

## Protocol implementation

- Depends on *structure* and *environment*
- Structure
  - Partitioning of functionality between user and kernel
  - Separation of layer processing (interface)
- Environment
  - Data copy cost
  - Interrupt overhead
  - Context switch time
  - Latency in accessing memory
  - Cache effects





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## Rules of thumb

- Optimise common case
- Watch out for bottlenecks
- Fine tune inner loops
- Choose good data structures
- Beware of data touching
- Minimize number of packets sent
- Send largest packets possible
- Cache hints
- Use hardware
- Exploit application properties

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