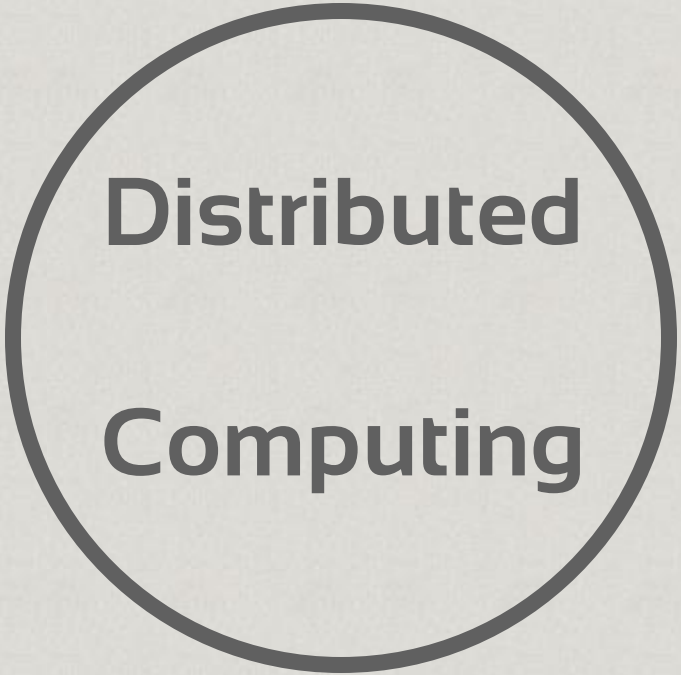

NETTY

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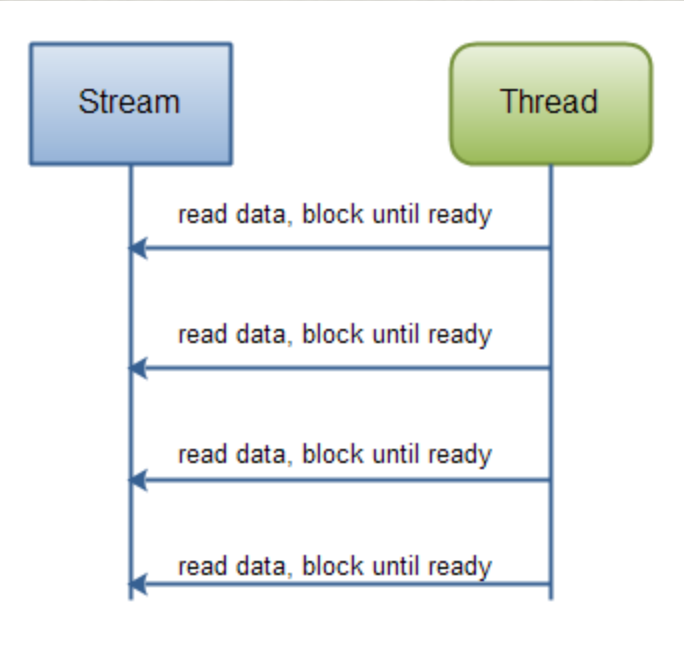
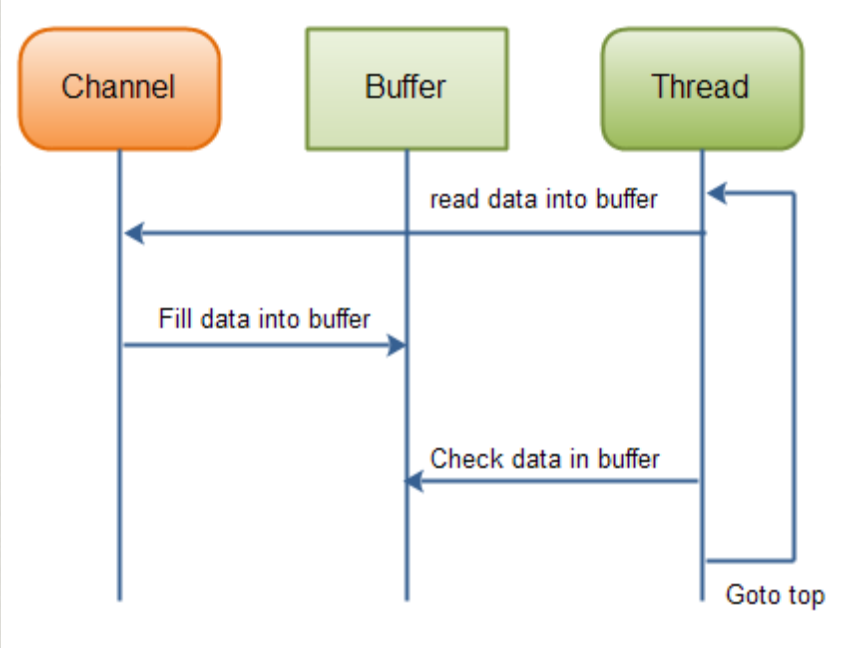
Java IO vs NIO





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http://netty.io

The ASYNC Event-driven network application framework

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Netty

- “Netty is NIO client/sever framework which enables quick and easy development of network applications and services.”
- It greatly simplifies and streamlines network programming such as TCP and UDP socket server.
- Features:
  - Asynchronous.
  - Unified API.
  - High Performance.
  - Buffer Pooling.
  - Gathering / Scattering. (Read and write into multiple buffers)

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Asynchronous and none blocking by nature

- I/O operations don't block at all!
- Share one thread.

- The main advantage of Netty over simply reading from and writing to sockets using streams is that Netty supports non-blocking, asynchronous I/O (using Java's NIO API); when you use streams to read and write from sockets (and you start a new thread for each connected accepted from a ServerSocket) you are using blocking, synchronous I/O.

Supported Transport Protocols

- TCP.
- UDP.
- UDT.
- Serial.
- SCTP.

Ease of use

- Well-documented Javadoc, user guide and examples
- No additional dependencies, JDK 5 (Netty 3.x) or 6 (Netty 4.x) is enough

Performance

- Better throughput, lower latency(response time).
- Less resource consumption.
- Minimized unnecessary memory copy.

Security

- Complete SSL/TLS and StartTLS support

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Simple Chatting Sever/Client using NETTY

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QUESTIONS

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THANK YOU!

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