



## Quick Start Guide

Version 1.2.0.GA

This document is intended to provide a reference to quickly get you started with the newly released JBossAS Administration Console along with a basic overview of the features it provides to assist with the management of your JBoss Application Server 5 installation.

### Overview

This first release of the JBossAS Administration Console (referred to as Console in later references throughout this Guide) provides the following administrative features:

- Configuration Information about the System the JBoss Application Server is running on
- Deploy, Undeploy, and Update Enterprise Applications including:
  - Enterprise Applications (EARs)
  - Web Applications (WARs)
  - Resource Adapters(RARs)
  - EJB JARs (EJB2 and EJB3)
- Persistent configuration changes for the following resources:
  - Data Sources
  - Connection Factories
  - JMS Queues and Topics based on JBoss Messaging
- Control Operations
  - Stop, Start, Restart Applications
  - View Resource Statistics
  - View Resource Metric Information

For related community project information for the Console and JBoss Application Server 5, see the references section at the end of this document.

Let's get started . . .

# Installation

Download JBoss Application Server 5.1.0.GA from the JBoss AS community download page:

<http://www.jboss.org/jbossas/downloads/>

Click on the Download link and select the platform-independent zip distribution for the JDK you'll be using:

JavaSE 5 – **jboss-5.1.0.GA.zip**

JavaSE 6 – **jboss-5.1.0.GA-jdk6.zip**

Refer to the [JBoss AS 5.1.0.GA](#) and [JBossAS Administration Console](#) Release Notes for specific information on these project releases.

Once the download has completed, unzip it to an installation directory of your choice. We will refer to `JBOSS_HOME` as `<installation-dir>/jboss-5.1.0.GA`

The Console is distributed as part of the *'default'* and *'all'* server configurations.

Start the JBoss AS 5 server:

```
$JBOSS_HOME/bin
```

and execute the command

```
./run.sh for Unix systems
```

or

```
run.bat for Windows systems
```

The above command starts the *'default'* configuration. If you prefer to run with an alternate configuration, repeat the above command passing in your configuration using the `-c` option. Below is the syntax for starting the server with the *'all'* configuration.

Example:

```
./run.sh -c all
```

or

```
run.bat -c all
```

In addition to the *'default'* and *'all'* configurations, the Console has been tested with the *'standard'* configuration which is also a configuration provided with this distribution. To use the Console with the *'standard'* config, you can copy the `admin-console.war` directory from the *'default'* server configuration as shown below.

```
cd $JBOSS_HOME/server/default/deploy
cp -pr admin-console.war $JBOSS_HOME/server/standard/deploy
```

It is expected that that Console will work with any custom configuration. Use the above command replacing 'standard' with the custom configuration name of your choice. If you happen to encounter issues, please file an [EMBJOPR](#) JIRA to alert us of the problem.

**\*NOTE: JBoss AS Administration Console is not supported with the 'minimal' or 'web' configurations provided with the distribution nor configurations based on those.**

