000 Multi-Chassis system is also referred to as the “multi-chassis system” throughout this chapter.

The Cisco NCS 6000 Multi-Chassis system is a highly scalable routing platform designed for service providers to build next generation multi-service networks that provide video, data and voice services. The multi-chassis system consists of two major components: The line card chassis (LCC) and fabric card chassis (FCC). The LCC has 16 slots: eight line card (LC) slots, six fabric card slots, and two RP slots. The FCC has 14 slots: 12 fabric card slots and two slots for the SC or SC-SW shelf controller cards.

The interconnectivity of FCCs and the LCCs allows the system capacity of the NCS 6000 to scale from 8 Tbps to 128 Tbps of data.

Multi-Chassis System with ECP

The 2+1 Cisco NCS 6000 multi-chassis system with ECP consists of two line card chassis (LCC) and one fabric card chassis (FCC), interconnected with ECP. This multi-chassis configuration provides an aggregate bandwidth of 16 Tbps (with first generation line cards) and 32 Tbps (with 2T line cards). When the 2+1 Cisco NCS 6000 multi-chassis system is used with the ECP (External Control Plane), users can create up to 8 SDRs (secure domain routers).

The 4+1 Cisco NCS 6000 multi-chassis system with ECP consists of four line card chassis (LCC) and one fabric card chassis (FCC), interconnected with ECP. This multi-chassis configuration provides an aggregate bandwidth of 32 Tbps (with first generation line cards) and 64 Tbps (with 2T line cards). When the 4+1 Cisco NCS 6000 multi-chassis system is used with the ECP (External Control Plane), users can create up to 8 SDRs (secure domain routers).

Multi-Chassis System Hardware Requirements

The multi-chassis (MC) system is described as 1T or 2T, depending on the installed fabric cards and line cards. In a 1T system, each line card delivers up to 1 Tbps throughput. In a 2T system, each line card delivers up to 2 Tbps throughput. The following table lists the 1T and 2T multi-chassis hardware requirements.

Component	1T Multi-Chassis	2T Multi-Chassis
Fabric Card Chassis (FCC)		
S2 Fabric Cards	NCS-F-FC	NCS-F-FC2
Fabric Card Optics	CXP	CXP2
Line Card Chassis (LCC)		
S13 Fabric Cards	NC6-FC-MC	NC6-FC2-U
Fabric Card Optics	CXP	CXP2
Fan Tray	NC6-FANTRAY	NC6-FANTRAY-2
Line Cards	NC6-10X100G-L-K NC6-10X100G-M-K NC6-10X100G-L-P NC6-10X100G-M-P NC6-60X10GE-L-S NC6-60X10GE-M-S	NC6-20X100GE-L-C NC6-20X100GE-M-C

Prerequisites

Before cabling the system, install each line card chassis (LCC) and fabric card chassis (FCC) in the planned location. Ensure that you have adequate floor space to cable the multi-chassis system and an environment that meets the recommended specifications. For more information, see [Cisco Network Convergence System 6000 Series Routers Site Planning Guide](#).

Cabling Requirements

The following cables and optics are required to interconnect the LCC and FCC in a Cisco NCS 6000 Multi-Chassis system.



Note Cisco provides the optical modules but does not provide the cables specified below. You can order these cables from a Cisco approved vendor such as Tyco Electronics or Molex. To obtain the optics, please contact your Cisco sales representative for further information.

For connections from each route processor (RP) and SC (or SC portion of the SC-SW) card:

- Four 10G-SFP modules and two cables

Use SFP-10G-SR transceiver modules and 62.5/125 or 50/125 multi-mode fiber (MPO) cables, or SFP-10G-LR modules and 9/125 single-mode fiber (SMF) cables

For connections between the SC-SW cards in the FCC:

- QSFP-40GE-LR4 (long-reach) optical modules and standard SMF cables (recommended optic), or QSFP-40GE-SR4 (short-reach) MMF optical modules and MPO-12 ribbon cables

For connecting the fabric:

- 96 MPO-24 crossover cables for each LCC
- Two CXP optical module sets for each LCC. Each set includes 96 optical modules, for a total of 192 modules:
 - NCS-FAB-OPT—Includes 96 CXP-100G-SR12 modules for 1T multi-chassis systems.
 - NCS-FAB-OPT2—Includes 96 ONS-CXP2-SR25 modules for 2T multi-chassis systems.



Note The CXP and CXP2 modules use a 24-fiber MPO connector that supports bidirectional transmission across the fibers (12 Tx + 12 Rx), and provide 2-wire serial (I2C) management interface and digital diagnostics, including Tx and Rx optical power monitoring per wavelength.

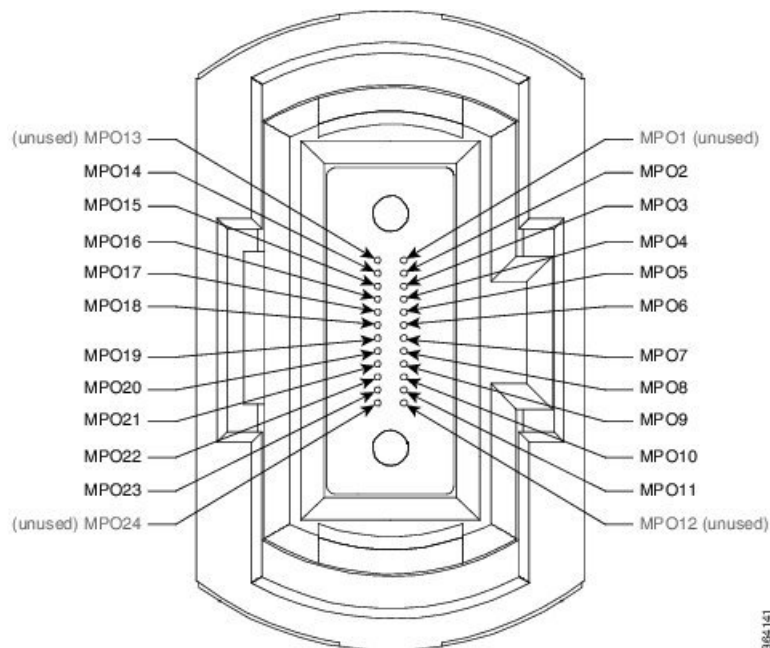
The CXP pluggable transceiver module has 12 dedicated transmit (Tx) channels and 12 receive (Rx) channels per transceiver with data rates up to 10.3125 Gbps and OTN rates up to 11.25 Gbps.

The CXP2 pluggable transceiver module has 12 dedicated transmit (Tx) channels and 12 receive (Rx) channels per transceiver with data rates up to 25 Gbps. CXP2 supports data rates up to 10.3125 Gbps and OTN rates up to 11.25 Gbps when connected to legacy CXP transceiver modules.

MPO-24 Cable Specifications

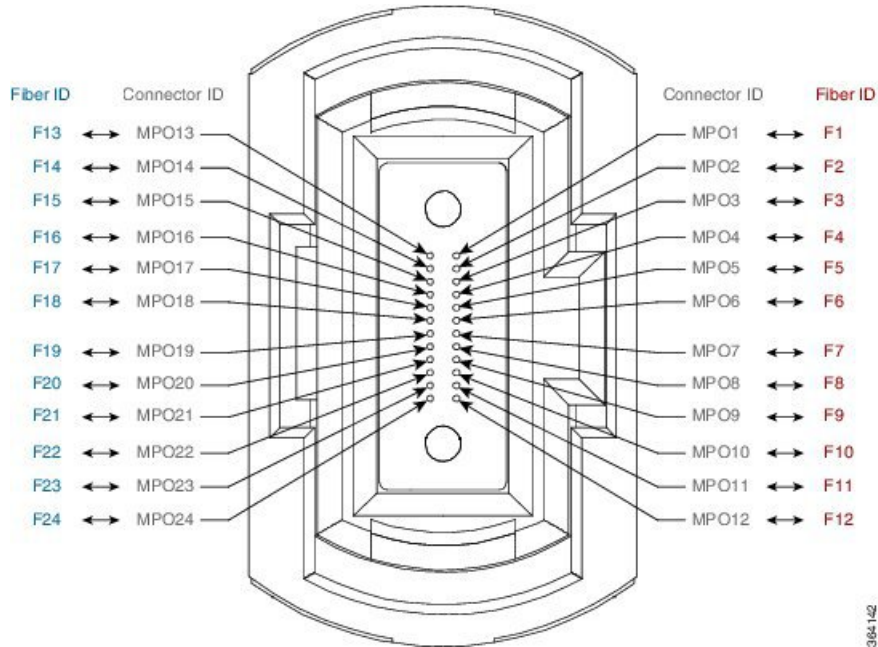
The following figure shows the MPO-24 connector pinouts.

Figure 1: MPO-24 Connector Pinouts



The following figure shows the MPO-24 connector fiber assignments.

Figure 2: MPO-24 Connector Fiber Assignments



The following table lists the 100G to 100G crossover cable connections.

Table 1: Crossover Cable Connections

MPO Connector		CXP Module		Connector		CXP Module	
Connector ID	Fiber ID	Pin	Transmit (TX) Receive (RX)	Connector ID	Fiber ID	Pin	Transmit (TX) Receive (RX)
MPO1	F1	1	RX	MPO1	F13	1	RX
MPO2	F2	2	RX	MPO2	F14	2	RX
MPO3	F3	3	RX	MPO3	F15	3	RX
MPO4	F4	4	RX	MPO4	F16	4	RX
MPO5	F5	5	RX	MPO5	F17	5	RX
MPO6	F6	6	RX	MPO6	F18	6	RX
MPO7	F7	7	RX	MPO7	F19	7	RX
MPO8	F8	8	RX	MPO8	F20	8	RX
MPO9	F9	9	RX	MPO9	F21	9	RX
MPO10	F10	10	RX	MPO10	F22	10	RX
MPO11	F11	11	RX	MPO11	F23	11	RX
MPO12	F12	12	RX	MPO12	F24	12	RX

MPO Connector		CXP Module		Connector		CXP Module	
Connector ID	Fiber ID	Pin	Transmit (TX) Receive (RX)	Connector ID	Fiber ID	Pin	Transmit (TX) Receive (RX)
MPO13	F13	13	TX	MPO13	F1	13	TX
MPO14	F14	14	TX	MPO14	F2	14	TX
MPO15	F15	15	TX	MPO15	F3	15	TX
MPO16	F16	16	TX	MPO16	F4	16	TX
MPO17	F17	17	TX	MPO17	F5	17	TX
MPO18	F18	18	TX	MPO18	F6	18	TX
MPO19	F19	19	TX	MPO19	F7	19	TX
MPO20	F20	20	TX	MPO20	F8	20	TX
MPO21	F21	21	TX	MPO21	F9	21	TX
MPO22	F22	22	TX	MPO22	F10	22	TX
MPO23	F23	23	TX	MPO23	F11	23	TX
MPO24	F24	24	TX	MPO24	F12	24	TX

Required Tools and Equipment

- ESD (Electrostatic Discharge) wrist strap (for inserting a CXP or SFP module)
- Number-2 Phillips screwdriver
- (Optional) Medium flat-blade screwdriver (1/4 inch [60 to 70 mm]) used for opening the bale latches on small form-factor pluggable [SFP] or Gigabit Interface Converter [GBIC] transceivers
- Cable Director (P/N 2123610-1), to provide support and strain relief for fabric cable connections (provided by Cisco approved vendor Tyco Electronics)
- Supply of Velcro tie wraps (to bundle cables)
- Ladder

Cabling Overview

Cable Routing Considerations

Cabling Routing

Whether the cables will be run overhead or under the floor, consider the airflow and cable characteristics of the combined cable sets to ensure that your cable management structures support the total capacity of cables for the Cisco NCS 6000 Multi-Chassis system installation.

Raised Floor Installations

To plan cable routing in an installation with a raised floor, consider all the characteristics of each cable required for the installation. Allow slack for cabling so that cables can be pooled under the floor for future expansion without exceeding bend radius or cable length limitations. Riser cables are not rated for installation in air plenum passages, nor are they designed for use in LSZH (low smoke zero halogen) applications.

Cable Characteristics

Plan your cable runs, consider the characteristics of each cable, such as the cable length limitations, combined diameter of bundled cables (such as power cables), weight of the cable groups, and bend radius of the cable or cables. Couple these considerations with the cable infrastructure available (or needed) at your facility. The infrastructure could include structures like the overhead cabling monorail or J-hook system, sleeve and riser diameters, and distances between floors or elements of the Cisco NCS 6000 Multi-Chassis system.

Analyze the cabling infrastructures, risers, and racking available in your facility to determine if the capacity of the cabling management systems at your facility will accommodate the required capacities of the multi-chassis system cabling.

Cable Length

The limit of the cables is 100 meters (328 feet). Consider this distance when planning the physical locations of the LCCs and FCCs. For more information on the range of lengths available for the OM4 fabric cables, contact a Cisco approved vendor such as Tyco Electronics or Molex.

Cable Bend Radius

Exceeding the bend radius allowed for a cable can break the glass in the cable or cause attenuation or loss of signal. Do not bend a cable more than the allowable bend radius.

See the [Cisco Network Convergence System 6000 Series Routers Site Planning Guide](#) for information on planning component locations and cable runs.

General Cabling Procedures

Observe these procedures as you attach every cable:

- Strap the bundles to the horizontal cable management brackets on the chassis.

Four horizontal cable management brackets are preinstalled on both the LCC and FCC (two on the front side and two on the rear side of each chassis).

- Handle all fiber-optic cables carefully.
 - Do not allow a fiber-optic cable to bend in a radius smaller than the allowable bend radius specified for that cable type.
 - Fiber-optic cables are glass. Do not step on fiber-optic cables or handle them roughly. Do not twist or stretch the cables.
 - To keep optical connections clean, do not remove the cable dust cover until immediately before you install the cable.
 - After you install a cable, immediately reserve each dust cover for storage by office personnel in a dust-free storage area. After all of the cables have been installed ensure that all the reserved dust covers are stored by office personnel in a dust free area for future use.
 - Install clean dust covers on every unused connection.
 - Consider labeling the chassis interconnection cables or creating a diagram of the cabling to ensure that the cables are connected correctly during system installation.
 - Consider labeling the chassis. Consider whether each chassis need to be physically positioned in sequence. Label each cable with the location of each termination as you install each cable

Safety Guidelines

Before you perform any procedures, review the safety guidelines in this section to avoid injuring yourself or damaging the equipment. The following guidelines are for your safety and to protect equipment. The guidelines do not include all hazards. Be alert.

- Review the safety warnings listed in the [Regulatory and Compliance Guide for the Cisco NCS 6000 Series Routers](#) before installing, configuring, or troubleshooting any installed card.
- Never attempt to lift an object that might be too heavy for you to lift by yourself.
- Keep the work area clear and dust free during and after installation. Do not allow dirt or debris to enter into any laser-based components.
- Keep tools and router components away from walk areas.
- Do not wear loose clothing, jewelry, or other items that could get caught in the router while working with cards, modules, and their associated components.
- Cisco equipment operates safely when used in accordance with its specifications and product-usage instructions.
- Do not work alone if potentially hazardous conditions exist.
- The installation must follow national and local electrical codes: in the United States, National Fire Protection Association (NFPA) 70, United States National Electrical Code; in Canada, Canadian Electrical Code, part I, CSA C22.1; in other countries, International Electrotechnical Commission (IEC) 60364, part 1 through part 7.

Cabling the Ethernet Control Plane Network

This section describes how to cable the control plane network for the Cisco NCS 6000 Multi-Chassis system. These connections control the network connectivity for the multi-chassis system. The following cabling configurations are described:

The control plane network carries all the signaling, routing updates, system configuration and management packets for the NCS 6000. The control network must be cabled before the NCS 6000 system can become fully operational.

The control plane of the multi-chassis system is connected between the LCC and FCC with four paths per LCC (two per RP). The ports between the LCC and FCC are connected with SFP+ modules. Each RP on the LCC has 10GE connections that connect to each of the two SC-SW cards in the FCCs. The SC-SW cards provide the control plane network between all chassis.

Each SC-SW card has 56 10GE connections and two 40GE connections. Two SC-SW cards are used for redundancy purposes. These cards interconnect to each other through their 40GE QSFP optical ports. Each RP and each SC in a multi-chassis system connects to both switches. Note that an SC must be externally connected to both SC-SW switch cards though a 10GE port even if the SC and SC-SW cards are installed in the same FCC.

Cabling the Control Plane for a 2+1 Multi-Chassis system

The following figure shows the control plane cabling for a 2+1 multi-chassis system.



Note The RPs can be attached to any port on the SC-SW card.

Figure 3: Control Plane Cabling for a 2+1 Multi-Chassis System

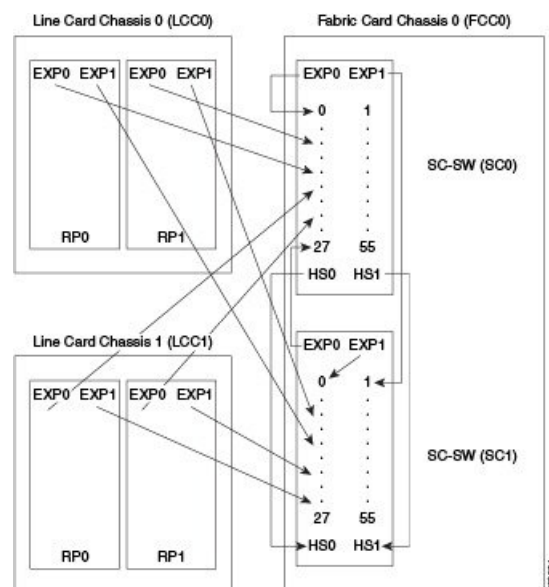


Table 2: RP Cards to SC-SW Card Connections (2+1 Configuration)

	From RP Port	To SC-SW Card
LCC0	RP0, EXP0	FCC0, SC0 any switch port
	RP1, EXP0	FCC0, SC0 any switch port
	RP0, EXP1	FCC0, SC1 any switch port
	RP1, EXP1	FCC0, SC1 any switch port
LCC1	RP0, EXP0	FCC0, SC0 any switch port
	RP1, EXP0	FCC0, SC0 any switch port
	RP0, EXP1	FCC0, SC1 any switch port
	RP1, EXP1	FCC0, SC1 any switch port

Table 3: FCC0 SC-SW to SC-SW Card Connections (2+1 Configuration)

From SC-SW Card	To SC-SW Card
SC0 EXP0	SC0, any switch port
SC0 EXP1	SC1, any switch port
SC1 EXP0	SC0, any switch port
SC1 EXP1	SC1, any switch port
SC0 HS0 (40GE)	SC1 HS0 (40GE)
SC0 HS1 (40GE)	SC1 HS1 (40GE)

Cabling the Control Plane for a 2+2 Multi-Chassis System

The following figure shows the control plane cabling for a 2+2 multi-chassis system.



Note The cabling may differ depending on the type of SFP modules that you use. For SFP-10G-SR (short-reach) transceiver modules, use 65/125 or 50/125 multi-mode cables. For SFP-10G-LR (long-reach) transceiver modules, use 9/125 single-mode cables. To connect the QSFP 40GE optical modules between the SC-SW cards, we recommend that you use QSFP supported cables.



Note Cabling the control plane for an $x+2$ (that is, 4+2 or 8+2), multi-chassis system is similar to that of a 2+2 multi-chassis system.

