JBoss Enterprise Application Platform 5

Admin Console User Guide

for Use with JBoss Enterprise Application Platform 5

Edition 5.2.0

Last Updated: 2017-10-12

JBoss Enterprise Application Platform 5 Admin Console User Guide

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Abstract

This book is a user guide to the Admin Console of JBoss Enterprise Application Platform 5 and its patch releases.

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CHAPTER 1. INTRODUCTION TO THE ADMIN CONSOLE

The JBoss Enterprise Application Platform Admin Console is a browser-based management tool for the applications and resources of a JBoss Enterprise Application Platform instance. Read this guide for an overview of Admin Console features; descriptions of administrative tasks; and procedures to perform those tasks.

This release of the Admin Console provides the following administrative features:

- Services Binding Manager configuration, management and control

- Enterprise Application Platform instance information

- Application configuration, management and control for:

  - Java EE Enterprise Applications (EARs)

  - Web Applications (WARs)

  - Resource Adapters (RARs)

  - Enterprise JavaBean 2 and 3 (EJBs)

- Resource configuration, management and control for:

  - data sources

  - connection factories

  - JMS queues and topics (based on JBoss Messaging)

The Admin Console provided with Enterprise Application Platform retains the JMX and web consoles. It is included in the **production**, **all**, **web** and **default** profiles. It has also been tested with the **standard** server profile. Copy **admin-console.war** from **JBOSS_HOME/server/production/deploy** to the **JBOSS_HOME/server/standard/deploy** directory to use the Admin Console with the **standard** profile.
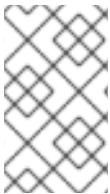
> **NOTE**
>
> The Admin Console is not intended for use with the **minimal** configuration provided with the distribution. Custom configurations based on this configuration should not be used with the Admin Console, either.

CHAPTER 2. CONFIGURE THE ADMIN CONSOLE

2.1. SECURITY

The Admin Console is secured by the JAAS security domain **jmx-console**. When the Enterprise Application Platform is installed using the zip archive, this security domain has no user accounts. This is to eliminate the possibility of default username/password based attacks. When the Enterprise Application Platform is installed using the Graphical Installer, a JAAS security domain and a user account is created as part of the install process. Even if the name of the JAAS security domain was changed during installation, the users are stored in the same location.

2.1.1. Authentication

Authentication is the process where a user identifies themselves to a system. The Admin Console makes use of username/password authentication, with permissions and roles assigned to users via the **jmx-console** and **jboss-web** domains.

2.1.2. Enable Authentication

The Enterprise Application Platform ships with authentication on the default security domains enabled by default. In order to check that authentication is enabled, or re-enable authentication that has previously been disabled, follow this procedure. For more information on security domains and authentication in the Enterprise Application Platform, refer to the *Security Guide*.

Procedure 2.1. Enabling Authentication

1. **Enabling Authentication on the JMX console**
   In this **web.xml** file:

   - **JBOSS_HOME/server/PROFILE/deploy/jmx-console.war/WEB-INF/web.xml**

   ensure the following **security-constraint** fragment is uncommented.

   ```
   <security-constraint>
      <web-resource-collection>
         <web-resource-name>HtmlAdaptor</web-resource-name>
         <description>
            An example security config that only allows users with the
   role
            JBossAdmin to access the HTML JMX console web application
         </description>
         <url-pattern>/*</url-pattern>
      </web-resource-collection>
      <auth-constraint>
         <role-name>JBossAdmin</role-name>
      </auth-constraint>
   </security-constraint>
   ```

2. **Enabling Security Domain on the JMX console**
   In this **jboss-web.xml** file:

   - **JBOSS_HOME/server/PROFILE/deploy/jmx-console.war/WEB-INF/jboss-web.xml**

ensure the following fragment is included.

```
<jboss-web>
  <!-- Uncomment the security-domain to enable security. You will
      need to edit the htmladaptor login configuration to setup the
      login modules used to authentication users.
  -->
  <security-domain>java:/jaas/jmx-console</security-domain>
</jboss-web>
```

