

Redis Complete Guide with Examples

Basic Redis Commands

PING

Checks if the Redis server is running.

Example:

```
PING
```

SET key value

Stores a value under a key.

Example:

```
SET user:1 'Alice'
```

GET key

Retrieves the value of a key.

Example:

```
GET user:1
```

DEL key

Deletes a key.

Example:

```
DEL user:1
```

EXISTS key

Checks if a key exists.

Example:

```
EXISTS user:1
```

EXPIRE key seconds

Sets a timeout on a key.

Example:

```
EXPIRE session 60
```

TTL key

Checks remaining TTL of a key.

Example:

```
TTL session
```

Intermediate Redis Commands

MSET key1 value1 key2 value2

Sets multiple keys at once.

Example:

```
MSET name Alice age 25
```

MGET key1 key2

Gets multiple values at once.

Example:

```
MGET name age
```

INCRBY key increment

Increments a value by a specific amount.

Example:

```
INCRBY counter 5
```

LPOP list

Removes and returns the first element from a list.

Example:

```
LPOP mylist
```

ZRANGE zset start stop

Gets elements from a sorted set.

Example:

```
ZRANGE leaderboard 0 -1
```

Redis Pub/Sub (Publish-Subscribe)

PUBLISH channel message

Publishes a message to a channel.

Example:

```
PUBLISH news 'Breaking News: Market up 5%'
```

SUBSCRIBE channel

Subscribes to a channel.

Example:

```
SUBSCRIBE news
```

UNSUBSCRIBE channel

Unsubscribes from a channel.

Example:

```
UNSUBSCRIBE news
```

PSUBSCRIBE pattern

Subscribes to channels matching a pattern.

Example:

```
PSUBSCRIBE news*
```

PUBSUB CHANNELS

Lists active Pub/Sub channels.

Example:

```
PUBSUB CHANNELS
```

Advanced Redis: Transactions, Streams, and Persistence

MULTI

Starts a transaction block.

Example:

```
MULTI
```

```
SET user:1 'Alice'
```

```
SET age:1 25
```

```
EXEC
```

DISCARD

Aborts a transaction.

Example:

```
MULTI
```

```
SET user:1 'Bob'
```

```
DISCARD
```

XADD stream_key * field1 value1

Adds an entry to a stream.

Example:

```
XADD mystream * sensor temperature 22
```

XRANGE stream_key start end

Reads a range of stream messages.

Example:

```
XRANGE mystream - +
```

SAVE

Synchronously saves dataset to disk.

Example:

```
SAVE
```

BGSAVE

Asynchronously saves dataset to disk.

Example:

```
BGSAVE
```

CONFIG SET appendonly yes

Enables Append-Only File (AOF) persistence.

Example:

```
CONFIG SET appendonly yes
```