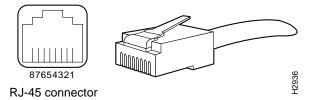
## **RJ-45 Cables**

Cisco products use the following three types of RJ-45 cables:

- Straight-through
- Crossover
- Rolled

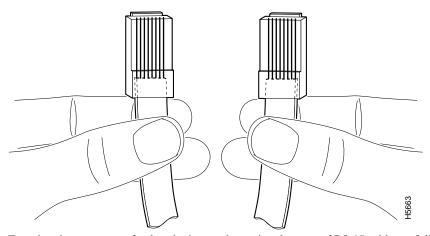
Cisco does not provide these cables; they are widely available from other sources.

Figure 8-43: RJ-45 Cable



To identify the RJ-45 cable type, hold the two ends of the cable next to each other so you can see the colored wires inside the ends, as shown in the following figure.

Figure 8-44: RJ-45 Cable Identification



Examine the sequence of colored wires to determine the type of RJ-45 cable, as follows:

- Straight-through the colored wires are in the same sequence at both ends of the cable.
- Crossover the first (far left) colored wire at one end of the cable is the third colored wire at the other end of the cable.
- Rolled the colored wires at one end of the cable are in the reverse sequence of the colored wires at the other end of the cable.

Table 8-8: RJ-45 Straight-Through (Ethernet) Cable Pinouts

Signal	Pin	Pin	Signal
Tx+	1	1	Tx+
Tx-	2	2	Tx-
Rx+	3	3	Rx+
_	4	4	-
_	5	5	-

Signal	Pin	Pin	Signal
Rx-	6	6	Rx-
_	7	7	_
_	8	8	_

Table 8-9: RJ-45 Crossover (Ethernet) Cable Pinouts

Signal	Pin	Pin	Signal
Tx+	1	3	Rx+
Tx-	2	6	Rx-
Rx+	3	1	Tx+
_	4	4	-
_	5	5	-
Rx-	6	2	Tx-
_	7	7	_
_	8	8	_

Table 8-10: RJ-45 Rolled (Console) Cable Pinouts

Signal	Pin	Pin	Signal
_	1	8	_
_	2	7	_
_	3	6	_
_	4	5	_
_	5	4	_
_	6	3	_
_	7	2	_
_	8	1	_