Figure 4: Control Plane Cabling for a 2+2 Multi-Chassis System

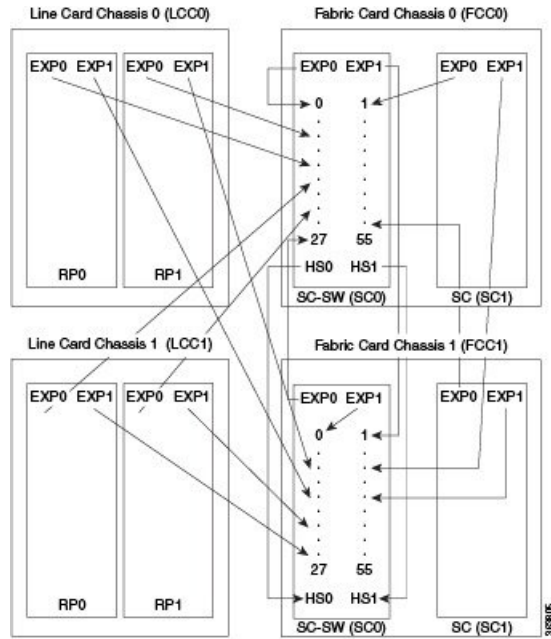


Table 4: RP Cards to SC-SW Card Connections (2+2 Configuration)

From Line Card Chassis	LCC RP Port	To SC-SW Cards in Fabric Card Chassis
LCC0	RP0, EXP0	FCC0, SC0 any switch port
	RP1, EXP0	FCC0, SC0 any switch port
	RP0, EXP1	FCC1, SC0 any switch port
	RP1, EXP1	FCC1, SC0 any switch port
LCC1	RP0, EXP0	FCC0, SC0 any switch port
	RP1, EXP0	FCC0, SC0 any switch port
	RP0, EXP1	FCC1, SC0 any switch port
	RP1, EXP1	FCC1, SC0 any switch port

Table 5: RP Cards to SC-SW Card Connections (8+2 Configuration)

From Line Card Chassis	LCC RP Port	To SC-SW Cards in Fabric Card Chassis
LCC0	RP0, EXP0	FCC0, SC0 any switch port
	RP1, EXP0	FCC0, SC0 any switch port
	RP0, EXP1	FCC1, SC0 any switch port
	RP1, EXP1	FCC1, SC0 any switch port
LCC1	RP0, EXP0	FCC0, SC0 any switch port
	RP1, EXP0	FCC0, SC0 any switch port
	RP0, EXP1	FCC1, SC0 any switch port
	RP1, EXP1	FCC1, SC0 any switch port
LCC2, LCC3, LCC4, LCC5, LCC6, and LCC7	RP0, EXP0	FCC0, SC0 any switch port
	RP1, EXP0	FCC0, SC0 any switch port
	RP0, EXP0	FCC1, SC0 any switch port
	RP1, EXP0	FCC1, SC0 any switch port

Table 6: SC-SW and SC Card Connections (2+2 and 8+2 Configuration)

From SC-SW Card	To SC-SW Card
FCC0, SC0 EXP0	FCC0, SC0 any switch port
FCC0, SC0 EXP1	FCC1, SC0 any switch port
FCC1, SC0 EXP0	FCC0, SC0 any switch port
FCC1, SC0 EXP1	FCC1, SC0 any switch port
FCC0, SC0 HS0 (40GE)	FCC1, SC0 HS0 (40GE)
FCC0, SC0 HS1 (40GE)	FCC1, SC0 HS1 (40GE)
From SC Card	To SC-SW Card
FCC0, SC1 EXP0	FCC0, SC0 any switch port
FCC0, SC1 EXP1	FCC1, SC0 any switch port
FCC1, SC1 EXP0	FCC0, SC0 any switch port
FCC1, SC1 EXP1	FCC1, SC0 any switch port

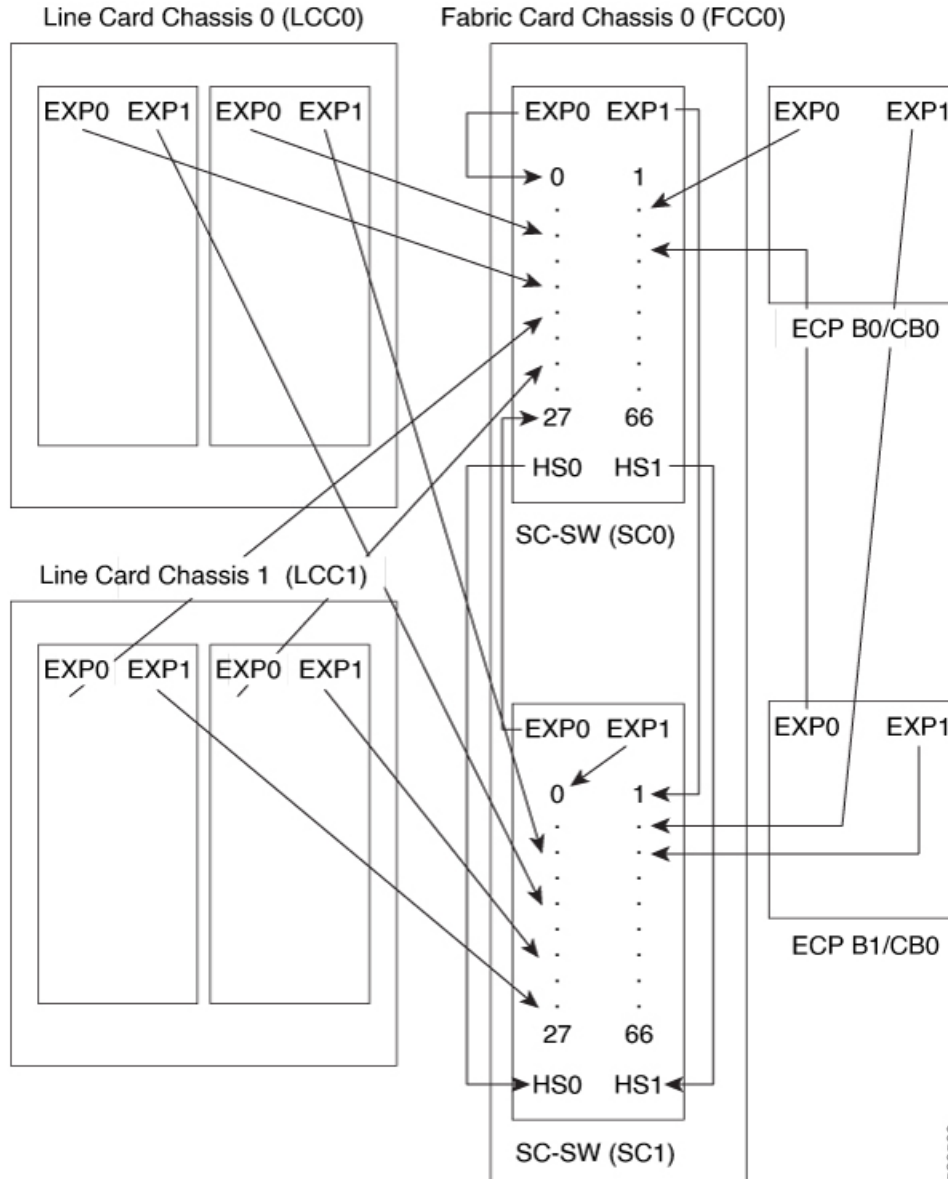
Cabling the Control Plane for a 2+1 Multi-Chassis System with ECP

The following figure shows the control plane cabling for a 2+1 multi-chassis system with ECP.



Note The RPs can be attached to any port on the SC-SW card.

Figure 5: Control Plane Cabling for a 2+1 Multi-Chassis System with ECP



520599

Table 7: RP Cards to SC-SW Card Connections (2+1 Configuration)

	From RP Port	To SC-SW Card
LCC0	RP0, EXP0	FCC0, SC0 any switch port
	RP1, EXP0	FCC0, SC0 any switch port
	RP0, EXP1	FCC0, SC1 any switch port
	RP1, EXP1	FCC0, SC1 any switch port
LCC1	RP0, EXP0	FCC0, SC0 any switch port
	RP1, EXP0	FCC0, SC0 any switch port
	RP0, EXP1	FCC0, SC1 any switch port
	RP1, EXP1	FCC0, SC1 any switch port

Table 8: FCC0 SC-SW to SC-SW Card Connections (2+1 Configuration)

From SC-SW Card	To SC-SW Card
SC0 EXP0	SC0, any switch port
SC0 EXP1	SC1, any switch port
SC1 EXP0	SC0, any switch port
SC1 EXP1	SC1, any switch port
SC0 HS0 (40GE)	SC1 HS0 (40GE)
SC0 HS1 (40GE)	SC1 HS1 (40GE)

Table 9: ECP B/CB to SC-SW Card Connections (2+1 Configuration)

ECP B/CB Card	To SC-SW Card
B0/CB0, EXP0	FCC0, SC0 any switch port
B0/CB0, EXP1	FCC0, SC1 any switch port
B1/CB0, EXP0	FCC0, SC0 any switch port
B1/CB0, EXP1	FCC0, SC1 any switch port

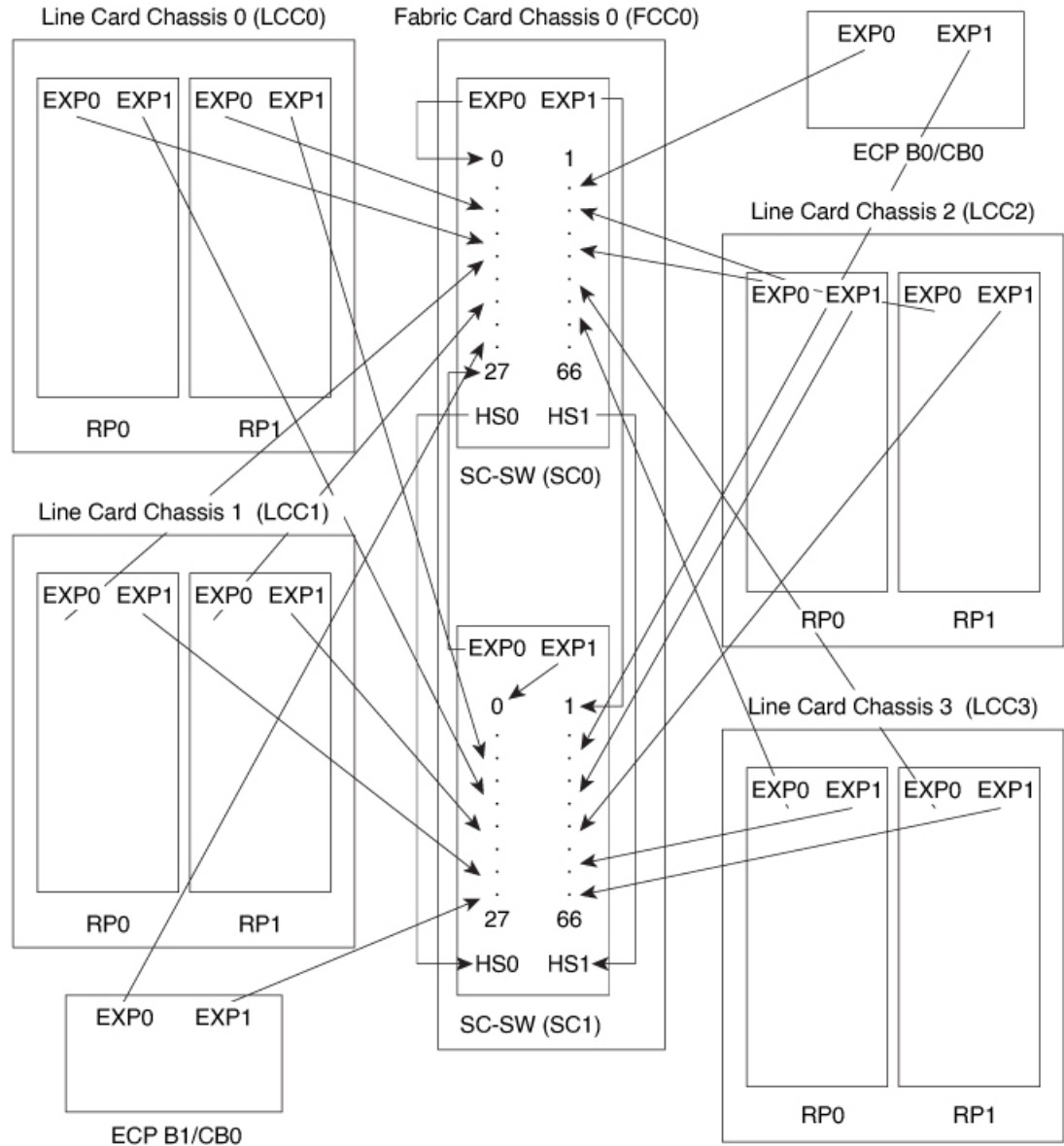
Cabling the Control Plane for a 4+1 Multi-Chassis System with ECP

The following figure shows the control plane cabling for a 4+1 multi-chassis system with ECP.



Note The RPs can be attached to any port on the SC-SW card.

Figure 6: Control Plane Cabling for a 4+1 Multi-Chassis System with ECP



520060

Table 10: RP Cards to SC-SW Card Connections (4+1 Configuration)

	From RP Port	To SC-SW Card
LCC0	RP0, EXP0	FCC0, SC0 any switch port
	RP1, EXP0	FCC0, SC0 any switch port
	RP0, EXP1	FCC0, SC1 any switch port
	RP1, EXP1	FCC0, SC1 any switch port
LCC1	RP0, EXP0	FCC0, SC0 any switch port
	RP1, EXP0	FCC0, SC0 any switch port
	RP0, EXP1	FCC0, SC1 any switch port
	RP1, EXP1	FCC0, SC1 any switch port
LCC2	RP0, EXP0	FCC0, SC0 any switch port
	RP1, EXP0	FCC0, SC0 any switch port
	RP0, EXP1	FCC0, SC1 any switch port
	RP1, EXP1	FCC0, SC1 any switch port
LCC3	RP0, EXP0	FCC0, SC0 any switch port
	RP1, EXP0	FCC0, SC0 any switch port
	RP0, EXP1	FCC0, SC1 any switch port
	RP1, EXP1	FCC0, SC1 any switch port

Table 11: FCC0 SC-SW to SC-SW Card Connections (4+1 Configuration)

From SC-SW Card	To SC-SW Card
SC0 EXP0	SC0, any switch port
SC0 EXP1	SC1, any switch port
SC1 EXP0	SC0, any switch port
SC1 EXP1	SC1, any switch port
SC0 HS0 (40GE)	SC1 HS0 (40GE)
SC0 HS1 (40GE)	SC1 HS1 (40GE)

Table 12: ECP B/CB to SC-SW Card Connections (4+1 Configuration)

ECP B/CB Card	To SC-SW Card
B0/CB0, EXP0	FCC0, SC0 any switch port
B0/CB0, EXP1	FCC0, SC1 any switch port
B1/CB0, EXP0	FCC0, SC0 any switch port
B1/CB0, EXP1	FCC0, SC1 any switch port

Cabling the Fabric

This section describes how to configure the fabric cabling between the LCCs and the fabric components in the FCCs. The fabric provides the data connection for router traffic between all the CXP optical ports in the LCCs. The fabric cabling must be completed to enable data communications through the Cisco NCS 6000 Multi-Chassis system.

Multi-Chassis 2+1 Configuration

This section describes how to configure a multi-chassis 2+1 configuration. In this configuration, two LCCs (LCC0 and LCC1) connect to one FCC. The configuration differs depending on the number of S2 FCs that are installed in the FCC. The configurations described here include:



Note

At the LCC end of a fabric cable, the plane number is determined by the slot to which the cable is connected. The other end of each fabric cable must connect to the S2 fabric card designated for the same plane number.

Prerequisites

For connecting the fabric, you need the following:

- 192 MPO-24 fiber cables (96 per LCC)
- Optical module sets:
 - **In 1T multi-chassis 2+1 mode:** Four CXP optical module sets (Cisco PID NCS-FAB-OPT). Two sets are required per LCC: one set plugs into the LCC and the other set plugs into the FCC. Each set includes 96 CXP-100G-SR12 modules for a total of 384 modules.
 - **In 2T multi-chassis 2+1 mode:** Four CXP2 optical module sets (Cisco PID NCS-FAB-OPT2). Two sets are required per LCC: one set plugs into the LCC and the other set plugs into the FCC. Each set includes 96 ONS-CXP2-SR25 modules for a total of 384 modules.

Configuring a 2+1 Configuration with Six S2 FCs

The following figure shows two line card chassis (LCC0 and LCC1) connected to one fabric card chassis (FCC0) that has six S2 FCs installed. The figure shows the 2+1 connections for one fabric plane. To complete the configuration, you must repeat the cabling for the remaining five fabric planes until all six S2 cards are connected.

Figure 7: Cisco NCS 6000 Multi-Chassis 2+1 Configuration (Six S2 Fabric Cards)

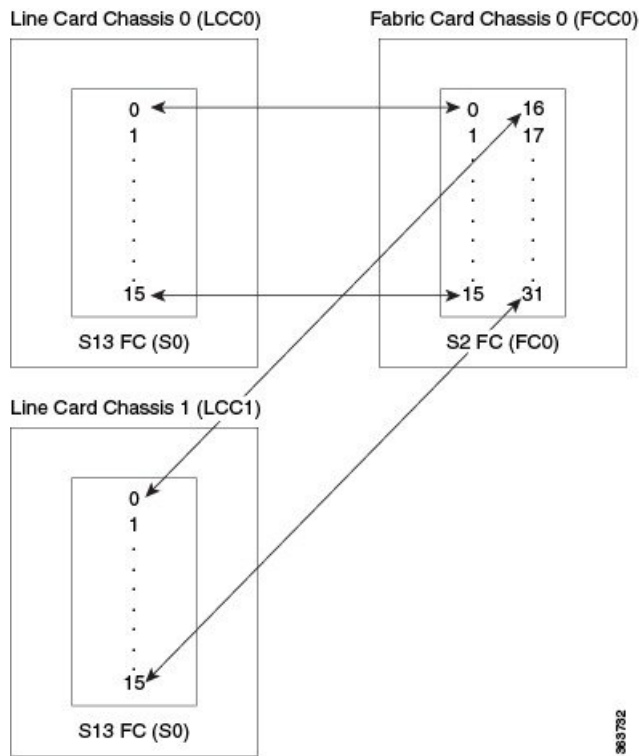


Table 13: Cabling Plan for LCC0 in a 2+1 Multi-Chassis Configuration with Six S2 Fabric Cards

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis
S0/0 to FC0/0		S1/0 to FC1/0		S2/0 to FC2/0		S3/0 to FC3/0		S4/0 to FC4/0		S5/0 to FC5/0	
S0/1 to FC0/1		S1/1 to FC1/1		S2/1 to FC2/1		S3/1 to FC3/1		S4/1 to FC4/1		S5/1 to FC5/1	
S0/2 to FC0/2		S1/2 to FC1/2		S2/2 to FC2/2		S3/2 to FC3/2		S4/2 to FC4/2		S5/2 to FC5/2	
S0/3 to FC0/3		S1/3 to FC1/3		S2/3 to FC2/3		S3/3 to FC3/3		S4/3 to FC4/3		S5/3 to FC5/3	
S0/4 to FC0/4		S1/4 to FC1/4		S2/4 to FC2/4		S3/4 to FC3/4		S4/4 to FC4/4		S5/4 to FC5/4	
S0/5 to FC0/5		S1/5 to FC1/5		S2/5 to FC2/5		S3/5 to FC3/5		S4/5 to FC4/5		S5/5 to FC5/5	

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis
S0/6 to FC0/6		S1/6 to FC1/6		S2/6 to FC2/6		S3/6 to FC3/6		S4/6 to FC4/6		S5/6 to FC5/6	
S0/7 to FC0/7		S1/7 to FC1/7		S2/7 to FC2/7		S3/7 to FC3/7		S4/7 to FC4/7		S5/7 to FC5/7	
S0/8 to FC0/8		S1/8 to FC1/8		S2/8 to FC1/8		S3/8 to FC3/8		S4/8 to FC4/8		S5/8 to FC5/8	
S0/9 to FC0/9		S1/9 to FC1/9		S2/9 to FC2/9		S3/9 to FC3/9		S4/9 to FC4/9		S5/9 to FC5/9	
S0/10 to FC0/10		S1/10 to FC1/10		S2/10 to FC2/10		S3/10 to FC3/10		S4/10 to FC4/10		S5/10 to FC5/10	
S0/11 to FC0/11		S1/11 to FC1/11		S2/11 to FC2/11		S3/11 to FC3/11		S4/11 to FC4/11		S5/11 to FC5/11	
S0/12 to FC0/12		S1/12 to FC1/12		S2/12 to FC2/12		S3/12 to FC3/12		S4/12 to FC4/12		S5/12 to FC5/12	
S0/13 to FC0/13		S1/13 to FC1/13		S2/13 to FC2/13		S3/13 to FC3/13		S4/13 to FC4/13		S5/13 to FC5/13	
S0/14 to FC0/14		S1/14 to FC1/14		S2/14 to FC2/14		S3/14 to FC3/14		S4/14 to FC4/14		S5/14 to FC5/14	
S0/15 to FC0/15		S1/15 to FC1/15		S2/15 to FC2/15		S3/15 to FC3/15		S4/15 to FC4/15		S5/15 to FC5/15	

Table 14: Cabling Plan for LCC1 in a 2+1 Multi-Chassis Configuration with Six S2 Fabric Cards

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1(S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis
S0/0 to FC0/16		S1/0 to FC1/16		S2/0 to FC2/16		S3/0 to FC3/16		S4/0 to FC4/16		S5/0 to FC5/16	
S0/1 to FC0/17		S1/1 to FC1/17		S2/1 to FC2/17		S3/1 to FC3/17		S4/1 to FC4/17		S5/1 to FC5/17	
S0/2 to FC0/18		S1/2 to FC1/18		S2/2 to FC2/18		S3/2 to FC3/18		S4/2 to FC4/18		S5/2 to FC5/18	
S0/3 to FC0/19		S1/3 to FC1/19		S2/3 to FC2/19		S3/3 to FC3/19		S4/3 to FC4/19		S5/3 to FC5/19	
S0/4 to FC0/20		S1/4 to FC1/20		S2/4 to FC2/20		S3/4 to FC3/20		S4/4 to FC4/20		S5/4 to FC5/20	
S0/5 to FC0/21		S1/5 to FC1/21		S2/5 to FC2/21		S3/5 to FC3/21		S4/5 to FC4/21		S5/5 to FC5/21	
S0/6 to FC0/22		S1/6 to FC1/22		S2/6 to FC2/22		S3/6 to FC3/22		S4/6 to FC4/22		S5/6 to FC5/22	
S0/7 to FC0/23		S1/7 to FC1/23		S2/7 to FC2/23		S3/7 to FC3/23		S4/7 to FC4/23		S5/7 to FC5/23	
S0/8 to FC0/24		S1/8 to FC1/24		S2/8 to FC2/24		S3/8 to FC3/24		S4/8 to FC4/24		S5/8 to FC5/24	
S0/9 to FC0/25		S1/9 to FC1/25		S2/9 to FC2/25		S3/9 to FC3/25		S4/9 to FC4/25		S5/9 to FC5/25	
S0/10 to FC0/26		S1/10 to FC1/26		S2/10 to FC2/26		S3/10 to FC3/26		S4/10 to FC4/26		S5/10 to FC5/26	

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1(S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis
S0/11 to FC0/27		S1/11 to FC1/27		S2/11 to FC2/27		S3/11 to FC3/27		S4/11 to FC4/27		S5/11 to FC5/27	
S0/12 to FC0/28		S1/12 to FC1/28		S2/12 to FC2/28		S3/12 to FC3/28		S4/12 to FC4/28		S5/12 to FC5/28	
S0/13 to FC0/29		S1/13 to FC1/29		S2/13 to FC2/29		S3/13 to FC3/29		S4/13 to FC4/29		S5/13 to FC5/29	
S0/14 to FC0/30		S1/14 to FC1/30		S2/14 to FC2/30		S3/14 to FC3/30		S4/14 to FC4/30		S5/14 to FC5/30	
S0/15 to FC0/31		S1/15 to FC1/31		S2/15 to FC2/31		S3/15 to FC3/31		S4/15 to FC4/31		S5/15 to FC5/31	

2+1 Software Configuration (Six S2 Fabric Cards)

An explicit admin configuration is required to specify an ordered list of S2 connections assigned for a plane. Each S2 connection is specified as an instance. The instances are contiguous, starting from 0.

```
controller fabric plane 0
instance 0
location F0/FC0
```

```
controller fabric plane 1
instance 0
location F0/FC1
```

```
controller fabric plane 2
instance 0
location F0/FC2
```

```
controller fabric plane 3
instance 0
location F0/FC3
```

```
controller fabric plane 4
instance 0
location F0/FC4
```

