

You would have to set up a proper environment for iBATIS before starting off with actual development work. This chapter explains how to set up a working environment for iBATIS.

iBATIS Installation

Carry out the following simple steps to install iBATIS on your Linux machine –

- Download the latest version of iBATIS from [Download iBATIS](#).
- Unzip the downloaded file to extract .jar file from the bundle and keep them in appropriate lib directory.
- Set PATH and CLASSPATH variables at the extracted .jar files appropriately.

```
$ unzip ibatis-2.3.4.726.zip
inflating: META-INF/MANIFEST.MF
  creating: doc/
  creating: lib/

  creating: simple_example/
  creating: simple_example/com/
  creating: simple_example/com/mydomain/
  creating: simple_example/com/mydomain/data/
  creating: simple_example/com/mydomain/domain/

  creating: src/

inflating: doc/dev-javadoc.zip
inflating: doc/user-javadoc.zip

inflating: jar-dependencies.txt
inflating: lib/ibatis-2.3.4.726.jar
inflating: license.txt
inflating: notice.txt
inflating: release.txt

$pwd
/var/home/ibatis
$set PATH=$PATH:/var/home/ibatis/
$set CLASSPATH=$CLASSPATH:/var/home/ibatis\
    /lib/ibatis-2.3.4.726.jar
```

Database Setup

Create an EMPLOYEE table in any MySQL database using the following syntax –

```
mysql> CREATE TABLE EMPLOYEE (
  id INT NOT NULL auto_increment,
  first_name VARCHAR(20) default NULL,
  last_name  VARCHAR(20) default NULL,
  salary     INT default NULL,
  PRIMARY KEY (id)
);
```

Create SqlMapConfig.xml

Consider the following –

- We are going to use JDBC to access the database **testdb**.
- JDBC driver for MySQL is "com.mysql.jdbc.Driver".

- Connection URL is "jdbc:mysql://localhost:3306/testdb".
- We would use username and password as "root" and "root" respectively.
- Our sql statement mappings for all the operations would be described in "Employee.xml".

Based on the above assumptions, we have to create an XML configuration file with name **SqlMapConfig.xml** with the following content. This is where you need to provide all configurations required for iBatis –

It is important that both the files SqlMapConfig.xml and Employee.xml should be present in the class path. For now, we would keep Employee.xml file empty and we would cover its contents in subsequent chapters.

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE sqlMapConfig PUBLIC "-//ibatis.apache.org//DTD SQL Map Config 2.0//EN"
"http://ibatis.apache.org/dtd/sql-map-config-2.dtd">

<sqlMapConfig>
  <settings useStatementNamespaces="true"/>

  <transactionManager type="JDBC">
    <dataSource type="SIMPLE">

      <property name="JDBC.Driver" value="com.mysql.jdbc.Driver"/>
      <property name="JDBC.ConnectionURL"
value="jdbc:mysql://localhost:3306/testdb"/>
      <property name="JDBC.Username" value="root"/>
      <property name="JDBC.Password" value="root"/>

    </dataSource>
  </transactionManager>

  <sqlMap resource="Employee.xml"/>
</sqlMapConfig>
```

You can set the following optional properties as well using SqlMapConfig.xml file –

```
<property name="JDBC.AutoCommit" value="true"/>
<property name="Pool.MaximumActiveConnections" value="10"/>
<property name="Pool.MaximumIdleConnections" value="5"/>
<property name="Pool.MaximumCheckoutTime" value="150000"/>
<property name="Pool.MaximumTimeToWait" value="500"/>
<property name="Pool.PingQuery" value="select 1 from Employee"/>
<property name="Pool.PingEnabled" value="false"/>
```

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