

**ADVANCED REDIS TECHNIQUES** 

Redis is an open source, BSD licensed, advanced **key-value store**. It is often referred to as a **data structure server** since keys can contain strings, hashes, lists, sets and sorted sets.

### THE BASICS

## 46:COUNT":902 KEY:VALUE) {"VON:COUNTER S:DOWNLOADS:

## LISTS MILK, EGG S,CEREAL,BACO N, SALT, PLATES ORANGES, LETT

## AIL: BOB@GMAI COM', PASSWOR D: 'PASSWORD'}

## SO WHAT MAKES IT DIFFERENT?

## Deep structural awareness in the **storage layer**.

# PUSH, POP, SETS, SORTED SETS, PUB/SUB, UNIONS, INTERSECT, ETC

## SO WHAT ABOUT THE COOL KIDS

RESQUE SIDEKIQ **FNORDMETRIC** VON LEADERBOARD INSTAGRAM SPOOL **TWITTER** 

## USE THE BUILT IN DATA STRUCTURES

## LPUSH mylist 'work' LPOP mylist => 'work'

hset myhash count 0
hincrby myhash count 1
hget myhash count => 1

zadd myzset 1 "jim" zadd myzset 2 "bob" zrange myzset 0 -1

# STORE ONLY WHAT YOU NEED

#### TWEETID: USERID

## THE PIPELINE FOR ROFLSCALE

```
redis.pipelined do
  redis.set('foo', 'bar')
  redis.incr('baz')
end
```

# OPTIVIZE WHAT YOU ARE STORING

#### SET user:1234 5678

## \* 3,000,000 = 21GB

HSET 'users:100' '1234' '5689'

## \*3,0000,000 = 568

hash-max-zipmap-entries 256 hash-max-zipmap-value 1024

## SHARD THE DATA

lpush 'users:20130313' 'bob'



## GETTING REALLY NERSON

setbit activeusers:20130313 231 1 setbit activeusers:20130313 102 1

## DEVOPS TIPS

## DATA TO DISK

#### save 60 1000

# REPLICATE FOR HIGH AVAILABILITY & REDUNDANCY

#### slaveof 10.0.0.3

# **USE SENTINEL FOR** AUTOMATIC FAILOVER