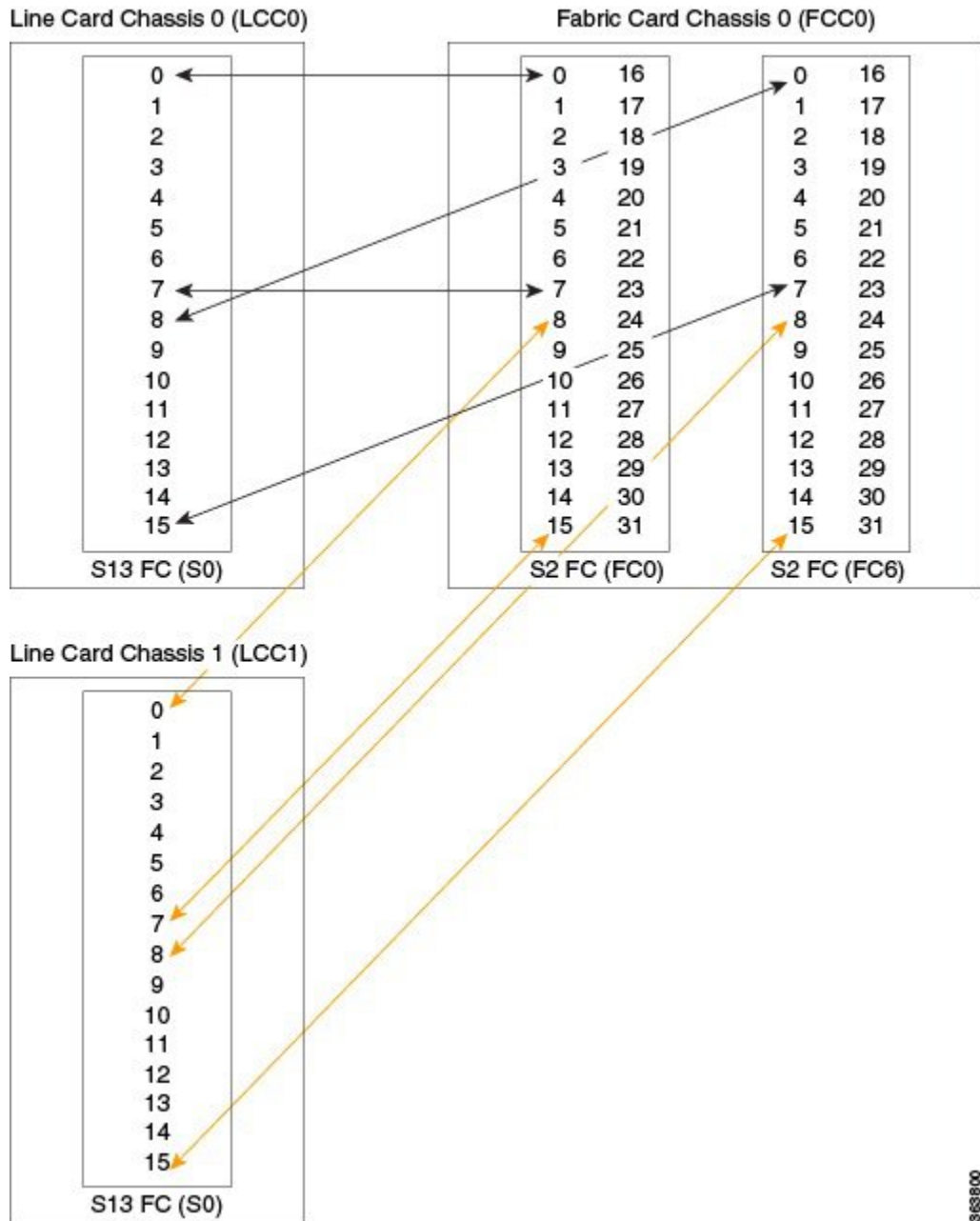
```
controller fabric plane 5
instance 0
location F0/FC5
```

Configuring a 2+1 Configuration with 12 S2 FCs

The following figure shows two line card chassis (LCC0 and LCC1) connected to one fabric card chassis (FCC0) that has 12 S2 FCs installed. The advantage of installing 12 S2 FCs cards instead of 6 S2 FCs cards is that only half of the available S2 ports are used. This allows up to two additional LCCs to be added later without having to re-cable the initial 2 LCCs.

The figure below shows the connections for one fabric plane. To complete the configuration, you must repeat the cabling for the remaining five fabric planes until all 12 S2 FCs cards are connected.

Figure 8: Cisco NCS 6000 Multi-Chassis 2+1 Configuration (12 S2 FCs)



8698600

Table 15: Cabling Plan for LCC0 in a 2+1 Multi-Chassis Configuration with 12 S2 Cards

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis
S0/0 to FC0/0		S1/0 to FC1/0		S2/0 to FC2/0		S3/0 to FC3/0		S4/0 to FC4/0		S5/0 to FC5/0	

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis
S0/1 to FC0/1		S1/1 to FC1/1		S2/1 to FC2/1		S3/1 to FC3/1		S4/1 to FC4/1		S5/1 to FC5/1	
S0/2 to FC0/2		S1/2 to FC1/2		S2/2 to FC2/2		S3/2 to FC3/2		S4/2 to FC4/2		S5/2 to FC5/2	
S0/3 to FC0/3		S1/3 to FC1/3		S2/3 to FC2/3		S3/3 to FC3/3		S4/3 to FC4/3		S5/3 to FC5/3	
S0/4 to FC0/4		S1/4 to FC1/4		S2/4 to FC2/4		S3/4 to FC3/4		S4/4 to FC4/4		S5/4 to FC5/4	
S0/5 to FC0/5		S1/5 to FC1/5		S2/5 to FC2/5		S3/5 to FC3/5		S4/5 to FC4/5		S5/5 to FC5/5	
S0/6 to FC0/6		S1/6 to FC1/6		S2/6 to FC2/6		S3/6 to FC3/6		S4/6 to FC4/6		S5/6 to FC5/6	
S0/7 to FC0/7		S1/7 to FC1/7		S2/7 to FC2/7		S3/7 to FC3/7		S4/7 to FC4/7		S5/7 to FC5/7	
S0/8 to FC6/0		S1/8 to FC7/0		S2/8 to FC8/0		S3/8 to FC9/0		S4/8 to FC10/0		S5/8 to FC11/0	
S0/9 to FC6/1		S1/9 to FC7/1		S2/9 to FC8/1		S3/9 to FC9/1		S4/9 to FC10/1		S5/9 to FC11/1	
S0/10 to FC6/2		S1/10 to FC7/2		S2/10 to FC8/2		S3/10 to FC9/2		S4/10 to FC10/2		S5/10 to FC11/2	
S0/11 to FC6/3		S1/11 to FC7/3		S2/11 to FC8/3		S3/11 to FC9/3		S4/11 to FC10/3		S5/11 to FC11/3	
S0/12 to FC6/4		S1/12 to FC7/4		S2/12 to FC8/4		S3/12 to FC9/4		S4/12 to FC10/4		S5/12 to FC11/4	
S0/13 to FC6/5		S1/13 to FC7/5		S2/13 to FC8/5		S3/13 to FC9/5		S4/13 to FC10/5		S5/13 to FC11/5	
S0/14 to FC6/6		S1/14 to FC7/6		S2/14 to FC8/6		S3/14 to FC9/6		S4/14 to FC10/6		S5/14 to FC11/6	
S0/15 to FC6/7		S1/15 to FC7/7		S2/15 to FC8/7		S3/15 to FC9/7		S4/15 to FC10/7		S5/15 to FC11/7	

Table 16: Cabling Plan for LCC1 in a 2+1 Multi-Chassis Configuration with 12 S2 Cards

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1(S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis
S0/0 to FC0/8		S1/0 to FC1/8		S2/0 to FC2/8		S3/0 to FC3/8		S4/0 to FC4/8		S5/0 to FC5/8	
S0/1 to FC0/9		S1/1 to FC1/9		S2/1 to FC2/9		S3/1 to FC3/9		S4/1 to FC4/9		S5/1 to FC5/9	
S0/2 to FC0/10		S1/2 to FC1/10		S2/2 to FC2/10		S3/2 to FC3/10		S4/2 to FC4/10		S5/2 to FC5/10	
S0/3 to FC0/11		S1/3 to FC1/11		S2/3 to FC2/11		S3/3 to FC3/11		S4/3 to FC4/11		S5/3 to FC5/11	
S0/4 to FC0/12		S1/4 to FC1/12		S2/4 to FC2/12		S3/4 to FC3/12		S4/4 to FC4/12		S5/4 to FC5/12	
S0/5 to FC0/13		S1/5 to FC1/13		S2/5 to FC2/13		S3/5 to FC3/13		S4/5 to FC4/13		S5/5 to FC5/13	

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1(S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis
S0/6 to FC0/14		S1/6 to FC1/14		S2/6 to FC2/14		S3/6 to FC3/14		S4/6 to FC4/14		S5/6 to FC5/14	
S0/7 to FC0/15		S1/7 to FC1/15		S2/7 to FC2/15		S3/7 to FC3/15		S4/7 to FC4/15		S5/7 to FC5/15	
S0/8 to FC6/8		S1/8 to FC7/8		S2/8 to FC8/8		S3/8 to FC9/8		S4/8 to FC10/8		S5/8 to FC11/8	
S0/9 to FC6/9		S1/9 to FC7/9		S2/9 to FC8/9		S3/9 to FC9/9		S4/9 to FC10/9		S5/9 to FC11/9	
S0/10 to FC6/10		S1/10 to FC7/10		S2/10 to FC8/10		S3/10 to FC9/10		S4/10 to FC10/10		S5/10 to FC11/10	
S0/11 to FC6/11		S1/11 to FC7/11		S2/11 to FC8/11		S3/11 to FC9/11		S4/11 to FC10/11		S5/11 to FC11/11	
S0/12 to FC6/12		S1/12 to FC7/12		S2/12 to FC8/12		S3/12 to FC9/12		S4/12 to FC10/12		S5/12 to FC11/12	
S0/13 to FC6/13		S1/13 to FC7/13		S2/13 to FC8/13		S3/13 to FC9/13		S4/13 to FC10/13		S5/13 to FC11/13	
S0/14 to FC6/14		S1/14 to FC7/14		S2/14 to FC8/14		S3/14 to FC9/14		S4/14 to FC10/14		S5/14 to FC11/14	
S0/15 to FC6/15		S1/15 to FC7/15		S2/15 to FC8/15		S3/15 to FC9/15		S4/15 to FC10/15		S5/15 to FC11/15	

2+1 Software Configuration (12 S2 Fabric Cards)

An explicit admin configuration is required to specify an ordered list of S2 connections assigned for a plane. Each S2 connection is specified as an instance. The instances are contiguous, starting from 0.

```

controller fabric plane 0
instance 0
location F0/FC0
instance 1
location F0/FC6

controller fabric plane 1
instance 0
location F0/FC1
instance 1
location F0/FC7

controller fabric plane 2
instance 0
location F0/FC2
instance 1
location F0/FC8

controller fabric plane 3
instance 0
location F0/FC3
instance 1
location F0/FC9

controller fabric plane 4
instance 0
location F0/FC4

```

```
instance 1
location F0/FC10

controller fabric plane 5
instance 0
location F0/FC5
instance 1
location F0/FC11
```

Multi-Chassis 2+2 Configuration

This section describes how to configure a multi-chassis 2+2 configuration. In this configuration, two line card chassis (LCC0 and LCC1) are connected to two fabric card chassis (FCC0 and FCC1).

Prerequisites

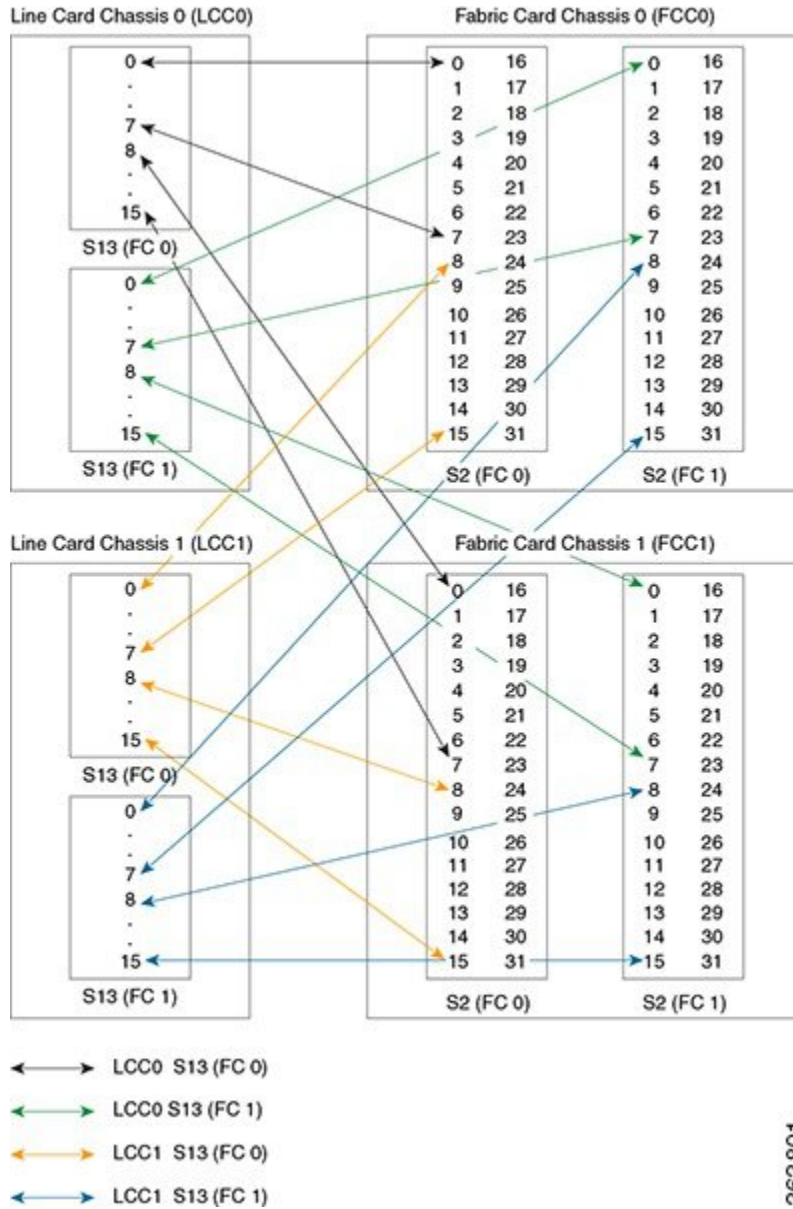
For connecting the fabric, you need the following:

- 192 MPO-24 fiber cables (96 per LCC)
- Optical module sets:
 - **In 1T multi-chassis 2+2 mode:** Four CXP optical module sets (Cisco PID NCS-FAB-OPT). Two sets are required per LCC: one set plugs into the LCC and the other set plugs into the FCC. Each set includes 96 CXP-100G-SR12 modules for a total of 384 modules.
 - **In 2T multi-chassis 2+2 mode:** Four CXP2 optical module sets (Cisco PID NCS-FAB-OPT2). Two sets are required per LCC: one set plugs into the LCC and the other set plugs into the FCC. Each set includes 96 ONS-CXP2-SR25 modules for a total of 384 modules.

Configuring a 2+2 Configuration with 12 S2 Fabric Cards

The following shows two line card chassis (LCC0 and LCC1) connected to two fabric card chassis (FCC0 and FCC1). In this configuration, there are 6 FCs in each fabric card chassis; in total 12 FCs are installed. The figure shows the 2+2 connections for two fabric planes. To complete the configuration, you must repeat the cabling for the remaining four fabric planes until all 12 S2 cards are connected.

Figure 9: Cisco NCS 6000 Multi-Chassis 2+2 Configuration with 12 S2 FC's



The following table shows the cabling plan for a 2+2 multi-chassis configuration with 12 SC FCs installed. FCC0 has a fabric instance 0 for planes 0 through 5 in FCC0 (6 SC FCs in slots 0 through 5), and fabric instance 1 in FCC1 (also in slots 0 through 5). Other mappings are possible (for example, you can put both instances of planes 0 through 2 in FCC0, and planes 3 through 5 in FCC1 but the following table and software configuration assume that instance 0 is in FCC0 and instance 1 is in FCC1).

Table 17: Cabling Plan for LCC0 in a 2+2 Multi-Chassis Configuration with 12 S2 Fabric Cards

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis
S0/0 to FC0/0 (FCC0)		S1/0 to FC1/0 (FCC0)		S2/0 to FC2/0 (FCC0)		S3/0 to FC3/0 (FCC0)		S4/0 to FC4/0 (FCC0)		S5/0 to FC5/0 (FCC0)	
S0/1 to FC0/1 (FCC0)		S1/1 to FC1/1 (FCC0)		S2/1 to FC2/1 (FCC0)		S3/1 to FC3/1 (FCC0)		S4/1 to FC4/1 (FCC0)		S5/1 to FC5/1 (FCC0)	
S0/2 to FC0/2 (FCC0)		S1/2 to FC1/2 (FCC0)		S2/2 to FC2/2 (FCC0)		S3/2 to FC3/2 (FCC0)		S4/2 to FC4/2 (FCC0)		S5/2 to FC5/2 (FCC0)	
S0/3 to FC0/3 (FCC0)		S1/3 to FC1/3 (FCC0)		S2/3 to FC2/3 (FCC0)		S3/3 to FC3/3 (FCC0)		S4/3 to FC4/3 (FCC0)		S5/3 to FC5/3 (FCC0)	
S0/4 to FC0/4 (FCC0)		S1/4 to FC1/4 (FCC0)		S2/4 to FC2/4 (FCC0)		S3/4 to FC3/4 (FCC0)		S4/4 to FC4/4 (FCC0)		S5/4 to FC5/4 (FCC0)	
S0/5 to FC0/5 (FCC0)		S1/5 to FC1/5 (FCC0)		S2/5 to FC2/5 (FCC0)		S3/5 to FC3/5 (FCC0)		S4/5 to FC4/5 (FCC0)		S5/5 to FC5/5 (FCC0)	
S0/6 to FC0/6 (FCC0)		S1/6 to FC1/6 (FCC0)		S2/6 to FC2/6 (FCC0)		S3/6 to FC3/6 (FCC0)		S4/6 to FC4/6 (FCC0)		S5/6 to FC5/6 (FCC0)	
S0/7 to FC0/7 (FCC0)		S1/7 to FC1/7 (FCC0)		S2/7 to FC2/7 (FCC0)		S3/7 to FC3/7 (FCC0)		S4/7 to FC4/7 (FCC0)		S5/7 to FC5/7 (FCC0)	
S0/8 to FC0/0 (FCC1)		S1/8 to FC1/0 (FCC1)		S2/8 to FC2/0 (FCC1)		S3/8 to FC3/0 (FCC1)		S4/8 to FC4/0 (FCC1)		S5/8 to FC5/0 (FCC1)	
S0/9 to FC0/2 (FCC1)		S1/9 to FC1/1 (FCC1)		S2/9 to FC2/1 (FCC1)		S3/9 to FC3/1 (FCC1)		S4/9 to FC4/1 (FCC1)		S5/9 to FC5/1 (FCC1)	
S0/10 to FC0/2 (FCC1)		S1/10 to FC1/2 (FCC1)		S2/10 to FC2/2 (FCC1)		S3/10 to FC3/2 (FCC1)		S4/10 to FC4/2 (FCC1)		S5/10 to FC5/2 (FCC1)	
S0/11 to FC0/3 (FCC1)		S1/11 to FC1/3 (FCC1)		S2/11 to FC2/3 (FCC1)		S3/11 to FC3/3 (FCC1)		S4/11 to FC4/3 (FCC1)		S5/11 to FC5/3 (FCC1)	
S0/12 to FC0/4 (FCC1)		S1/12 to FC1/4 (FCC1)		S2/12 to FC2/4 (FCC1)		S3/12 to FC3/4 (FCC1)		S4/12 to FC4/4 (FCC1)		S5/12 to FC5/4 (FCC1)	
S0/13 to FC0/5 (FCC1)		S1/13 to FC1/5 (FCC1)		S2/13 to FC2/5 (FCC1)		S3/13 to FC3/5 (FCC1)		S4/13 to FC4/5 (FCC1)		S5/13 to FC5/5 (FCC1)	
S0/14 to FC0/5 (FCC1)		S1/14 to FC1/6 (FCC1)		S2/14 to FC2/6 (FCC1)		S3/14 to FC3/6 (FCC1)		S4/14 to FC4/6 (FCC1)		S5/14 to FC5/6 (FCC1)	
S0/15 to FC0/7 (FCC1)		S1/15 to FC1/7 (FCC1)		S2/15 to FC2/7 (FCC1)		S3/15 to FC3/7 (FCC1)		S4/15 to FC4/7 (FCC1)		S5/15 to FC5/7 (FCC1)	

Table 18: Cabling Plan for LCC1 in a 2+2 Multi-Chassis Configuration with 12 S2 Fabric Cards

