



## State Diagrams

### EE 122: Intro to Communication Networks

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<http://inst.eecs.berkeley.edu/~ee122/>

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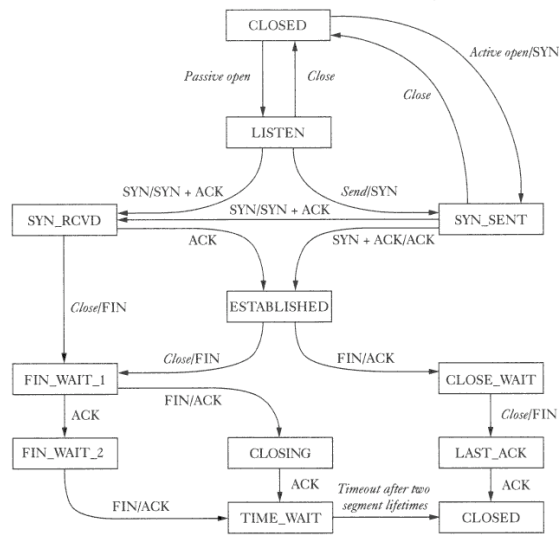
1

## State Diagrams

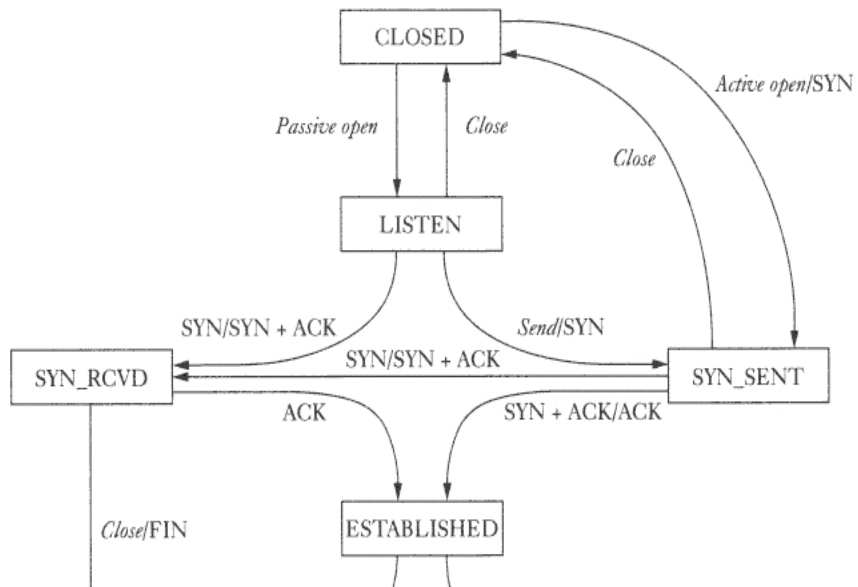
- For complicated protocols, operation depends critically on current mode of operation
- Important tool for capture this: **state diagram**
- At any given time, protocol endpoint is in a particular state
  - Dictates its current behavior
- Endpoint transitions to other states on **events**
  - Interaction with lower layer
    - o Reception of certain types of packets
  - Interaction with upper layer
    - o New data arrives to send, or received data is consumed
  - Timers

