

Overview of Redis / What is it?

In-memory Data Structure Store

Key-value DatabaseCache

Message Broker

Core Use Cases

Caching

Real-time Analytics

Session Management

Pub/Sub Messaging

Leaderboards and Counters

Key Features

Data Persistence Options

Rich Data Structures

High Performance and Scalability

Redis

What is Redis?

Redis vs Other Databases

Redis vs SQL/NoSQL DBs

When to choose Redis?

Getting Started with Redis

Installing Redis Locally

Using Package Managers

Pre-compiled Binaries

Using Docker

Running Redis

Starting the Server

Connecting using Redis CLI

Basic Commands / SET, GET

Core Data Structures

Strings

SETGET

INCRDECR

APPENDSTRLEN

More Commands

Common Commands

Usecases

Lists

LPUSHRPUSH

LPOPRPOP

LRANGELINDEX

LLENLMOVE

More Commands

Common Commands

Usecases

Sets

SADDSREM

SMEMBERS

SISMEMBER

SINTERSCARD

SUNIONSDIFF

More Commands

Common Commands

Usecases

Sorted Sets

ZADDZRANGE

ZRANKZREM

ZRANGEBYSCORE

ZINCRBYZCOUNT

More Commands

Common Commands

Usecases

Hashes

HSETHGET

HGETALLHDEL

HEXISTS

More Commands

Common Commands

Usecases

Basic Data Operations and Getting Keys

DELEXPIRETTL

Overview of Data Types

Strings, Lists, Sets, Hashes, Sorted Sets

First Steps

Working with Redis

Naming Conventions

Retrieval by Pattern

Expiration

Key Management

Atomicity in Redis

Pipelining

Batch Operations

MSET / MGET

Advanced Data Structures

Bitmaps

SETBITGETBIT

BITOPBITPOS

BITCOUNT

Common Commands

Usecases

HyperLogLog

PFMERGE

PFADD

PFCOUNT

Common Commands

Usecases

Streams

XADDXREAD

XRANGEXLEN

More Commands

Common Commands

Usecases

Geospatial Indexes

GEOADD

GEOSEARCH

More Commands

Common Commands

Usecases

Lua Scripting

EVALEVALSHA

Common Commands

Usecases

Transactions

WATCH

EXEC

MULTI

Common Commands

Optimistic Locking

Pub/Sub

SUBSCRIBE

UNSUBSCRIBE

PUBLISH

More Commands

Common Commands

Usecases

Persistence Options

No Persistence Option

How RDB Works?

Configuring Save Interval

Usecases / Best Practices

Snapshotting (RDB)

How AOF Works?

AOF rewrite & compaction

Truncation / Corruption

Usecases

Append-Only File (AOF)

RDB vs AOF Tradeoffs

Hybrid Persistence

Choosing Right Strategy

Replication / HA

Replication Basics

Redis Sentinel

Clustering

Security

Authentication

Network Security

SSL/TLS Encryption

Monitoring / Optimization

INFOMONITOR

Built-in Tools

RedisInsight

RedisCommander

3rd Party Tools

Managing Redis in Production

redis.conf

Important Configurations

Backup and Recovery

RDB and AOF Files

Disaster Recovery

Upgrading Redis

Minimizing Downtimes

Redis Enterprise

Active-Active geo Distribution

Redis on Flash

Security and Compliance

Enterprise Features

When to consider enterprise?

Continue Learning with following relevant tracks

MongoDB

PostgreSQL

SQL

TONIC

Synthetic data from scratch

Generate synthetic data

No production data needed!

Start from a varie (schema, sample, etc)

PARTNER CO