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OpenShift is a cloud solution for your application server requirements. OpenShift is a cloud-based application platform for Java, Perl, PHP, Python, and Ruby applications. JBoss Developer Studio supports OpenShift deployments and this guide will show you how to connect, create and deploy with OpenShift from your JBoss Developer Studio workbench.
Creating an OpenShift Application

The **OpenShift Application** creation wizard is accessed through **JBoss Central** or by navigating to **File → New → Other**.

![Selecting the OpenShift Application wizard](image)

**Figure 2.1. Selecting the OpenShift Application wizard**

After clicking on the **OpenShift Application** link, the creation wizard will launch.
Chapter 2. Creating an OpenSh...

Sign in to OpenShift

Please provide your OpenShift credentials.

If you do not have an account on OpenShift, please sign up here.

Username: username
Password: ********

☐ Save password (could trigger secure storage login)

Figure 2.2. Input OpenShift credentials
If you have already signed up for an OpenShift account then you can input your **Username** and **Password** here and click the **Next** button. If validation is successful you will see the **Setup OpenShift Application** screen.

If you do not have an OpenShift account, you can create one through the link at the top of the wizard screen. This will open the OpenShift sign-up page within your workbench. Once you have created an account you will need to relaunch the **OpenShift Application** wizard and input your new username and password.

---

**Domain Creation**

Select an alphanumerical name and a type for the domain to edit.

<table>
<thead>
<tr>
<th>Domain name</th>
<th>SSH Public Key</th>
<th>Browse</th>
<th>New</th>
</tr>
</thead>
</table>

Please make sure that your private key for the public key is listed in the **SSH2 Preferences**.

---

**Figure 2.3. Creating a domain**

If you need to create a domain, type the name you wish to have into the **Domain name** field. You will also need to provide your public SSH key. Ensure that the paired private key is listed within the SSH2 Preferences. If you are unsure, click the **SSH2 Preferences** link. Click **Finish** to complete domain creation.

If you already have a domain name then you will not see the **Domain Creation** screen.
Note

If you ever wish to rename your domain, this can be done through the OpenShift Explorer.
**Setup OpenShift Application**

Select an alphanumerical name and a type for the application to create.

- **Use existing application:** [ ]
  - [ ] Browse...

**New application**

- **Name:**
  - [ ]

- **Type:**
  - [ ]

- **Gear profile:**
  - [ ]
  - [ ] Enable scaling

**Embeddable Cartridges**

- [ ] mongodb-2.0
- [ ] cron-1.4
- [ ] mysql-5.1
- [ ] postgresql-8.4
- [ ] haproxy-1.4
- [ ] 10gen-mms-agent-0.1
- [ ] phpmyadmin-3.4
- [ ] metrics-0.1

---

**Figure 2.4. Creating a new OpenShift application**
Now ready to create your OpenShift application, you will need to specify a name, the platform type to deploy for, from the **Type** drop-down list, and the **Gear profile** to be used.

**Note**

No underscores or special characters are allowed in the application name.

You can also select to embed cartridges into your application. By embedding a cartridge, you allow your application the ability to use the associated technology. For example, embedding the `mysql` cartridge will grant your application the capability to use a MySQL database.
Setup Project for OpenShift Application "jbossas"

Configure your project and server adapter settings, then click 'next' or 'finish'.

- **Create a new project**

  Use existing project: [Browse...]

- **Server Adapter**
  - Create and setup a server for easy publishing

---

**Figure 2.5. Application setup**
Since you are creating a new project, leave the Create a new project checkbox ticked.

For easy interaction with the OpenShift server and your domain it is recommended that you leave the Create and setup a server for easy publishing checkbox ticked. Doing so will create an OpenShift server instance in the Servers view, upon completing the wizard.

Click the Next button to progress in the wizard.
Import an existing OpenShift application

Configure the cloning settings by specifying the clone destination if you create a new project, and the git remote name if you’re using an existing project.

- **Cloning settings**
  - Use default location
    - Location: /home/irooskov/git
  - Use default remote name
    - Remote name: origin

Make sure your SSH key used with the domain is listed in SSH2 Preferences.

Figure 2.6. Cloning settings
The final screen of the **OpenShift application wizard** specifies **Cloning settings**. Here you can set the properties for creating a local copy of your application. The **Location** and **Remote name** options will be set to automatically, however you are able to change these by deselecting the default option and specifying custom settings in the fields provided.

Click the **Finish** to begin the cloning of the Git repository.

**Figure 2.7. Importing the project**

After the Git repository has been cloned, it will be available through the **Git Repositories** view. You can open it by navigating to **Window → Show View → Other → Git → Git Repositories**. With the **Git Repositories** option selected, click **OK**.
Figure 2.8. Project in Package Explorer

The OpenShift application that you created through the wizard, will appear in your Package Explorer tab.
Figure 2.9. Publishing your project through the server adaptor

The wizard has also created a server adaptor that connects to your OpenShift service. In the **Servers** tab there will be an OpenShift server available that contains your application. Any changes you make locally to the application can be published to your OpenShift instance by right-clicking on the application under the server in the **Servers** view, and selecting **Full Publish**.

Figure 2.10. OpenShift server overview and settings

As with a local server, double-clicking on the OpenShift server instance in the **Servers** tab will open the server overview page in your workbench.
Chapter 3.

Viewing the Remote Console

**Note**

If you have not yet created an OpenShift server adapter, follow the instructions in *Chapter 2, Creating an OpenShift Application*.

Similar to when you are running a server locally, you are also able to see console output for your remote OpenShift server. To have this output displayed to you, right-click on your OpenShift server in the *Servers* tab and select *Show In → Remote console*. 
Figure 3.1. Selecting the OpenShift Profile

A new tab will open called Console and display the last 100 lines of the servers boot.log and server.log files. This Console tab will now tail the content of these files on the server, outputing any updates to you, as they occur.
Figure 3.2. Selecting the OpenShift Profile

This information can be useful in debugging the remote server and ensuring processes are occurring as expected.
Modifying your Maven Web Application to Deploy to OpenShift

Open the pom.xml file of your web application in the editor by double-clicking on the file in your Project Explorer and selecting the pom.xml tab in your workbench.

Create profiles tags within the project tags of the pom.xml file. Within the profiles tags, press Ctrl and Spacebar together to trigger auto-completion.

From the auto-completion menu, select OpenShift profile. The profile information to connect to OpenShift will be inserted.
Chapter 4. Modifying your Mav...

Figure 4.1. Selecting the OpenShift Profile
Appendix A. Revision History

Revision History
Revision 1-0      Tue Nov 29 2011      IsaacRooskov<irooskov@redhat.com>
Initial creation of book