



Introduction to Apache Derby



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This document is a brief introduction to Apache Derby. Apache Derby is an open source relational database management system based on Java(TM) and SQL.

1. Apache Derby in LogicBlaze FUSE

Apache Derby is preinstalled for you as part of the LogicBlaze FUSE distribution.

LogicBlaze FUSE uses Apache Derby to log messages. The `jndi-xbean.xml` configuration file sets this up. The `jndi-xbean.xml` file is located in:

- Binary Install:

```
[fuse_dir]\components\jndi\
```

- Source Install:

```
[fuse_dir]\target\fuse-x.x\fuse-x.x\components\jndi\
```

Inside the `jndi-xbean.xml` file we establish the use of Derby as our database with the following code:

```
<entry key="java:comp/env/jdbc/servicemixDB">
  <bean id="derby-ds"
    class="org.apache.derby.jdbc.EmbeddedDataSource">
    <property name="databaseName" value="servicemixDB" />
    <property name="createDatabase" value="create" />
  </bean>
</entry>
```

In the ServiceMix JBI Container portlet of the LogicBlaze FUSE console there is a service called `jdbcAuditor`. When the `jdbcAuditor` service is started it will store the normalized messages (JBI messages) in the Apache Derby database. By default this service is in a stopped state because it will create a lot of entries in the database. It can be started and used for troubleshooting or monitoring and then turned off (stopped).

To see `jdbcAuditor` in action:

1. Open the LogicBlaze FUSE console in a browser.
2. In the ServiceMix JBI Container portlet start the `jdbcAuditor` from the Actions pull-down menu.

For more information about the console, please refer to the LogicBlaze *Fuse Console Guide*.

We find the code for the `jdbcAuditor` in the `servicemix-xbean.xml`. This XML file can be found in:

- Binary Install:

```
[fuse_dir]\components\activemq\servicemix\
```

- Source Install:

```
[fuse_dir]\target\fuse-x.x\fuse-x.x\components\activemq\servicemix\
```

The code inside `servicemix-xbean.xml` that initiates the `jdbcAuditor` is as follows:

```
<sm:jdbcAuditor container="#jbi" dataSource="#servicemixDB" autoStart="false"/>
<bean id="servicemixDB" class="org.springframework.jndi.JndiObjectFactoryBean">
  <property name="jndiName" value="java:comp/env/jdbc/servicemixDB" />
</bean>
```

2. Additional Resources

For more information about Apache Derby please see: <http://db.apache.org/derby/>.