

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE ejb-jar PUBLIC "-//Sun Microsystems, Inc.//DTD Enterprise JavaBeans 2.0//EN"
    "http://java.sun.com/dtd/ejb-jar_2_0.dtd">
<ejb-jar>
```

```
<enterprise-beans>
  <entity>
    <description>Entity bean description</description>
    <display-name>Display name for tools</display-name>
    <small-icon>File name of a JPEG/GIF image</small-icon>
    <large-icon>File name of a JPEG/GIF image</large-icon>
    <ejb-name>SomeEntityBean</ejb-name>
    <home>com.company.EntityBeanRemoteHome</home>
    <remote>com.company.EntityBeanRemote</remote>
    <local-home>com.company.EntityBeanLocalHome</local-home>
    <local>com.company.EntityBeanLocal</local>
    <ejb-class>com.company.EntityBeanEJB</ejb-class>
    <persistence-type>Container / Bean</persistence-type>
    <prim-key-class>com.company.EntityBeanPK</prim-key-class>
    <reentrant>False / True</reentrant>
    <cmp-version>2.x / 1.x</cmp-version>
    <abstract-schema-name>EntityBean</abstract-schema-name>
    <cmp-field><field-name>field1</field-name></cmp-field> <!--optional-->
    <cmp-field><field-name>field2</field-name></cmp-field> <!--optional-->
    <primkey-field>field1</primkey-field>
    <env-entry> <!--optional-->
      <description>Environment entry description</description>
      <env-entry-name>envEntry1</env-entry-name>
      <env-entry-type>java.lang.Integer</env-entry-type>
      <env-entry-value>2000</env-entry-value>
    </env-entry>
    <ejb-ref> <!--optional-->
      <description>EJB reference description</description>
      <ejb-ref-name>ejb/OtherEntityBeanHomeRemote</ejb-ref-name>
      <ejb-ref-type>Entity / Session</ejb-ref-type>
      <home>com.company.OtherEntityBeanRemoteHome</home>
      <remote>com.company.OtherEntityBeanRemote</remote>
      <ejb-link>SomeEntityOrSessionBeanName</ejb-link>
    </ejb-ref>
    <ejb-local-ref> <!--optional-->
      <description>Local EJB reference description</description>
      <ejb-ref-name>ejb/OtherLocalEntityBeanHomeRemote</ejb-ref-name>
      <ejb-ref-type>Entity / Session</ejb-ref-type>
      <local-home>com.company.OtherLocalEntityBeanRemoteHome</local-home>
      <local>com.company.OtherLocalEntityBeanRemote</local>
      <ejb-link>SomeEntityOrSessionBeanName</ejb-link>
    </ejb-local-ref>
```

Bean Provider

Application Assembler

Deployer

Bold: Mandatory elements

Red: Default values