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1(S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis
S0/0 to FC0/8 (FCC0)		S1/0 to FC1/8 (FCC0)		S2/0 to FC2/8 (FCC0)		S3/0 to FC3/8 (FCC0)		S4/0 to FC4/8 (FCC0)		S5/0 to FC5/8 (FCC0)	
S0/1 to FC0/9 (FCC0)		S1/1 to FC1/9 (FCC0)		S2/1 to FC2/9 (FCC0)		S3/1 to FC3/9 (FCC0)		S4/1 to FC4/9 (FCC0)		S5/1 to FC5/9 (FCC0)	
S0/2 to FC0/10 (FCC0)		S1/2 to FC1/10 (FCC0)		S2/2 to FC2/10 (FCC0)		S3/2 to FC3/10 (FCC0)		S4/2 to FC4/10 (FCC0)		S5/2 to FC5/10 (FCC0)	
S0/3 to FC0/11 (FCC0)		S1/3 to FC1/11 (FCC0)		S2/3 to FC2/11 (FCC0)		S3/3 to FC3/11 (FCC0)		S4/3 to FC4/11 (FCC0)		S5/3 to FC5/11 (FCC0)	
S0/4 to FC0/12 (FCC0)		S1/4 to FC1/12 (FCC0)		S2/4 to FC2/12 (FCC0)		S3/4 to FC3/12 (FCC0)		S4/4 to FC4/12 (FCC0)		S5/4 to FC5/12 (FCC0)	
S0/5 to FC0/13 (FCC0)		S1/5 to FC1/13 (FCC0)		S2/5 to FC2/13 (FCC0)		S3/5 to FC3/13 (FCC0)		S4/5 to FC4/13 (FCC0)		S5/5 to FC5/13 (FCC0)	
S0/6 to FC0/14 (FCC0)		S1/6 to FC1/14 (FCC0)		S2/6 to FC2/14 (FCC0)		S3/6 to FC3/14 (FCC0)		S4/6 to FC4/14 (FCC0)		S5/6 to FC5/14 (FCC0)	
S0/7 to FC0/15 (FCC0)		S1/7 to FC1/15 (FCC0)		S2/7 to FC2/15 (FCC0)		S3/7 to FC3/15 (FCC0)		S4/7 to FC4/15 (FCC0)		S5/7 to FC5/15 (FCC0)	
S0/8 to FC0/8 (FCC1)		S1/8 to FC1/8 (FCC1)		S2/8 to FC2/8 (FCC1)		S3/8 to FC3/8 (FCC1)		S4/8 to FC4/8 (FCC1)		S5/8 to FC5/8 (FCC1)	
S0/9 to FC0/9 (FCC1)		S1/9 to FC1/9 (FCC1)		S2/9 to FC2/9 (FCC1)		S3/9 to FC3/9 (FCC1)		S4/9 to FC4/9 (FCC1)		S5/9 to FC5/9 (FCC1)	
S0/10 to FC0/10 (FCC1)		S1/10 to FC1/10 (FCC1)		S2/10 to FC2/10 (FCC1)		S3/10 to FC3/10 (FCC1)		S4/10 to FC4/10 (FCC1)		S5/10 to FC5/10 (FCC1)	
S0/11 to FC0/11 (FCC1)		S1/11 to FC1/11 (FCC1)		S2/11 to FC2/11 (FCC1)		S3/11 to FC3/11 (FCC1)		S4/11 to FC4/11 (FCC1)		S5/11 to FC5/11 (FCC1)	
S0/12 to FC0/12 (FCC1)		S1/12 to FC1/12 (FCC1)		S2/12 to FC2/12 (FCC1)		S3/12 to FC3/12 (FCC1)		S4/12 to FC4/12 (FCC1)		S5/12 to FC5/12 (FCC1)	
S0/13 to FC0/13 (FCC1)		S1/13 to FC1/13 (FCC1)		S2/13 to FC2/13 (FCC1)		S3/13 to FC3/13 (FCC1)		S4/13 to FC4/13 (FCC1)		S5/13 to FC5/13 (FCC1)	
S0/14 to FC0/14 (FCC1)		S1/14 to FC1/14 (FCC1)		S2/14 to FC2/14 (FCC1)		S3/14 to FC3/14 (FCC1)		S4/14 to FC4/14 (FCC1)		S5/14 to FC5/14 (FCC1)	
S0/15 to FC0/15 (FCC1)		S1/15 to FC1/15 (FCC1)		S2/15 to FC2/15 (FCC1)		S3/15 to FC3/15 (FCC1)		S4/15 to FC4/15 (FCC1)		S5/15 to FC5/15 (FCC1)	

2+2 Software Configuration (12 S2 Fabric Cards)

An explicit admin configuration is required to specify an ordered list of S2 connections assigned for a plane. Each S2 connection is specified as an instance. The instances are contiguous, starting from 0.

```
controller fabric plane 0
instance 0
location F0/FC0
instance 1
location F1/FC0

controller fabric plane 1
instance 0
location F0/FC1
instance 1
location F1/FC1

controller fabric plane 2
instance 0
location F0/FC2
instance 1
location F1/FC2

controller fabric plane 3
instance 0
location F0/FC3
instance 1
location F1/FC3

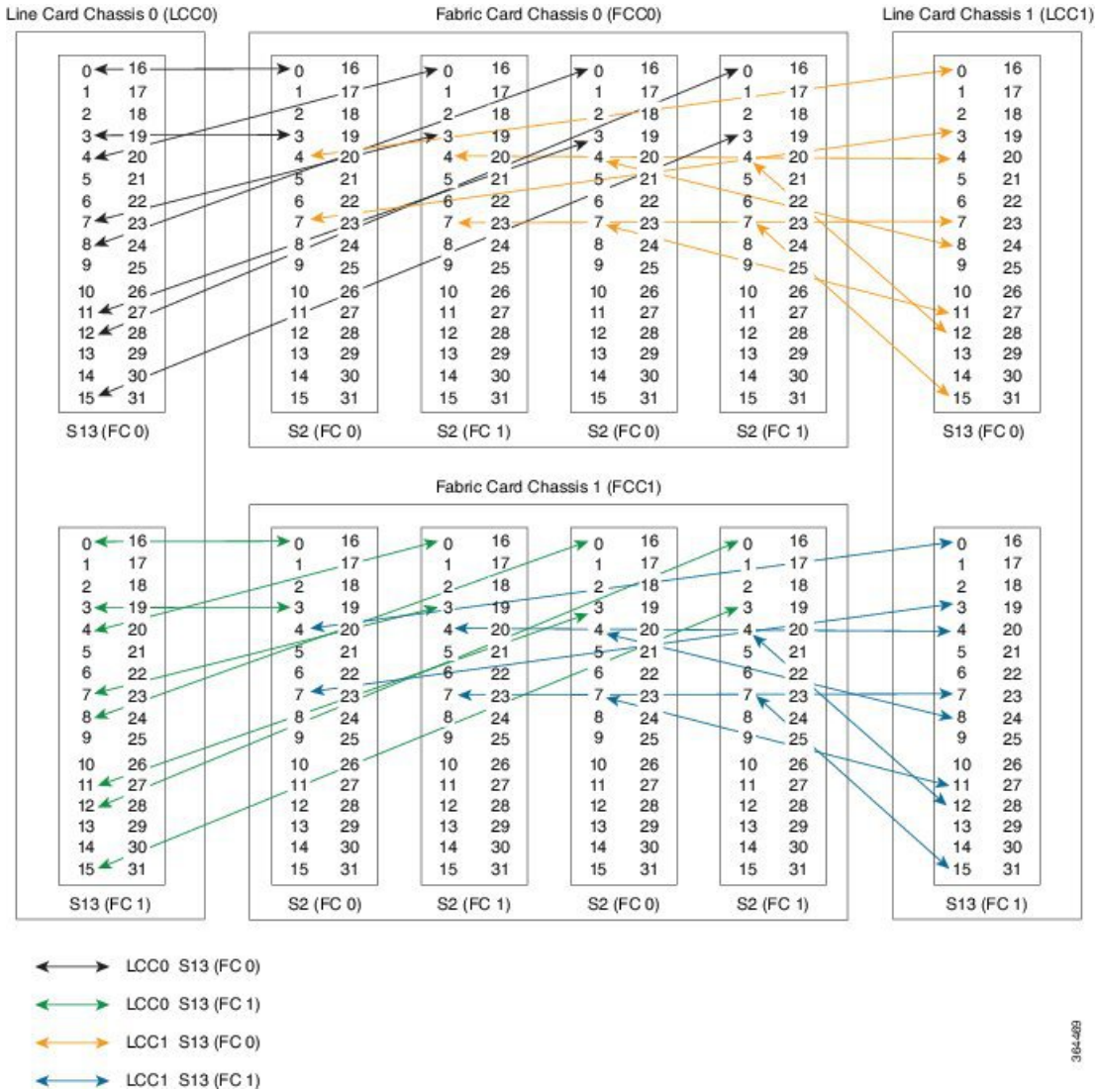
controller fabric plane 4
instance 0
location F0/FC4
instance 1
location F1/FC4

controller fabric plane 5
instance 0
location F0/FC5
instance 1
location F1/FC5
```

Configuring a 2+2 Configuration with 24 S2 Fabric Cards

The following figure shows four line card chassis (LCC0 and LCC1) connected to two fabric card chassis (FCC0 and FCC1). In this configuration, there are 12 FCs in each fabric card chassis; in total 24 FCs are installed. The figure shows the 2+2 connections for two fabric planes. To complete the configuration, you must repeat the cabling for the remaining four fabric planes until all 24 S2 cards are connected.

Figure 10: Cisco NCS 6000 Multi-Chassis 2+2 Configuration with 24 S2 FC's



The following table shows the cabling plan for a 2+2 multi-chassis configuration with 24 SC FCs installed. The FCC0 has the fabric instances 0 through 5 for planes 0, 2, and 4. The FCC1 has the fabric instances 0 through 5 for planes 1, 3, and 5.

Table 19: Cabling Plan for LCC0 in a 2+2 Multi-Chassis Configuration with 24 S2 Fabric Cards

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis
S0/0 to FC0/0 (FCC0)		S1/0 to FC0/0 (FCC1)		S2/0 to FC4/0 (FCC0)		S3/0 to FC4/0 (FCC1)		S4/0 to FC8/0 (FCC0)		S5/0 to FC8/0 (FCC1)	

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis
S0/1 to FC0/1 (FCC0)		S1/1 to FC0/1 (FCC1)		S2/1 to FC4/1 (FCC0)		S3/1 to FC4/1 (FCC1)		S4/1 to FC8/1 (FCC0)		S5/1 to FC8/1 (FCC1)	
S0/2 to FC0/2 (FCC0)		S1/2 to FC0/2 (FCC1)		S2/2 to FC4/2 (FCC0)		S3/2 to FC4/2 (FCC1)		S4/2 to FC8/2 (FCC0)		S5/2 to FC8/2 (FCC1)	
S0/3 to FC0/3 (FCC0)		S1/3 to FC0/3 (FCC1)		S2/3 to FC4/3 (FCC0)		S3/3 to FC4/3 (FCC1)		S4/3 to FC8/3 (FCC0)		S5/3 to FC8/3 (FCC1)	
S0/4 to FC1/0 (FCC0)		S1/4 to FC1/0 (FCC1)		S2/4 to FC5/0 (FCC0)		S3/4 to FC5/0 (FCC1)		S4/4 to FC9/0 (FCC0)		S5/4 to FC9/0 (FCC1)	
S0/5 to FC1/1 (FCC0)		S1/5 to FC1/1 (FCC1)		S2/5 to FC5/1 (FCC0)		S3/5 to FC5/1 (FCC1)		S4/5 to FC9/1 (FCC0)		S5/5 to FC9/1 (FCC1)	
S0/6 to FC1/2 (FCC0)		S1/6 to FC1/2 (FCC1)		S2/6 to FC5/2 (FCC0)		S3/6 to FC5/2 (FCC1)		S4/6 to FC9/2 (FCC0)		S5/6 to FC9/2 (FCC1)	
S0/7 to FC1/3 (FCC0)		S1/7 to FC1/3 (FCC1)		S2/7 to FC5/3 (FCC0)		S3/7 to FC5/3 (FCC1)		S4/7 to FC9/3 (FCC0)		S5/7 to FC9/3 (FCC1)	
S0/8 to FC2/0 (FCC0)		S1/8 to FC2/0 (FCC1)		S2/8 to FC6/0 (FCC0)		S3/8 to FC6/0 (FCC1)		S4/8 to FC10/0 (FCC0)		S5/8 to FC10/0 (FCC1)	
S0/9 to FC2/1 (FCC0)		S1/9 to FC2/1 (FCC1)		S2/9 to FC6/1 (FCC0)		S3/9 to FC6/1 (FCC1)		S4/9 to FC10/1 (FCC0)		S5/9 to FC10/1 (FCC1)	
S0/10 to FC2/2 (FCC0)		S1/10 to FC2/2 (FCC1)		S2/10 to FC6/2 (FCC0)		S3/10 to FC6/2 (FCC1)		S4/10 to FC10/2 (FCC0)		S5/10 to FC10/2 (FCC1)	
S0/11 to FC2/3 (FCC0)		S1/11 to FC2/3 (FCC1)		S2/11 to FC6/3 (FCC0)		S3/11 to FC6/3 (FCC1)		S4/11 to FC10/3 (FCC0)		S5/11 to FC10/3 (FCC1)	
S0/12 to FC3/0 (FCC0)		S1/12 to FC3/0 (FCC1)		S2/12 to FC7/0 (FCC0)		S3/12 to FC7/0 (FCC1)		S4/12 to FC11/0 (FCC0)		S5/12 to FC11/0 (FCC1)	
S0/13 to FC3/1 (FCC0)		S1/13 to FC3/1 (FCC1)		S2/13 to FC7/1 (FCC0)		S3/13 to FC7/1 (FCC1)		S4/13 to FC11/1 (FCC0)		S5/13 to FC11/1 (FCC1)	
S0/14 to FC3/2 (FCC0)		S1/14 to FC3/2 (FCC1)		S2/14 to FC7/2 (FCC0)		S3/14 to FC7/2 (FCC1)		S4/14 to FC11/2 (FCC0)		S5/14 to FC11/2 (FCC1)	
S0/15 to FC3/3 (FCC0)		S1/15 to FC3/3 (FCC1)		S2/15 to FC7/3 (FCC0)		S3/15 to FC7/3 (FCC1)		S4/15 to FC11/3 (FCC0)		S5/15 to FC11/3 (FCC1)	

Table 20: Cabling Plan for LCC1 in a 2+2 Multi-Chassis Configuration with 24 S2 Fabric Cards

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1(S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis
S0/0 to FC0/4 (FCC0)		S1/0 to FC0/4 (FCC1)		S2/0 to FC4/4 (FCC0)		S3/0 to FC4/4 (FCC1)		S4/0 to FC8/4 (FCC0)		S5/0 to FC8/4 (FCC1)	
S0/1 to FC0/5 (FCC0)		S1/1 to FC0/5 (FCC1)		S2/1 to FC4/5 (FCC0)		S3/1 to FC4/5 (FCC1)		S4/1 to FC8/5 (FCC0)		S5/1 to FC8/5 (FCC1)	
S0/2 to FC0/6 (FCC0)		S1/2 to FC0/6 (FCC1)		S2/2 to FC4/6 (FCC0)		S3/2 to FC4/6 (FCC1)		S4/2 to FC8/6 (FCC0)		S5/2 to FC8/6 (FCC1)	
S0/3 to FC0/7 (FCC0)		S1/3 to FC0/7 (FCC1)		S2/3 to FC4/7 (FCC0)		S3/3 to FC4/7 (FCC1)		S4/3 to FC8/7 (FCC0)		S5/3 to FC8/7 (FCC1)	
S0/4 to FC1/4 (FCC0)		S1/4 to FC1/4 (FCC1)		S2/4 to FC5/4 (FCC0)		S3/4 to FC5/4 (FCC1)		S4/4 to FC9/4 (FCC0)		S5/4 to FC9/4 (FCC1)	
S0/5 to FC1/5 (FCC0)		S1/5 to FC1/5 (FCC1)		S2/5 to FC5/5 (FCC0)		S3/5 to FC5/5 (FCC1)		S4/5 to FC9/5 (FCC0)		S5/5 to FC9/5 (FCC1)	
S0/6 to FC1/6 (FCC0)		S1/6 to FC1/6 (FCC1)		S2/6 to FC5/6 (FCC0)		S3/6 to FC5/6 (FCC1)		S4/6 to FC9/6 (FCC0)		S5/6 to FC9/6 (FCC1)	
S0/7 to FC1/7 (FCC0)		S1/7 to FC1/7 (FCC1)		S2/7 to FC5/7 (FCC0)		S3/7 to FC5/7 (FCC1)		S4/7 to FC9/7 (FCC0)		S5/7 to FC9/7 (FCC1)	
S0/8 to FC2/4 (FCC0)		S1/8 to FC2/4 (FCC1)		S2/8 to FC6/4 (FCC0)		S3/8 to FC6/4 (FCC1)		S4/8 to FC10/4 (FCC0)		S5/8 to FC10/4 (FCC1)	
S0/9 to FC2/5 (FCC0)		S1/9 to FC2/5 (FCC1)		S2/9 to FC6/5 (FCC0)		S3/9 to FC6/5 (FCC1)		S4/9 to FC10/5 (FCC0)		S5/9 to FC10/5 (FCC1)	
S0/10 to FC2/6 (FCC0)		S1/10 to FC2/6 (FCC1)		S2/10 to FC6/6 (FCC0)		S3/10 to FC6/6 (FCC1)		S4/10 to FC10/6 (FCC0)		S5/10 to FC10/6 (FCC1)	
S0/11 to FC2/7 (FCC0)		S1/11 to FC2/7 (FCC1)		S2/11 to FC6/7 (FCC0)		S3/11 to FC6/7 (FCC1)		S4/11 to FC10/7 (FCC0)		S5/11 to FC10/7 (FCC1)	
S0/12 to FC3/4 (FCC0)		S1/12 to FC3/4 (FCC1)		S2/12 to FC7/4 (FCC0)		S3/12 to FC7/4 (FCC1)		S4/12 to FC11/4 (FCC0)		S5/12 to FC11/4 (FCC1)	
S0/13 to FC3/5 (FCC0)		S1/13 to FC3/5 (FCC1)		S2/13 to FC7/5 (FCC0)		S3/13 to FC7/5 (FCC1)		S4/13 to FC11/5 (FCC0)		S5/13 to FC11/5 (FCC1)	
S0/14 to FC3/6 (FCC0)		S1/14 to FC3/6 (FCC1)		S2/14 to FC7/6 (FCC0)		S3/14 to FC7/6 (FCC1)		S4/14 to FC11/6 (FCC0)		S5/14 to FC11/6 (FCC1)	
S0/15 to FC3/7 (FCC0)		S1/15 to FC3/7 (FCC1)		S2/15 to FC7/7 (FCC0)		S3/15 to FC7/7 (FCC1)		S4/15 to FC11/7 (FCC0)		S5/15 to FC11/7 (FCC1)	

2+2 Software Configuration (24 S2 Fabric Cards)

An explicit admin configuration is required to specify an ordered list of S2 connections assigned for a plane. Each S2 connection is specified as an instance. The instances are contiguous, starting from 0.

```
controller fabric plane 0
instance 0
location F0/FC0
instance 1
location F0/FC1
instance 2
location F0/FC2
instance 3
location F0/FC3
```

```
controller fabric plane 1
instance 0
location F1/FC0
instance 1
location F1/FC1
instance 2
location F1/FC2
instance 3
location F1/FC3
```

```
controller fabric plane 2
instance 0
location F0/FC4
instance 1
location F0/FC5
instance 2
location F0/FC6
instance 3
location F0/FC7
```

```
controller fabric plane 3
instance 0
location F1/FC4
instance 1
location F1/FC5
instance 2
location F1/FC6
instance 3
location F1/FC7
```

```
controller fabric plane 4
instance 0
location F0/FC8
instance 1
location F0/FC9
instance 2
location F0/FC10
instance 3
location F0/FC11
```

```
controller fabric plane 5
instance 0
location F1/FC8
instance 1
location F1/FC9
instance 2
location F1/FC10
```



```
instance 3
location F1/FC11
```

Multi-Chassis 4+2 Configuration

This section describes how to configure a multi-chassis 4+2 configuration. In this configuration, four line card chassis (LCC0, LCC1, LCC2, and LCC3) are connected to two fabric card chassis (FCC0 and FCC1).

Prerequisites

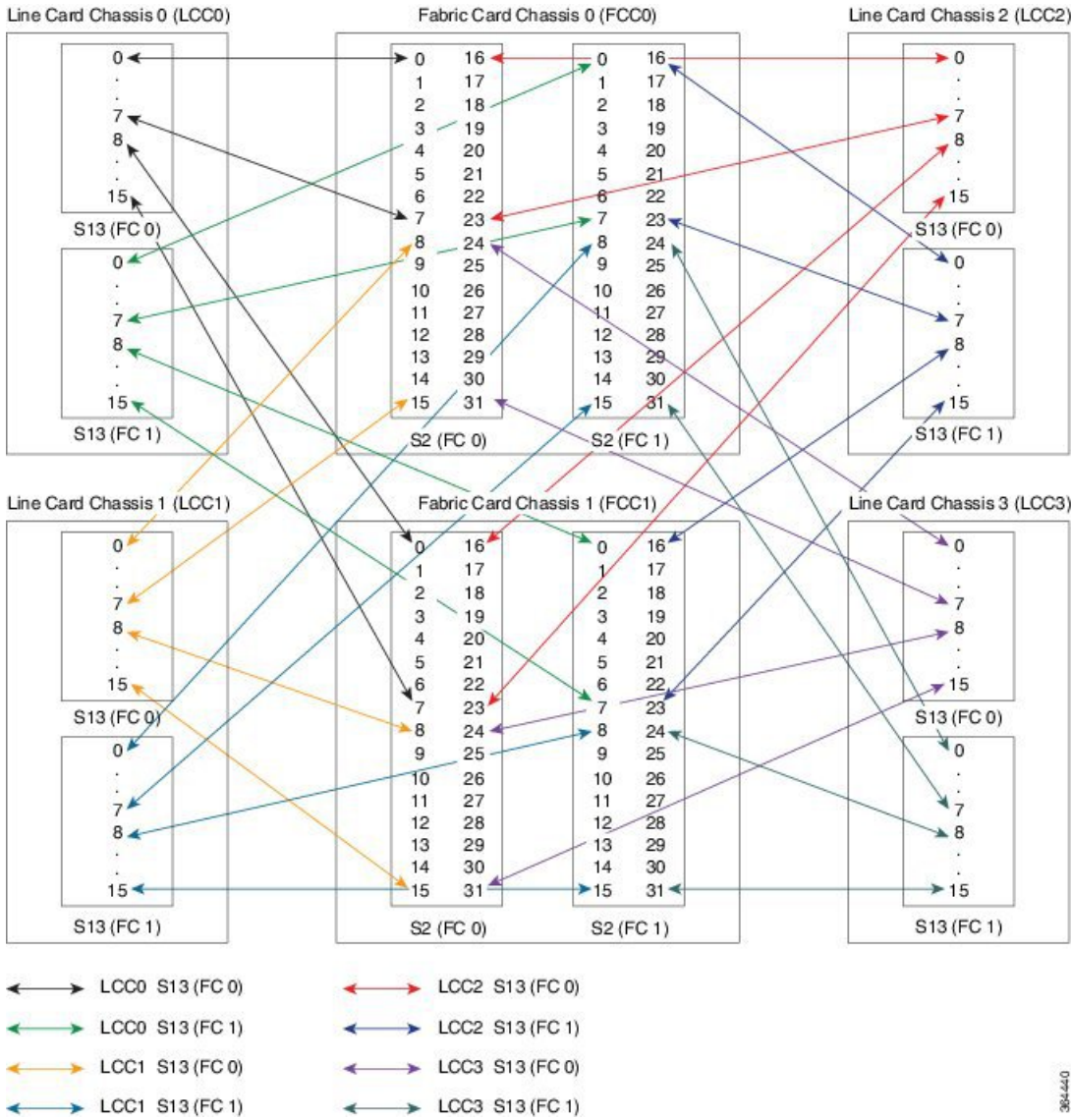
For connecting the fabric, you need the following:

- 384 MPO-24 fiber cables (96 per LCC)
- Optical module sets:
 - **In 1T multi-chassis 4+2 mode:** Eight CXP optical module sets (Cisco PID NCS-FAB-OPT). Two sets are required per LCC: one set plugs into the LCC and the other set plugs into the FCC. Each set includes 96 CXP-100G-SR12 modules for a total of 768 modules.
 - **In 2T multi-chassis 4+2 mode:** Eight CXP2 optical module sets (Cisco PID NCS-FAB-OPT2). Two sets are required per LCC: one set plugs into the LCC and the other set plugs into the FCC. Each set includes 96 ONS-CXP2-SR25 modules for a total of 768 modules.