3. **Enabling Authentication on the Admin Console**
   In this **web.xml** file:

   - **JBOSS_HOME/server/PROFILE/deploy/management/console-mgr.sar/web-console.war/WEB-INF/web.xml**

   ensure the following **security-constraint** fragment is uncommented.

```
<security-constraint>
   <web-resource-collection>
      <web-resource-name>HtmlAdaptor</web-resource-name>
      <description>
         An example security config that only allows users with the
role
         JBossAdmin to access the HTML JMX console web application
      </description>
      <url-pattern>/*</url-pattern>
   </web-resource-collection>
   <auth-constraint>
     <role-name>JBossAdmin</role-name>
   </auth-constraint>
</security-constraint>
```

4. **Enabling Security Domain on the Admin Console**
   In this **jboss-web.xml** file:

   - **JBOSS_HOME/server/PROFILE/deploy/management/console-mgr.sar/web.console.war/WEB-INF/jboss-web.xml**

   ensure the following fragment is included.

```
<jboss-web>
  <!-- Uncomment the security-domain to enable security. You will
      need to edit the htmladaptor login configuration to setup the
      login modules used to authentication users.
  -->
  <security-domain>java:/jaas/jmx-console</security-domain>
</jboss-web>
```

2.1.3. Users and Roles

The Enterprise Application Platform uses Roles to enable and restrict access to the Admin Console. Specifically, the roles allocated to users of the Admin Console are the **JBossAdmin** and **HttpInvoker** roles, as detailed in the procedure.

Procedure 2.2. Creating a User

This procedure creates a user, then grants the user permission to access the Admin Console and HTTP Invoker.

1. **Create a user in the jmx-console JAAS security domain**
   Edit the file `jmx-console-users.properties` in the directory `JBOSS_HOME/server/PROFILE/conf/props/`.

   a. **Create a username and password**
      Create a *username = password* pair.

      > **IMPORTANT**
      >
      > The commented **admin=admin** username and password is an example of the username/password definition syntax. Do not use this for your user account.

2. **Create a user in the web-console JAAS security domain**

   a. Edit the file `web-console-users.properties` in the directory `JBOSS_HOME/server/PROFILE/deploy/management/console-mgr.sar/web-console.war/WEB-INF/classes/`.

   b. **Add username and password**
      Add the *username = password* pair.

      > **IMPORTANT**
      >
      > The commented **admin=admin** username and password is an example of the username/password definition syntax. Do not use this for your user account.

3. **Grant web console permissions to user**

   a. Edit the file `web-console-roles.properties` in the directory `JBOSS_HOME/server/PROFILE/deploy/management/console-mgr.sar/web-console.war/WEB-INF/classes/`.

   b. Create an entry for the user of the form:

      ```
      username=JBossAdmin,HttpInvoker
      ```

      JBossAdmin

      > Grant the user permission to access the Web-Console

      HttpInvoker

      > Grant the user permission to access the HTTP Invoker

4. **Grant JMX console permissions to user**

   a. Edit the file `jmx-console-roles.properties` in the directory `JBOSS_HOME/server/PROFILE/conf/props/`

JBOSS_HOME/server/PROFILE/conf/props/.

b. Create an entry for the user of the form:

> *username*=JBossAdmin,HttpInvoker

JBossAdmin

Grant the user permission to access the Web-Console

HttpInvoker

Grant the user permission to access the HTTP Invoker

2.1.4. Disable Authentication

Authentication can be disabled for use in development environments, where the installation is on a secure, internal machine.

⚠️ **WARNING**

Do not disable authentication on an externally-facing installation.

Procedure 2.3. Disabling Authentication

1. **Disable security constraints on the JMX Console**
   In this **web.xml** file:

   - **JBOSS_HOME/server/PROFILE/deploy/jmx-console.war/WEB-INF/web.xml**

   comment out the **security-constraint** fragment.

