

## Silver Mobile

Getting up and running with Silver Mobile should take only a minute for a single server instance using the embedded default database. This document will cover the basics of moving beyond this default by covering such topics as configuring enterprise databases and LDAP systems, logging, and clustering.



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# 1 Getting started

## 1.1 Overview

The Silver Mobile Server is a collection of Java components running in an embedded Jetty app server instance. Start-up properties and configurations files are located in SilverMobile/conf directory. If no external database is configured in silver-mobile.properties, the default in-process hsqldb instance is used. While this is appropriate for development it should not be considered a proper production configuration.

## 1.2 Starting the Server

To run on \*nix:

```
./startup.sh
```

To stop the server on \*nix:

```
./shutdown.sh
```

To run a blocking process on \*nix with all logging piped to system:

```
./startup.sh run
```

These command on Windows become:

```
startup.bat
```

```
shutdown.bat
```

The "run" option is very useful for diagnosing problems with the system or with server-side code deployed to Silver Mobile.

The "run" option is not available on Windows since startup.bat functions the same way as "startup.sh run" on \*nix. It is recommended to run startup.bat from Windows Explorer.

## 1.3 System requirements

Java 1.6 is required. The java command should be included in the system path or in JAVA\_HOME. One GB free RAM is recommended for development. For production environments, 4 GB is recommended for 1000+ users. Actual RAM, processor speed and cluster-size requirements are highly dependent on the actual load put through the system in the form of messages, events, simultaneous user sessions, etc.

For running example scripts, Groovy 1.8 is required, although it is not required to have Groovy installed on the server running Silver Mobile Server itself.

## 1.4 Supported platforms

### 1.4.1 Server OS Support:

Operating System	Bits
Windows 2003 Server	32
Windows 2003 Server	64
Windows 7	32
Windows 7	64
Linux Red Hat Enterprise Linux 5	32
Linux Red Hat Enterprise Linux 5	64
Linux Red Hat Enterprise Linux 6	32
Linux Red Hat Enterprise Linux 6	64
Linux SuSE SLES 10	32
Linux SuSE SLES 10	64

Linux SuSE SLES 11	32
Linux SuSE SLES 11	64
MAC OS X 10.7	64

## 1.4.2 Native Client OS Support

Device Operating System	Version
iOS	5.1 or later
Android	2.2 or later

## 1.4.3 Server Browser Support

Browser	Version
Mozilla Firefox	3.6
Mozilla Firefox	latest
Google Chrome	latest
Apple Safari	latest

## 1.4.4 Client Browser Support

Browser	Version
Mozilla Firefox	3.6
Mozilla Firefox	latest
Google Chrome	latest
Apple Safari	latest
Internet Explorer	latest



## 2 Enterprise Configuration

### 2.1 Database Server

The Silver Mobile Server uses a relational database to hold information about the users and mobile apps involved in a deployment. The configuration information for the URL, driver type, username and password are found in the silver-mobile.properties file. The tables will be created automatically when first connecting with a newly configured system.

#### 2.1.1 Supported Databases

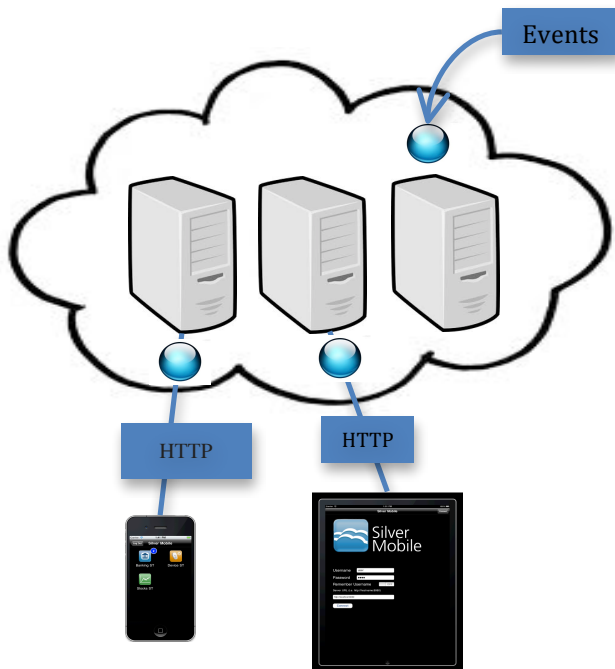
Database	Version
HSQL	included
Oracle	11g
Microsoft SQL	2005
Microsoft SQL	2008
Sybase ASE	15

### 2.2 LDAP/AD System

An LDAP server can be used to authenticate and authorize users. The bootstrap settings are found in the ldap.properties file found in SilverMobile/conf. Once this data is loaded into the system, the file becomes obsolete. Modifications made via the web interface are saved to the persistent RDBMS database.

Silver Mobile's real-time data, user sessions, and websocket connections are all clustered via Hazelcast. Hazelcast supports TCP/IP, multicast, and AWS operation. The configuration information is contained in hazelcast.xml in the

SilverMobile/conf directory. Each configuration and supporting documentation can be found in that file.



## 3 Miscellaneous

### 3.1 Logging

The log files are located in SilverMobile/logs directory. The bootstrap settings for log-level are found in system.properties under SilverMobile/conf. These settings include log level, time-to-live, and max file size (the logs are rolled over). This file is only used once – upon initial startup. The settings are subsequently saved to the configured RDBMS.

### 3.2 Shared public resources

Shared resources (like JavaScript toolkits and static images) can be placed in a directory accessible to the Jetty server. By including this directory in the System setting the security filter will allow any user to access this data without requiring explicit permission.

### 3.3 Ports and Protocols

HTTPS operation is recommended for production. Please see the appropriate Jetty guide to configure the server for HTTPS operation. To simply change the HTTP port from 8080 to 80, modify the port value in the SilverMobile/jetty/etc/jetty.xml file.

### 3.4 Authentication redirect

After installing the server, modify the SilverMobile\conf\shiro.ini file by replacing “localhost” with the appropriate server in the “shiro.loginUrl” property.