

Network Troubleshooting Tools



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Overview



Crimper

Cable Stripper

Tone generator and toner probe

Cable Tester

Loopback plug

Punchdown tool

Network tap

Wi-Fi Analyzer



Network Troubleshooting Tools



Crimper



Making your own ethernet connections

- **Cutting the cable at exactly the required length**

Presser connector on the cable jacket

- **Ensures metal from connector touches copper wires**
- **Ensures connect won't easily pull off**

Cable Stripper

Used for removal of protective coating



Tone Generator and Probe



Find two ends of a cable

One end to a tone generator

- Will create a sound on the wire**

Probe on the other end

- Will hear sound when very close to it**

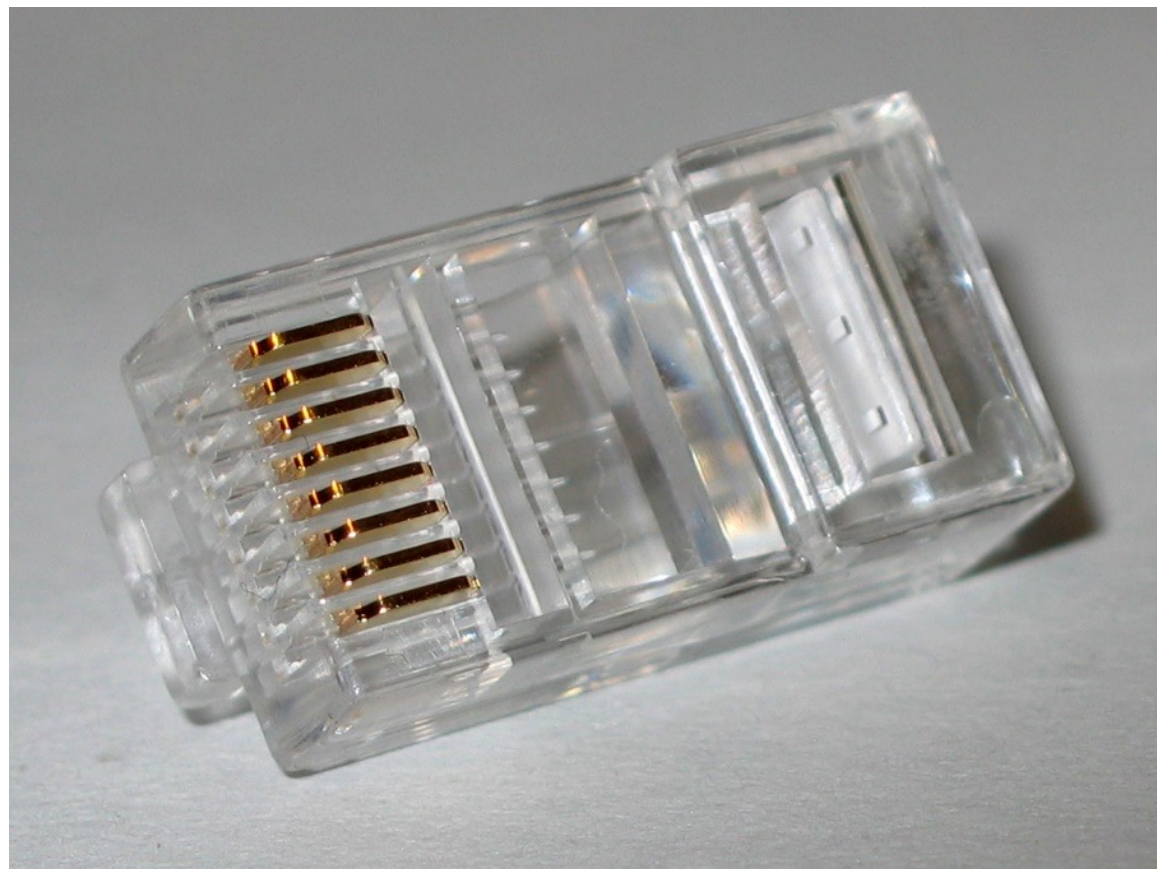
Cable Tester

Validates networking cables are well connected

Interference & signal loss measurement



Loopback Plug



Useful when trying to troubleshoot a physical interface

“Fakes” that a computer is being connected to a network

Will send back whatever you send on it

Punchdown Tool

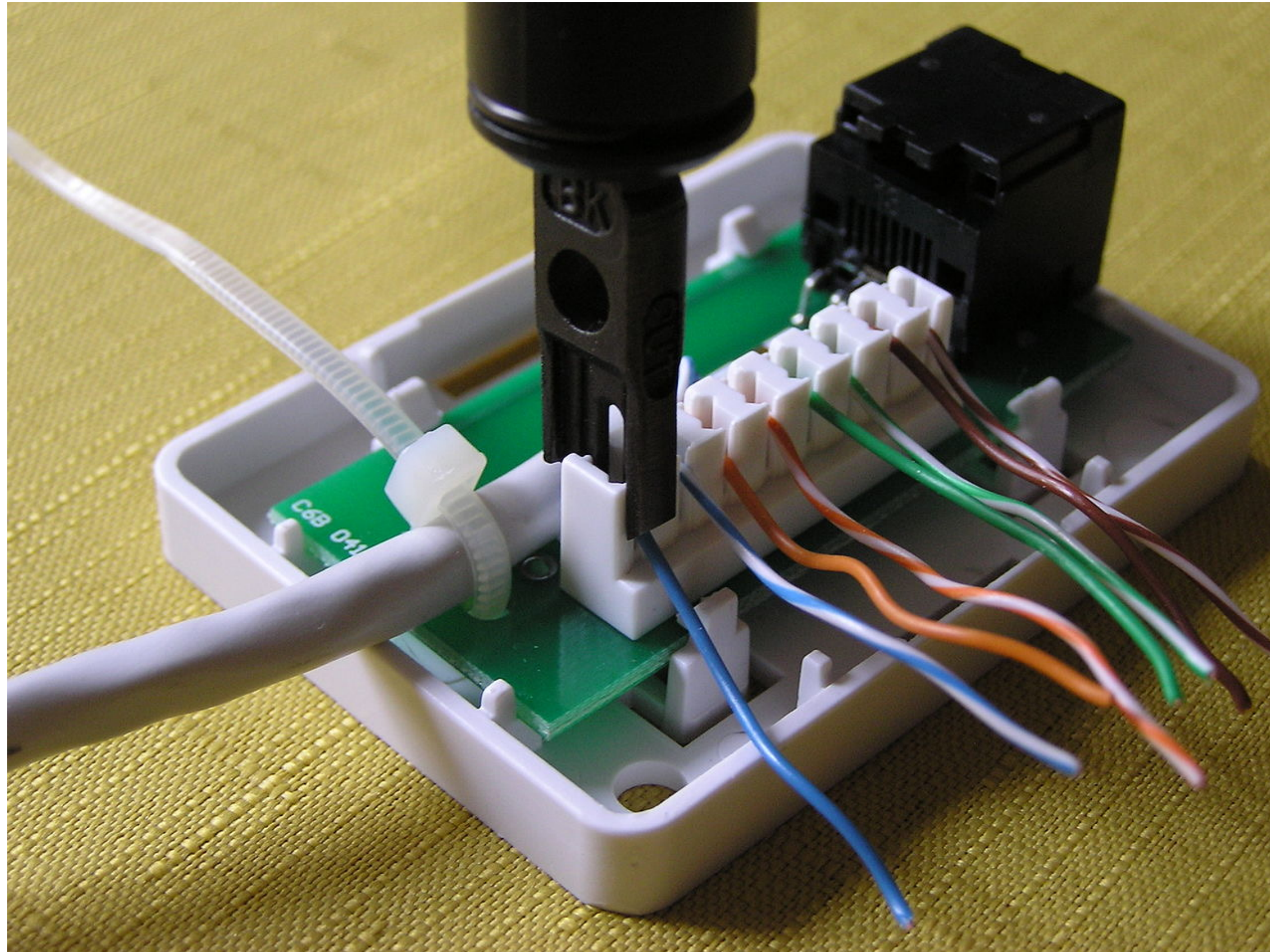


Used with patch panels

Physically connect wire to connectors