   ```
   <security-constraint>
      <web-resource-collection>
         <web-resource-name>HtmlAdaptor</web-resource-name>
         <description>
            An example security config that only allows users with the
   role
            JBossAdmin to access the HTML JMX console web application
         </description>
         <url-pattern>/*</url-pattern>
      </web-resource-collection>
      <auth-constraint>
         <role-name>JBossAdmin</role-name>
      </auth-constraint>
   </security-constraint>
   ```

2. **Disabling Security Domain on the JMX Console**
   In this **jboss-web.xml** file:

   - **JBOSS_HOME/server/PROFILE/deploy/jmx-console.war/WEB-INF/jboss-**

```
                                                                web.xml
```

remove the following fragment.

```xml
<jboss-web>
  <!-- Uncomment the security-domain to enable security. You will
       need to edit the htmladaptor login configuration to setup the
       login modules used to authentication users.
  -->
  <security-domain>java:/jaas/jmx-console</security-domain>
</jboss-web>
```

3. **Disable security constraints on the Web Console**
   In this **web.xml** file:

   - **JBOSS_HOME/server/PROFILE/deploy/management/console-mgr.sar/web-console.war/WEB-INF/web.xml**

   comment out the **security-constraint** fragment.

```xml
<security-constraint>
   <web-resource-collection>
      <web-resource-name>HtmlAdaptor</web-resource-name>
      <description>
         An example security config that only allows users with the
role
         JBossAdmin to access the HTML JMX console web application
      </description>
      <url-pattern>/*</url-pattern>
   </web-resource-collection>
   <auth-constraint>
     <role-name>JBossAdmin</role-name>
   </auth-constraint>
</security-constraint>
```

4. **Disabling Security Domain for the Web Console**
   In this **jboss-web.xml** file:

   - **JBOSS_HOME/server/PROFILE/deploy/management/console-mgr.sar/web.console.war/WEB-INF/jboss-web.xml**

   remove the following fragment.

```xml
<jboss-web>
  <!-- Uncomment the security-domain to enable security. You will
       need to edit the htmladaptor login configuration to setup the
       login modules used to authentication users.
  -->
  <security-domain>java:/jaas/jmx-console</security-domain>
</jboss-web>
```

2.2. ACCESS THE ADMIN CONSOLE

The Admin Console is accessed using a web browser. By default, JBoss Application Server is

configured to only offer this service on the local machine. To configure the Application Server to enable remote access of the Admin Console and other services, refer to the *Installation Guide*.

> **NOTE**
>
> The Admin Console has been tested against and is supported for use with Mozilla Firefox 2.0, 3.0, 3.5 and 3.6; and Internet Explorer 6 and 7. It may also work in other browsers, but it is only supported in the browsers listed here.

> **NOTE**
>
> Ensure that the Enterprise Application Platform has been configured as described in Section 2.1, "Security", and is running locally.

Procedure 2.4. Access the Admin Console

1. Using a web browser, navigate to http://localhost:8080. The JBoss Welcome Page is displayed.

2. Select the 'Admin Console' link. The Admin Console login page is displayed.

3. Enter credentials created in Section 2.1.3, "Users and Roles", and click `Login`. The Admin Console is displayed.

2.3. PORT CONFIGURATION

The Service Binding Manager co-ordinates which ports the Enterprise Application Platform instance listens on when it starts up. Which port set is used by the Service Binding Manager can be configured using the Admin Console. The Enterprise Application Platform ships with four port sets predefined:

- ports-default: The standard ports, for instance JBoss Web listens for HTTP requests on 8080.

- ports-01: The standard ports incremented by 100. For example, HTTP is on 8180

- ports-02: The standard ports incremented by 200. For example, HTTP is on 8280

- ports-03: The standard ports incremented by 300. For example, HTTP is on 8380

Additional port sets can also be created. All port sets can be deleted, configured and have their service bindings displayed using the Admin Console.

