Referring to an EJB from outside its EAR

Introduction

Referring to beans from other Jar not included in the same Ear is not as simple as in case they are included in one Ear. There are three ways to accomplish this purpose.

Jar with referred bean

Java code

```
@Stateless(name="JmsDispatcherGate")
public class JmsDispatcherGateImpl implements DispatcherGateLocal, DispatcherGateRemote {
```

```
@Local
public interface DispatcherGateLocal {
```

```
@Remote
public interface DispatcherGateRemote {
```

Geronimo's specific XML

```
<?xml version="1.0" encoding="UTF-8"?>
<openejb-jar xmlns="http://www.openejb.org/xml/ns/openejb-jar-2.1" xmlns:pkgen="http://www.openejb.org/xml/ns
/pkgen-2.0" xmlns:sec="http://geronimo.apache.org/xml/ns/security-2.0" xmlns:sys="http://geronimo.apache.org/xml
/ns/deployment-1.2">
  <sys:environment>
    <sys:moduleId>
      <sys:groupId>my.app.dispatcher</sys:groupId>
      <sys:artifactId>Dispatcher</sys:artifactId>
      <sys:version>1.0</sys:version>
      <sys:type>jar</sys:type>
    </sys:moduleId>
  </sys:environment>
</openejb-jar>
```

Referring with @EJB(mappedName="...") + openejb-jar.xml

```
package my.app.services;

@Stateless(name = "Sender")
public class SenderImpl {

        @EJB(mappedName="Dispatcher/JmsDispatcherGate")
        private DispatcherGateRemote dispatcherGate = null;
```

```
<openejb-jar xmlns="http://www.openejb.org/xml/ns/openejb-jar-2.1"
             xmlns:nam="http://geronimo.apache.org/xml/ns/naming-1.2"
             xmlns:pkgen="http://www.openejb.org/xml/ns/pkgen-2.0"
             xmlns:sec="http://geronimo.apache.org/xml/ns/security-2.0"
             xmlns:sys="http://geronimo.apache.org/xml/ns/deployment-1.2">
  <sys:environment>
    <sys:moduleId>
      <sys:groupId>my.app.services</sys:groupId>
      <sys:artifactId>Services</sys:artifactId>
      <sys:version>1.0</sys:version>
      <sys:type>jar</sys:type>
    </sys:moduleId>
    <!-- only dependency is required -->
    <sys:dependencies>
      <sys:dependency>
        <sys:groupId>my.app.dispatcher</sys:groupId>
        <sys:artifactId>Dispatcher</sys:artifactId>
        <sys:version>1.0</sys:version>
        <sys:type>jar</sys:type>
      </sys:dependency>
    </sys:dependencies>
  </sys:environment>

</openejb-jar>
```

Referring with @EJB(name="") + openejb-jar.xml

```
package my.app.services;

@Stateless(name = "Sender")
public class SenderImpl {

        @EJB(name="dispatcher")
        private DispatcherGateRemote dispatcherGate = null;
```

```
<openejb-jar xmlns="http://www.openejb.org/xml/ns/openejb-jar-2.1"
             xmlns:nam="http://geronimo.apache.org/xml/ns/naming-1.2"
             xmlns:pkgen="http://www.openejb.org/xml/ns/pkgen-2.0"
             xmlns:sec="http://geronimo.apache.org/xml/ns/security-2.0"
             xmlns:sys="http://geronimo.apache.org/xml/ns/deployment-1.2">
  <sys:environment>
    <sys:moduleId>
      <sys:groupId>my.app.services</sys:groupId>
      <sys:artifactId>Services</sys:artifactId>
      <sys:version>1.0</sys:version>
      <sys:type>jar</sys:type>
    </sys:moduleId>
    <sys:dependencies>
      <sys:dependency>
        <sys:groupId>my.app.dispatcher</sys:groupId>
        <sys:artifactId>Dispatcher</sys:artifactId>
        <sys:version>1.0</sys:version>
        <sys:type>jar</sys:type>
      </sys:dependency>
    </sys:dependencies>
  </sys:environment>
  <enterprise-beans>
    <session>
      <ejb-name>Sender</ejb-name>
      <ejb-ref>
        <!-- @EJB(name="dispatcher") DispatcherGateRemote dispatcherGateRemote; -->
        <ref-name>dispatcher</ref-name>
        <nam:pattern xmlns:nam="http://geronimo.apache.org/xml/ns/naming-1.1">
          <nam:artifactId>Dispatcher</nam:artifactId>
          <nam:name>JmsDispatcherGate</nam:name>
        </nam:pattern>
      </ejb-ref>
    </session>
  </enterprise-beans>

</openejb-jar>
```

Referring with @EJB(no name) + openejb-jar.xml

```
package my.app.services;

@Stateless(name = "Sender")
public class SenderImpl {

    @EJB
    private DispatcherGateRemote dispatcherGate = null;

    ...
}
```

```
<openejb-jar xmlns="http://www.openejb.org/xml/ns/openejb-jar-2.1"
             xmlns:nam="http://geronimo.apache.org/xml/ns/naming-1.2"
             xmlns:pkgen="http://www.openejb.org/xml/ns/pkgen-2.0"
             xmlns:sec="http://geronimo.apache.org/xml/ns/security-2.0"
             xmlns:sys="http://geronimo.apache.org/xml/ns/deployment-1.2">
  <sys:environment>
    <sys:moduleId>
      <sys:groupId>my.app.services</sys:groupId>
      <sys:artifactId>Services</sys:artifactId>
      <sys:version>1.0</sys:version>
      <sys:type>jar</sys:type>
    </sys:moduleId>
    <sys:dependencies>
      <sys:dependency>
        <sys:groupId>my.app.dispatcher</sys:groupId>
        <sys:artifactId>Dispatcher</sys:artifactId>
        <sys:version>1.0</sys:version>
        <sys:type>jar</sys:type>
      </sys:dependency>
    </sys:dependencies>
  </sys:environment>
  <enterprise-beans>
    <session>
      <ejb-name>Sender</ejb-name>
      <ejb-ref>
        <!-- @EJB DispatcherGateRemote dispatcherGateRemote; -->
        <ref-name>my.app.services.SenderImpl/dispatcherGate</ref-name>
        <nam:pattern xmlns:nam="http://geronimo.apache.org/xml/ns/naming-1.1">
          <nam:artifactId>Dispatcher</nam:artifactId>
          <nam:name>JmsDispatcherGate</nam:name>
        </nam:pattern>
      </ejb-ref>
    </session>
  </enterprise-beans>
</openejb-jar>
```