Connector Pin Assignments

This appendix lists the connector pin assignments for the Cisco Content Delivery Engines.

Serial Console-Interface Connector Pin Assignments

The serial console-interface connector is a 9-pin, RS-232 D-type, DTE connector. A null modem cable is required to connect a workstation running the Linux or Windows operating system. Table B-1 lists the pin assignments for the serial console interface-connector.

Table B-1 RS-232 Connector Pin Assignments

Description	Pin	I/O	Signal Name
Data carrier detect; input	1	In	DCD
Receive data; input	2	In	RXD
Transmit data; output	3	Out	TXD
Data terminal ready; output	4	Out	DTR
Interface signal ground	5	—	GND
Data set ready; input	6	In	DSR
Ready to send; output	7	Out	RTS
Clear to send; input	8	In	CTS
Ring indicator; input	9	In	RI

Table B-2 RJ-45 Connector Pin Assignments

Description	Pin	I/O	Signal Name
Request to Send; input	1	In	RTS
Data Terminal Ready; output	2	Out	DTR
Transmit data; output	3	Out	TXD

Table B-2 RJ-45 Connector Pin Assignments (continued)

Description	Pin	I/O	Signal Name
Interface signal ground	4	—	GND
Interface signal ground	5	—	GND
Receive Data; input	6	In	RXD
Ready to send; output	7	Out	RTS
Data Set Ready; input	8	In	DSR
Clear to Send; input	9	In	CTS

Serial Port Connector

The CDEs have one standard serial port connector located on the back of the device.

Note The CDE280 Engine uses a KVM console or CIMC virtual console. For more information on the KVM console, see the "KVM Console" section on page B-3

Figure B-1 shows the pin number assignments for the 9-pin, male D-shell serial port connector on the back of the device. These pin number assignments conform to the industry standard for RS-232 communications.

Figure B-1 Serial Port Connector

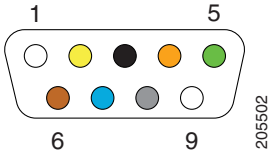


Table B-3 provides the RJ-45-to-DB-9 pinout information for the interconnections between the terminal server and a CDE.

Table B-3 RJ-45 Connector to DB-9 Pinout

Signal Name/ Function	RJ-45 Pin	RJ-45	DB-9 Pin	Signal Name/ Function
TXD	6	Yellow	2	RXD
RXD	3	Black	3	TXD
DSR	2	Orange	4	DTR
GND	5	Green	5	GND
DTR	7	Brown	6	DSR
RTS	1	Blue	7	CTS
CTS	8	Slate/Grey	8	RTS
GND	4	Red	—	GND

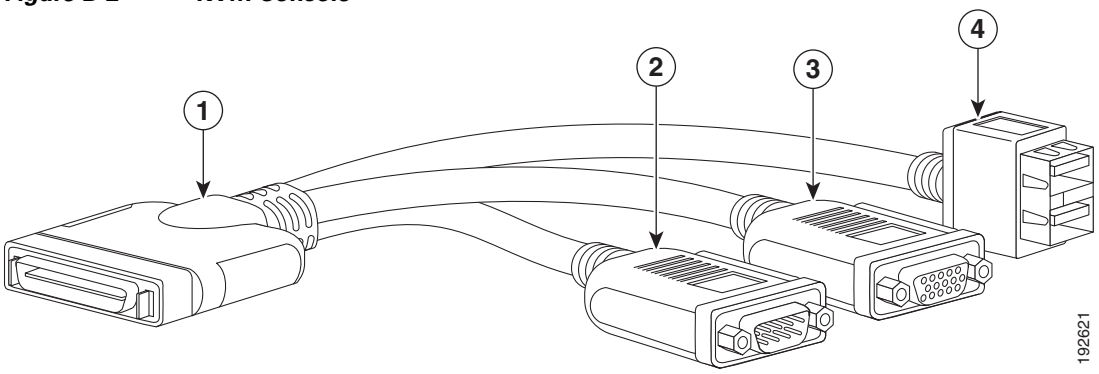
Table B-3 RJ-45 Connector to DB-9 Pinout

Signal Name/ Function	RJ-45 Pin	RJ-45	DB-9 Pin	Signal Name/ Function
—	—	White	—	—
—	—	Purple	—	—

KVM Console

The KVM cable provides a connection into the server, providing a DB9 serial connector, a VGA connector for a monitor, and dual USB 2.0 ports for a keyboard and mouse. With this cable, you can create a direct connection to the operating system and the BIOS running on the server.

Figure B-2 KVM Console



1	Connector (to server front panel)	3	VGA connector (for a monitor)
2	DB-9 serial connector	4	Two-port USB 2.0 connector (for a mouse and keyboard)

Ethernet Connector Pin Assignments

The Ethernet connector is an 8-pin, modular RJ-45 connector. Table B-4 through Table B-6 list the Ethernet connector pin assignments.