2.3.1. Configure the Service Binding Manager

The Service Binding Manager can be configured to use a different Service Binding Set (different set of ports) on the Enterprise Application Platform.

Procedure 2.5. Configuring the Service Binding Manager

1. Navigate to the Service Binding Manager.

2. Click the 'Configuration' tab.

3. Edit 'Active Binding Set Name' to reflect the Service Binding Set to use.

4. Click **Save**. For these changes to take effect, the Enterprise Application Platform must be restarted.

2.3.2. Add a Service Binding Set

Alternative Service Binding Sets can be added to the Service Binding Manager using the Admin Console.

Procedure 2.6. Adding a Service Binding Set

1. Navigate to 'Service Binding Sets', located under the 'Service Binding Manager' menu.

2. Click `Add a new resource`.

3. Select the Resource Template to use (Service Binding Set). Click `Continue`.

4. Enter Name, Default Host Name and Port Offset.

5. Enter in any Override Bindings, by clicking **Add New**, and entering the required data. Click **OK** when finished.

6. Click **Save**.

2.3.3. Service Binding Set Configuration

Procedure 2.7. Configuring a Service Binding Set

1. Navigate to 'Service Binding Sets' and click on the Service Binding Set to be configured.

2. Click on the 'Configuration' tab.

3. Edit the fields to be changed.

4. Click **Save**.

2.3.4. Display Bindings for a Service Binding Set

Procedure 2.8. Displaying Bindings for a Service Binding Set

1. Navigate to 'Service Binding Sets' and click on the Service Binding Set for which the bindings are to be displayed.

2. Click the 'Control' tab.

3. Click `Display Bindings`. The bindings are displayed.

2.3.5. Delete Service Binding Sets

Procedure 2.9. Deleting a Service Binding Set

1. Navigate to 'Service Binding Sets'.

2. Click `Delete` to delete the Service Binding Set.

3. Click **OK** to confirm the Service Binding Set is to be deleted.

CHAPTER 3. APPLICATIONS

Applications are deployed on the Enterprise Application Platform. They are user-facing, providing services and interfaces such as web sites, APIs, and other resources.

These application types can be managed through the Admin Console Applications section of the interface:

- Enterprise ARchives (EARs)

- Web Application aRchives (WARs)

- Resource Adapter aRchives (RARs)

- Enterprise Java Bean archives (EJBs), both EJB2 and EJB3

EARs can contain other application types. When EARs containing other applications are deployed, these embedded applications are shown in the Embedded `Application_Type` section of the Admin Console. Control of these embedded applications is through the parent EAR.

3.1. DEPLOY AN APPLICATION

Deployed applications are available for end users, and can be manipulated through the Admin Console. Follow this procedure to deploy an application to the Enterprise Application Platform ready for use.

Procedure 3.1. Deploying an Application

1. **Navigate to the Application type**

   a. Expand the Applications menu by clicking on it.

   b. Click on the submenu of the type of application to add.

2. **Configuring the Application**

   a. Click `Add a new resource`.

   b. Specify the file to be deployed.

   c. Set options to deploy the application exploded, and to deploy the application as farmed.

3. **Deploy the Application**
   Click `Continue` to deploy the application.

3.2. UPDATE AN APPLICATION

An application is typically updated to apply a patch or similar change, by replacing the original application archive with a new file. To update an application, follow this procedure.
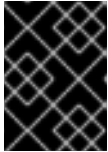
Procedure 3.2. Updating an Application

1. **Navigating to the Content tab**

   a. Click on the application's type submenu to expand it.

   b. Click on the application.

c. Click on the Content Tab.

2. **Finding the updated application file.**

   a. Click `Browse`.

   b. Browse to the location of the updated application file.

   c. Click `Open`.

