

Network Applications

Principals of Network Applications

- To create a **network application**, we need to write a program that runs on **different end systems**, and **communicates over a network**.
- There is a **layer of abstraction** between **network applications** and **the network**; allowing for **rapid network application development**.
- There are different **application architectures** we can use to develop **network applications**.

Client-Server Architecture

- The **client-server architecture** consists of two entities, the **client** and the **server**.
- The **server** is a **network host that is always on**, and has a **permanent IP address**.
- The **client** communicate with the **server** over a **network**, and can have a **dynamic IP address**.
- The clients do not **directly communicate**, they use the **server to communicate**.

Peer to Peer Architecture

- The **peer to peer architecture** has **no always-on server**.
- The **clients communicate directly**.