



# Identifying Loopback Plugs

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CCIE #4923



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CCIE Routing & Switching



# Video Overview

- 4.10 Identify the different loop-back plugs

# Loopback Testing...what problem solved?

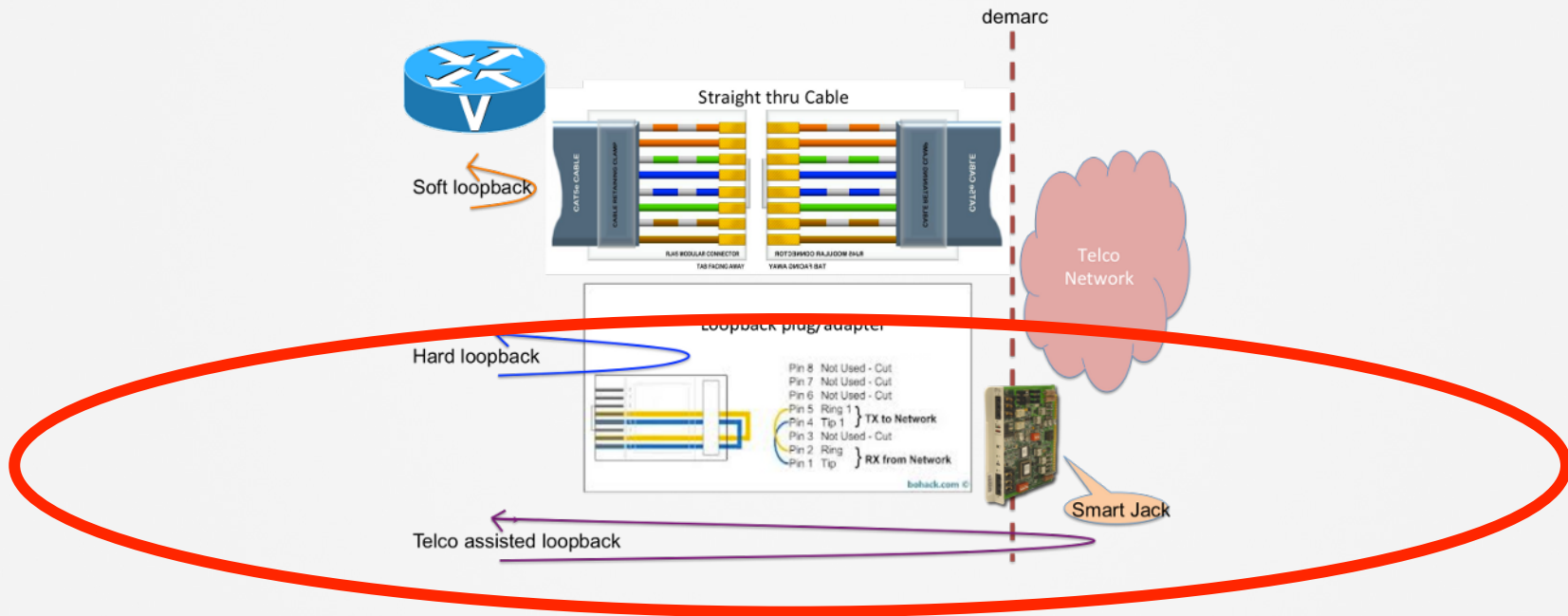
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▶ Sometimes troubleshooting line errors requires answering the following questions:

- Is there a problem with my local NIC?
- Is the problem with the cable connected to my NIC?
- Is the problem with the Telco's line/equipment?

▶ Loopback testing can help answer these questions.