3. **Performing the update.**
   Click `Update`. The currently deployed application will be replaced by the new application file.

IMPORTANT

The file to be updated must have the same name as the original application, otherwise the operation will fail.

3.3. UNDEPLOY AN APPLICATION

Undeploying an application using the Admin Console removes it from the server. The application can no longer be managed using the Admin Console, until it is deployed again. To undeploy an application, follow this procedure.

Procedure 3.3. Undeploying an Application

1. **Navigate to the Application**
   Click on the application's type submenu to expand it.

2. **Undeploy the Application**

   a. Click `Delete` next to the application.

   b. Confirm the removal of the application. The application is undeployed.

3.4. CONTROLLING APPLICATIONS

Applications can be started, restarted, and stopped using the Admin Console. Control operations available for applications are:

- Start

- Stop

- Restart

To perform these control operations, follow this procedure.

Procedure 3.4. Using Application Controls

1. **Navigate to the Control Tab**

   a. Click on the application's type submenu to expand it.

   b. Click on the application.

    c. Click the Control Tab.

2. **Perform the operation**
   Click the operation to perform. The results of the operation are displayed.

CHAPTER 4. RESOURCES

Anything managed by the Admin Console is a *resource*. This includes Applications, Services, and Datasources. The Admin Console separates Applications out from other managed resources. The remaining resources are accessible by navigating to the 'Resources' menu item in the Admin Console. They are categorized as JBoss Messaging, JBoss Web, Scripts, Connection Factories, and Datasources.
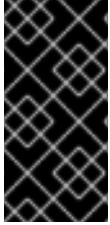
> **IMPORTANT**
>
> Resources deployed and modified using the Admin Console should continue to be administered using the Admin Console, as changes are not reflected in the original configuration file for the resource. Manual editing of configuration files and changes made using the Admin Console are not compatible.

4.1. JBOSS MESSAGING

JBoss Messaging provides the Java Messaging Services for the Enterprise Application Platform. Only destinations for JBoss Messaging can be configured through the Admin Console. Destinations are divided into Topics and Queues.

4.1.1. View the Deployed Messaging Queues

A list of Messaging Queues deployed on the EAP server is available in the Admin Console. To view this list:

Procedure 4.1.

1. Log in to the Admin Console of the Server at 127.0.0.1:8080/admin-console

2. a. **For JBoss Messaging:**
   Click on **Resources** → **JBoss Messaging** → **Queues**

   b. **For HornetQ:**
   Click on **JMS Manager** → **JMS Queues**

A list of the JMS queues deployed on the server will be displayed.

4.1.2. Add a JBoss Messaging Resource

To add new destinations to the Enterprise Application Platform instance, use the following procedures.

Procedure 4.2. Adding a JBoss Messaging Queue

1. Click **Resources** → **JBoss Messaging** → **Queues**. Click **Add a new resource**.

2. Select the Template to use for the resource.

3. Enter in the name of the Queue, and the JNDI name.

4. Optional: Edit the other values available. For more information about Queue settings, refer to the *JBoss Messaging User Guide*.

5. Click **Save**.

Procedure 4.3. Adding a JBoss Messaging Topic

1. Click **Resources** → **JBoss Messaging** → **Topics**. Click `Add a new resource`.

2. Select the Template to use for the resource.

3. Enter in the name of the Topic, and the JNDI name.

4. Optional: Edit the other values available, or leave them set to their default values. For more information about Topic settings, see the *JBoss Messaging User Guide*.

5. Click **Save**.

4.1.3. Remove a JBoss Messaging Resource

Removing a Messaging Resource will discard all messages associated with that resource. Do this with caution.

Procedure 4.4. Removing a JBoss Messaging Resource

1. Navigate to the JBoss Messaging Type - Topic or Queue, under **Resources** → **JBoss Messaging**.

2. Click `Delete` next to the resource to be deleted.

3. Click **OK** to confirm the delete operation.

4.1.4. JBoss Messaging Resource Configuration

Messaging resources can be fine tuned using configuration options. To change the configuration of a messaging resource, follow this procedure.

