# VII. Port Binding

**What is a port? What is a Unix socket?**

- **IP sockets** (especially TCP/IP sockets) are a mechanism allowing communication between processes over the **network**. In some cases, you can use TCP/IP sockets to talk with processes running on the same computer (by using the loopback interface, a.k.a. 127.0.0.1).

- A **Unix socket** is an **inter-process** communication mechanism that allows bidirectional data exchange between processes running on the **same machine**.

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**Ports vs. Unix Sockets**

- **Unix domain sockets** know that they're executing on the **same system**, so they can avoid some checks and operations (like routing); which makes them **faster and lighter** than IP sockets.

- If you plan to communicate with processes on the **same host,** this is a better option than **IP sockets**.

- This requires **adding a webserver** library to the app by using dependency declaration, such as Tornado for Python, Thin for Ruby, or Jetty for Java and other JVM-based languages to create a **port-bound IP/port-facing service**.