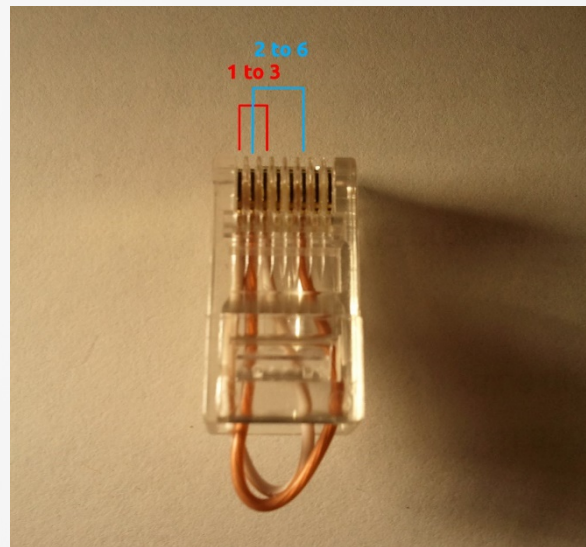
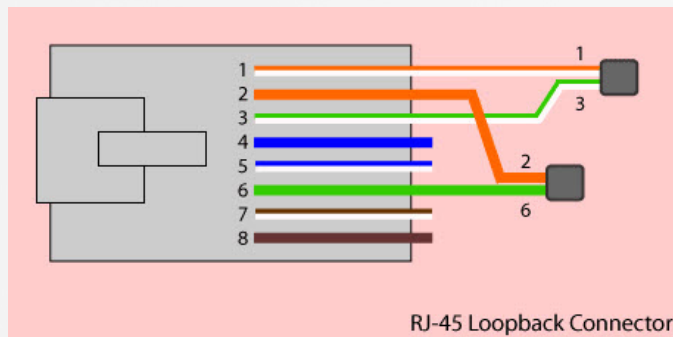
# Types of Loopback Tests



# Types of Loopback Plugs – Ethernet RJ45

## ▷ Ethernet

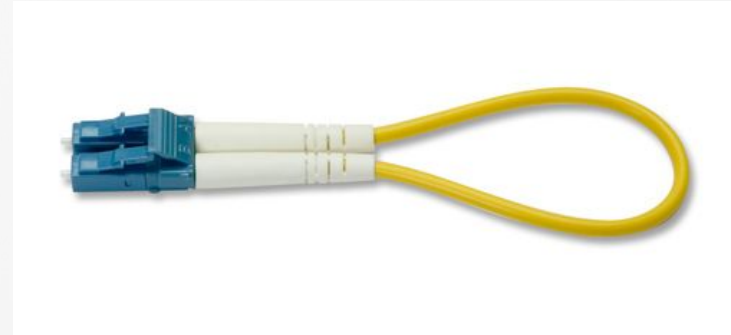
- RJ45 Loopback Plugs



# Types of Loopback Plugs – Ethernet Fiber

## ▷ Ethernet - Fiber

- Ensure fiber is correct type (SMF or MMF)



# Types of Loopback Plugs – T1

- T1 (RJ-48c) Loopback Plugs

## How To Make A Simple Loopback Plug



### RJ-48C Wiring

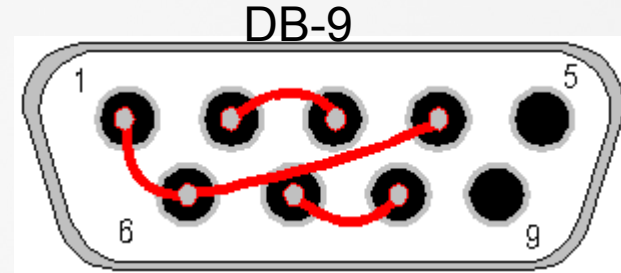
- |       |                |
|-------|----------------|
| Pin 8 | Not Used - Cut |
| Pin 7 | Not Used - Cut |
| Pin 6 | Not Used - Cut |
| Pin 5 | Ring 1         |
| Pin 4 | Tip 1          |
| Pin 3 | Not Used - Cut |
| Pin 2 | Ring           |
| Pin 1 | Tip            |
- } TX to Network
- } RX from Network





# Types of Loopback Plugs – RS-232

- RS-232 comes in many form-factors:



DB-25