Cuts down excess wire

Punchdown Tool



Test Access Point / Terminal Access Point

Connects directly to cabling infrastructure

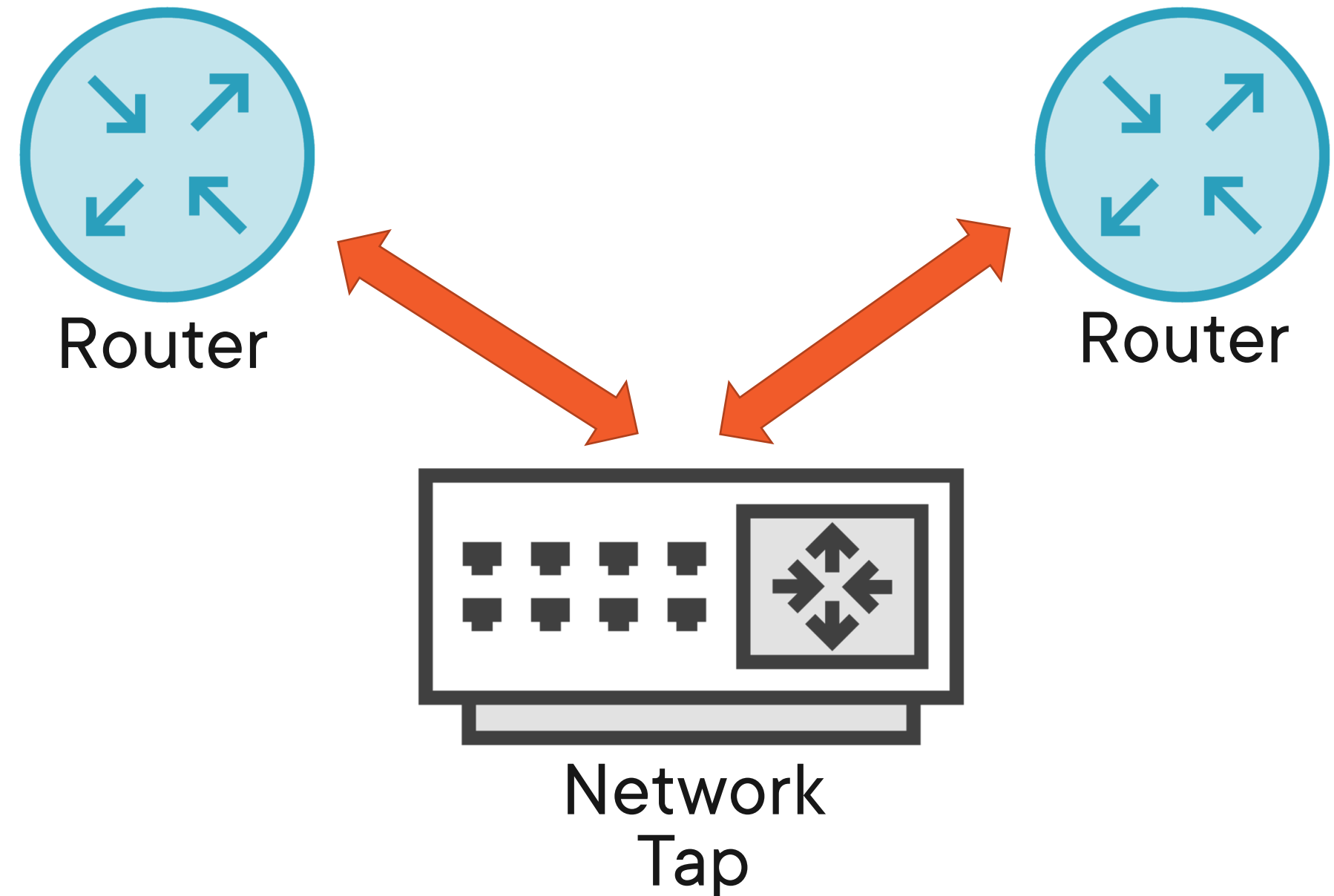
Splits or copies packets

Analysis

Security

Network management

Network Tap



Wi-Fi Analyzer



Either hardware or software

Show signal strength, interference

Allows for network optimization



Conclusion



Crimper

Cable Stripper

Tone generator and probe

Cable Tester

Loopback plug

Punchdown tool

Network tap

Wi-Fi Analyzer



Up Next:

Install and Configure a Basic Home and Small
Business Network