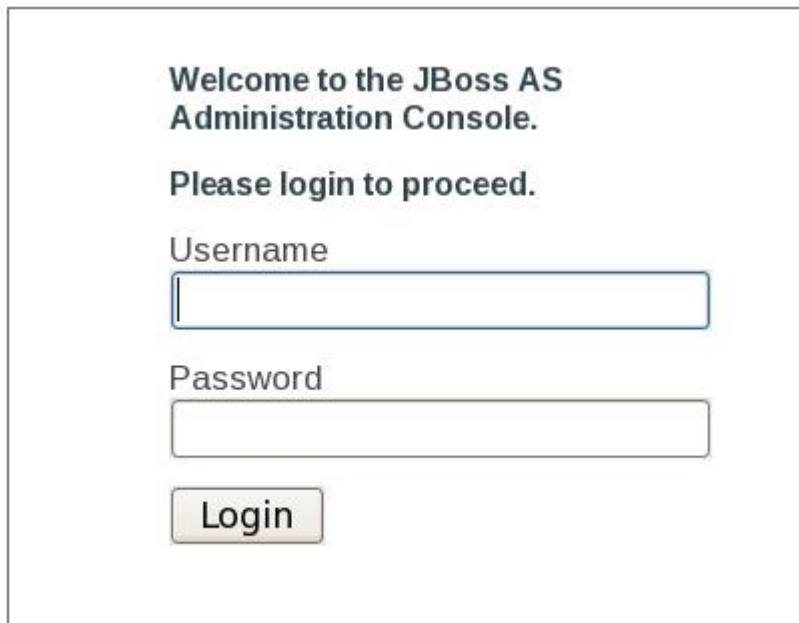
## Accessing the Console

Once the server is started, the Console is ready to assist you with your Application Server administration tasks. Simply point your browser to:

<http://localhost:8080/admin-console>

**\*NOTE: The Console has been tested with Mozilla FireFox 3 and Internet Explorer 7.**

This will bring you to the JBoss AS Administration Console Login page.



Welcome to the JBoss AS  
Administration Console.

Please login to proceed.

Username

Password

Login

Login credentials are the same as used for the JMX console. A default user is provided for out-of-box access. When prompted, enter **admin** for Username and Password .

Click the **Login** button.

**\*NOTE:** To change the default login or to add additional users, visit the Red Hat Knowledge Base to find out “[How to enable authentication on JBoss services such as rmi-http, jmx-console, and web-console?](#)”.

The Console provides a single administration point for managing and modifying your Applications and System Resources. Add, Update, Modify, and Delete functions are available for all resource types. Control Operations, Resource Metrics, and Configuration modifications are available depending on the the resource type.

## Navigation Overview

Once successfully logged in you have an overall Summary of the JBoss AS 5 server running. The left navigation pane allows direct access to any administrative task. Note that these tasks are available for the JBoss AS 5 server configuration currently running as shown in the parenthesis. Only one running server is managed at a time.

The screenshot displays the JBoss AS Administration Console. On the left, a navigation tree shows the hierarchy: localhost.localdomain > JBossAS Servers > JBoss AS 5 (default) > Applications > EJB 2.x Application (EJB), EJB 3.x Application (EJB), Embedded EJB 2.x Appl, Embedded Resource Ad, Embedded Web Applica, Enterprise Application (E), Resource Adapter (RAR), Web Application (WAR), Resources > JBoss Web, Connection Factories, Datasources, JMS Destinations. The main panel shows the 'JBossAS Server' configuration page with tabs for Summary, Configuration, Metrics, Control, and Content. The Summary tab is selected, showing 'JBoss Application Server' and a table with one entry: 'JBoss AS 5 (default)' with status 'UP'.

Name	Status	Actions
<a href="#">JBoss AS 5 (default)</a>	UP	

Click on the JBoss AS 5 (config) link and an overview of the system that the JBoss server is running on such as Operating System information and host name is shown.