Configuring a 4+2 Configuration with 12 S2 Fabric Cards

The following figure shows four line card chassis (LCC0, LCC1, LCC2, and LCC3) connected to two fabric card chassis (FCC0 and FCC1). In this configuration, there are 6 FCs in each fabric card chassis; in total 12 FCs are installed. The figure shows the 4+2 connections for two fabric plane. To complete the configuration, you must repeat the cabling for the remaining four fabric planes until all 12 S2 cards are connected.

Figure 11: Cisco NCS 6000 Multi-Chassis 4+2 Configuration with 12 S2 FC's



The following tables show the cabling plan for a 4+2 multi-chassis configuration with 12 SC FCs installed. FCC0 has a fabric instance 0 for planes 0 through 5 in FCC0 (6 SC FCs in slots 0 through 5), and fabric instance 1 in FCC1 (also in slots 0 through 5). Other mappings are possible (for example, you can put both instances of planes 0 through 2 in FCC0, and planes 3 through 5 in FCC1 but the following table and software configuration assume that instance 0 is in FCC0 and instance 1 is in FCC1).

Table 21: Cabling Plan for LCC0 in a 4+2 Multi-Chassis Configuration with 12 S2 Fabric Cards

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis
S0/0 to FC0/0 (FCC0)		S1/0 to FC1/0 (FCC0)		S2/0 to FC2/0 (FCC0)		S3/0 to FC3/0 (FCC0)		S4/0 to FC4/0 (FCC0)		S5/0 to FC5/0 (FCC0)	
S0/1 to FC0/1 (FCC0)		S1/1 to FC1/1 (FCC0)		S2/1 to FC2/1 (FCC0)		S3/1 to FC3/1 (FCC0)		S4/1 to FC4/1 (FCC0)		S5/1 to FC5/1 (FCC0)	
S0/2 to FC0/2 (FCC0)		S1/2 to FC1/2 (FCC0)		S2/2 to FC2/2 (FCC0)		S3/2 to FC3/2 (FCC0)		S4/2 to FC4/2 (FCC0)		S5/2 to FC5/2 (FCC0)	
S0/3 to FC0/3 (FCC0)		S1/3 to FC1/3 (FCC0)		S2/3 to FC2/3 (FCC0)		S3/3 to FC3/3 (FCC0)		S4/3 to FC4/3 (FCC0)		S5/3 to FC5/3 (FCC0)	
S0/4 to FC0/4 (FCC0)		S1/4 to FC1/4 (FCC0)		S2/4 to FC2/4 (FCC0)		S3/4 to FC3/4 (FCC0)		S4/4 to FC4/4 (FCC0)		S5/4 to FC5/4 (FCC0)	
S0/5 to FC0/5 (FCC0)		S1/5 to FC1/5 (FCC0)		S2/5 to FC2/5 (FCC0)		S3/5 to FC3/5 (FCC0)		S4/5 to FC4/5 (FCC0)		S5/5 to FC5/5 (FCC0)	
S0/6 to FC0/6 (FCC0)		S1/6 to FC1/6 (FCC0)		S2/6 to FC2/6 (FCC0)		S3/6 to FC3/6 (FCC0)		S4/6 to FC4/6 (FCC0)		S5/6 to FC5/6 (FCC0)	
S0/7 to FC0/7 (FCC0)		S1/7 to FC1/7 (FCC0)		S2/7 to FC2/7 (FCC0)		S3/7 to FC3/7 (FCC0)		S4/7 to FC4/7 (FCC0)		S5/7 to FC5/7 (FCC0)	
S0/8 to FC0/0 (FCC1)		S1/8 to FC1/0 (FCC1)		S2/8 to FC2/0 (FCC1)		S3/8 to FC3/0 (FCC1)		S4/8 to FC4/0 (FCC1)		S5/8 to FC5/0 (FCC1)	
S0/9 to FC0/2 (FCC1)		S1/9 to FC1/1 (FCC1)		S2/9 to FC2/1 (FCC1)		S3/9 to FC3/1 (FCC1)		S4/9 to FC4/1 (FCC1)		S5/9 to FC5/1 (FCC1)	
S0/10 to FC0/2 (FCC1)		S1/10 to FC1/2 (FCC1)		S2/10 to FC2/2 (FCC1)		S3/10 to FC3/2 (FCC1)		S4/10 to FC4/2 (FCC1)		S5/10 to FC5/2 (FCC1)	
S0/11 to FC0/3 (FCC1)		S1/11 to FC1/3 (FCC1)		S2/11 to FC2/3 (FCC1)		S3/11 to FC3/3 (FCC1)		S4/11 to FC4/3 (FCC1)		S5/11 to FC5/3 (FCC1)	
S0/12 to FC0/4 (FCC1)		S1/12 to FC1/4 (FCC1)		S2/12 to FC2/4 (FCC1)		S3/12 to FC3/4 (FCC1)		S4/12 to FC4/4 (FCC1)		S5/12 to FC5/4 (FCC1)	
S0/13 to FC0/5 (FCC1)		S1/13 to FC1/5 (FCC1)		S2/13 to FC2/5 (FCC1)		S3/13 to FC3/5 (FCC1)		S4/13 to FC4/5 (FCC1)		S5/13 to FC5/5 (FCC1)	
S0/14 to FC0/5 (FCC1)		S1/14 to FC1/6 (FCC1)		S2/14 to FC2/6 (FCC1)		S3/14 to FC3/6 (FCC1)		S4/14 to FC4/6 (FCC1)		S5/14 to FC5/6 (FCC1)	
S0/15 to FC0/7 (FCC1)		S1/15 to FC1/7 (FCC1)		S2/15 to FC2/7 (FCC1)		S3/15 to FC3/7 (FCC1)		S4/15 to FC4/7 (FCC1)		S5/15 to FC5/7 (FCC1)	

Table 22: Cabling Plan for LCC1 in a 4+2 Multi-Chassis Configuration with 12 S2 Fabric Cards

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1(S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis
S0/0 to FC0/8 (FCC0)		S1/0 to FC1/8 (FCC0)		S2/0 to FC2/8 (FCC0)		S3/0 to FC3/8 (FCC0)		S4/0 to FC4/8 (FCC0)		S5/0 to FC5/8 (FCC0)	
S0/1 to FC0/9 (FCC0)		S1/1 to FC1/9 (FCC0)		S2/1 to FC2/9 (FCC0)		S3/1 to FC3/9 (FCC0)		S4/1 to FC4/9 (FCC0)		S5/1 to FC5/9 (FCC0)	
S0/2 to FC0/10 (FCC0)		S1/2 to FC1/10 (FCC0)		S2/2 to FC2/10 (FCC0)		S3/2 to FC3/10 (FCC0)		S4/2 to FC4/10 (FCC0)		S5/2 to FC5/10 (FCC0)	
S0/3 to FC0/11 (FCC0)		S1/3 to FC1/11 (FCC0)		S2/3 to FC2/11 (FCC0)		S3/3 to FC3/11 (FCC0)		S4/3 to FC4/11 (FCC0)		S5/3 to FC5/11 (FCC0)	
S0/4 to FC0/12 (FCC0)		S1/4 to FC1/12 (FCC0)		S2/4 to FC2/12 (FCC0)		S3/4 to FC3/12 (FCC0)		S4/4 to FC4/12 (FCC0)		S5/4 to FC5/12 (FCC0)	
S0/5 to FC0/13 (FCC0)		S1/5 to FC1/13 (FCC0)		S2/5 to FC2/13 (FCC0)		S3/5 to FC3/13 (FCC0)		S4/5 to FC4/13 (FCC0)		S5/5 to FC5/13 (FCC0)	
S0/6 to FC0/14 (FCC0)		S1/6 to FC1/14 (FCC0)		S2/6 to FC2/14 (FCC0)		S3/6 to FC3/14 (FCC0)		S4/6 to FC4/14 (FCC0)		S5/6 to FC5/14 (FCC0)	
S0/7 to FC0/15 (FCC0)		S1/7 to FC1/15 (FCC0)		S2/7 to FC2/15 (FCC0)		S3/7 to FC3/15 (FCC0)		S4/7 to FC4/15 (FCC0)		S5/7 to FC5/15 (FCC0)	
S0/8 to FC0/8 (FCC1)		S1/8 to FC1/8 (FCC1)		S2/8 to FC2/8 (FCC1)		S3/8 to FC3/8 (FCC1)		S4/8 to FC4/8 (FCC1)		S5/8 to FC5/8 (FCC1)	
S0/9 to FC0/9 (FCC1)		S1/9 to FC1/9 (FCC1)		S2/9 to FC2/9(FCC1)		S3/9 to FC3/9 (FCC1)		S4/9 to FC4/9 (FCC1)		S5/9 to FC5/9 (FCC1)	
S0/10 to FC0/10 (FCC1)		S1/10 to FC1/10 (FCC1)		S2/10 to FC2/10 (FCC1)		S3/10 to FC3/10 (FCC1)		S4/10 to FC4/10 (FCC1)		S5/10 to FC5/10 (FCC1)	
S0/11 to FC0/11 (FCC1)		S1/11 to FC1/11 (FCC1)		S2/11 to FC2/11 (FCC1)		S3/11 to FC3/11 (FCC1)		S4/11 to FC4/11 (FCC1)		S5/11 to FC5/11 (FCC1)	
S0/12 to FC0/12 (FCC1)		S1/12 to FC1/12(FCC1)		S2/12 to FC2/12 (FCC1)		S3/12 to FC3/12 (FCC1)		S4/12 to FC4/12 (FCC1)		S5/12 to FC5/12 (FCC1)	
S0/13 to FC0/13 (FCC1)		S1/13 to FC1/13 (FCC1)		S2/13 to FC2/13 (FCC1)		S3/13 to FC3/13 (FCC1)		S4/13 to FC4/13 (FCC1)		S5/13 to FC5/13 (FCC1)	
S0/14 to FC0/14 (FCC1)		S1/14 to FC1/14 (FCC1)		S2/14 to FC2/14 (FCC1)		S3/14 to FC3/14 (FCC1)		S4/14 to FC4/14 (FCC1)		S5/14 to FC5/14 (FCC1)	
S0/15 to FC0/15 (FCC1)		S1/15 to FC1/15 (FCC1)		S2/15 to FC2/15 (FCC1)		S3/15 to FC3/15 (FCC1)		S4/15 to FC4/15 (FCC1)		S5/15 to FC5/15 (FCC1)	

Table 23: Cabling Plan for LCC2 in a 4+2 Multi-Chassis Configuration with 12 S2 Fabric Cards

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC2 (S13) slot/port	FCC (S2) slot/port/chassis	LCC2 (S13) slot/port	FCC (S2) slot/port/chassis	LCC2 (S13) slot/port	FCC (S2) slot/port/chassis	LCC2 (S13) slot/port	FCC (S2) slot/port/chassis	LCC2 (S13) slot/port	FCC (S2) slot/port/chassis	LCC2 (S13) slot/port	FCC (S2) slot/port/chassis
S0/0 to FC0/16 (FCC0)		S1/0 to FC1/16 (FCC0)		S2/0 to FC2/16 (FCC0)		S3/0 to FC3/16 (FCC0)		S4/0 to FC4/16 (FCC0)		S5/0 to FC5/16 (FCC0)	
S0/1 to FC0/17 (FCC0)		S1/1 to FC1/17 (FCC0)		S2/1 to FC2/17 (FCC0)		S3/1 to FC3/17 (FCC0)		S4/1 to FC4/17 (FCC0)		S5/1 to FC5/17 (FCC0)	
S0/2 to FC0/18 (FCC0)		S1/2 to FC1/18 (FCC0)		S2/2 to FC2/18 (FCC0)		S3/2 to FC3/18 (FCC0)		S4/2 to FC4/18 (FCC0)		S5/2 to FC5/18 (FCC0)	
S0/3 to FC0/19 (FCC0)		S1/3 to FC1/19 (FCC0)		S2/3 to FC2/19 (FCC0)		S3/3 to FC3/19 (FCC0)		S4/3 to FC4/19 (FCC0)		S5/3 to FC5/19 (FCC0)	
S0/4 to FC0/20 (FCC0)		S1/4 to FC1/20 (FCC0)		S2/4 to FC2/20 (FCC0)		S3/4 to FC3/20 (FCC0)		S4/4 to FC4/20 (FCC0)		S5/4 to FC5/20 (FCC0)	
S0/5 to FC0/21 (FCC0)		S1/5 to FC1/21 (FCC0)		S2/5 to FC2/21 (FCC0)		S3/5 to FC3/21 (FCC0)		S4/5 to FC4/21 (FCC0)		S5/5 to FC5/21 (FCC0)	
S0/6 to FC0/22 (FCC0)		S1/6 to FC1/22 (FCC0)		S2/6 to FC2/22 (FCC0)		S3/6 to FC3/22 (FCC0)		S4/6 to FC4/22 (FCC0)		S5/6 to FC5/22 (FCC0)	
S0/7 to FC0/23 (FCC0)		S1/7 to FC1/23 (FCC0)		S2/7 to FC2/23 (FCC0)		S3/7 to FC3/23 (FCC0)		S4/7 to FC4/23 (FCC0)		S5/7 to FC5/23 (FCC0)	
S0/8 to FC0/16 (FCC1)		S1/8 to FC1/16 (FCC1)		S2/8 to FC2/16 (FCC1)		S3/8 to FC3/16 (FCC1)		S4/8 to FC4/16 (FCC1)		S5/8 to FC5/16 (FCC1)	
S0/9 to FC0/17 (FCC1)		S1/9 to FC1/17 (FCC1)		S2/9 to FC2/17 (FCC1)		S3/9 to FC3/17 (FCC1)		S4/9 to FC4/17 (FCC1)		S5/9 to FC5/17 (FCC1)	
S0/10 to FC0/18 (FCC1)		S1/10 to FC1/18 (FCC1)		S2/10 to FC2/18 (FCC1)		S3/10 to FC3/18 (FCC1)		S4/10 to FC4/18 (FCC1)		S5/10 to FC5/18 (FCC1)	
S0/11 to FC0/19 (FCC1)		S1/11 to FC1/19 (FCC1)		S2/11 to FC2/19 (FCC1)		S3/11 to FC3/19 (FCC1)		S4/11 to FC4/19 (FCC1)		S5/11 to FC5/19 (FCC1)	
S0/12 to FC0/20 (FCC1)		S1/12 to FC1/20 (FCC1)		S2/12 to FC2/20 (FCC1)		S3/12 to FC3/20 (FCC1)		S4/12 to FC4/20 (FCC1)		S5/12 to FC5/20 (FCC1)	
S0/13 to FC0/21 (FCC1)		S1/13 to FC1/21 (FCC1)		S2/13 to FC2/21 (FCC1)		S3/13 to FC3/21 (FCC1)		S4/13 to FC4/21 (FCC1)		S5/13 to FC5/21 (FCC1)	
S0/14 to FC0/22 (FCC1)		S1/14 to FC1/22 (FCC1)		S2/14 to FC2/22 (FCC1)		S3/14 to FC3/22 (FCC1)		S4/14 to FC4/22 (FCC1)		S5/14 to FC5/22 (FCC1)	
S0/15 to FC0/23 (FCC1)		S1/15 to FC1/23 (FCC1)		S2/15 to FC2/23 (FCC1)		S3/15 to FC3/23 (FCC1)		S4/15 to FC4/23 (FCC1)		S5/15 to FC5/23 (FCC1)	

Table 24: Cabling Plan for LCC3 in a 4+2 Multi-Chassis Configuration with 12 S2 Fabric Cards

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC3 (S13) slot/port	FCC (S2) slot/port/chassis	LCC3 (S13) slot/port	FCC (S2) slot/port/chassis	LCC3 (S13) slot/port	FCC (S2) slot/port/chassis	LCC3(S13) slot/port	FCC (S2) slot/port/chassis	LCC3 (S13) slot/port	FCC (S2) slot/port/chassis	LCC3 (S13) slot/port	FCC (S2) slot/port/chassis
S0/0 to FC0/24 (FCC0)		S1/0 to FC1/24 (FCC0)		S2/0 to FC2/24 (FCC0)		S3/0 to FC3/24 (FCC0)		S4/0 to FC4/24 (FCC0)		S5/0 to FC5/24 (FCC0)	
S0/1 to FC0/25 (FCC0)		S1/1 to FC1/25 (FCC0)		S2/1 to FC2/25 (FCC0)		S3/1 to FC3/25 (FCC0)		S4/1 to FC4/25 (FCC0)		S5/1 to FC5/25 (FCC0)	
S0/2 to FC0/26 (FCC0)		S1/2 to FC1/26 (FCC0)		S2/2 to FC2/26 (FCC0)		S3/2 to FC3/26 (FCC0)		S4/2 to FC4/26 (FCC0)		S5/2 to FC5/26 (FCC0)	
S0/3 to FC0/27 (FCC0)		S1/3 to FC1/27 (FCC0)		S2/3 to FC2/27 (FCC0)		S3/3 to FC3/27 (FCC0)		S4/3 to FC4/27 (FCC0)		S5/3 to FC5/27 (FCC0)	
S0/4 to FC0/28 (FCC0)		S1/4 to FC1/28 (FCC0)		S2/4 to FC2/28 (FCC0)		S3/4 to FC3/28 (FCC0)		S4/4 to FC4/28 (FCC0)		S5/4 to FC5/28 (FCC0)	
S0/5 to FC0/29 (FCC0)		S1/5 to FC1/29 (FCC0)		S2/5 to FC2/29 (FCC0)		S3/5 to FC3/29 (FCC0)		S4/5 to FC4/29 (FCC0)		S5/5 to FC5/29 (FCC0)	
S0/6 to FC0/30 (FCC0)		S1/6 to FC1/30 (FCC0)		S2/6 to FC2/30 (FCC0)		S3/6 to FC3/30 (FCC0)		S4/6 to FC4/30 (FCC0)		S5/6 to FC5/30 (FCC0)	
S0/7 to FC0/31 (FCC0)		S1/7 to FC1/31 (FCC0)		S2/7 to FC2/31 (FCC0)		S3/7 to FC3/31 (FCC0)		S4/7 to FC4/31 (FCC0)		S5/7 to FC5/31 (FCC0)	
S0/8 to FC0/24 (FCC1)		S1/8 to FC1/24 (FCC1)		S2/8 to FC2/24 (FCC1)		S3/8 to FC3/24 (FCC1)		S4/8 to FC4/24 (FCC1)		S5/8 to FC5/24 (FCC1)	
S0/9 to FC0/25 (FCC1)		S1/9 to FC1/25 (FCC1)		S2/9 to FC2/25 (FCC1)		S3/9 to FC3/25 (FCC1)		S4/9 to FC4/25 (FCC1)		S5/9 to FC5/25 (FCC1)	
S0/10 to FC0/26 (FCC1)		S1/10 to FC1/26 (FCC1)		S2/10 to FC2/26 (FCC1)		S3/10 to FC3/26 (FCC1)		S4/10 to FC4/26 (FCC1)		S5/10 to FC5/26 (FCC1)	
S0/11 to FC0/27 (FCC1)		S1/11 to FC1/27 (FCC1)		S2/11 to FC2/27 (FCC1)		S3/11 to FC3/27 (FCC1)		S4/11 to FC4/27 (FCC1)		S5/11 to FC5/27 (FCC1)	
S0/12 to FC0/28 (FCC1)		S1/12 to FC1/28 (FCC1)		S2/12 to FC2/28 (FCC1)		S3/12 to FC3/28 (FCC1)		S4/12 to FC4/28 (FCC1)		S5/12 to FC5/28 (FCC1)	
S0/13 to FC0/29 (FCC1)		S1/13 to FC1/29 (FCC1)		S2/13 to FC2/29 (FCC1)		S3/13 to FC3/29 (FCC1)		S4/13 to FC4/29 (FCC1)		S5/13 to FC5/29 (FCC1)	
S0/14 to FC0/30 (FCC1)		S1/14 to FC1/30 (FCC1)		S2/14 to FC2/30 (FCC1)		S3/14 to FC3/30 (FCC1)		S4/14 to FC4/30 (FCC1)		S5/14 to FC5/30 (FCC1)	
S0/15 to FC0/31 (FCC1)		S1/15 to FC1/31 (FCC1)		S2/15 to FC2/31 (FCC1)		S3/15 to FC3/31 (FCC1)		S4/15 to FC4/31 (FCC1)		S5/15 to FC5/31 (FCC1)	

4+2 Software Configuration (12 S2 Fabric Cards)