Table B-4 Ethernet Connector Pin Assignments for T568A

RJ-45 Pin	Wire Color (T568A)	Wire Diagram (T568A)	10BASE-T 100BASE-T	1000BASE-T Signal
1	White/Green		Transmit+	BI_DA+
2	Green		Transmit–	BI_DA–
3	White/Orange		Receive+	BI_DB+
4	Blue		Unused	BI_DC+

Table B-4 Ethernet Connector Pin Assignments for T568A

RJ-45 Pin	Wire Color (T568A)	Wire Diagram (T568A)	10BASE-T 100BASE-T	1000BASE-T Signal
5	White/Blue		Unused	BI_DC–
6	Orange		Receive–	BI_DB–
7	White/Brown		Unused	BI_DD+
8	Brown		Unused	BI_DD–

Table B-5 Ethernet Connector Pin Assignments for T568B

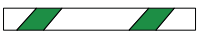
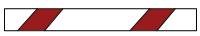
RJ-45 Pin	Wire Color (T568B)	Wire Diagram (T568B)	10BASE-T 100BASE-T	1000BASE-T Signal
1	White/Orange		Transmit+	BI_DA+
2	Orange		Transmit–	BI_DA–
3	White/Green		Receive+	BI_DB+
4	Blue		Unused	BI_DC+
5	White/Blue		Unused	BI_DC–
6	Green		Receive–	BI_DB–
7	White/Brown		Unused	BI_DD+
8	Brown		Unused	BI_DD–

Table B-6 RJ-45 Crossover Cable Pin Assignments for T568B

RJ-45 Pin End 1	Wire Color	Diagram End 1	RJ-45 Pin End 2
1	White/Orange		3
2	Orange		6
3	White/Green		1
4	Blue		7
5	White/Blue		8
6	Green		2
7	White/Brown		4
8	Brown		5

Ethernet Port Connector

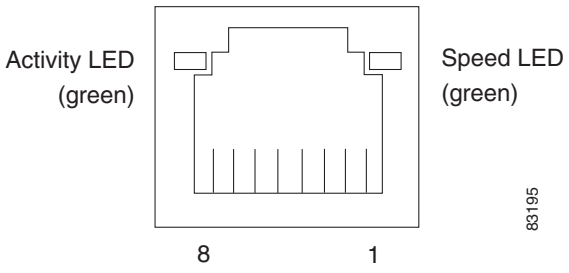
The CDEs come with an integrated dual-port Ethernet controller. This controller provides an interface for connecting to 10-Mbps, 100-Mbps, or 1000-Mbps networks; it provides full-duplex (FDX) capability, which enables simultaneous transmission and reception of data on the Ethernet LAN.

To access the Ethernet port, connect a Category 3, 4, or 5 unshielded twisted-pair (UTP) cable to the RJ-45 connector on the back of the device.

Note The 100BASE-TX/1000BASE-TX Ethernet standard requires that the cabling in the network be Category 5 or higher.

Figure B-3 shows the pin number assignments for the Ethernet RJ-45 port.

Figure B-3 RJ-45 Ethernet Port Connector



Fiber Connector Type

The fiber connector type used to connect to the SE dual-fiber NIC cards is the GLC-SX-MM.

Note If you are using a TenGigabit network interface, you must use the Intel Transceiver Twinax cable.

Cable Pin Assignments

Figure B-4 through Figure B-6 show the pin assignments for the cable connection for an RS-232 null modem, RJ-45 straight-through cable, and RJ-45 crossover cable, respectively.

Figure B-4 Pin Assignments for RS-232 Null Modem

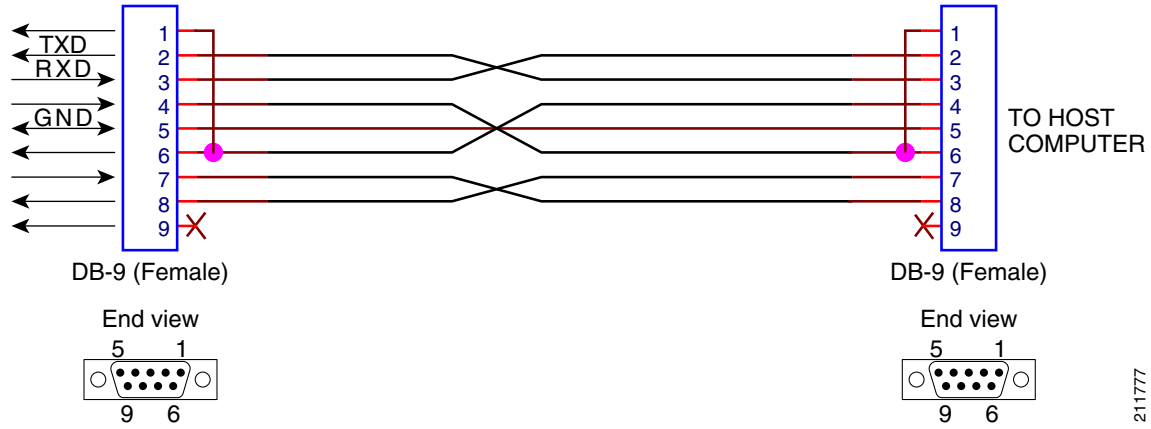


Figure B-5 Pin Assignments and Wiring for an RJ-45 Straight-Through Cable

Figure B-6 Pin Assignments and Wiring for an RJ-45 Crossover Cable