

Cisco CCNA (200-301)

Episode Title: Identifying Common Interface and Cable Issues

Learner Objectives: Identify network interfaces and cabling issues.

Description: You will learn how to identify troubling connectivity issues are directly related to physical interface or cabling.

Questions:

H: What do you mean when you say there are interface issues and cabling issues?

easier to show: -PL: show ip interface g0/0 - status 4 combo

-maybe B-roll of lights on a NIC flashing and steady.

H: Ok, so what causes the interfaces to be anything different from "up-up"

Let me show you some detail from interface output show command notice collisions, errors, mismatch duplex, and speed. 2 of these are cable related issues and 1 or 2 are interface related issues.

H: What is an example of a collision and why is this a cabling issue?

Collisions occur when data on the cable happens to be sent exactly at the same time or on same frequency. key here is sent. It is the only place for data collisions to occur.

H: how about errors, what causes these the interface or the cabling?

This is the tricky one...because I can send a corrupted data packet.Errors are received, can be caused anything ranging from high interference or improper cable termination, broken conductors in the cable.

H: So are Duplex and Speed issues definitely interface issues?

yes, let me explain.

- Mismatch duplex - end to end issue. sending and receiving are not setup properly
- speed issue - interface issue on both ends. electrical differences not caused by cabling but port.

Endnote, External, and etc.

- Objective: 1.4
- Exam 200-301 objectives
- Practice Labs