An explicit admin configuration is required to specify an ordered list of S2 connections assigned for a plane. Each S2 connection is specified as an instance. The instances are contiguous, starting from 0.

```
controller fabric plane 0
instance 0
location F0/FC0
instance 1
location F1/FC0

controller fabric plane 1
instance 0
location F0/FC1
instance 1
location F1/FC1

controller fabric plane 2
instance 0
location F0/FC2
instance 1
location F1/FC2

controller fabric plane 3
instance 0
location F0/FC3
instance 1
location F1/FC3

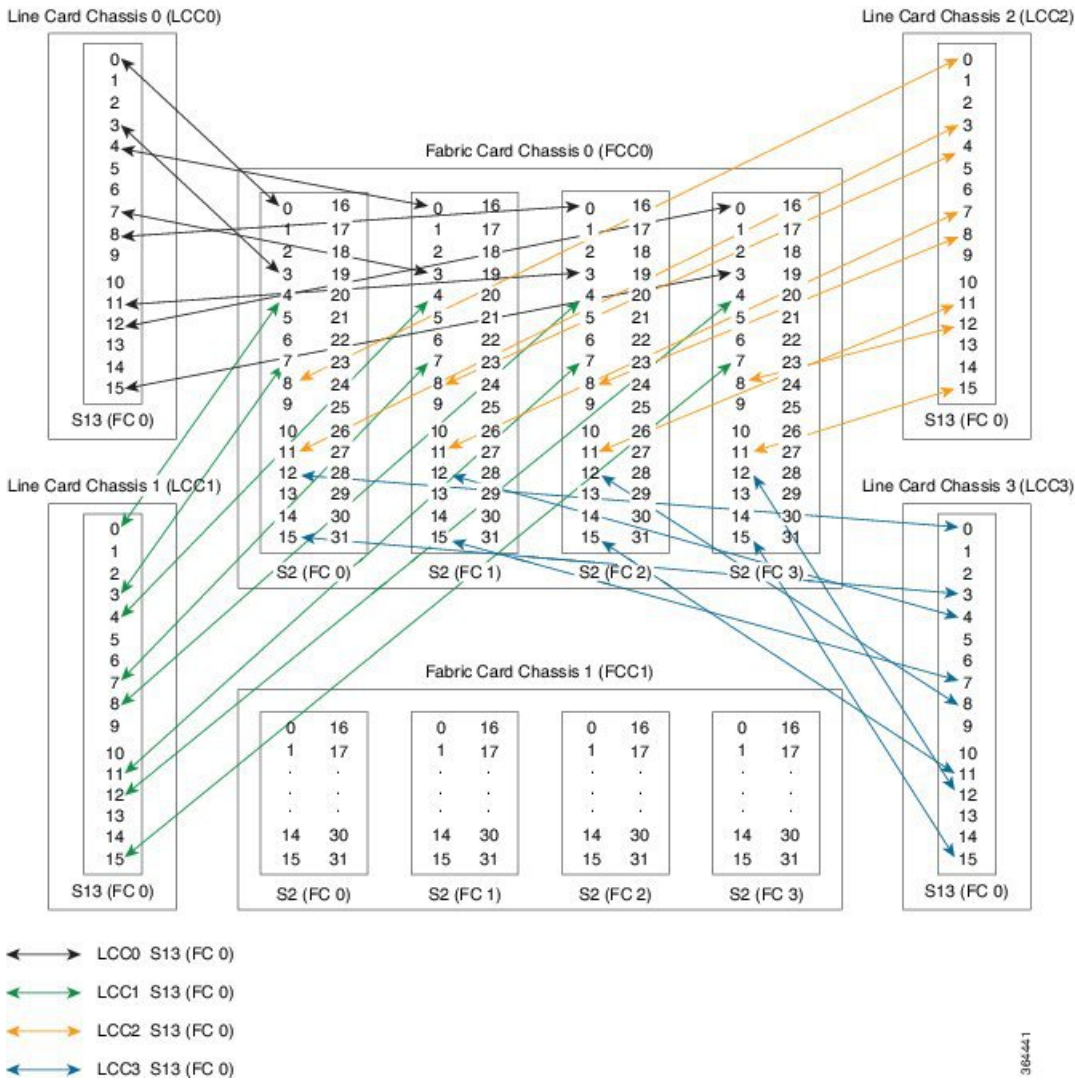
controller fabric plane 4
instance 0
location F0/FC4
instance 1
location F1/FC4

controller fabric plane 5
instance 0
location F0/FC5
instance 1
location F1/FC5
```

Configuring a 4+2 Configuration with 24 S2 Fabric Cards

The following figure shows four line card chassis (LCC0, LCC1, LCC2, and LCC3) connected to two fabric card chassis (FCC0 and FCC1). In this configuration, there are 12 FCs in each fabric card chassis; in total 24 FCs are installed. The figure shows the 4+2 connections for one fabric plane. To complete the configuration, you must repeat the cabling for the remaining five fabric planes until all 24 S2 cards are connected.

Figure 12: Cisco NCS 6000 Multi-Chassis 4+2 Configuration with 24 S2 FC's



The following tables show the cabling plan for a 4+2 multi-chassis configuration with 24 SC FCs installed. The FCC0 has the fabric instances 0 through 5 for planes 0, 2, and 4. The FCC1 has the fabric instances 0 through 5 for planes 1, 3, and 5.

Table 25: Cabling Plan for LCC0 in a 4+2 Multi-Chassis Configuration with 24 S2 Fabric Cards

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis
S0/0 to FC0/0 (FCC0)		S1/0 to FC0/0 (FCC1)		S2/0 to FC4/0 (FCC0)		S3/0 to FC4/0 (FCC1)		S4/0 to FC8/0 (FCC0)		S5/0 to FC8/0 (FCC1)	

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis
S0/1 to FC0/1 (FCC0)		S1/1 to FC0/1 (FCC1)		S2/1 to FC4/1 (FCC0)		S3/1 to FC4/1 (FCC1)		S4/1 to FC8/1 (FCC0)		S5/1 to FC8/1 (FCC1)	
S0/2 to FC0/2 (FCC0)		S1/2 to FC0/2 (FCC1)		S2/2 to FC4/2 (FCC0)		S3/2 to FC4/2 (FCC1)		S4/2 to FC8/2 (FCC0)		S5/2 to FC8/2 (FCC1)	
S0/3 to FC0/3 (FCC0)		S1/3 to FC0/3 (FCC1)		S2/3 to FC4/3 (FCC0)		S3/3 to FC4/3 (FCC1)		S4/3 to FC8/3 (FCC0)		S5/3 to FC8/3 (FCC1)	
S0/4 to FC1/0 (FCC0)		S1/4 to FC1/0 (FCC1)		S2/4 to FC5/0 (FCC0)		S3/4 to FC5/0 (FCC1)		S4/4 to FC9/0 (FCC0)		S5/4 to FC9/0 (FCC1)	
S0/5 to FC1/1 (FCC0)		S1/5 to FC1/1 (FCC1)		S2/5 to FC5/1 (FCC0)		S3/5 to FC5/1 (FCC1)		S4/5 to FC9/1 (FCC0)		S5/5 to FC9/1 (FCC1)	
S0/6 to FC1/2 (FCC0)		S1/6 to FC1/2 (FCC1)		S2/6 to FC5/2 (FCC0)		S3/6 to FC5/2 (FCC1)		S4/6 to FC9/2 (FCC0)		S5/6 to FC9/2 (FCC1)	
S0/7 to FC1/3(FCC0)		S1/7 to FC1/3 (FCC1)		S2/7 to FC5/3(FCC0)		S3/7 to FC5/3(FCC1)		S4/7 to FC9/3(FCC0)		S5/7 to FC9/3(FCC1)	
S0/8 to FC2/0 (FCC0)		S1/8 to FC2/0 (FCC1)		S2/8 to FC6/0 (FCC0)		S3/8 to FC6/0 (FCC1)		S4/8 to FC10/0 (FCC0)		S5/8 to FC10/0 (FCC1)	
S0/9 to FC2/1 (FCC0)		S1/9 to FC2/1 (FCC1)		S2/9 to FC6/1 (FCC0)		S3/9 to FC6/1 (FCC1)		S4/9 to FC10/1 (FCC0)		S5/9 to FC10/1 (FCC1)	
S0/10 to FC2/2 (FCC0)		S1/10 to FC2/2 (FCC1)		S2/10 to FC6/2 (FCC0)		S3/10 to FC6/2 (FCC1)		S4/10 to FC10/2 (FCC0)		S5/10 to FC10/2 (FCC1)	
S0/11 to FC2/3 (FCC0)		S1/11 to FC2/3 (FCC1)		S2/11 to FC6/3 (FCC0)		S3/11 to FC6/3 (FCC1)		S4/11 to FC10/3 (FCC0)		S5/11 to FC10/3 (FCC1)	
S0/12 to FC3/0 (FCC0)		S1/12 to FC3/0 (FCC1)		S2/12 to FC7/0 (FCC0)		S3/12 to FC7/0 (FCC1)		S4/12 to FC11/0 (FCC0)		S5/12 to FC11/0 (FCC1)	
S0/13 to FC3/1 (FCC0)		S1/13 to FC3/1 (FCC1)		S2/13 to FC7/1 (FCC0)		S3/13 to FC7/1 (FCC1)		S4/13 to FC11/1 (FCC0)		S5/13 to FC11/1 (FCC1)	
S0/14 to FC3/2 (FCC0)		S1/14 to FC3/2 (FCC1)		S2/14 to FC7/2 (FCC0)		S3/14 to FC7/2 (FCC1)		S4/14 to FC11/2 (FCC0)		S5/14 to FC11/2 (FCC1)	
S0/15 to FC3/3 (FCC0)		S1/15 to FC3/3 (FCC1)		S2/15 to FC7/3 (FCC0)		S3/15 to FC7/3 (FCC1)		S4/15 to FC11/3 (FCC0)		S5/15 to FC11/3 (FCC1)	

Table 26: Cabling Plan for LCC1 in a 4+2 Multi-Chassis Configuration with 24 S2 Fabric Cards

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1(S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis
S0/0 to FC0/4 (FCC0)		S1/0 to FC0/4 (FCC1)		S2/0 to FC4/4 (FCC0)		S3/0 to FC4/4 (FCC1)		S4/0 to FC8/4 (FCC0)		S5/0 to FC8/4 (FCC1)	
S0/1 to FC0/5 (FCC0)		S1/1 to FC0/5 (FCC1)		S2/1 to FC4/5 (FCC0)		S3/1 to FC4/5 (FCC1)		S4/1 to FC8/5 (FCC0)		S5/1 to FC8/5 (FCC1)	
S0/2 to FC0/6 (FCC0)		S1/2 to FC0/6 (FCC1)		S2/2 to FC4/6 (FCC0)		S3/2 to FC4/6 (FCC1)		S4/2 to FC8/6 (FCC0)		S5/2 to FC8/6 (FCC1)	
S0/3 to FC0/7 (FCC0)		S1/3 to FC0/7 (FCC1)		S2/3 to FC4/7 (FCC0)		S3/3 to FC4/7 (FCC1)		S4/3 to FC8/7 (FCC0)		S5/3 to FC8/7 (FCC1)	
S0/4 to FC1/4 (FCC0)		S1/4 to FC1/4 (FCC1)		S2/4 to FC5/4 (FCC0)		S3/4 to FC5/4 (FCC1)		S4/4 to FC9/4 (FCC0)		S5/4 to FC9/4 (FCC1)	
S0/5 to FC1/5 (FCC0)		S1/5 to FC1/5 (FCC1)		S2/5 to FC5/5 (FCC0)		S3/5 to FC5/5 (FCC1)		S4/5 to FC9/5 (FCC0)		S5/5 to FC9/5 (FCC1)	
S0/6 to FC1/6 (FCC0)		S1/6 to FC1/6 (FCC1)		S2/6 to FC5/6 (FCC0)		S3/6 to FC5/6 (FCC1)		S4/6 to FC9/6 (FCC0)		S5/6 to FC9/6 (FCC1)	
S0/7 to FC1/7 (FCC0)		S1/7 to FC1/7 (FCC1)		S2/7 to FC5/7 (FCC0)		S3/7 to FC5/7 (FCC1)		S4/7 to FC9/7 (FCC0)		S5/7 to FC9/7 (FCC1)	
S0/8 to FC2/4 (FCC0)		S1/8 to FC2/4 (FCC1)		S2/8 to FC6/4 (FCC0)		S3/8 to FC6/4 (FCC1)		S4/8 to FC10/4 (FCC0)		S5/8 to FC10/4 (FCC1)	
S0/9 to FC2/5 (FCC0)		S1/9 to FC2/5 (FCC1)		S2/9 to FC6/5 (FCC0)		S3/9 to FC6/5 (FCC1)		S4/9 to FC10/5 (FCC0)		S5/9 to FC10/5 (FCC1)	
S0/10 to FC2/6 (FCC0)		S1/10 to FC2/6 (FCC1)		S2/10 to FC6/6 (FCC0)		S3/10 to FC6/6 (FCC1)		S4/10 to FC10/6 (FCC0)		S5/10 to FC10/6 (FCC1)	
S0/11 to FC2/7 (FCC0)		S1/11 to FC2/7 (FCC1)		S2/11 to FC6/7 (FCC0)		S3/11 to FC6/7 (FCC1)		S4/11 to FC10/7 (FCC0)		S5/11 to FC10/7 (FCC1)	
S0/12 to FC3/4 (FCC0)		S1/12 to FC3/4 (FCC1)		S2/12 to FC7/4 (FCC0)		S3/12 to FC7/4 (FCC1)		S4/12 to FC11/4 (FCC0)		S5/12 to FC11/4 (FCC1)	
S0/13 to FC3/5 (FCC0)		S1/13 to FC3/5 (FCC1)		S2/13 to FC7/5 (FCC0)		S3/13 to FC7/5 (FCC1)		S4/13 to FC11/5 (FCC0)		S5/13 to FC11/5 (FCC1)	
S0/14 to FC3/6 (FCC0)		S1/14 to FC3/6 (FCC1)		S2/14 to FC7/6 (FCC0)		S3/14 to FC7/6 (FCC1)		S4/14 to FC11/6 (FCC0)		S5/14 to FC11/6 (FCC1)	
S0/15 to FC3/7 (FCC0)		S1/15 to FC3/7 (FCC1)		S2/15 to FC7/7 (FCC0)		S3/15 to FC7/7 (FCC1)		S4/15 to FC11/7 (FCC0)		S5/15 to FC11/7 (FCC1)	

Table 27: Cabling Plan for LCC2 in a 4+2 Multi-Chassis Configuration with 24 S2 Fabric Cards

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC2 (S13) slot/port	FCC (S2) slot/port/chassis	LCC2 (S13) slot/port	FCC (S2) slot/port/chassis	LCC2 (S13) slot/port	FCC (S2) slot/port/chassis	LCC2 (S13) slot/port	FCC (S2) slot/port/chassis	LCC2 (S13) slot/port	FCC (S2) slot/port/chassis	LCC2 (S13) slot/port	FCC (S2) slot/port/chassis
S0/0 to FC0/8 (FCC0)		S1/0 to FC0/8 (FCC1)		S2/0 to FC4/8 (FCC0)		S3/0 to FC4/8 (FCC1)		S4/0 to FC8/8 (FCC0)		S5/0 to FC8/8 (FCC1)	
S0/1 to FC0/9 (FCC0)		S1/1 to FC0/9 (FCC1)		S2/1 to FC4/9 (FCC0)		S3/1 to FC4/9 (FCC1)		S4/1 to FC8/9 (FCC0)		S5/1 to FC8/9 (FCC1)	
S0/2 to FC0/10 (FCC0)		S1/2 to FC0/10 (FCC1)		S2/2 to FC4/10 (FCC0)		S3/2 to FC4/10 (FCC1)		S4/2 to FC8/10 (FCC0)		S5/2 to FC8/10 (FCC1)	
S0/3 to FC0/11 (FCC0)		S1/3 to FC0/11 (FCC1)		S2/3 to FC4/11 (FCC0)		S3/3 to FC4/11 (FCC1)		S4/3 to FC8/11 (FCC0)		S5/3 to FC8/11 (FCC1)	
S0/4 to FC1/8 (FCC0)		S1/4 to FC1/8 (FCC1)		S2/4 to FC5/8 (FCC0)		S3/4 to FC5/8 (FCC1)		S4/4 to FC9/8 (FCC0)		S5/4 to FC9/8 (FCC1)	
S0/5 to FC1/9 (FCC0)		S1/5 to FC1/9 (FCC1)		S2/5 to FC5/9 (FCC0)		S3/5 to FC5/9 (FCC1)		S4/5 to FC9/9 (FCC0)		S5/5 to FC9/9 (FCC1)	
S0/6 to FC1/10 (FCC0)		S1/6 to FC1/10 (FCC1)		S2/6 to FC5/10 (FCC0)		S3/6 to FC5/10 (FCC1)		S4/6 to FC9/10 (FCC0)		S5/6 to FC9/10 (FCC1)	
S0/7 to FC1/11 (FCC0)		S1/7 to FC1/11 (FCC1)		S2/7 to FC5/11 (FCC0)		S3/7 to FC5/11 (FCC1)		S4/7 to FC9/11 (FCC0)		S5/7 to FC9/11 (FCC1)	
S0/8 to FC2/8 (FCC0)		S1/8 to FC2/8 (FCC1)		S2/8 to FC6/8 (FCC0)		S3/8 to FC6/8 (FCC1)		S4/8 to FC10/8 (FCC0)		S5/8 to FC10/8 (FCC1)	
S0/9 to FC2/9 (FCC0)		S1/9 to FC2/9 (FCC1)		S2/9 to FC6/9 (FCC0)		S3/9 to FC6/9 (FCC1)		S4/9 to FC10/9 (FCC0)		S5/9 to FC10/9 (FCC1)	
S0/10 to FC2/10 (FCC0)		S1/10 to FC2/10 (FCC1)		S2/10 to FC6/10 (FCC0)		S3/10 to FC6/10 (FCC1)		S4/10 to FC10/10 (FCC0)		S5/10 to FC10/10 (FCC1)	
S0/11 to FC2/11 (FCC0)		S1/11 to FC2/11 (FCC1)		S2/11 to FC6/11 (FCC0)		S3/11 to FC6/11 (FCC1)		S4/11 to FC10/11 (FCC0)		S5/11 to FC10/11 (FCC1)	
S0/12 to FC3/8 (FCC0)		S1/12 to FC3/8 (FCC1)		S2/12 to FC7/8 (FCC0)		S3/12 to FC7/8 (FCC1)		S4/12 to FC11/8 (FCC0)		S5/12 to FC11/8 (FCC1)	
S0/13 to FC3/9 (FCC0)		S1/13 to FC3/9 (FCC1)		S2/13 to FC7/9 (FCC0)		S3/13 to FC7/9 (FCC1)		S4/13 to FC11/9 (FCC0)		S5/13 to FC11/9 (FCC1)	
S0/14 to FC3/10 (FCC0)		S1/14 to FC3/10 (FCC1)		S2/14 to FC7/10 (FCC0)		S3/14 to FC7/10 (FCC1)		S4/14 to FC11/10 (FCC0)		S5/14 to FC11/10 (FCC1)	
S0/15 to FC3/11 (FCC0)		S1/15 to FC3/11 (FCC1)		S2/15 to FC7/11 (FCC0)		S3/15 to FC7/11 (FCC1)		S4/15 to FC11/11 (FCC0)		S5/15 to FC11/11 (FCC1)	

Table 28: Cabling Plan for LCC3 in a 4+2 Multi-Chassis Configuration with 24 S2 Fabric Cards

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC3 (S13) slot/port	FCC (S2) slot/port/chassis	LCC3 (S13) slot/port	FCC (S2) slot/port/chassis	LCC3 (S13) slot/port	FCC (S2) slot/port/chassis	LCC3(S13) slot/port	FCC (S2) slot/port/chassis	LCC3 (S13) slot/port	FCC (S2) slot/port/chassis	LCC3 (S13) slot/port	FCC (S2) slot/port/chassis
S0/0 to FC0/12 (FCC0)		S1/0 to FC0/12 (FCC1)		S2/0 to FC4/12 (FCC0)		S3/0 to FC4/12 (FCC1)		S4/0 to FC8/12 (FCC0)		S5/0 to FC8/12 (FCC1)	
S0/1 to FC0/13 (FCC0)		S1/1 to FC0/13 (FCC1)		S2/1 to FC4/13 (FCC0)		S3/1 to FC4/13 (FCC1)		S4/1 to FC8/13 (FCC0)		S5/1 to FC8/13 (FCC1)	
S0/2 to FC0/14 (FCC0)		S1/2 to FC0/14 (FCC1)		S2/2 to FC4/14 (FCC0)		S3/2 to FC4/14 (FCC1)		S4/2 to FC8/14 (FCC0)		S5/2 to FC8/14 (FCC1)	
S0/3 to FC0/15 (FCC0)		S1/3 to FC0/15 (FCC1)		S2/3 to FC4/15 (FCC0)		S3/3 to FC4/15 (FCC1)		S4/3 to FC8/15 (FCC0)		S5/3 to FC8/15 (FCC1)	
S0/4 to FC1/12 (FCC0)		S1/4 to FC1/12 (FCC1)		S2/4 to FC5/12 (FCC0)		S3/4 to FC5/12 (FCC1)		S4/4 to FC9/12 (FCC0)		S5/4 to FC9/12 (FCC1)	
S0/5 to FC1/13 (FCC0)		S1/5 to FC1/13 (FCC1)		S2/5 to FC5/13 (FCC0)		S3/5 to FC5/13 (FCC1)		S4/5 to FC9/13 (FCC0)		S5/5 to FC9/13 (FCC1)	
S0/6 to FC1/14 (FCC0)		S1/6 to FC1/14 (FCC1)		S2/6 to FC5/14 (FCC0)		S3/6 to FC5/14 (FCC1)		S4/6 to FC9/14 (FCC0)		S5/6 to FC9/14 (FCC1)	
S0/7 to FC1/15 (FCC0)		S1/7 to FC1/15 (FCC1)		S2/7 to FC5/15 (FCC0)		S3/7 to FC5/15 (FCC1)		S4/7 to FC9/15 (FCC0)		S5/7 to FC9/15 (FCC1)	
S0/8 to FC2/12 (FCC0)		S1/8 to FC2/12 (FCC1)		S2/8 to FC6/12 (FCC0)		S3/8 to FC6/12 (FCC1)		S4/8 to FC10/12 (FCC0)		S5/8 to FC10/12 (FCC1)	
S0/9 to FC2/13 (FCC0)		S1/9 to FC2/13 (FCC1)		S2/9 to FC6/13 (FCC0)		S3/9 to FC6/13 (FCC1)		S4/9 to FC10/13 (FCC0)		S5/9 to FC10/13 (FCC1)	
S0/10 to FC2/14 (FCC0)		S1/10 to FC2/14 (FCC1)		S2/10 to FC6/14 (FCC0)		S3/10 to FC6/14 (FCC1)		S4/10 to FC10/14 (FCC0)		S5/10 to FC10/14 (FCC1)	
S0/11 to FC2/15 (FCC0)		S1/11 to FC2/15 (FCC1)		S2/11 to FC6/15 (FCC0)		S3/11 to FC6/15 (FCC1)		S4/11 to FC10/15 (FCC0)		S5/11 to FC10/15 (FCC1)	
S0/12 to FC3/12 (FCC0)		S1/12 to FC3/12 (FCC1)		S2/12 to FC7/12 (FCC0)		S3/12 to FC7/12 (FCC1)		S4/12 to FC11/12 (FCC0)		S5/12 to FC11/12 (FCC1)	
S0/13 to FC3/13 (FCC0)		S1/13 to FC3/13 (FCC1)		S2/13 to FC7/13 (FCC0)		S3/13 to FC7/13 (FCC1)		S4/13 to FC11/13 (FCC0)		S5/13 to FC11/13 (FCC1)	
S0/14 to FC3/14 (FCC0)		S1/14 to FC3/14 (FCC1)		S2/14 to FC7/14 (FCC0)		S3/14 to FC7/14 (FCC1)		S4/14 to FC11/14 (FCC0)		S5/14 to FC11/14 (FCC1)	
S0/15 to FC3/15 (FCC0)		S1/15 to FC3/15 (FCC1)		S2/15 to FC7/15 (FCC0)		S3/15 to FC7/15 (FCC1)		S4/15 to FC11/15 (FCC0)		S5/15 to FC11/15 (FCC1)	

4+2 Software Configuration (24 S2 Fabric Cards)

An explicit admin configuration is required to specify an ordered list of S2 connections assigned for a plane. Each S2 connection is specified as an instance. The instances are contiguous, starting from 0.

```
controller fabric plane 0
instance 0
location F0/FC0
instance 1
location F0/FC1
instance 2
location F0/FC2
instance 3
location F0/FC3

controller fabric plane 1
instance 0
location F1/FC0
instance 1
location F1/FC1
instance 2
location F1/FC2
instance 3
location F1/FC3

controller fabric plane 2
instance 0
location F0/FC4
instance 1
location F0/FC5
instance 2
location F0/FC6
instance 3
location F0/FC7

controller fabric plane 3
instance 0
location F1/FC4
instance 1
location F1/FC5
instance 2
location F1/FC6
instance 3
location F1/FC7

controller fabric plane 4
instance 0
location F0/FC8
instance 1
location F0/FC9
instance 2
location F0/FC10
instance 3
location F0/FC11

controller fabric plane 5
instance 0
location F1/FC8
instance 1
location F1/FC9
instance 2
location F1/FC10
```

```
instance 3
location F1/FC11
```

Multi-Chassis 8+2 Configuration

This section describes how to configure a multi-chassis 8+2 configuration. In this configuration, eight line card chassis (LCC0, LCC1, LCC2, LCC3, LCC4, LCC5, LCC6, and LCC7) are connected to two fabric card chassis (FCC0 and FCC1).

