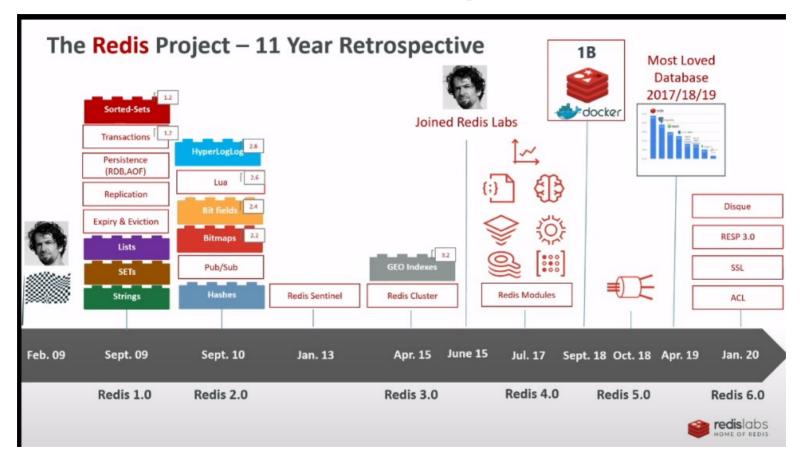
Redis

History



Tools

CLI:

• redis-cli

iredis

redli

GUI:

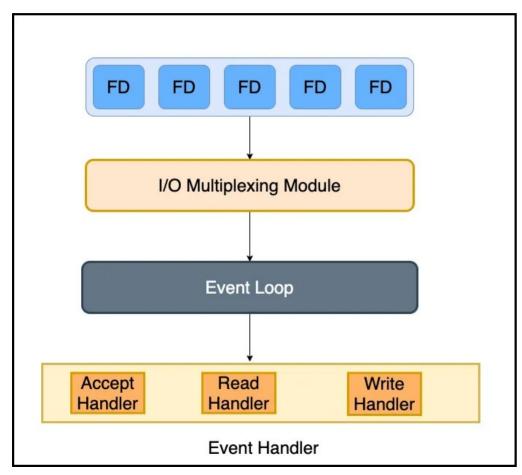
RedisInsight

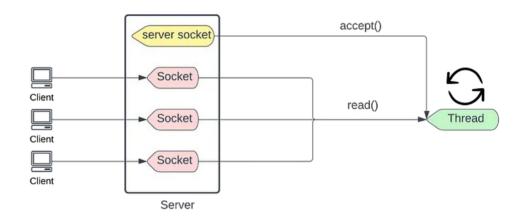
Iredis

Medis (mac)

Full list: https://redis.io/resources/tools/

Engine







100k QPS RAM-based IO Multiplexing & Single-threaded read/write IO Multiplex Socket 0.3ns Register 0.9ns L1 Cache Socket1 Socket2 Task Event Event L2 Cache 2.8ns Socket3 Queue Dispatcher Loop Socket2 12.9ns L3 Cache Socket1 Redis uses RAM. 120ns RAM Event not disk Socket3 Processors 50-150us SSD 1-10ms HDD multi-threaded single-threaded Efficient Data Structure 1. O(1) for string length query SDS String SDS header 2. Pre-allocated space (Simple Dynamic Strings) 3. Use 'free' to record free space for free 0 LinkedList future usage List length 5 **ZipList** Skip List buffer S Hash HashTable Set **IntSet** Sorted Set SkipList 6 Layered indices for quick lookup

Query language

hello world

String

011011010110111101101101

Bitmap

{23334}{6634728}{916}

Bitfield

{a: "hello", b: "world"}

Hash

[A>B>C>C]

List

{A<B<C}

Set

{A:1, B:2, C:3}

Sorted set

{A: (50.1, 0,5)}

Geospatial

01101101 01101111 01101101

Hyperlog

{id1=time1.seq((a: "foo", a: "bar")) }

Stream

https://redis.io/commands/

Inverted Index

