

Forge Reference Guide

Version: 3.3.1

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Introduction to Forge

Forge allows developers to use the familiar terminal or command line interface within an Integrated Development Environment (IDE).

Using Forge

To begin using Forge, launch the **Forge Console** view by navigating to **Window** → **Show View** → **Other** → **Forge** → **Forge Console**.

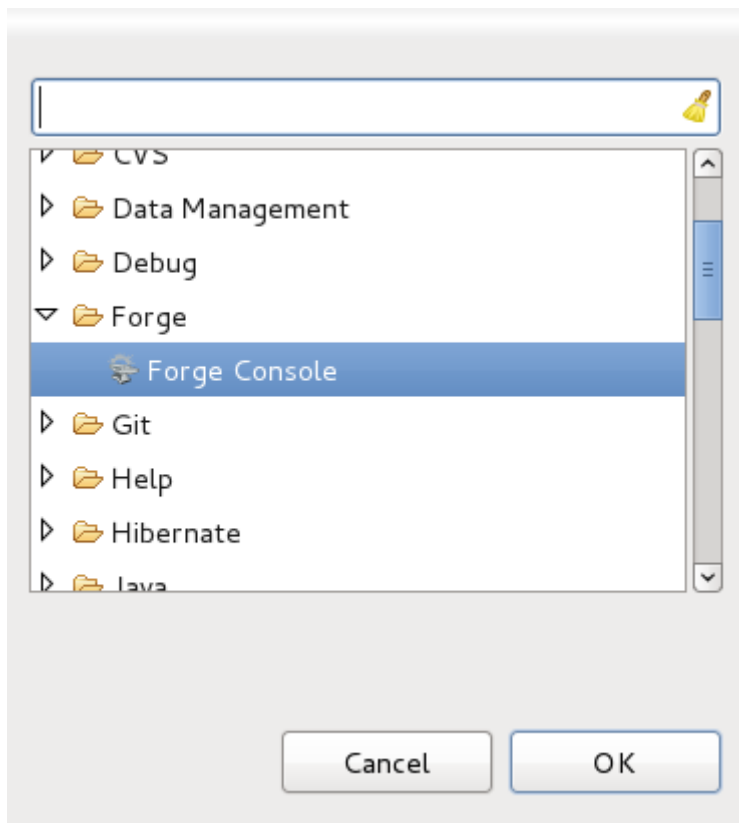


Figure 2.1. Forge Console selection

The **Forge Console** will launch in an inactive state. How and when Forge starts can be changed, see [Chapter 5, Preferences](#).

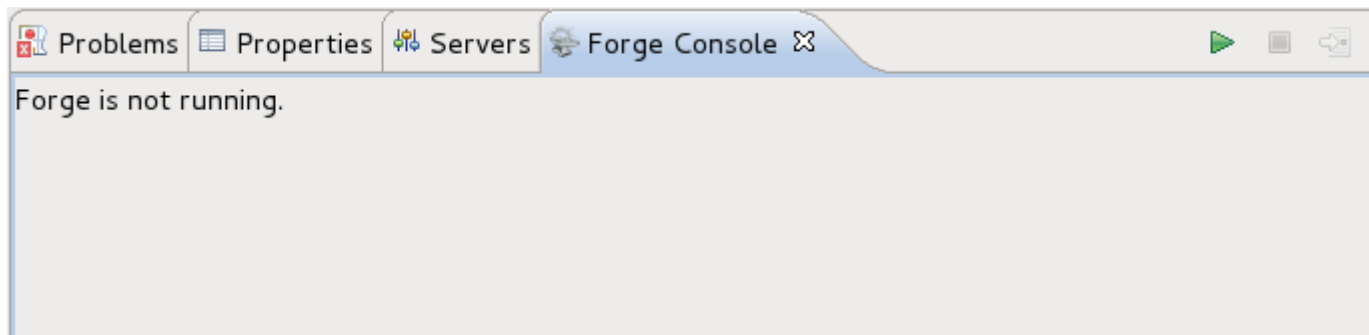


Figure 2.2. The Forge Console

To start Forge, click the green arrow in the **Forge Console**.