Prerequisites

For connecting the fabric, you need the following:

- 768 MPO-24 fiber cables per system
- Optical module sets:
 - **In 1T multi-chassis 8+2 mode:** Eight CXP optical module sets (Cisco PID NCS-FAB-OPT). Two sets are required per LCC: one set plugs into the LCC and the other set plugs into the FCC. Each set includes 96 CXP-100G-SR12 modules for a total of 1536 modules.
 - **In 2T multi-chassis 8+2 mode:** Eight CXP2 optical module sets (Cisco PID NCS-FAB-OPT2). Two sets are required per LCC: one set plugs into the LCC and the other set plugs into the FCC. Each set includes 96 ONS-CXP2-SR25 modules for a total of 1536 modules.



Note If a 1T LCC is preferred, then ONS-100G-SR12 module can be used for that particular LCC.

Configuring a 8+2 Configuration with 24 S2 Fabric Cards

In this configuration, there are 12 FCs in each fabric card chassis; in total 24 FCs are installed.

To complete the configuration, you must repeat the cabling for the remaining five fabric planes until all 24 S2 cards are connected.

The following tables show the cabling plan for a 8+2 multi-chassis configuration with 24 SC FCs installed. The FCC0 has the fabric instances 0 through 5 for planes 0, 2, and 4. The FCC1 has the fabric instances 0 through 5 for planes 1, 3, and 5.

Table 29: Cabling Plan for LCC0 in a 8+2 Multi-Chassis Configuration with 24 S2 Fabric Cards

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis
S0/0 to FC0/0 (FCC0)		S1/0 to FC0/0 (FCC1)		S2/0 to FC4/0 (FCC0)		S3/0 to FC4/0 (FCC1)		S4/0 to FC8/0 (FCC0)		S5/0 to FC8/0 (FCC1)	
S0/1 to FC0/1 (FCC0)		S1/1 to FC0/1 (FCC1)		S2/1 to FC4/1 (FCC0)		S3/1 to FC4/1 (FCC1)		S4/1 to FC8/1 (FCC0)		S5/1 to FC8/1 (FCC1)	

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis	LCC0 (S13) slot/port	FCC (S2) slot/port/chassis
S0/2 to FC0/2 (FCC0)		S1/2 to FC0/2 (FCC1)		S2/2 to FC4/2 (FCC0)		S3/2 to FC4/2 (FCC1)		S4/2 to FC8/2 (FCC0)		S5/2 to FC8/2 (FCC1)	
S0/3 to FC0/3 (FCC0)		S1/3 to FC0/3 (FCC1)		S2/3 to FC4/3 (FCC0)		S3/3 to FC4/3 (FCC1)		S4/3 to FC8/3 (FCC0)		S5/3 to FC8/3 (FCC1)	
S0/4 to FC1/0 (FCC0)		S1/4 to FC1/0 (FCC1)		S2/4 to FC5/0 (FCC0)		S3/4 to FC5/0 (FCC1)		S4/4 to FC9/0 (FCC0)		S5/4 to FC9/0 (FCC1)	
S0/5 to FC1/1 (FCC0)		S1/5 to FC1/1 (FCC1)		S2/5 to FC5/1 (FCC0)		S3/5 to FC5/1 (FCC1)		S4/5 to FC9/1 (FCC0)		S5/5 to FC9/1 (FCC1)	
S0/6 to FC1/2 (FCC0)		S1/6 to FC1/2 (FCC1)		S2/6 to FC5/2 (FCC0)		S3/6 to FC5/2 (FCC1)		S4/6 to FC9/2 (FCC0)		S5/6 to FC9/2 (FCC1)	
S0/7 to FC1/3(FCC0)		S1/7 to FC1/3 (FCC1)		S2/7 to FC5/3(FCC0)		S3/7 to FC5/3(FCC1)		S4/7 to FC9/3(FCC0)		S5/7 to FC9/3(FCC1)	
S0/8 to FC2/0 (FCC0)		S1/8 to FC2/0 (FCC1)		S2/8 to FC6/0 (FCC0)		S3/8 to FC6/0 (FCC1)		S4/8 to FC10/0 (FCC0)		S5/8 to FC10/0 (FCC1)	
S0/9 to FC2/1 (FCC0)		S1/9 to FC2/1 (FCC1)		S2/9 to FC6/1 (FCC0)		S3/9 to FC6/1 (FCC1)		S4/9 to FC10/1 (FCC0)		S5/9 to FC10/1 (FCC1)	
S0/10 to FC2/2 (FCC0)		S1/10 to FC2/2 (FCC1)		S2/10 to FC6/2 (FCC0)		S3/10 to FC6/2 (FCC1)		S4/10 to FC10/2 (FCC0)		S5/10 to FC10/2 (FCC1)	
S0/11 to FC2/3 (FCC0)		S1/11 to FC2/3 (FCC1)		S2/11 to FC6/3 (FCC0)		S3/11 to FC6/3 (FCC1)		S4/11 to FC10/3 (FCC0)		S5/11 to FC10/3 (FCC1)	
S0/12 to FC3/0 (FCC0)		S1/12 to FC3/0 (FCC1)		S2/12 to FC7/0 (FCC0)		S3/12 to FC7/0 (FCC1)		S4/12 to FC11/0 (FCC0)		S5/12 to FC11/0 (FCC1)	
S0/13 to FC3/1 (FCC0)		S1/13 to FC3/1 (FCC1)		S2/13 to FC7/1 (FCC0)		S3/13 to FC7/1 (FCC1)		S4/13 to FC11/1 (FCC0)		S5/13 to FC11/1 (FCC1)	
S0/14 to FC3/2 (FCC0)		S1/14 to FC3/2 (FCC1)		S2/14 to FC7/2 (FCC0)		S3/14 to FC7/2 (FCC1)		S4/14 to FC11/2 (FCC0)		S5/14 to FC11/2 (FCC1)	
S0/15 to FC3/3 (FCC0)		S1/15 to FC3/3 (FCC1)		S2/15 to FC7/3 (FCC0)		S3/15 to FC7/3 (FCC1)		S4/15 to FC11/3 (FCC0)		S5/15 to FC11/3 (FCC1)	

Table 30: Cabling Plan for LCC1 in a 8+2 Multi-Chassis Configuration with 24 S2 Fabric Cards

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1(S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis	LCC1 (S13) slot/port	FCC (S2) slot/port/chassis
S0/0 to FC0/4 (FCC0)		S1/0 to FC0/4 (FCC1)		S2/0 to FC4/4 (FCC0)		S3/0 to FC4/4 (FCC1)		S4/0 to FC8/4 (FCC0)		S5/0 to FC8/4 (FCC1)	
S0/1 to FC0/5 (FCC0)		S1/1 to FC0/5 (FCC1)		S2/1 to FC4/5 (FCC0)		S3/1 to FC4/5 (FCC1)		S4/1 to FC8/5 (FCC0)		S5/1 to FC8/5 (FCC1)	
S0/2 to FC0/6 (FCC0)		S1/2 to FC0/6 (FCC1)		S2/2 to FC4/6 (FCC0)		S3/2 to FC4/6 (FCC1)		S4/2 to FC8/6 (FCC0)		S5/2 to FC8/6 (FCC1)	
S0/3 to FC0/7 (FCC0)		S1/3 to FC0/7 (FCC1)		S2/3 to FC4/7 (FCC0)		S3/3 to FC4/7 (FCC1)		S4/3 to FC8/7 (FCC0)		S5/3 to FC8/7 (FCC1)	
S0/4 to FC1/4 (FCC0)		S1/4 to FC1/4 (FCC1)		S2/4 to FC5/4 (FCC0)		S3/4 to FC5/4 (FCC1)		S4/4 to FC9/4 (FCC0)		S5/4 to FC9/4 (FCC1)	
S0/5 to FC1/5 (FCC0)		S1/5 to FC1/5 (FCC1)		S2/5 to FC5/5 (FCC0)		S3/5 to FC5/5 (FCC1)		S4/5 to FC9/5 (FCC0)		S5/5 to FC9/5 (FCC1)	
S0/6 to FC1/6 (FCC0)		S1/6 to FC1/6 (FCC1)		S2/6 to FC5/6 (FCC0)		S3/6 to FC5/6 (FCC1)		S4/6 to FC9/6 (FCC0)		S5/6 to FC9/6 (FCC1)	
S0/7 to FC1/7 (FCC0)		S1/7 to FC1/7 (FCC1)		S2/7 to FC5/7 (FCC0)		S3/7 to FC5/7 (FCC1)		S4/7 to FC9/7 (FCC0)		S5/7 to FC9/7 (FCC1)	
S0/8 to FC2/4 (FCC0)		S1/8 to FC2/4 (FCC1)		S2/8 to FC6/4 (FCC0)		S3/8 to FC6/4 (FCC1)		S4/8 to FC10/4 (FCC0)		S5/8 to FC10/4 (FCC1)	
S0/9 to FC2/5 (FCC0)		S1/9 to FC2/5 (FCC1)		S2/9 to FC6/5 (FCC0)		S3/9 to FC6/5 (FCC1)		S4/9 to FC10/5 (FCC0)		S5/9 to FC10/5 (FCC1)	
S0/10 to FC2/6 (FCC0)		S1/10 to FC2/6 (FCC1)		S2/10 to FC6/6 (FCC0)		S3/10 to FC6/6 (FCC1)		S4/10 to FC10/6 (FCC0)		S5/10 to FC10/6 (FCC1)	
S0/11 to FC2/7 (FCC0)		S1/11 to FC2/7 (FCC1)		S2/11 to FC6/7 (FCC0)		S3/11 to FC6/7 (FCC1)		S4/11 to FC10/7 (FCC0)		S5/11 to FC10/7 (FCC1)	
S0/12 to FC3/4 (FCC0)		S1/12 to FC3/4 (FCC1)		S2/12 to FC7/4 (FCC0)		S3/12 to FC7/4 (FCC1)		S4/12 to FC11/4 (FCC0)		S5/12 to FC11/4 (FCC1)	
S0/13 to FC3/5 (FCC0)		S1/13 to FC3/5 (FCC1)		S2/13 to FC7/5 (FCC0)		S3/13 to FC7/5 (FCC1)		S4/13 to FC11/5 (FCC0)		S5/13 to FC11/5 (FCC1)	
S0/14 to FC3/6 (FCC0)		S1/14 to FC3/6 (FCC1)		S2/14 to FC7/6 (FCC0)		S3/14 to FC7/6 (FCC1)		S4/14 to FC11/6 (FCC0)		S5/14 to FC11/6 (FCC1)	
S0/15 to FC3/7 (FCC0)		S1/15 to FC3/7 (FCC1)		S2/15 to FC7/7 (FCC0)		S3/15 to FC7/7 (FCC1)		S4/15 to FC11/7 (FCC0)		S5/15 to FC11/7 (FCC1)	

Table 31: Cabling Plan for LCC2 in a 8+2 Multi-Chassis Configuration with 24 S2 Fabric Cards

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC2 (S13) slot/port	FCC (S2) slot/port/chassis	LCC2 (S13) slot/port	FCC (S2) slot/port/chassis	LCC2 (S13) slot/port	FCC (S2) slot/port/chassis	LCC2 (S13) slot/port	FCC (S2) slot/port/chassis	LCC2 (S13) slot/port	FCC (S2) slot/port/chassis	LCC2 (S13) slot/port	FCC (S2) slot/port/chassis
S0/0 to FC0/8 (FCC0)		S1/0 to FC0/8 (FCC1)		S2/0 to FC4/8 (FCC0)		S3/0 to FC4/8 (FCC1)		S4/0 to FC8/8 (FCC0)		S5/0 to FC8/8 (FCC1)	
S0/1 to FC0/9 (FCC0)		S1/1 to FC0/9 (FCC1)		S2/1 to FC4/9 (FCC0)		S3/1 to FC4/9 (FCC1)		S4/1 to FC8/9 (FCC0)		S5/1 to FC8/9 (FCC1)	
S0/2 to FC0/10 (FCC0)		S1/2 to FC0/10 (FCC1)		S2/2 to FC4/10 (FCC0)		S3/2 to FC4/10 (FCC1)		S4/2 to FC8/10 (FCC0)		S5/2 to FC8/10 (FCC1)	
S0/3 to FC0/11 (FCC0)		S1/3 to FC0/11 (FCC1)		S2/3 to FC4/11 (FCC0)		S3/3 to FC4/11 (FCC1)		S4/3 to FC8/11 (FCC0)		S5/3 to FC8/11 (FCC1)	
S0/4 to FC1/8 (FCC0)		S1/4 to FC1/8 (FCC1)		S2/4 to FC5/8 (FCC0)		S3/4 to FC5/8 (FCC1)		S4/4 to FC9/8 (FCC0)		S5/4 to FC9/8 (FCC1)	
S0/5 to FC1/9 (FCC0)		S1/5 to FC1/9 (FCC1)		S2/5 to FC5/9 (FCC0)		S3/5 to FC5/9 (FCC1)		S4/5 to FC9/9 (FCC0)		S5/5 to FC9/9 (FCC1)	
S0/6 to FC1/10 (FCC0)		S1/6 to FC1/10 (FCC1)		S2/6 to FC5/10 (FCC0)		S3/6 to FC5/10 (FCC1)		S4/6 to FC9/10 (FCC0)		S5/6 to FC9/10 (FCC1)	
S0/7 to FC1/11 (FCC0)		S1/7 to FC1/11 (FCC1)		S2/7 to FC5/11 (FCC0)		S3/7 to FC5/11 (FCC1)		S4/7 to FC9/11 (FCC0)		S5/7 to FC9/11 (FCC1)	
S0/8 to FC2/8 (FCC0)		S1/8 to FC2/8 (FCC1)		S2/8 to FC6/8 (FCC0)		S3/8 to FC6/8 (FCC1)		S4/8 to FC10/8 (FCC0)		S5/8 to FC10/8 (FCC1)	
S0/9 to FC2/9 (FCC0)		S1/9 to FC2/9 (FCC1)		S2/9 to FC6/9 (FCC0)		S3/9 to FC6/9 (FCC1)		S4/9 to FC10/9 (FCC0)		S5/9 to FC10/9 (FCC1)	
S0/10 to FC2/10 (FCC0)		S1/10 to FC2/10 (FCC1)		S2/10 to FC6/10 (FCC0)		S3/10 to FC6/10 (FCC1)		S4/10 to FC10/10 (FCC0)		S5/10 to FC10/10 (FCC1)	
S0/11 to FC2/11 (FCC0)		S1/11 to FC2/11 (FCC1)		S2/11 to FC6/11 (FCC0)		S3/11 to FC6/11 (FCC1)		S4/11 to FC10/11 (FCC0)		S5/11 to FC10/11 (FCC1)	
S0/12 to FC3/8 (FCC0)		S1/12 to FC3/8 (FCC1)		S2/12 to FC7/8 (FCC0)		S3/12 to FC7/8 (FCC1)		S4/12 to FC11/8 (FCC0)		S5/12 to FC11/8 (FCC1)	
S0/13 to FC3/9 (FCC0)		S1/13 to FC3/9 (FCC1)		S2/13 to FC7/9 (FCC0)		S3/13 to FC7/9 (FCC1)		S4/13 to FC11/9 (FCC0)		S5/13 to FC11/9 (FCC1)	
S0/14 to FC3/10 (FCC0)		S1/14 to FC3/10 (FCC1)		S2/14 to FC7/10 (FCC0)		S3/14 to FC7/10 (FCC1)		S4/14 to FC11/10 (FCC0)		S5/14 to FC11/10 (FCC1)	
S0/15 to FC3/11 (FCC0)		S1/15 to FC3/11 (FCC1)		S2/15 to FC7/11 (FCC0)		S3/15 to FC7/11 (FCC1)		S4/15 to FC11/11 (FCC0)		S5/15 to FC11/11 (FCC1)	

Table 32: Cabling Plan for LCC3 in a 8+2 Multi-Chassis Configuration with 24 S2 Fabric Cards

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC3 (S13) slot/port	FCC (S2) slot/port/chassis	LCC3 (S13) slot/port	FCC (S2) slot/port/chassis	LCC3 (S13) slot/port	FCC (S2) slot/port/chassis	LCC3(S13) slot/port	FCC (S2) slot/port/chassis	LCC3 (S13) slot/port	FCC (S2) slot/port/chassis	LCC3 (S13) slot/port	FCC (S2) slot/port/chassis
S0/0 to FC0/12 (FCC0)		S1/0 to FC0/12 (FCC1)		S2/0 to FC4/12 (FCC0)		S3/0 to FC4/12 (FCC1)		S4/0 to FC8/12 (FCC0)		S5/0 to FC8/12 (FCC1)	
S0/1 to FC0/13 (FCC0)		S1/1 to FC0/13 (FCC1)		S2/1 to FC4/13 (FCC0)		S3/1 to FC4/13 (FCC1)		S4/1 to FC8/13 (FCC0)		S5/1 to FC8/13 (FCC1)	
S0/2 to FC0/14 (FCC0)		S1/2 to FC0/14 (FCC1)		S2/2 to FC4/14 (FCC0)		S3/2 to FC4/14 (FCC1)		S4/2 to FC8/14 (FCC0)		S5/2 to FC8/14 (FCC1)	
S0/3 to FC0/15 (FCC0)		S1/3 to FC0/15 (FCC1)		S2/3 to FC4/15 (FCC0)		S3/3 to FC4/15 (FCC1)		S4/3 to FC8/15 (FCC0)		S5/3 to FC8/15 (FCC1)	
S0/4 to FC1/12 (FCC0)		S1/4 to FC1/12 (FCC1)		S2/4 to FC5/12 (FCC0)		S3/4 to FC5/12 (FCC1)		S4/4 to FC9/12 (FCC0)		S5/4 to FC9/12 (FCC1)	
S0/5 to FC1/13 (FCC0)		S1/5 to FC1/13 (FCC1)		S2/5 to FC5/13 (FCC0)		S3/5 to FC5/13 (FCC1)		S4/5 to FC9/13 (FCC0)		S5/5 to FC9/13 (FCC1)	
S0/6 to FC1/14 (FCC0)		S1/6 to FC1/14 (FCC1)		S2/6 to FC5/14 (FCC0)		S3/6 to FC5/14 (FCC1)		S4/6 to FC9/14 (FCC0)		S5/6 to FC9/14 (FCC1)	
S0/7 to FC1/15 (FCC0)		S1/7 to FC1/15 (FCC1)		S2/7 to FC5/15 (FCC0)		S3/7 to FC5/15 (FCC1)		S4/7 to FC9/15 (FCC0)		S5/7 to FC9/15 (FCC1)	
S0/8 to FC2/12 (FCC0)		S1/8 to FC2/12 (FCC1)		S2/8 to FC6/12 (FCC0)		S3/8 to FC6/12 (FCC1)		S4/8 to FC10/12 (FCC0)		S5/8 to FC10/12 (FCC1)	
S0/9 to FC2/13 (FCC0)		S1/9 to FC2/13 (FCC1)		S2/9 to FC6/13 (FCC0)		S3/9 to FC6/13 (FCC1)		S4/9 to FC10/13 (FCC0)		S5/9 to FC10/13 (FCC1)	
S0/10 to FC2/14 (FCC0)		S1/10 to FC2/14 (FCC1)		S2/10 to FC6/14 (FCC0)		S3/10 to FC6/14 (FCC1)		S4/10 to FC10/14 (FCC0)		S5/10 to FC10/14 (FCC1)	
S0/11 to FC2/15 (FCC0)		S1/11 to FC2/15 (FCC1)		S2/11 to FC6/15 (FCC0)		S3/11 to FC6/15 (FCC1)		S4/11 to FC10/15 (FCC0)		S5/11 to FC10/15 (FCC1)	
S0/12 to FC3/12 (FCC0)		S1/12 to FC3/12 (FCC1)		S2/12 to FC7/12 (FCC0)		S3/12 to FC7/12 (FCC1)		S4/12 to FC11/12 (FCC0)		S5/12 to FC11/12 (FCC1)	
S0/13 to FC3/13 (FCC0)		S1/13 to FC3/13 (FCC1)		S2/13 to FC7/13 (FCC0)		S3/13 to FC7/13 (FCC1)		S4/13 to FC11/13 (FCC0)		S5/13 to FC11/13 (FCC1)	
S0/14 to FC3/14 (FCC0)		S1/14 to FC3/14 (FCC1)		S2/14 to FC7/14 (FCC0)		S3/14 to FC7/14 (FCC1)		S4/14 to FC11/14 (FCC0)		S5/14 to FC11/14 (FCC1)	
S0/15 to FC3/15 (FCC0)		S1/15 to FC3/15 (FCC1)		S2/15 to FC7/15 (FCC0)		S3/15 to FC7/15 (FCC1)		S4/15 to FC11/15 (FCC0)		S5/15 to FC11/15 (FCC1)	