## JBoss AS 5 (default)

Summary Configuration **Metrics** Control Content

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**General Properties**

**Name:** JBoss AS 5 (default)  
**Version:** 5.1.0.GA  
**Description:** JBoss Application Server

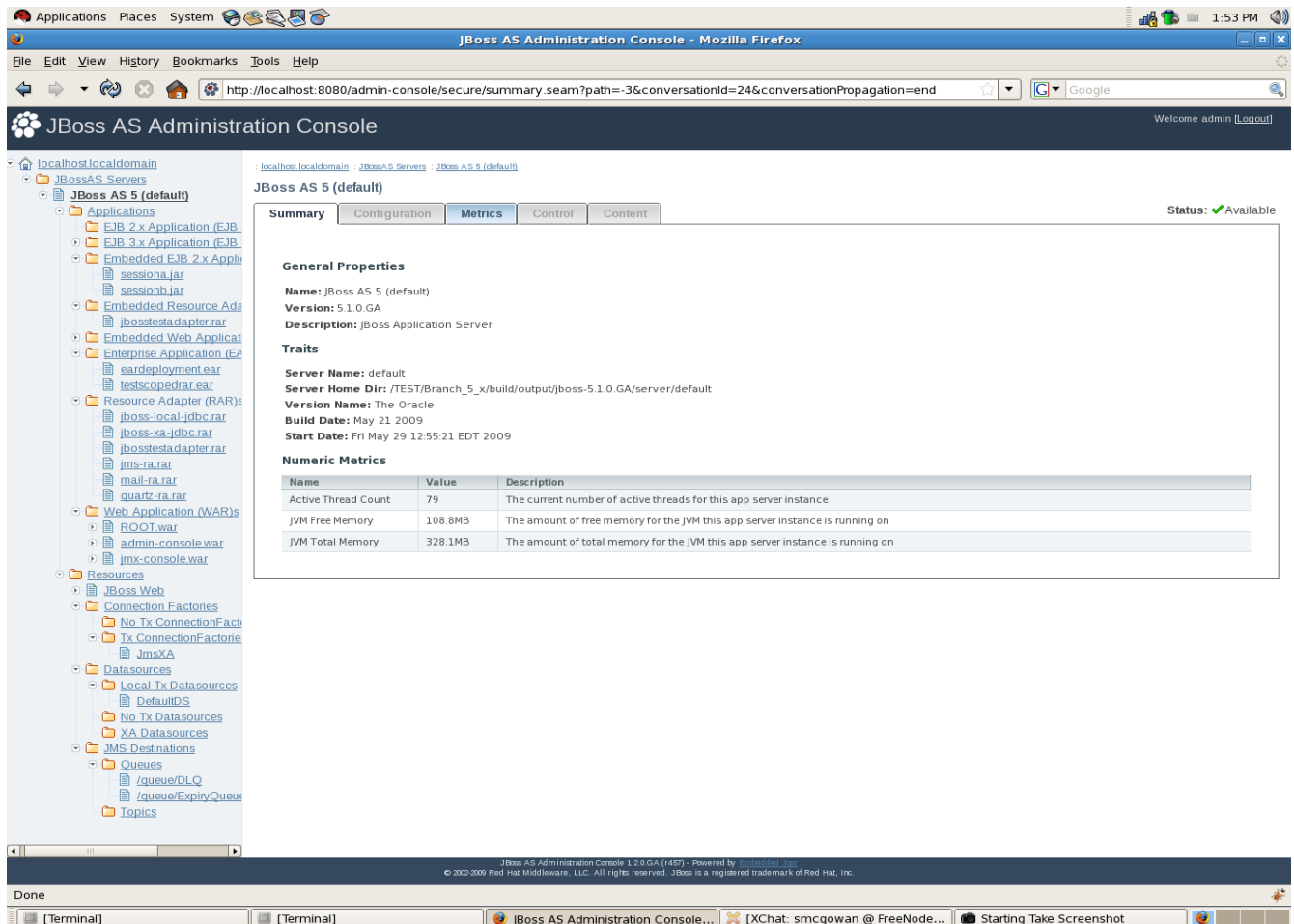
**Traits**

**Server Name:** default  
**Server Home Dir:** /TEST/Branch\_5\_x/build/output/jboss-5.1.0.GA/server/default  
**Version Name:** The Oracle  
**Build Date:** May 21 2009  
**Start Date:** Fri May 29 12:55:21 EDT 2009

**Numeric Metrics**

Name	Value	Description
Active Thread Count	79	The current number of active threads for this app server instance
JVM Free Memory	108.8MB	The amount of free memory for the JVM this app server instance is running on
JVM Total Memory	328.1MB	The amount of total memory for the JVM this app server instance is running on

All applications and resources discovered during server start up are available. The screen shot below is shown with all the views expanded. If your view is not consistent with the text in this document being referenced, be sure that the view is expanded by clicking on the arrow next to the item being referenced.