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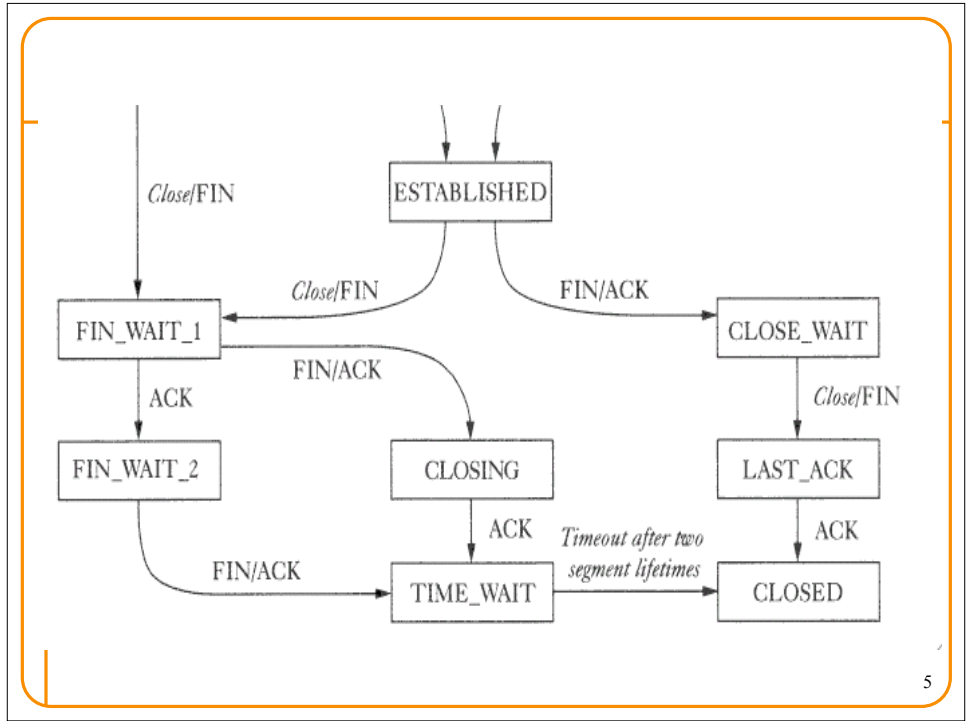
# TCP State Diagram



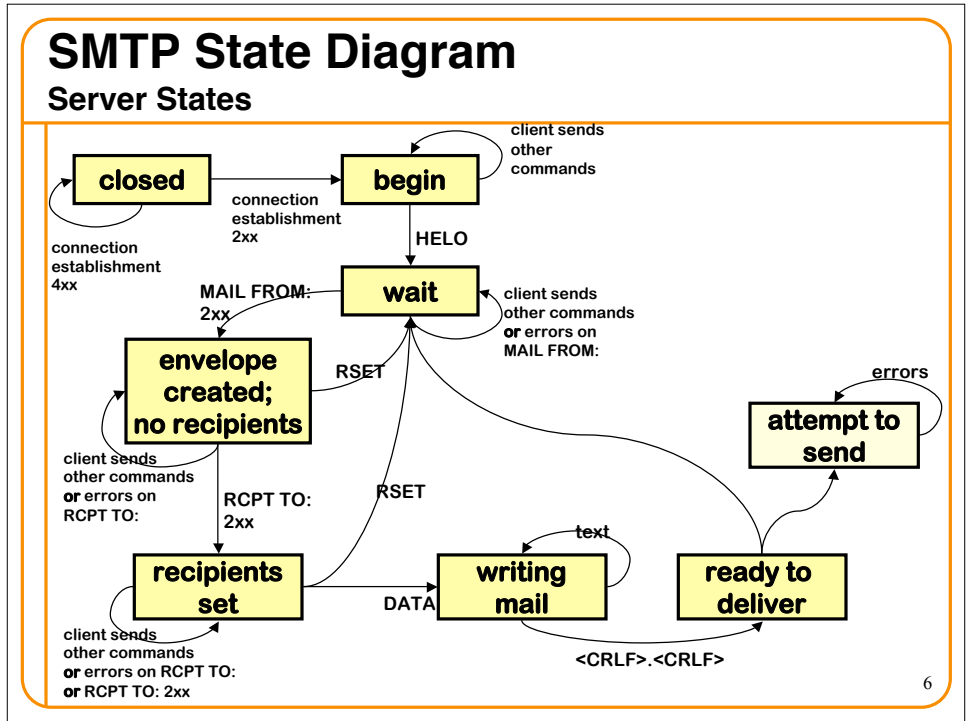
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# SMTP State Diagram

## Command States