Table 33: Cabling Plan for LCC4 in a 8+2 Multi-Chassis Configuration with 24 S2 Fabric Cards

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC4 (S13) slot/port	FCC (S2) slot/port/chassis	LCC4 (S13) slot/port	FCC (S2) slot/port/chassis	LCC4 (S13) slot/port	FCC (S2) slot/port/chassis	LCC4(S13) slot/port	FCC (S2) slot/port/chassis	LCC4 (S13) slot/port	FCC (S2) slot/port/chassis	LCC4 (S13) slot/port	FCC (S2) slot/port/chassis
S0/0 to FC0/16 (FCC0)		S1/0 to FC0/16 (FCC1)		S2/0 to FC4/16 (FCC0)		S3/0 to FC4/16 (FCC1)		S4/0 to FC8/16 (FCC0)		S5/0 to FC8/16 (FCC1)	
S0/1 to FC0/17 (FCC0)		S1/1 to FC0/17 (FCC1)		S2/1 to FC4/17 (FCC0)		S3/1 to FC4/17 (FCC1)		S4/1 to FC8/17 (FCC0)		S5/1 to FC8/17 (FCC1)	
S0/2 to FC0/18 (FCC0)		S1/2 to FC0/18 (FCC1)		S2/2 to FC4/18 (FCC0)		S3/2 to FC4/18 (FCC1)		S4/2 to FC8/18 (FCC0)		S5/2 to FC8/18 (FCC1)	
S0/3 to FC0/19 (FCC0)		S1/3 to FC0/19 (FCC1)		S2/3 to FC4/19 (FCC0)		S3/3 to FC4/19 (FCC1)		S4/3 to FC8/19 (FCC0)		S5/3 to FC8/19 (FCC1)	
S0/4 to FC1/16 (FCC0)		S1/4 to FC1/16 (FCC1)		S2/4 to FC5/16 (FCC0)		S3/4 to FC5/16 (FCC1)		S4/4 to FC9/16 (FCC0)		S5/4 to FC9/16 (FCC1)	
S0/5 to FC1/17 (FCC0)		S1/5 to FC1/13 (FCC1)		S2/5 to FC5/13 (FCC0)		S3/5 to FC5/13 (FCC1)		S4/5 to FC9/13 (FCC0)		S5/5 to FC9/13 (FCC1)	
S0/6 to FC1/18 (FCC0)		S1/6 to FC1/18 (FCC1)		S2/6 to FC5/18 (FCC0)		S3/6 to FC5/18 (FCC1)		S4/6 to FC9/18 (FCC0)		S5/6 to FC9/18 (FCC1)	
S0/7 to FC1/19 (FCC0)		S1/7 to FC1/19 (FCC1)		S2/7 to FC5/19 (FCC0)		S3/7 to FC5/19 (FCC1)		S4/7 to FC9/19 (FCC0)		S5/7 to FC9/19 (FCC1)	
S0/8 to FC2/16 (FCC0)		S1/8 to FC2/16 (FCC1)		S2/8 to FC6/16 (FCC0)		S3/8 to FC6/16 (FCC1)		S4/8 to FC10/16 (FCC0)		S5/8 to FC10/16 (FCC1)	
S0/9 to FC2/17 (FCC0)		S1/9 to FC2/17 (FCC1)		S2/9 to FC6/17 (FCC0)		S3/9 to FC6/17 (FCC1)		S4/9 to FC10/17 (FCC0)		S5/9 to FC10/17 (FCC1)	
S0/10 to FC2/18 (FCC0)		S1/10 to FC2/18 (FCC1)		S2/10 to FC6/18 (FCC0)		S3/10 to FC6/18 (FCC1)		S4/10 to FC10/18 (FCC0)		S5/10 to FC10/18 (FCC1)	
S0/11 to FC2/19 (FCC0)		S1/11 to FC2/19 (FCC1)		S2/11 to FC6/19 (FCC0)		S3/11 to FC6/19 (FCC1)		S4/11 to FC10/19 (FCC0)		S5/11 to FC10/19 (FCC1)	
S0/12 to FC3/16 (FCC0)		S1/12 to FC3/16 (FCC1)		S2/12 to FC7/16 (FCC0)		S3/12 to FC7/16 (FCC1)		S4/12 to FC11/16 (FCC0)		S5/12 to FC11/16 (FCC1)	
S0/13 to FC3/17 (FCC0)		S1/13 to FC3/17 (FCC1)		S2/13 to FC7/17 (FCC0)		S3/13 to FC7/17 (FCC1)		S4/13 to FC11/17 (FCC0)		S5/13 to FC11/17 (FCC1)	
S0/14 to FC3/18 (FCC0)		S1/14 to FC3/18 (FCC1)		S2/14 to FC7/18 (FCC0)		S3/14 to FC7/18 (FCC1)		S4/14 to FC11/18 (FCC0)		S5/14 to FC11/18 (FCC1)	
S0/15 to FC3/19 (FCC0)		S1/15 to FC3/19 (FCC1)		S2/15 to FC7/19 (FCC0)		S3/15 to FC7/19 (FCC1)		S4/15 to FC11/19 (FCC0)		S5/15 to FC11/19 (FCC1)	

Table 34: Cabling Plan for LCC5 in a 8+2 Multi-Chassis Configuration with 24 S2 Fabric Cards

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC5 (S13) slot/port	FCC (S2) slot/port/chassis	LCC5 (S13) slot/port	FCC (S2) slot/port/chassis	LCC5 (S13) slot/port	FCC (S2) slot/port/chassis	LCC5(S13) slot/port	FCC (S2) slot/port/chassis	LCC5 (S13) slot/port	FCC (S2) slot/port/chassis	LCC5 (S13) slot/port	FCC (S2) slot/port/chassis
S0/0 to FC0/20 (FCC0)		S1/0 to FC0/20 (FCC1)		S2/0 to FC4/20 (FCC0)		S3/0 to FC4/20 (FCC1)		S4/0 to FC8/20 (FCC0)		S5/0 to FC8/20 (FCC1)	
S0/1 to FC0/21 (FCC0)		S1/1 to FC0/21 (FCC1)		S2/1 to FC4/21 (FCC0)		S3/1 to FC4/21 (FCC1)		S4/1 to FC8/21 (FCC0)		S5/1 to FC8/21 (FCC1)	
S0/2 to FC0/22 (FCC0)		S1/2 to FC0/22 (FCC1)		S2/2 to FC4/22 (FCC0)		S3/2 to FC4/22 (FCC1)		S4/2 to FC8/22 (FCC0)		S5/2 to FC8/22 (FCC1)	
S0/3 to FC0/23 (FCC0)		S1/3 to FC0/23 (FCC1)		S2/3 to FC4/23 (FCC0)		S3/3 to FC4/23 (FCC1)		S4/3 to FC8/23 (FCC0)		S5/3 to FC8/23 (FCC1)	
S0/4 to FC1/20 (FCC0)		S1/4 to FC1/24 (FCC1)		S2/4 to FC5/24 (FCC0)		S3/4 to FC5/24 (FCC1)		S4/4 to FC9/24 (FCC0)		S5/4 to FC9/24 (FCC1)	
S0/5 to FC1/21 (FCC0)		S1/5 to FC1/25 (FCC1)		S2/5 to FC5/25 (FCC0)		S3/5 to FC5/25 (FCC1)		S4/5 to FC9/25 (FCC0)		S5/5 to FC9/25 (FCC1)	
S0/6 to FC1/22 (FCC0)		S1/6 to FC1/26 (FCC1)		S2/6 to FC5/26 (FCC0)		S3/6 to FC5/26 (FCC1)		S4/6 to FC9/26 (FCC0)		S5/6 to FC9/26 (FCC1)	
S0/7 to FC1/23 (FCC0)		S1/7 to FC1/27 (FCC1)		S2/7 to FC5/27 (FCC0)		S3/7 to FC5/27 (FCC1)		S4/7 to FC9/27 (FCC0)		S5/7 to FC9/27 (FCC1)	
S0/8 to FC2/20 (FCC0)		S1/8 to FC2/20 (FCC1)		S2/8 to FC6/20 (FCC0)		S3/8 to FC6/20 (FCC1)		S4/8 to FC10/20 (FCC0)		S5/8 to FC10/20 (FCC1)	
S0/9 to FC2/21 (FCC0)		S1/9 to FC2/21 (FCC1)		S2/9 to FC6/21 (FCC0)		S3/9 to FC6/21 (FCC1)		S4/9 to FC10/21 (FCC0)		S5/9 to FC10/21 (FCC1)	
S0/10 to FC2/22 (FCC0)		S1/10 to FC2/22 (FCC1)		S2/10 to FC6/22 (FCC0)		S3/10 to FC6/22 (FCC1)		S4/10 to FC10/22 (FCC0)		S5/10 to FC10/22 (FCC1)	
S0/11 to FC2/23 (FCC0)		S1/11 to FC2/23 (FCC1)		S2/11 to FC6/23 (FCC0)		S3/11 to FC6/23 (FCC1)		S4/11 to FC10/23 (FCC0)		S5/11 to FC10/23 (FCC1)	
S0/12 to FC3/20 (FCC0)		S1/12 to FC3/20 (FCC1)		S2/12 to FC7/20 (FCC0)		S3/12 to FC7/20 (FCC1)		S4/12 to FC11/20 (FCC0)		S5/12 to FC11/20 (FCC1)	
S0/13 to FC3/21 (FCC0)		S1/13 to FC3/21 (FCC1)		S2/13 to FC7/21 (FCC0)		S3/13 to FC7/21 (FCC1)		S4/13 to FC11/21 (FCC0)		S5/13 to FC11/21 (FCC1)	
S0/14 to FC3/22 (FCC0)		S1/14 to FC3/22 (FCC1)		S2/14 to FC7/22 (FCC0)		S3/14 to FC7/22 (FCC1)		S4/14 to FC11/22 (FCC0)		S5/14 to FC11/22 (FCC1)	
S0/15 to FC3/23 (FCC0)		S1/15 to FC3/23 (FCC1)		S2/15 to FC7/23 (FCC0)		S3/15 to FC7/23 (FCC1)		S4/15 to FC11/23 (FCC0)		S5/15 to FC11/23 (FCC1)	

Table 35: Cabling Plan for LCC6 in a 8+2 Multi-Chassis Configuration with 24 S2 Fabric Cards

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC6 (S13) slot/port	FCC (S2) slot/port/chassis	LCC6 (S13) slot/port	FCC (S2) slot/port/chassis	LCC6 (S13) slot/port	FCC (S2) slot/port/chassis	LCC6(S13) slot/port	FCC (S2) slot/port/chassis	LCC6 (S13) slot/port	FCC (S2) slot/port/chassis	LCC6 (S13) slot/port	FCC (S2) slot/port/chassis
S0/0 to FC0/24 (FCC0)		S1/0 to FC0/24 (FCC1)		S2/0 to FC4/24 (FCC0)		S3/0 to FC4/24 (FCC1)		S4/0 to FC8/24 (FCC0)		S5/0 to FC8/24 (FCC1)	
S0/1 to FC0/25 (FCC0)		S1/1 to FC0/25 (FCC1)		S2/1 to FC4/25 (FCC0)		S3/1 to FC4/25 (FCC1)		S4/1 to FC8/25 (FCC0)		S5/1 to FC8/25 (FCC1)	
S0/2 to FC0/26 (FCC0)		S1/2 to FC0/26 (FCC1)		S2/2 to FC4/26 (FCC0)		S3/2 to FC4/26 (FCC1)		S4/2 to FC8/26 (FCC0)		S5/2 to FC8/26 (FCC1)	
S0/3 to FC0/27 (FCC0)		S1/3 to FC0/27 (FCC1)		S2/3 to FC4/27 (FCC0)		S3/3 to FC4/27 (FCC1)		S4/3 to FC8/27 (FCC0)		S5/3 to FC8/27 (FCC1)	
S0/4 to FC1/24 (FCC0)		S1/4 to FC1/24 (FCC1)		S2/4 to FC5/24 (FCC0)		S3/4 to FC5/24 (FCC1)		S4/4 to FC9/24 (FCC0)		S5/4 to FC9/24 (FCC1)	
S0/5 to FC1/25 (FCC0)		S1/5 to FC1/25 (FCC1)		S2/5 to FC5/25 (FCC0)		S3/5 to FC5/25 (FCC1)		S4/5 to FC9/25 (FCC0)		S5/5 to FC9/25 (FCC1)	
S0/6 to FC1/26 (FCC0)		S1/6 to FC1/26 (FCC1)		S2/6 to FC5/26 (FCC0)		S3/6 to FC5/26 (FCC1)		S4/6 to FC9/26 (FCC0)		S5/6 to FC9/26 (FCC1)	
S0/7 to FC1/27 (FCC0)		S1/7 to FC1/27 (FCC1)		S2/7 to FC5/27 (FCC0)		S3/7 to FC5/27 (FCC1)		S4/7 to FC9/27 (FCC0)		S5/7 to FC9/27 (FCC1)	
S0/8 to FC2/24 (FCC0)		S1/8 to FC2/24 (FCC1)		S2/8 to FC6/24 (FCC0)		S3/8 to FC6/24 (FCC1)		S4/8 to FC10/24 (FCC0)		S5/8 to FC10/24 (FCC1)	
S0/9 to FC2/25 (FCC0)		S1/9 to FC2/25 (FCC1)		S2/9 to FC6/25 (FCC0)		S3/9 to FC6/25 (FCC1)		S4/9 to FC10/25 (FCC0)		S5/9 to FC10/25 (FCC1)	
S0/10 to FC2/26 (FCC0)		S1/10 to FC2/26 (FCC1)		S2/10 to FC6/26 (FCC0)		S3/10 to FC6/26 (FCC1)		S4/10 to FC10/26 (FCC0)		S5/10 to FC10/26 (FCC1)	
S0/11 to FC2/27 (FCC0)		S1/11 to FC2/27 (FCC1)		S2/11 to FC6/27 (FCC0)		S3/11 to FC6/27 (FCC1)		S4/11 to FC10/27 (FCC0)		S5/11 to FC10/27 (FCC1)	
S0/12 to FC3/24 (FCC0)		S1/12 to FC3/24 (FCC1)		S2/12 to FC7/24 (FCC0)		S3/12 to FC7/24 (FCC1)		S4/12 to FC11/24 (FCC0)		S5/12 to FC11/24 (FCC1)	
S0/13 to FC3/25 (FCC0)		S1/13 to FC3/25 (FCC1)		S2/13 to FC7/25 (FCC0)		S3/13 to FC7/25 (FCC1)		S4/13 to FC11/25 (FCC0)		S5/13 to FC11/25 (FCC1)	
S0/14 to FC3/26 (FCC0)		S1/14 to FC3/26 (FCC1)		S2/14 to FC7/26 (FCC0)		S3/14 to FC7/26 (FCC1)		S4/14 to FC11/26 (FCC0)		S5/14 to FC11/26 (FCC1)	
S0/15 to FC3/27 (FCC0)		S1/15 to FC3/27 (FCC1)		S2/15 to FC7/27 (FCC0)		S3/15 to FC7/27 (FCC1)		S4/15 to FC11/27 (FCC0)		S5/15 to FC11/27 (FCC1)	

Table 36: Cabling Plan for LCC7 in a 8+2 Multi-Chassis Configuration with 24 S2 Fabric Cards

Plane 0		Plane 1		Plane 2		Plane 3		Plane 4		Plane 5	
LCC7 (S13) slot/port	FCC (S2) slot/port/chassis	LCC7 (S13) slot/port	FCC (S2) slot/port/chassis	LCC7 (S13) slot/port	FCC (S2) slot/port/chassis	LCC7(S13) slot/port	FCC (S2) slot/port/chassis	LCC7 (S13) slot/port	FCC (S2) slot/port/chassis	LCC7 (S13) slot/port	FCC (S2) slot/port/chassis
S0/0 to FC0/28 (FCC0)		S1/0 to FC0/28 (FCC1)		S2/0 to FC4/28 (FCC0)		S3/0 to FC4/28 (FCC1)		S4/0 to FC8/28 (FCC0)		S5/0 to FC8/28 (FCC1)	
S0/1 to FC0/29 (FCC0)		S1/1 to FC0/29 (FCC1)		S2/1 to FC4/29 (FCC0)		S3/1 to FC4/29 (FCC1)		S4/1 to FC8/29 (FCC0)		S5/1 to FC8/29 (FCC1)	
S0/2 to FC0/30 (FCC0)		S1/2 to FC0/30 (FCC1)		S2/2 to FC4/30 (FCC0)		S3/2 to FC4/30 (FCC1)		S4/2 to FC8/30 (FCC0)		S5/2 to FC8/30 (FCC1)	
S0/3 to FC0/31 (FCC0)		S1/3 to FC0/31 (FCC1)		S2/3 to FC4/31 (FCC0)		S3/3 to FC4/31 (FCC1)		S4/3 to FC8/31 (FCC0)		S5/3 to FC8/31 (FCC1)	
S0/4 to FC1/28 (FCC0)		S1/4 to FC1/28 (FCC1)		S2/4 to FC5/28 (FCC0)		S3/4 to FC5/28 (FCC1)		S4/4 to FC9/28 (FCC0)		S5/4 to FC9/28 (FCC1)	
S0/5 to FC1/29 (FCC0)		S1/5 to FC1/29 (FCC1)		S2/5 to FC5/29 (FCC0)		S3/5 to FC5/29 (FCC1)		S4/5 to FC9/29 (FCC0)		S5/5 to FC9/29 (FCC1)	
S0/6 to FC1/30 (FCC0)		S1/6 to FC1/30 (FCC1)		S2/6 to FC5/30 (FCC0)		S3/6 to FC5/30 (FCC1)		S4/6 to FC9/30 (FCC0)		S5/6 to FC9/30 (FCC1)	
S0/7 to FC1/31 (FCC0)		S1/7 to FC1/31 (FCC1)		S2/7 to FC5/31 (FCC0)		S3/7 to FC5/31 (FCC1)		S4/7 to FC9/31 (FCC0)		S5/7 to FC9/31 (FCC1)	
S0/8 to FC2/28 (FCC0)		S1/8 to FC2/28 (FCC1)		S2/8 to FC6/28 (FCC0)		S3/8 to FC6/28 (FCC1)		S4/8 to FC10/28 (FCC0)		S5/8 to FC10/28 (FCC1)	
S0/9 to FC2/29 (FCC0)		S1/9 to FC2/29 (FCC1)		S2/9 to FC6/29 (FCC0)		S3/9 to FC6/29 (FCC1)		S4/9 to FC10/25 (FCC0)		S5/9 to FC10/29 (FCC1)	
S0/10 to FC2/30 (FCC0)		S1/10 to FC2/30 (FCC1)		S2/10 to FC6/30 (FCC0)		S3/10 to FC6/30 (FCC1)		S4/10 to FC10/30 (FCC0)		S5/10 to FC10/30 (FCC1)	
S0/11 to FC2/31 (FCC0)		S1/11 to FC2/31 (FCC1)		S2/11 to FC6/31 (FCC0)		S3/11 to FC6/31 (FCC1)		S4/11 to FC10/31 (FCC0)		S5/11 to FC10/31 (FCC1)	
S0/12 to FC3/28 (FCC0)		S1/12 to FC3/28 (FCC1)		S2/12 to FC7/28 (FCC0)		S3/12 to FC7/28 (FCC1)		S4/12 to FC11/28 (FCC0)		S5/12 to FC11/28 (FCC1)	
S0/13 to FC3/29 (FCC0)		S1/13 to FC3/29 (FCC1)		S2/13 to FC7/29 (FCC0)		S3/13 to FC7/29 (FCC1)		S4/13 to FC11/29 (FCC0)		S5/13 to FC11/29 (FCC1)	
S0/14 to FC3/30 (FCC0)		S1/14 to FC3/30 (FCC1)		S2/14 to FC7/30 (FCC0)		S3/14 to FC7/30 (FCC1)		S4/14 to FC11/30 (FCC0)		S5/14 to FC11/30 (FCC1)	
S0/15 to FC3/31 (FCC0)		S1/15 to FC3/31 (FCC1)		S2/15 to FC7/31 (FCC0)		S3/15 to FC7/31 (FCC1)		S4/15 to FC11/31 (FCC0)		S5/15 to FC11/31 (FCC1)	

8+2 Software Configuration (24 S2 Fabric Cards)

An explicit admin configuration is required to specify an ordered list of S2 connections assigned for a plane. Each S2 connection is specified as an instance. The instances are contiguous, starting from 0.

```
controller fabric plane 0
instance 0
location F0/FC0
instance 1
location F0/FC1
instance 2
location F0/FC2
instance 3
location F0/FC3
```

```
controller fabric plane 1
instance 0
location F1/FC0
instance 1
location F1/FC1
instance 2
location F1/FC2
instance 3
location F1/FC3
```

```
controller fabric plane 2
instance 0
location F0/FC4
instance 1
location F0/FC5
instance 2
location F0/FC6
instance 3
location F0/FC7
```

```
controller fabric plane 3
instance 0
location F1/FC4
instance 1
location F1/FC5
instance 2
location F1/FC6
instance 3
location F1/FC7
```

```
controller fabric plane 4
instance 0
location F0/FC8
instance 1
location F0/FC9
instance 2
location F0/FC10
instance 3
location F0/FC11
```

```
controller fabric plane 5
instance 0
location F1/FC8
instance 1
location F1/FC9
instance 2
location F1/FC10
instance 3
location F1/FC11
```