Procedure 4.5. Configuring a JBoss Messaging Resource

1. Navigate to the resource to be configured, using **Resources** → **JBoss Messaging** → **MESSAGING_TYPE** → **RESOURCE_NAME**.

2. Click the 'Configuration' tab.

3. When configuration options have been changed, click **Save**. For more information about configuration options, refer to the *JBoss Messaging User Guide*.

4.1.5. JBoss Messaging Resource Control

Various control operations are available for Queues and Topics. Both Messaging Resources have these operations available:

- Remove all messages - removes all messages from the destination.

- Start - starts the destination.

- Stop - stops the destination.

- List All Messages - lists all messages for the specified selector.

- List Durable Messages - lists all durable messages for the specified selector.

- List Non Durable Messages - lists all non durable messages for the specified selector.

Queue specific control operations are:

- List Message Counter As HTML - displays the message counter as HTML.

- List Message Counter History As HTML - displays the message counter history as HTML.

- Reset Message Counter - resets the message counter to zero.

- Reset Message Counter History - clears the message counter history.

Topic specific control operations are:

- List All Subscriptions - displays all subscriptions to the topic.

- List All Subscriptions As HTML - displays all subscriptions to the topic in HTML.

- List Durable Subscriptions - displays all durable subscriptions.

- List Durable Subscriptions As HTML - displays all durable subscriptions in HTML.

- List Non-Durable Subscriptions - displays all non-durable subscriptions.

- List Non-Durable Subscriptions As HTML - displays all non-durable subscriptions in HTML.

To perform any of these control operations, follow this procedure.

Procedure 4.6. Controlling a JBoss Messaging Resource

1. Navigate to the resource, using **Resources** → **JBoss Messaging** → **MESSAGING_TYPE** → **RESOURCE_NAME**.

2. Click the 'Control' tab.

3. Click the operation to be performed. For information about the effect of these operations, refer to the *JBoss Messaging User Guide*.

4.2. CONNECTION FACTORY

Connection Factories provide connection objects to the Resource Adapter (deployed in a RAR) they are associated with. The following types of Connection Factories are managed through the Admin Console:

- No Tx Connection Factories - these do not take part in JTA transactions

- Local Transaction Connection Factories - these participate in local JTA transactions

- XA Transaction Connection Factories - these participate in distributed JTA transactions

4.2.1. Add a Connection Factory Resource

To add a Connection Factory for use by a Resource Adapter, follow this procedure.

Procedure 4.7. Adding a Connection Factory to JBoss Messaging

1. Navigate to the Connection Factory type required, under **Resources** → **Connection Factories**.

2. Click `Add a new resource`.

3. Select the template to use, and click `Continue`.

4. Enter the JNDI name, RAR name, and Connection Definition in the labeled fields.
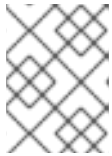
> **NOTE**
>
> The RAR for the associated Resource Adapter must be deployed before adding the Connection Factory.

5. Configure extra options for the connection factory. For more information about configuration options, see the *JBoss Messaging User Guide*.

6. Click **Save**. The new Connection Factory will be displayed in the Admin Console.

4.2.2. Remove a Connection Factory Resource

Removing a Connection Factory removes the ability to connect to the associated Resource Application. Similarly, if a Resource Application is removed, the corresponding Connection Factory should be removed. To perform this function, follow this procedure.

Procedure 4.8. Removing a Connection Factory

1. Navigate to the Connection Factory type of the Connection Factory to be removed, under **Resources** → **Connection Factories**.

2. Click `Delete` next to the Connection Factory to be removed.

3. Click **OK** to confirm the removal of the Connection Factory. The Connection Factory is removed.

4.2.3. Connection Factory Resource Configuration

Connection Factories have attributes that can be changed using the Admin Console. To access these attributes and change them, follow this procedure.

