

1. Chapter 1. Installation for UNIX and Windows Environments .....	2
1.1 1.1 Basic Installation (Fresh Install) .....	2
1.2 1.2 Basic Upgrade .....	3
1.3 1.3 Advanced Installation (with MySQL as the database) .....	4

# Chapter 1. Installation for UNIX and Windows Environments

## Installation Guide (Unix and Windows)

This chapter describes basic installation on fresh system, basic upgrade and advanced installation (with MySQL as the database).

### Database Recommendations

As of v4.1, QFlex has been changed to utilize it's relational database only to store client-specific configuration data. All the realtime statistics and runtime data has been moved off relational database into blazing fast open source enterprise search platform ([Apache Solr](#)) to mainly improve performance around reporting and statistics. For this reason, it is recommended to have QFlex run it's default database (HSQLDB). Other external databases, like MySQL, SQL Server, Oracle and etc., can still be utilized instead of default database, but this will provide no additional benefits.

All the large data sets (statistics, alerts) is handled by Apache Solr engine, which is a file-based search engine.



#### Apache Solr

Apache Solr lives in **QFLEX\_HOME/bin/solr\_home** directory. Thus, it is important to make sure that this directory is writable and never manually changed or manipulated in any way, which might corrupt the index.

Since Solr stores all data in simple files, it is recommended to have at least **10GB+** of free disk space on the same host where QFlex is running.



#### Solr Upgrade

**IMPORTANT:** Since Qflex v4.3.0, we changed Apache Solr core to the latest version, which improves the problem of frequent index updates. The downside of this change is that Apache Solr index files from v4.3.0+ are not compatible with older versions of Qflex.

### Websphere SSL Connections

Oracle has made some changes to cryptographic algorithms supported by Java JDK 1.7 and above. Several algorithms have been removed, which created issues with Queue Manager SSL connectivity when using Oracle JDK.

Please see this forum thread for more information: [http://www.capitalware.com/rl\\_blog/?p=3074](http://www.capitalware.com/rl_blog/?p=3074)



So far, the only way we managed to get SSL working was by using IBM's JDK or JRE 1.7

## 1.1 Basic Installation (Fresh Install)

### Basic Fresh Installation (Recommended)

1. Download latest QFlex installer (.zip).
2. Ensure you have Java Development Kit 1.7 installed. JDK installation location must be exported to **JAVA\_HOME** environment variable.



#### JDK 7 is minimal

Starting with QFlex v4.3.0, JDK/JRE 1.7 and higher is mandatory.



#### JRE 7 is sufficient

Starting with version 4.2.6, QFlex can run under JRE (Java Runtime Environment), no full JDK is required. In this case JRE installation directory must be exported to **JRE\_HOME** environment variable.

3. Extract the archive into desired destination.
4. By default QFlex comes with embedded HSQLDB database that runs on port 9001.



### HSQL (default database)

Default database credentials: *qflex/netflexity*

5. Change directory into **QFLEX\_HOME/bin** and start up QFlex, using appropriate for your environment **startup** script (startup.bat or startup.sh).
6. Point your browser to <http://localhost:8881> and select "For Administrators".
7. Specify the serial number (request if necessary from [Request QFlex Serial Number](#) page) as well as default email account where all SMTP monitoring alerts would go.



Default QFlex admin credentials: *admin/admin*

## 1.2 Basic Upgrade

### Recommended Approach

For future upgrades, we recommend exporting Qflex configuration from Qflex itself and then simply importing it into a fresh version of the product. With latest release, in-memory database that comes bundled with Qflex is sufficient enough to run in production mode without a need in any dedicated external database.



Note that statistical data will not get exported, only configuration data. In case you **MUST** have your statistical data in place, proceed with approach below. Statistics can only be copied between v4.3.x

First, login to your current version of Qflex application and perform export using **Options->Export** menu as illustrated below:

The screenshot shows the Qflex web application interface. At the top, there is a navigation bar with the Qflex logo and the text "Qflex for Business users Logout". Below the navigation bar, there is a sidebar menu with the following items: Home | Logout, Resources, Reports, Problem Management, Utilities, Operations, Options, SMTP, SNMP, LDAP, Data Collection, Data Archival, Polling Policies, Alert Cleanup Policies, Message Cleanup Policies, Recovery Actions, Broker Subscriptions, Broker Compressions, Security, and Export. The "Export" item is highlighted with a green arrow. The main content area shows the "Export Database to XML file" form with the following fields: Configuration name (Backup-01302015), Export filename (Backup-01302015), and an "Export" button with the text "Click to perform export data to XML file". A green arrow points to the "Export" button.

