

Configuring EJB Containers

An Enterprise JavaBeans(EJB) container is used to provide a runtime environment for enterprise beans within the application server. The container handles operation of EJBs and also acts as an intermediary between the business logic layer and the rest of the Java EE environment. In Geronimo, [Open EJB](#) is included as a plugin to manage EJBs.

In Geronimo, stateless and stateful session beans have only one container each. In OpenEJB, the pool size is set per container. Therefore, you can set only one pool size for all stateless beans and one for all stateful beans.

To configure the default properties of each container, you can either use the administration console or edit the `config.xml` file manually. The only difference is that you must stop the server first if you choose to update `config.xml` manually; while using the administration console, you can restart OpenEJB module on-the-fly.

- [Understanding the configuration](#)
- [Configuring the value from console](#)

Understanding the configuration

Take the EJB container **DefaultStatefulContainer** as an example. By looking into `config.xml`, you can see the container is defined as follows:

config.xml

```
...
<gbean name="DefaultStatefulContainer">
  <attribute name="timeout">${StatefulTimeout}</attribute>
  <attribute name="capacity">${Capacity}</attribute>
  <attribute name="bulkPassivate">${BulkPassivate}</attribute>
</gbean>
...
```

All these values are set as system variables in `config-substitutions.properties` file under the same directory as `config.xml`.

config-substitutions.properties

```
...
Capacity=1000
StatefulTimeout=20
BulkPassivate=100
...
```

If you want to configure any of the properties, change the numbers in `config-substitutions.properties` or update `config.xml` after the server is stopped. Here is an example that updates `config.xml` directly:

config.xml

```
...
<gbean name="DefaultStatefulContainer">
  <attribute name="timeout">${StatefulTimeout}</attribute>
  <attribute name="capacity">500</attribute>
  <attribute name="bulkPassivate">${BulkPassivate}</attribute>
</gbean>
...
```

Restart the Geronimo to make the changes take effect.

Configuring the value from console

The **EJB Server** portlet that displays the EJB containers available in the server and their status is available by selecting **EJB Server** on the **Console** Navigation menu on the left side. You will also be presented with all the EJBs that the container is holding. The following figures illustrate the portlet layout.

EJB Server

```

Ejb Containers
├── Stateless Containers
│   └── DefaultStatelessContainer
│       ├── ejb/mgmt/MRC
│       └── ejb/mgmt/MEJB
├── Stateful Containers
│   └── DefaultStatefulContainer
├── None
│   └── DefaultSingletonContainer
├── BMP Entity Containers
│   └── DefaultBMPContainer
├── CMP Entity Containers
│   └── DefaultCMPContainer
└── Message Driven Containers
    ├── org.apache.geronimo.configs/activemq-ra/2.2-SNAPSHOT/car.ActiveMQ
    ├── RA-javax.jms.MessageListener
    └── console.jms/jmstestGroup/1.0/rar/jmstestGroup-javax.jms.MessageListener
                    
```

Name	Value
Bean Class Name	org.apache.geronimo.mgmt.MEJB
Deployment Id	mejb/ejb/mgmt/MEJB
EJB Name	ejb/mgmt/MEJB
EJB Home Interface	javax.management.j2ee.ManagementHome
JNDI Names	ejb/mgmt/MEJB
Remote Interface	javax.management.j2ee.Management

Expand the tree and find the container that you want to configure. Input the value and click **Update**. After that, the administration console will prompt the following message:

The openejb configuration should be restarted for the changes that were made to the fields to take effect. The changed fields are now shown in red color.

EJB Server

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```

Ejb Containers
├── Stateless Containers
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│   └── DefaultStatefulContainer
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├── BMP Entity Containers
├── CMP Entity Containers
└── Message Driven Containers
                    
```

Name	Value
Container Class	org.apache.openejb.core.stateful.StatefulContainerFactory
Container Id	DefaultStatefulContainer
Container Description	null
Display Name	null
Cache	org.apache.openejb.core.stateful.SimpleCache
Passivator	org.apache.openejb.core.stateful.SimplePassivator
TimeOut	<input type="text" value="20"/> <input type="button" value="Update"/>
Capacity	<input type="text" value="2000"/> <input type="button" value="Update"/>
BulkPassivate	<input type="text" value="100"/> <input type="button" value="Update"/>

To restart the openejb module on-the-fly, click **Application->System Modules** on the left panel and select the **Expert Mode** check box. Then find `org.apache.geronimo.configs/openejb/2.2-SNAPSHOT/car` and click **Restart** to make your changes take effect.

Console Navigation

- [Welcome](#)
- [Server](#)
- [Information](#)
- [Java System Info](#)
- [Server Logs](#)
- [Shutdown](#)
- [Web Server](#)
- [Thread Pools](#)
- [Apache HTTP](#)
- [Monitoring](#)
- [JMS Server](#)
- [EJB Server](#)
- [Services](#)
- [Repository](#)
- [JMS Resources](#)
- [Database Pools](#)
- [Applications](#)
- [Web App WARs](#)
- [System Modules](#)

Installed System Modules

- Expert User (enable all actions on Geronimo Provided Components)
- Show parent and child components

Component Name	State	Commands		
console.realm/geronimo-admin/1.0/car	stopped	Start		Uninstall
org.apache.geronimo.configs/activemq-broker/2.2-SNAPSHOT/car	running	Stop	Restart	Uninstall
org.apache.geronimo.configs/aspectj/2.2-SNAPSHOT/car	running	Stop	Restart	Uninstall
org.apache.geronimo.configs/axis/2.2-SNAPSHOT/car	running	Stop	Restart	Uninstall
org.apache.geronimo.configs/axis-deployer/2.2-SNAPSHOT/car	running	Stop	Restart	Uninstall
org.apache.geronimo.configs/axis2/2.2-SNAPSHOT/car	stopped	Start		Uninstall
org.apache.geronimo.configs/axis2-deployer/2.2-SNAPSHOT/car	running	Stop	Restart	Uninstall
org.apache.geronimo.configs/axis2-ejb/2.2-SNAPSHOT/car	stopped	Start		Uninstall
org.apache.geronimo.configs/axis2-ejb-deployer/2.2-SNAPSHOT/car	running	Stop	Restart	Uninstall
org.apache.geronimo.configs/client/2.2-SNAPSHOT/car	stopped	Start		Uninstall
org.apache.geronimo.configs/client-corba-yoko/2.2-SNAPSHOT/car	stopped	Start		Uninstall
org.apache.geronimo.configs/client-deployer/2.2-SNAPSHOT/car	running	Stop	Restart	Uninstall
org.apache.geronimo.configs/client-security/2.2-SNAPSHOT/car	stopped	Start		Uninstall
org.apache.geronimo.configs/client-transaction/2.2-SNAPSHOT/car	stopped	Start		Uninstall
org.apache.geronimo.configs/clustering/2.2-SNAPSHOT/car	stopped	Start		Uninstall
org.apache.geronimo.configs/concurrent/2.2-SNAPSHOT/car	running	Stop	Restart	Uninstall
org.apache.geronimo.configs/openspdx/2.2-SNAPSHOT/car	running	Stop	Restart	Uninstall