## Applications Overview

All applications discovered when the server was started are listed in the Summary view. However, Applications can be listed by their Types to simplify the view. The Applications Types that can be managed in this release are:

- EJB 2.x Application (EJB JAR)s
- EJB 3.x Application (EJB JAR)s
- Embedded EJB 2.x Application (EJB JAR)s
- Embedded EJB 3.x Application (EJB JAR)s
- Embedded Resource Adapters (RAR)s
- Embedded Web Applications (WAR)s
- Enterprise Applications (EAR)s
- Resource Adapters (RAR)s
- Web Applications (WAR)s

Note that the Embedded application types were deployed as part of an Enterprise Archive. They are listed separately for easier management and each embedded archive shows the relationship to its' parent

in the Summary tab. Embedded applications are managed via their parent. In other words, they cannot be deleted or updated nor do control operations apply. The management of these applications are done via the operations on the parent. Applications are expected to be JavaEE-compliant and appropriately packaged for deployment to the application server including any specific runtime descriptor information.

## Add New Application Resource

To add (deploy) applications, navigate to the Application type you want to add. In this example, we will use an Enterprise Applications.

Clicking on the link **Enterprise Applications (EARs)**



Will bring you to the Enterprise Application (EAR) Summary Tab.

: localhost.localdomain : JBossAS Servers : JBoss AS 5 (standard) : Applications : Enterprise Application (EAR)s

### Enterprise Application (EAR)

Summary	Configuration	Metrics	Control	Content
Enterprise Application				
				<a href="#">Add a new resource</a>
Name	Status	Actions		
 eardeployment.ear	UP	<a href="#">Delete</a>		

Clicking on



brings you to **Add New Enterprise Application (EAR)** tab. Click the **BROWSE** button and select the .ear file to be deployed. Click **CONTINUE** to proceed with the application deployment. The status of the deployment will be shown and if successful, added to the list of applications ready to be managed. Otherwise, the reason for the failed deployment will be shown.

Follow this procedure for other Application Types that you want to Add.

## Control Operations

Control Operations are available for all Application Types. From the Enterprise Application Summary Tab, select the Enterprise Application deployed in the above step. This brings you to the Summary Tab of that deployed application. Select the Control Tab.

The Operations available for Application Types are:

- **START** starts this EAR
- **STOP** stops this EAR
- **RESTART** stops and then restarts this EAR

## Updating Applications

To Update the Application Content, select the Application that you want to Update. Click on the Content Tab. **BROWSE** to the location of where the updated Application resides.



## eardeployment.ear

Summary	Configuration	Metrics	Control	Content	Status:  Available
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**File Path:** /TEST/Branch\_5\_x/build/output/jboss-5.1.0.GA/server/standard/deploy/eardeployment.ear

**File Size:** 9,227 bytes

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To update the EAR File, specify a local file path then click Update. Note, the specified file must be named eardeployment.ear.

***\*NOTE: The file to be Updated must be the same name as the application selected for Update.***

## Deleting Applications

Applications can be Deleted by navigating to the Applications Summary Tab or the Application-specific Type (such as Enterprise Application) Summary Tab by simply clicking the **DELETE** button next to the name of the Application you want to delete. Once the DELETE has been confirmed, the Application will be undeployed from the server and will no longer be able to be managed. You can always Add the resource again if needed. As noted above, Embedded Applications will not have the DELETE option available.

## Resources Overview

Click on the Resources link from the left Navigation pane:



brings you to the Resources landing page showing the different types of Resources to be managed.



Specifically,

- JBoss Web Servlet Container
  - Connectors
  - Virtual Hosts

- Connection Factories
  - No Tx Connection Factories
  - Tx Connection Factories
- Datasources
  - Local Tx Datasources
  - No Tx Datasources
  - XA Datasources
- JMS Destinations
  - Topics
  - Queues

Whether adding new resources or modifying resources already deployed to the running server, the Console offers easy management of the resource properties avoiding error-prone editing of XML configuration files. Next to each editable property is a Description detailing the use of the property, default value if any, and the affect of the property change. Configuration errors are immediately detected and will be highlighted when the attempting to **SAVE**. At any time during editing of a resource configuration, the changes can be **CANCELED**. Detailed overview of the different resource types is provided below.

