# MSOpenTech Redis 2.8.4 Release Notes

Welcome to the binary release of Redis from Microsoft Open Technologies, Inc.

## What is Redis?

Redis is an open source, high performance, key-value store. Values may contain strings, hashes, lists, sets and sorted sets. Redis has been developed primarily for UNIX-like operating systems.

## Porting Goals

Our goal is to provide a version of Redis that runs on Windows with a performance essentially equal to the performance of Redis on an equivalent UNIX machine.

## Differences from UNIX versions

### Networking

On UNIX all IO operations occur with file descriptors regardless of the type of IO operation. Most IO mechanisms in Windows do not use file descriptors. The approach we have taken is to unify all of Windows IO operations under a simulated file descriptor. We do not support named pipes at this time with our simulated file descriptor code.

### Fork

Redis uses the fork() UNIX system API to create a point-in-time snapshot of the data store for storage to disk. This impacts several features on Redis: AOF/RDB backup, master-slave synchronization, and clustering. Windows does not have a fork-like API available, so we have had to simulate this behavior by placing the Redis heap in a memory mapped file that can be shared with a child process. In order to control the size of this file we have added a maxheap flag. See the Redis.Windows.conf file for details on the usage of this flag. The default size of this file is equal to the size of physical memory on your target machine. If there is insufficient disk space for this file Redis will fail to start.

### Running as a Service

The UNIX version of Redis supports the –daemonize flag to in order to create terminate-and-stay resident instance. The Windows version of Redis does not support this flag. Instead new command line arguments have been added in order to integrate better with the Window Services model. Please see Redis.Windows.Conf for a description of these flags.

## How to develop for Redis

You will need a client library for accessing Redis. There are a wide variety of client libraries available as listed at <http://redis.io/clients>.