



# Introduction to Apache Derby



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## **Introduction to Apache Derby**

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/>.