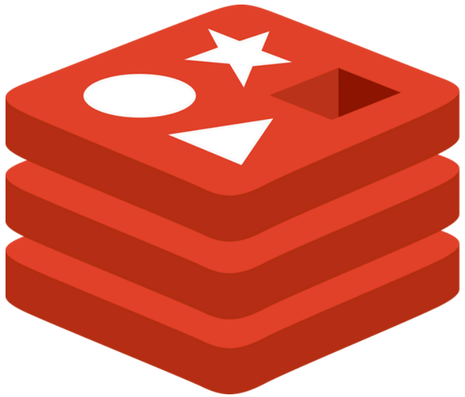
Introduction to



redis

Tom Freret, Youssouf Oumar, Aymane Ouraq

21 Nov 2025

Introducing Redis

First release 2009

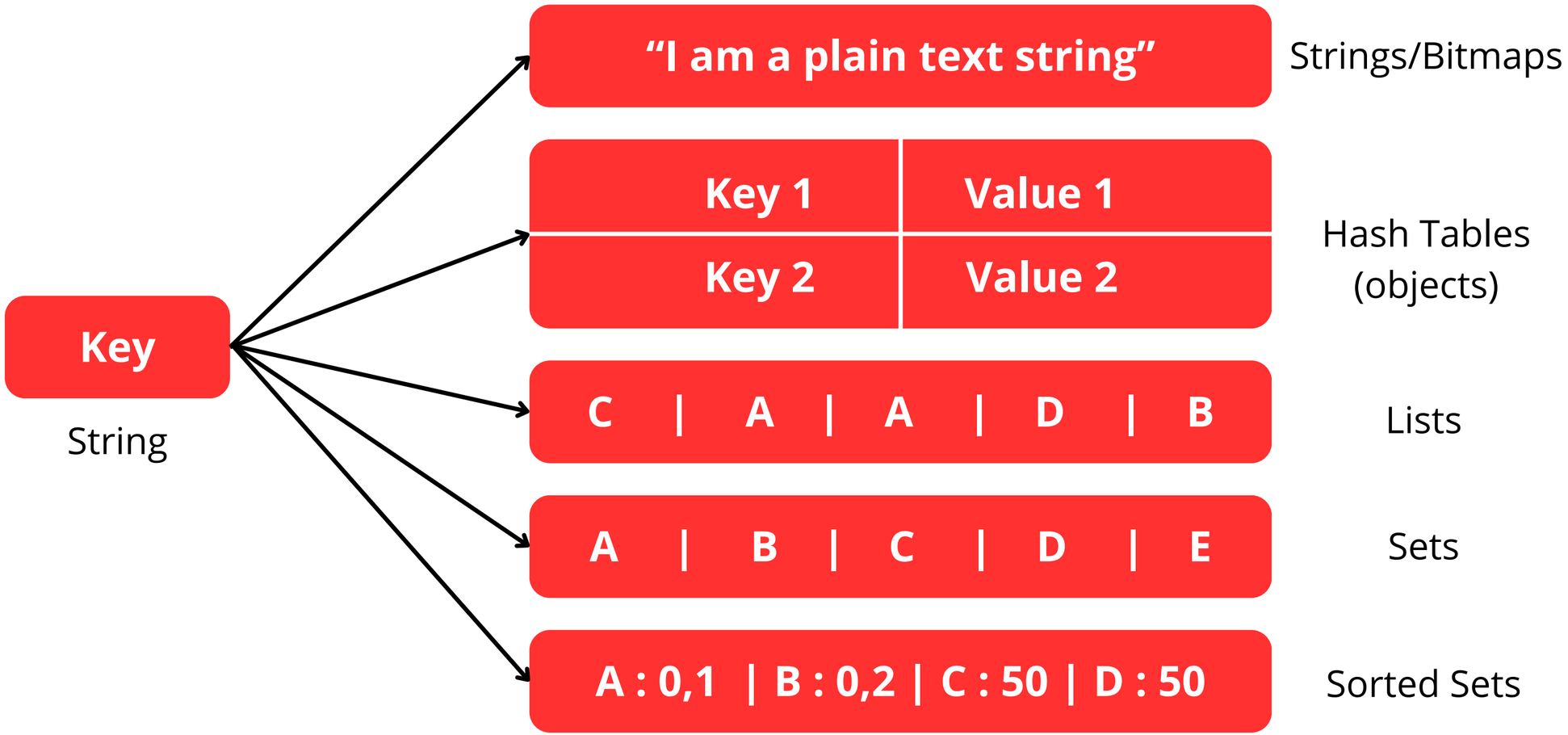
Redis Ltd.

An open-source **in-memory** database project implementing a distributed in-memory key-value store with optional durability.

NoSQL **Key/Value** store
Supports multiple data structures

Features like
- Transactions
- Pub/Sub
- Scalability / availability options
- Time to live for entities

Key - { Data Structures }



* Other data types are available through modules: Streams, JSON, and TimeSeries.

Why Redis ?

Ultra-fast (in-memory performance)

Scalable & distributed

Flexible data structures

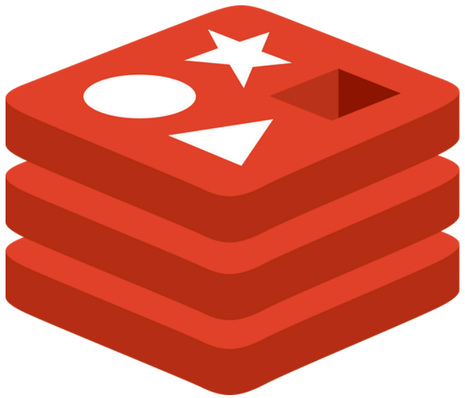
Versatile use cases

Simple & lightweight

Built-in retention & TTL

Typical uses of Redis

- Cache database query results
- Cache entire webpages (e.g. Wordpress)
- Use for HTTP session store
- Cache logins / cookies
- Buffer (queue, temporary storage, burst protection)



redis

Tom Freret, Youssouf Oumar, Aymane Ouraq

21 Nov 2025