Next, shutdown currently installed Qflex and startup **new** version of Qflex and navigate your web browser to <http://localhost:8881>, pick "For Administrators" and import exported file.

Qflex is a middleware management product that allows end users to have better visibility over their middleware infrastructure.



### for Administrators >

It enables companies to detect problems and troubleshoot managing environments that utilize IBM Middleware technologies.

### for Business users >

To keep business critical applications on-line at all times is to prepare for unforeseen in advance and to react effectively in real time.

### Utilities >

Utilities and tools Middleware technologies critical applications on-line that utilize IBM for unforeseen in advance.

© 2014, Netflexity Solutions, Inc.



Once imported, login using your present Qflex username and password.

- Clean install**  
Use this option to make fresh QFLEX installation with no data.  
Serial Number   
Valid Email Account
- Import Data**  
Use this option to import data from XML file. You will be prompted for login/password after process finish.  
Export file:  Backup-01302015.xml

## Deprecated Approach

1. Download latest QFlex installer (.zip) from [Downloads](#) page.
2. Extract the archive into desired destination, different from previous installation.
3. Perform the following procedure (just once) to port existing settings into new QFlex installation. Change directory into **QFLEX\_HOME/bin/sql/update** and run update script (update.bat or update.sh) with option **-u** and path to your existing QFlex installation. See example below.

```
update.bat -u "C:\Program Files\QFlex"
```

4. Now, you can continue from point 5-6 of the Basic Installation guide above.

## 1.3 Advanced Installation (with MySQL as the database)

### Advanced Installation

1. Please download latest QFlex installer (.zip)
2. Unzip into any desired directory.
3. Change directory into **QFLEX\_HOME\bin\apache-tomcat-7.0.40\conf\Catalina\localhost** and rename current QFLEX.xml to QFLEX.xml.old. Rename QFLEX.xml.mysql to QFLEX.xml
4. Open QFLEX.xml for editing. Change host/ip, port, username, password if needed.
5. Change directory into **QFLEX\_HOME\bin\sql\install** and run `mysql-install.bat` or `mysql-install.sh` to create qflex MySQL schema. Skip this step if you already have qflex schema created.



In case you already have QFlex running with MySQL and you want to upgrade, change directory into **QFLEX\_HOME\bin\sql\update** and run `mysql-updater.bat` or `mysql-updater.sh`. Both update and install scripts take the following arguments:

```
update.sh db_user db_password hostname port
```

6. Start QFlex by executing `startup.bat` or `startup.sh` in **QFLEX\_HOME\bin**

### Running QFLEX as Windows service

1. Change directory into **QFLEX\_HOME\bin\apache-tomcat-7.0.40\bin**
2. Run "As Administrator" command console (cmd.exe)
3. Execute following script:

```
service.bat install
```

### Running HSQLDB as Windows service

HSQLDB is default database in QFLEX. It can be installed as Windows service.

1. Change directory into **QFLEX\_HOME\bin\hsqldb\bin**
2. Run "As Administrator" command console (cmd.exe)
3. Execute following script to install service:

```
service.bat install
```

### Remove HSQLDB service

```
service.bat remove
```

### Configure HSQLDB service

By launching `servicemgr.bat` you can edit service parameters in GUI application. Make sure JVM path points to correct location of `jvm.dll`.

### Accessing QFlex Dashboard.

1. Point your browser to URL: <http://localhost:8881> and select "For Business Users"
2. Use your login/password to enter dashboard.



#### Appendix

- If you are having issues. Please zip up whatever screenshots you deem necessary, and logs located in **QFLEX\_HOME\bin\apa**

che-tomcat-7.0.40\logs directory. Use QFlex [Feedback Portal](http://feedback.netflexity.com/) (<http://feedback.netflexity.com/>) to submit an issue or send everything to [qflex@netflexity.com](mailto:qflex@netflexity.com) and someone will respond. Customers are encouraged to use [Feedback Portal](#) or call our tech support number.