



# Redis and Redis with .NET

How to operate with Redis Databases

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## Databases

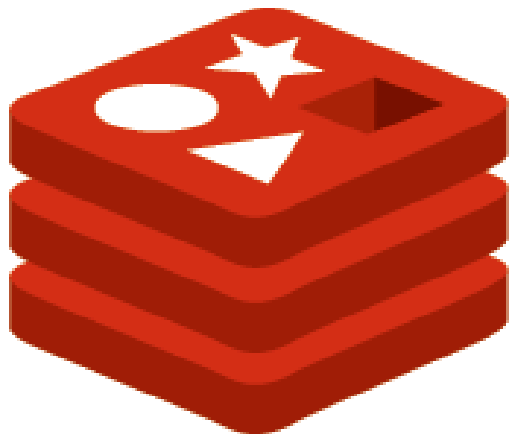
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# Redis

Ultra-Fast Data Structures Server



redis

- ◆ Redis is
  - ◆ Ultra-fast in-memory key-value data store
  - ◆ Powerful data structures server
  - ◆ Open-source software: <http://redis.io>
- ◆ Redis stores data structures:
  - ◆ Strings
  - ◆ Lists
  - ◆ Hash tables
  - ◆ Sets / sorted sets



- ◆ To install Redis on Linux/Mac OSX:
  - ◆ Download from <http://redis.io/download>
  - ◆ Run it
- ◆ To install Redis on Windows:
  - ◆ Download <https://github.com/MSOpenTech/redis>
  - ◆ Open the solution in the `msvs` folder and build it with VS
  - ◆ Or use Package manager s Chocolatey
    - ◆ <http://chocolatey.org/>

# Installing and Building a Redis Server

Live Demo

# Working with Redis and the .NET API

# Working with Redis and .NET

- ◆ Install the Redis Client of ServiceStack.Net

- ◆ Free and intuitive to use

- ◆ Run in VS console

```
Install-Package ServiceStack.Redis
```

- ◆ Then:

```
var redis = new RedisClient(host);  
var redisLogs = redis.As<Log>();  
redisLogs.Store(new Todo);  
redisLogs.GetAll()  
    .Print();
```

# Using Redis with .NET

## Live Demo



# Redis Clients

- ◆ The ServiceStack Redis API provides three different clients to work with the data:

- ◆ **IRedisNativeClient**

```
IRedisNativeClient client = new RedisClient()
```

- ◆ **IRedisClient**

```
IRedisClient client = new RedisClient()
```

- ◆ **IRedisTypedClient**

```
RedisClient client = new RedisClient()
```

# Redis Clients

## Live Demo

# Database Persistence

- ◆ Redis runs in the memory
  - ◆ That is the reason to be that fast
- ◆ Redis saves the data on the disk at a given period
  - ◆ By default:

```
save 900 1 // 1 key for 900 seconds  
save 300 10 //10 keys for 300 seconds  
save 60 10000 // 10000 keys for 60 seconds
```

# Database Persistence

## Live Demo

# Redis and Redis with .NET

Questions?

- ◆ No homework



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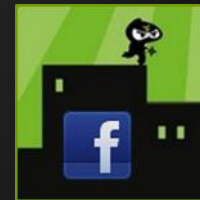
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