## JBoss Web Resources

- **Connectors**

### Connector

Summary

Configuration

Metrics

Control

Content

a JBoss Web Connector

No actions available

Name	Status	Actions
<a href="#">ajp://127.0.0.1:8009</a>	UP	
<a href="#">http://127.0.0.1:8080</a>	UP	

Total: 2

- HTTP

The HTTP connector is setup by default with JBoss Web and is ready to use. This connector features the lowest latency and best overall performance.

- AJP

If integration with the native web server is needed, an AJP connector will provide faster performance than proxied HTTP. The native connectors supported with JBoss Web in JBoss Application Server 5.1.0.GA release are:

- JK 1.2.x with any of the supported servers
- mod\_proxy on Apache HTTP Server 2.x (included by default in Apache HTTP Server 2.2), with AJP enabled

- **Virtual Hosts**

#### Virtual Host

Name	Status	Actions
<a href="#">localhost</a>	UP	
<a href="#">snert.home.bsd.de</a>	UP	
<a href="#">snert.home.pilhuhn.de</a>	UP	

Total: 3

- Refer to the [Virtual Hosts](#) article showing an example configuration with JBoss Application Server 5.

## Connection Factories

Select Connection Factories link under Resources to configure a JCA resource adapter connection factory.

**\*NOTE: The resource adapter must already be deployed prior to configuring the connection factory. If this has not yet been done, simply navigate to the Resource Adapters (RAR)s or Enterprise Application (EAR)s (for a resource adapter deployed as part of an Enterprise Archive) from Applications as described above.**

After clicking on the Connection Factories link, you will be brought to the Connection Factories Summary Tab where the existing connection factories deployed to the running server will be shown. The default view is All types where the Type of Connection Factories are:

- No Tx Connection Factories
- Tx Connection Factories

## Add New Connection Factory

To add a new connection factory, select the Connection Factory Type you want to add. Select No Tx Connection Factory to configure a connection factory that does not participate in JTA transactions. Alternatively, select the Tx Connection Factory link for connection factories that will participate in JTA transactions. After making your selection, click on the “**Add a new resource**” button

on the right side of your browser. You will be prompted for the template that will be used to create the configuration. Your template choices for each connection factory type are:

- No Tx Connection Factories
  - default (NoTxConnection Factory)
- Tx Connection Factories
  - Local Transaction (Tx Connection Factory)
  - XA Transaction (Tx Connection Factory)
  - default (Tx Connection Factory)

Click **CONTINUE**. You are now ready to add the configuration information for the connection factory. Refer to the Description column for information describing the use of each property. Check the **UnSet** box if the property will not be used. This is not available for every property. At the end of your configuration session, click **SAVE** which deploys the configuration information to the server. Click **CANCEL** if you decide not to create the new resource.



***\*NOTE: If a resource was previously deployed and modified via the Console, the administration of the resource should continue to be done via the Console. The resource modifications are persistent but will not be reflected in the original configuration file. In other words, changes between manual edits to configuration files and changes performed via the Console are not interchangeable.***

## Connection Factory Metrics

The Console provides connection information about each Connection Factory resource deployed. To view the Connection Factory metrics, select the connection factory that you would like to obtain information about from the Connection Factories Summary Tab. If there are several connection factory configuration files deployed, customize your view simply selecting the type of connection factory you want to obtain metrics about.

Different types of Connection Factories



From the specific view, click on the name of the Connection Factory. Select the Metrics Tab. Numeric Metrics and Trait information about this connection factory is displayed as shown below.

The screenshot shows the JBoss AS Administration Console interface. The main content area displays the configuration for the JmsXA resource. The 'Metrics' tab is selected, showing a table of performance metrics. The status is 'Available'.

**JmsXA** Status: ✔ Available

View the numeric metrics and traits for this resource.

