

# Embedded openMQ 5.0 (without installation)

#example#javabrokerembeddedjmsopenmqimqjms2openmq5

It is possible to run openMQ 5.0 embedded without referencing a complete installation of openMQ. This can be usefull when creating tests. It does however initially require an installation, since some files need to be copied to your project.

Do the following:

1. Download and install openMQ 5.0
2. In your project create in the 'src/test/resources' eg. an 'openmq' folder
3. In the 'openmq' folder create a folder named 'lib/props/broker'
4. Copy default.properties and install.properties from your openMQ installation here
5. In the 'openmq' folder create a folder named 'var/instances/imqbroker/etc'
6. Copy accesscontrol.properties and passwd from your openMQ installation here

In your pom.xml add the following dependency:

```
<dependency>
  <groupId>org.glassfish.main.extras</groupId>
  <artifactId>glassfish-embedded-all</artifactId>
  <version>4.0</version>
  <scope>test</scope>
</dependency>
```

Now you can create a (Java) class which creates an embedded broker. This looks like:

```
package my.package;

import com.sun.messaging.jmq.jmsclient.runtime.BrokerInstance;
import com.sun.messaging.jmq.jmsclient.runtime.ClientRuntime;
import com.sun.messaging.jmq.jmsserver.Globals;
import com.sun.messaging.jmq.jmsservice.BrokerEvent;
import com.sun.messaging.jmq.jmsservice.BrokerEventListener;
import lombok.extern.slf4j.Slf4j;

import java.util.Properties;

@Slf4j
public class EmbeddedBroker {

    private static final String IMQ_HOME = EmbeddedBroker.class.getClassLoader().getResource("op
    private static final String IMQ_VAR_HOME = IMQ_HOME.concat("/var");
    private static final String IMQ_LIB_HOME = IMQ_HOME.concat("/lib");
    private static final String IMQ_INSTANCE_HOME = IMQ_VAR_HOME.concat("/instances");
    private static final String IMQ_INSTANCE_NAME = "imqbroker";

    public static BrokerInstance start() throws ClassNotFoundException, IllegalAccessException,
        ClientRuntime clientRuntime = ClientRuntime.getRuntime();
        BrokerInstance brokerInstance = clientRuntime.createBrokerInstance();
        BrokerEventListener listener = new BrokerEventListener() {

            public void brokerEvent(BrokerEvent error) {

            }

            public boolean exitRequested(BrokerEvent event, Throwable thr) {
                return true;
            }
        };

        Properties properties = brokerInstance.parseArgs(getArguments());
        updateConfigurationForBroker();

        brokerInstance.init(properties, listener);
        brokerInstance.start();

        return brokerInstance;
    }

    private static String[] getArguments() {
        return new String[]{
            "-varhome", IMQ_VAR_HOME,
            "-libhome", IMQ_LIB_HOME,
            "-imqhome", IMQ_HOME
        };
    }

    private static void updateConfigurationForBroker() {
        try {
            Globals.getConfig().updateProperty("imq.home", IMQ_HOME);
            Globals.getConfig().updateProperty("imq.libhome", IMQ_LIB_HOME);
            Globals.getConfig().updateProperty("imq.varhome", IMQ_VAR_HOME);
            Globals.getConfig().updateProperty("imq.instanceshome", IMQ_INSTANCE_HOME);
            Globals.getConfig().updateProperty("imq.instancename", IMQ_INSTANCE_NAME);
            Globals.getConfig().updateBooleanProperty("imq.persist.file.newTxnLog.enabled", fals
            Globals.getConfig().updateBooleanProperty("imq.cluster.enabled", false, true);
            Globals.getConfig().updateProperty("imq.autocreate.destination.maxNumMsgs", "100");
        } catch (Exception e) {
            EmbeddedBroker.log.warn("Unable to set the configuration for the broker", e);
        }
    }
}
```

By calling the `EmbeddedBroker.start()` method, the broker will be started and you can do whatever you want to do, like creating queues/topics and send/receive JMS messages.

#example#javabrokerembeddedjmsopenmqimqjms2openmq5

Written by [Marcel van den Brink](#)

♥ Recommend

🐦 Say Thanks

🔕 Update Notifications Off

💬 Respond

## Related protips

[Recursively Expand Tabs to Spaces](#)

👁 1.289K

💬 0

[Behavior-Driven Integration and Unit Testing](#)

👁 617

💬 0

[I've started a repo about how really hard is to code asynchronously](#)

👁 396

💬 0

Have a fresh tip? Share with Coderwall community!

Post a tip

## Best #Example Authors

- 

leviter

★ 1.71K

#example#java#Open Source
- 

josefnpat

★ 1.289K

#example#Lua#PHP
- 

codeship

★ 615

#example#Clojure#Python
- 

ashnur

★ 394

#example#JavaScript#CoffeeScript
- 

niklongstone

★ 318

#example#git#Phyton

## Related Tags

#example#javabrokerembeddedjmsopenmqimqjms2openmq5

💎 Awesome Job

See All Jobs →

Post a job for only \$299

Scripted

Rich in Stack Overflow reputation points?

Make up to \$75/hr writing for Scripted! Set your own price.

Make Real Money