Procedure 4.9. Configuring a Connection Factory

1. Navigate to the Connection Factory type, under **Resources** → **Connection Factories**.

2. Click the Connection Factory.

3. Click the 'Configuration' tab.

4. When the attributes have been edited, click **Save**. The configuration of the Connection Factory is changed.

4.2.4. Control a Connection Factory Resource

Maintenance operations can be performed using Connection Factories. These operations are:

- Flush - Flush the connections in the pool

- List Formatted Sub Pool Statistics - gives a report on sub pool statistics

- List Statistics - general statistics report for the Connection Factory

- Test Connection - test the Connection Factory to ensure that connections can be obtained

To perform these operations, follow this procedure.

Procedure 4.10. Controlling a Connection Factory

1. Navigate to the Connection Factory type, under **Resources → Connection Factories**.

2. Click the Connection Factory.

3. Click the 'Control' tab.

4. Click the required operation. Result of the operation is displayed.

4.3. DATASOURCES

Datasources are generally databases. In order to make datasources available to applications in the Enterprise Application Platform, they need to be defined and published using JNDI. For more about datasources, refer to the *Administration and Configuration Guide*

Three types of datasources can be added to an Enterprise Application Platform instance:

- **No Tx** datasource. This does not take part in JTA transactions. Uses `java.sql.Driver`.

- **Local Tx** datasource. This does not support two phase commit. Uses `java.sql.Driver`. Suitable for a single database or a non-XA-aware resource.

- **XA** datasource. This supports two phase commit. Uses `javx.sql.XADataSource`.

4.3.1. Add a Datasource

Adding a datasource to the Enterprise Application Platform makes it available for use by applications on the instance. To add a datasource, use the following procedure.

Procedure 4.11. Adding a Local Tx or No Tx Datasource

1. Navigate to the Datasource type to be added, under **Resources → Datasources**.

2. Click **Add a new resource**.

3. Select the resource template from the drop-down box, and click **Continue**.

4. Enter required parameters of JNDI Name, JDBC Driver Class and Connection URL.

5. Optional: Configure extra options for the datasource. For more information about datasource configuration, see the *Administration and Configuration Guide*

6. Click **Save**. The datasource is available.

Procedure 4.12. Adding an XA Datasource

1. Navigate to the XA Datasource type, **Resources → Datasources → XA Datasources**.

2. Click `Add a new resource`.

3. Select the resource template from the drop-down box, and click `Continue`.

4. Enter required parameters of JNDI Name and XA DataSource Class.

5. Optional: Configure extra options for the datasource. For more information about datasource configuration, see the *Administration and Configuration Guide*

6. Click **Save**. The XA datasource is available.

4.3.2. Remove a Datasource

When a datasource is no longer in use, it can be removed from the Enterprise Application Platform using the following procedure.

Procedure 4.13. Removing a Datasource

1. Navigate to the Datasource type, under **Resources → Datasources**.

2. Click `Delete` next to the datasource to be removed.

3. Click **OK** to confirm the removal of the datasource. The datasource is removed.

4.3.3. Datasource Configuration

Datasources have a number of configuration options. To configure a datasource, follow this procedure.

Procedure 4.14. Configuring a Datasource

1. Navigate to the Datasource type, under **Resources → Datasources**.

2. Click the Datasource.

3. Click the 'Configuration' tab.

4. When the attributes have been edited, click **Save**. The configuration of the Datasource is changed.

4.3.4. Datasource Control

These operations are available for datasources:

- Flush. This flushes connections in the datasource pool.

- List Formatted Sub Pool Statistics. Displays a formatted sub pool statistics report.

- List Statistics. Displays a statistics report.

- Test Connection. Check that a connection is obtainable.

To perform maintenance, or display statistics, use the following procedure.