**Traits**

Transaction Type: XA      Run State: RUNNING      Pool JNDI Name: JmsXA

**Numeric Metrics**

Name	Value	Description
<b>Category: performance</b>		
Available Connection Count	20	Number of available connections.
Connection Count	0	Connection Count
Connection Created Count	0	Connection Created Count
Connection Destroyed Count	0	Connection Destroyed Count
In Use Connection Count	0	Number of connections currently in use.
Max Connections In Use Count	0	Maximum number of maximum connections that have been in use.
Max Size	20	Max Size
Min Size	0	Min Size

[Refresh](#)

## Connection Factory Control Operations

From the Control tab of any selected Connection Factory, you can Flush the connection pool or obtain statistics, including Sub Pool statistics.

Summary Configuration Metrics Control Content Status: Available

Select from the available control operations for this resource.

<b>Flush</b>	Flush the connections in the pool
<b>List Formatted Sub Pool Statistics</b>	Obtain a formatted sub pool statistics report
<b>List Statistics</b>	Obtain a statistics report

## Datasources

Administration tasks for Datasources are the similar to what has been described for Connection Factories. The main difference is in the template selection for configuring the resources. To add or modify a previously deployed datasource, click on the Datasources link in the left navigation panel. The Datasources Summary Tab is displayed showing the datasources configured in the running server configuration. The default view is to list all Datasource Types. The types of Datasources are:

- Local Tx Datasources
- No Tx Datasources
- XA Datasources

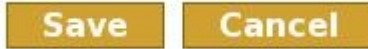
## Add New Datasource

To add a new Datasource, select the Datasource Type you want to add. The Datasource types are self-explanatory. Select the appropriate Datasource type that you want to add. After making your selection, click on the “**Add a new resource**” button on the right side of your browser. You will be prompted for the template that will be used to create the configuration. Your template choices for datasource types are:

- Local Tx Datasource
  - Oracle Local TX (Local Tx Datasource)
  - default (Local Tx Datasource)
- No Tx Datasources
  - Oracle No TX (No Tx Datasource)
  - default (No Tx Datasource)
- XA Datasources
  - Oracle XA (XA Datasource)

- default (XA Datasource)

After selecting the appropriate template, Click **CONTINUE**. Add the appropriate configuration information for the datasource. Refer to the Description column for information describing the use of each property. Check the **UnSet** box if the property will not be used. At the end of your configuration session, click **SAVE** which deploys the configuration information to the server. Click **CANCEL** if you decide not to create the new resource.



If additional modifications to the resources are needed after they are created, simply click on the Resource to be modified. Click on the Configuration Tab where edits to the configuration properties can be made.

DefaultDS

Summary Configuration Metrics Control Content Status: Available

**Edit Resource**  
\* denotes a required field.

Connection Information <span style="float: right;">⌵ Collapse</span>			
Name	Unset	Value	Description
JNDI Name *	<input type="checkbox"/>	DefaultDS	The global JNDI Name under which to bind the datasource
Username	<input type="checkbox"/>	sa	The default username when creating a new connection.
Password	<input type="checkbox"/>		The default password when creating a new connection.
Minimum Pool Size	<input type="checkbox"/>	5	The minimum number of connections the pool should hold. The default is 0.

Metric information about the Datasource is available from the Metrics Tab for the selected Datasource. Additionally, Control Operations that are available for Connection Factories are also available for all Datasource types.



Summary Configuration Metrics **Control** Content Status: Available

Select from the available control operations for this resource.