```

<resource-ref> <!--optional-->
    <description>Some DataSource description</description>
    <res-ref-name>jdbc/SomeDB</res-ref-name>
    <res-type>javax.sql.DataSource</res-type>
    <res-auth>Container / Application</res-auth>
    <res-sharing-scope>Shareable / Unshareable</res-sharing-scope>
</resource-ref>
<resource-env-ref> <!--optional-->
    <description>Some DataSource description</description>
    <resource-env-ref-name>jms/SomeQueue</resource-env-ref-name>
    <resource-env-ref-type>javax.jms.Queue</resource-env-ref-type>
</resource-env-ref>
<security-role-ref> <!--optional-->
    <description>Security role reference description</description>
    <role-name>Manager</role-name>
    <role-link>Administrator</role-link>
</security-role-ref>
<security-identity> <!--optional-->
    <description>Security identity description</description>
    <run-as>
        <description>Run as description</description>
        <role-name>Manager</role-name>
    </run-as>
    OR
    <use-caller-identity />
</security-identity>
<query> <!--optional-->
    <description>Query description</description>
    <query-method>
        <method-name>findSomething</method-name>
        <method-params> <!--optional-->
            <method-param>java.lang.String</method-param>
        </method-params>
    </query-method>
    <result-type-mapping>Local / Remote</result-type-mapping>
    <ejb-ql>SELECT OBJECT(e) FROM EntityBean e WHERE e.field1 = ?1</ejb-ql>
</query>
</entity>

```

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```

<session>
  <description>Session bean description</description>
  <display-name>Display name for tools</display-name>
  <small-icon>File name of a JPEG/GIF image</small-icon>
  <large-icon>File name of a JPEG/GIF image</large-icon>
  <ejb-name>SomeSessionBean</ejb-name>
  <home>com.company.SessionBeanRemoteHome</home>
  <remote>com.company.SessionBeanRemote</remote>
  <local-home>com.company.SessionBeanLocalHome</local-home>
  <local>com.company.SessionBeanLocal</local>
  <ejb-class>com.company.SessionBeanEJB</ejb-class>
  <session-type>Stateful / Stateless</session-type>
  <transaction-type>Container / Bean</transaction-type>
  <env-entry> <!--optional-->
    ...
  </env-entry>
  <ejb-ref> <!--optional-->
    ...
  </ejb-ref>
  <ejb-local-ref> <!--optional-->
    ...
  </ejb-local-ref>
  <resource-ref> <!--optional-->
    ...
  </resource-ref>
  <resource-env-ref> <!--optional-->
    ...
  </resource-env-ref>
  <security-role-ref> <!--optional-->
    ...
  </security-role-ref>
  <security-identity> <!--optional-->
    ...
  </security-identity>
</session>

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```

<message-driven>
  <description>Message-driven bean description</description>
  <display-name>Display name for tools</display-name>
  <small-icon>File name of a JPEG/GIF image</small-icon>
  <large-icon>File name of a JPEG/GIF image</large-icon>
  <ejb-name>SomeMDBean</ejb-name>
  <ejb-class>com.company.MDBeanEJB</ejb-class>
  <transaction-type>Container / Bean</transaction-type>
  <message-selector>Some message selector</message-selector>
  <acknowledge-mode>Auto-acknowledge / Dups-ok-acknowledge</acknowledge-mode>
  <message-driven-destination> <!--optional-->
    <destination-type>javax.jms.Queue / javax.jms.Topic</destination-type>
    <subscription-durability>Durable / NonDurable</subscription-durability>
  </message-driven-destination>
  <env-entry> <!--optional-->
    ...
  </env-entry>
  <ejb-ref> <!--optional-->
    ...
  </ejb-ref>
  <ejb-local-ref> <!--optional-->
    ...
  </ejb-local-ref>
  <resource-ref> <!--optional-->
    ...
  </resource-ref>
  <resource-env-ref> <!--optional-->
    ...
  </resource-env-ref>
  <security-identity> <!--optional-->
    <description>MDB Security identity description. Only run-as!!</description>
    <run-as>
      <description>Run as description</description>
      <role-name>Manager</role-name>
    </run-as>
  </security-identity>
</message-driven>
</enterprise-beans>

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Bean Provider

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```

<relationships> <!--optional-->
  <description>Relationships description</description>
  <ejb-relation>
    <description>EJB Relation description</description>
    <ejb-relation-name>Entity1-Entity2</ejb-relation-name>
    <ejb-relationship-role>
      <description>EJB Relationship role description</description>
      <ejb-relationship-role-name>Entity1-has-an-Entity2</ejb-relationship-role-name>
      <multiplicity>One</multiplicity>
      <relationship-role-source>
        <description>EJB Relationship role source description</description>
        <ejb-name>SomeEntityBean</ejb-name>
      </relationship-role-source>
      <cmr-field> <!-- optional -->
        <description>Container-managed relationship field description</description>
        <cmr-field-name>cmrField1</cmr-field-name>
        <cmr-field-type>java.util.Collection / java.util.Set</cmr-field-type>
      </cmr-field>
    </ejb-relationship-role>
    <ejb-relationship-role>
      <description>EJB Relationship role description</description>
      <ejb-relationship-role-name>Entity2-belongs-to-Entity1</ejb-relationship-role-name>
      <multiplicity>Many</multiplicity>
      <cascade-delete /> <!-- only allowed if other role source has multiplicity One!! -->
      <relationship-role-source>
        <description>EJB Relationship role source description</description>
        <ejb-name>SomeOtherEntityBean</ejb-name>
      </relationship-role-source>
    </ejb-relationship-role>
  </ejb-relation>
  <ejb-relation>
    ...
  </ejb-relation>
</relationships>

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```

<assembly-descriptor> <!--optional-->
    <security-role> <!--optional-->
        <description>Security role description</description>
        <role-name>Administrator</role-name>
    </security-role>
    <method-permission> <!--optional-->
        <role-name>everyone</role-name> OR <unchecked />
        <method> <!--Style 1-->
            <description>Style 1 Method description</description>
            <ejb-name>SomeEntityBean</ejb-name>
            <method-intf>Home / Remote / LocalHome / Local</method-intf>
            <method-name>*</method-name>
        </method>
        <method> <!--Style 2-->
            <description>Style 2 Method description</description>
            <ejb-name>SomeEntityBean</ejb-name>
            <method-intf>Home / Remote / LocalHome / Local</method-intf>
            <method-name>create</method-name>
        </method>
        <method> <!--Style 3-->
            <description>Style 3 Method description</description>
            <ejb-name>SomeEntityBean</ejb-name>
            <method-intf>Home / Remote / LocalHome / Local</method-intf>
            <method-name>createSomething</method-name>
            <method-params> <!--optional-->
                <method-param>java.lang.String</method-param>
            </method-params>
        </method>
    </method-permission>
    <container-transaction> <!--optional-->
        <description>Container transaction description</description>
        <method> <!-- Style 1, 2 or 3-->
            <ejb-name>SomeEntityBean</ejb-name>
            <method-name>*</method-name>
        </method>
        <trans-attribute>Required/RequiresNew/Mandatory/Never/Supports/NotSupported</trans-attribute>
    </container-transaction>
    <exclude-list> <!--optional-->
        <description>Exclude list description</description>
        <method> <!-- Style 1, 2 or 3-->
            <ejb-name>SomeEntityBean</ejb-name>
            <method-name>method1</method-name>
        </method>
    </exclude-list>
</assembly-descriptor>
<ejb-client-jar>someOtherClientJarFile.jar</ejb-client-jar> <!-- optional -->

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</ejb-jar>

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