Procedure 4.15. Controlling a Datasource

1. Navigate to the datasource, at **Resources → Datasources → DATASOURCE_TYPE → DATASOURCE_NAME**.

2. Click the 'Control' tab.

3. Click the operation to be performed.

4.4. SCRIPTS

Several scripts come with the Enterprise Application Platform, and are visible in the Admin Console.

- `classpath.sh` - used to set the class path for server and client.

- `jboss_init_hpux.sh` - sample initialization script for HP-UX systems.

- `jboss_init_solaris.sh` - sample initialization script for Solaris systems.

- `password_tool.sh`

- `probe.sh` - used to discover EAP clusters.

- `run.sh` - starts an instance of the Enterprise Application Platform. For usage, see the *Getting Started Guide*.

- `shutdown.sh` - shuts down the Enterprise Application Platform instance.

- `twiddle.sh`

- `wsconsume.sh` - generates portable JAX-WS artifacts from a WSDL file.

- `wsprovide.sh` - generates portable JAX-WS artifacts for an endpoint implementation.

- `wsrunclient.sh` - builds correct classpath and libraries for JAX-WS web service client.

- `wstools.sh`

Only some of these scripts are useful to run from Admin Console, as they are command line tools. To run a script using the Admin Console, use the following procedure.

Procedure 4.16. Running a Script

1. **Navigating to the script**

   a. Navigate to the Scripts section in the Admin Console, **Resources → Scripts**.

   b. Click the script to be run.

   c. Click the 'Control' tab.

2. **Running the script**

   a. Click **Execute Script**.

   b. Enter in the appropriate parameters, if any, and click **OK**.

c. When the script has finished running, the results are displayed.

CHAPTER 5. MONITOR THE JBOSS ENTERPRISE APPLICATION PLATFORM INSTANCE

Metrics associated with the JBoss Enterprise Application Platform instance can be viewed in the Admin Console. Data such as memory usage, transactions, and thread counts are available. For more complete metrics and monitoring, use the JBoss Operations Network.

Metrics are offered for the following:

- The EAP instance

- Queues

- Topics

- Connection Factories

- Datasources

To access these metrics, follow this procedure.

Procedure 5.1. Accessing Metrics

1. Navigate to the resource you wish to display metrics for.

2. Click the 'Metrics' tab. Metrics are displayed.

3. Optional: Click `Refresh` to get the latest data.

APPENDIX A. REVISION HISTORY

Revision 5.2.0-100.400   **2013-10-30**   **Rüdiger Landmann**
    Rebuild with publican 4.0.0

Revision 5.2.0-100   **Wed 23 Jan 2013**   **Russell Dickenson**
    Incorporated changes for JBoss Enterprise Application Platform 5.2.0 GA. For information about documentation changes to this guide, refer to *Release Notes 5.2.0.*

Revision 5.1.2-102   **17 Sep 2012**   **Russell Dickenson**
    Bump to have book re-Brewed

Revision 5.1.2-101   **Mon 30 January 2012**   **Russell Dickenson**
    Bugzilla ticket: https://bugzilla.redhat.com/show_bug.cgi?id=772990 - Fix for missing step in procedure

Revision 5.1.2-100   **Thu Dec 8 2011**   **Jared Morgan**
    Incorporated changes for JBoss Enterprise Application Platform 5.1.2 GA. For information about documentation changes to this guide, refer to *Release Notes 5.1.2*

Revision 5.1.1-100   **Mon Jul 18 2011**   **Jared Morgan**
    Incorporated changes for JBoss Enterprise Application Platform 5.1.1 GA. For information about documentation changes to this guide, refer to *Release Notes 5.1.1.*

Revision 5.1.0-100   **Tue Aug 03 2010**   **Rebecca Newton**
    Changed version number in line with new versioning requirements.
    Revised for JBoss Enterprise Application Platform 5.1.0.GA, including:
    JBPAPP-3278
    JBPAPP-3276
    JBPAPP-4776