

Why is it Challenging?

- **End hosts in Internet-based systems (like clouds)**
 - Each have their own clocks
 - Unlike processors (CPUs) within one server or workstation which share a system clock
- **Processes in Internet-based systems follow an *asynchronous* system model**
 - No bounds on
 - Message delays
 - Processing delays
 - Unlike multi-processor (or parallel) systems which follow a *synchronous* system model