**Flush** Flush the connections in the pool

---

**List Formatted Sub Pool Statistics** Obtain a formatted sub pool statistics report

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**List Statistics** Obtain a statistics report

## JMS Destinations

JMS Destination resources are also manageable via the Console. The JMS Destination types are:

- Queue
- Topic

### JMS Destinations

Summary Configuration Metrics Control Content

Different types of JMS Destinations

View by Type:  No actions available

Name	Type	Status	Actions
<a href="#">/queue/DLQ</a>	<a href="#">Queue</a>	UP	<a href="#">Delete</a>
<a href="#">/queue/ExpiryQueue</a>	<a href="#">Queue</a>	UP	<a href="#">Delete</a>
<a href="#">ListNonDurableSubscriptionsMultipleSubscribersExistingTopic</a>	<a href="#">Topic</a>	UP	<a href="#">Delete</a>

Total: 3

## Add New Queue or Topic

To add a new JMS Destination resource, select Queue or Topic link under JMS Destinations in the left navigation panel. Click on the “**Add a new resource**” button on the right side of your browser. The only template option is the default template of the destination type. Select the default template and click **CONTINUE** to proceed with configuring your resource. Refer to the Description column to assist with your configuration entries and the affect each property modification has. If there are default values for the properties, they will be listed as well.

Throughput and utilization Metric information are available from the Metrics Tab for the selected JMS Destination.

## Control Operations

Control Operations are available for JMS Destination. From the JMS Destination Summary Tab, select the JMS destination to control. This brings you to the Summary Tab of the topic or queue. Select the Control Tab. The Operations available for topics and queues are:

- **REMOVE All Messages** Remove all messages from the destination.
- **START** Start the Destination
- **STOP** Stop the Destination
- **List All Messages** List all messages for the specified subscription with the specified selector
- **List Durable Messages** List all durable messages for the specified subscription with the specified selector
- **List Non Durable Messages** List all non durable messages for the specified subscription with the specified selector

Operations available specific to queues are:

- **List Message Counter As HTML** Get the message counter as HTML
- **List Message Counter History As HTML** Get the message counter history as HTML
- **Reset Message Counter** Reset the message counter
- **Reset Message Counter History** Reset the message counter history

Operations available specific to topics are:

- **List All Subscriptions** Return all subscriptions for the topic or queue
- **List All Subscriptions As HTML** Return all subscriptions for the topic or queue in HTML
- **List Durable Subscriptions** Return all durable subscriptions for the topic or queue.
- **List Durable Subscriptions As HTML** Return all durable subscriptions for the topic or queue in HTML
- **List Non Durable Subscriptions** Return all non durable subscriptions for the topic or queue
- **List Non Durable Subscriptions As HTML** Return all non durable subscriptions for the topic or queue in HTML

Once the Control operation is executed, the Operation status is returned and listed in the Operations History pane.

## Deleting Resources

Any resource type can be Deleted by navigating to the Resources-specific Type (e.g., Datasources) Summary Tab by simply clicking the **DELETE** button next to the name of the Resource you want to delete. Once the DELETE has been confirmed, the Resource will be removed from the server and will no longer be able to be managed. You can always Add the resource again if needed.

: localhost.localdomain : JBossAS Servers : JBoss AS 5 (standard) : Resources : Datasources

### Datasources

Different types of Datasources

View by Type: All Types No actions available

Name	Type	Status	Actions
<a href="#">DefaultDS</a>	<a href="#">Local TX Datasource</a>	UP	<a href="#">Delete</a>

Total: 1

## References

The JBoss AS Administration Console distributed as part of the JBoss Application Server 5 release encompasses several open source community projects. The references below provide additional information on those individual projects. Your feedback is requested and appreciated. Use the respective forums for discussions related to these projects and let us know of any issues by filing in the project JIRA.

[Embedded JOPR](#)

[JBoss Application Server](#)

[Profile Service](#)

[SEAM](#)

[Rich Faces](#)

If you are running JBoss AS 4.2.x release, you can [download](#) the Embedded JOPR 1.1.0.GA release to try it out.

## Summary

This is the first GA release of the JBoss AS Administration Console for JBoss AS 5 but the work continues to provide our development community ease-of-administration and management capabilities.

## About the Author

[Shelly McGowan](#) is a member of the JBoss AS development team working from the Westford, Massachusetts Engineering office. Her work on the EMBJOPR project focused on the test design and development strategy using [JSFUnit](#). The tests are included as part of the EMBJOPR project. More information on the test design can be seen on the [EMBJOPR QA](#) wiki.