# Transport Layer (process to process delivery):

**Process-to-process delivery** refers to the mechanism that ensures data is delivered **from a specific process on one device to a specific process on another device** across a network.

**In Simple Terms:**

It’s not enough to just get data from one computer to another (host-to-host delivery). We need to make sure that the data reaches the **right application** (or process) running on the destination computer.

**Example:**

* Suppose you're using a web browser (like Chrome) on your computer.
* You visit a website like www.example.com.
* Your computer connects to the web server (host-to-host delivery).
* But on that server, there are many processes running (email server, file server, web server, etc.).
* **Process-to-process delivery** ensures your request goes to the **web server process**, not the email server.

**How It's Achieved:**

* The **Transport Layer** (like TCP or UDP in the TCP/IP model) is responsible for process-to-process delivery.
* It uses **port numbers** to identify processes.
  + For example:
    - Port 80 = HTTP (web server)
    - Port 25 = SMTP (email server)
* Each process is bound to a specific port number.

**Summary:**

* **Process-to-process delivery = host-to-host delivery + correct application targeting**
* It ensures the right data reaches the right application (process) at the destination.