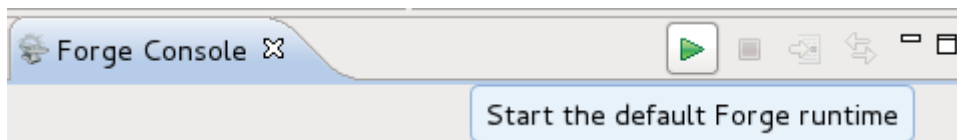


Figure 2.3. Starting Forge

Once Forge starts you will notice the name *Forge* appear in the **Forge Console** view and a command line currently in your root workspace directory, without a project selected.



Figure 2.4. Started Forge

From the **Forge Console** command line you can type the command `cd` (change directory) followed by the directory to change to, and if a navigator view is opened, the navigator view will also change to the specified directory. If the resource is not in the local workspace and the **Remote Systems** view is open, the directory will be selected in the **Remote Systems** explorer.

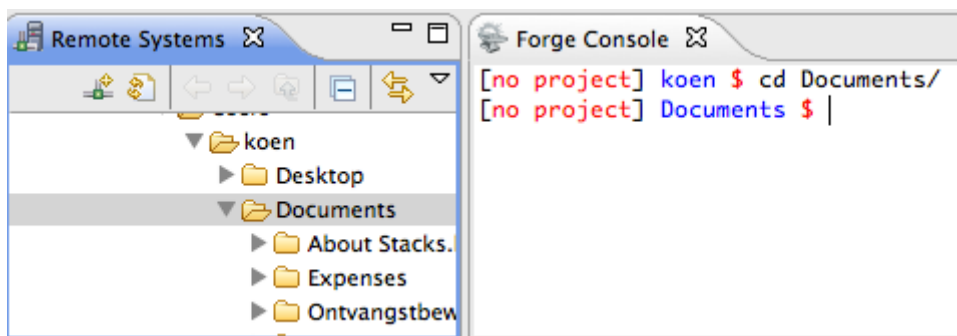


Figure 2.5. Remote Systems view with the Forge Console

Through the **Forge Console** you can also link the console output to the currently open editor by clicking on the **Link with Editor** button.

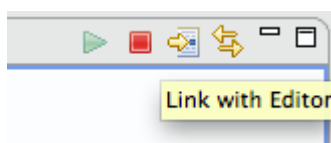


Figure 2.6. Link with Editor button

If you find it easier to navigate your project via the **Project Explorer** view, you can right-click on a file from this view and select **Show In** → **Forge Console** from the context menu.

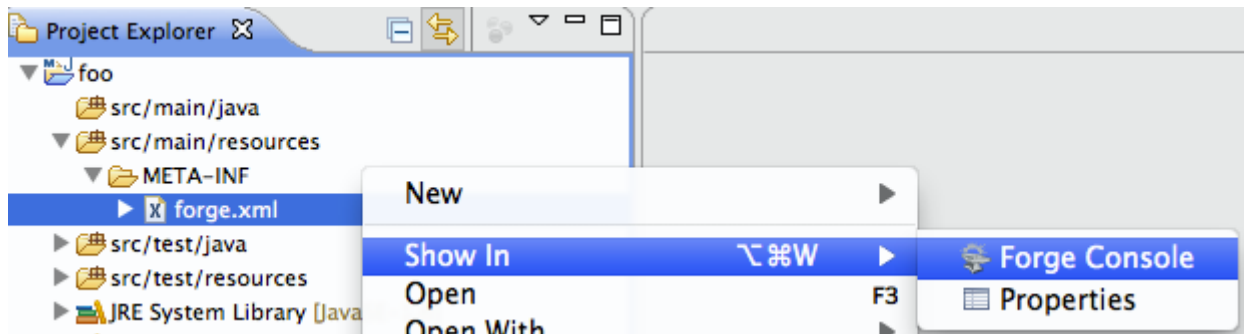


Figure 2.7. Opening a file in Forge from the Project Explorer

This will automatically execute the `pick-up` command, changing the current Forge runtime context to the selected resource and opening the file or folder. For more on this command see: [Section 4.2, “The pick-up command”](#)

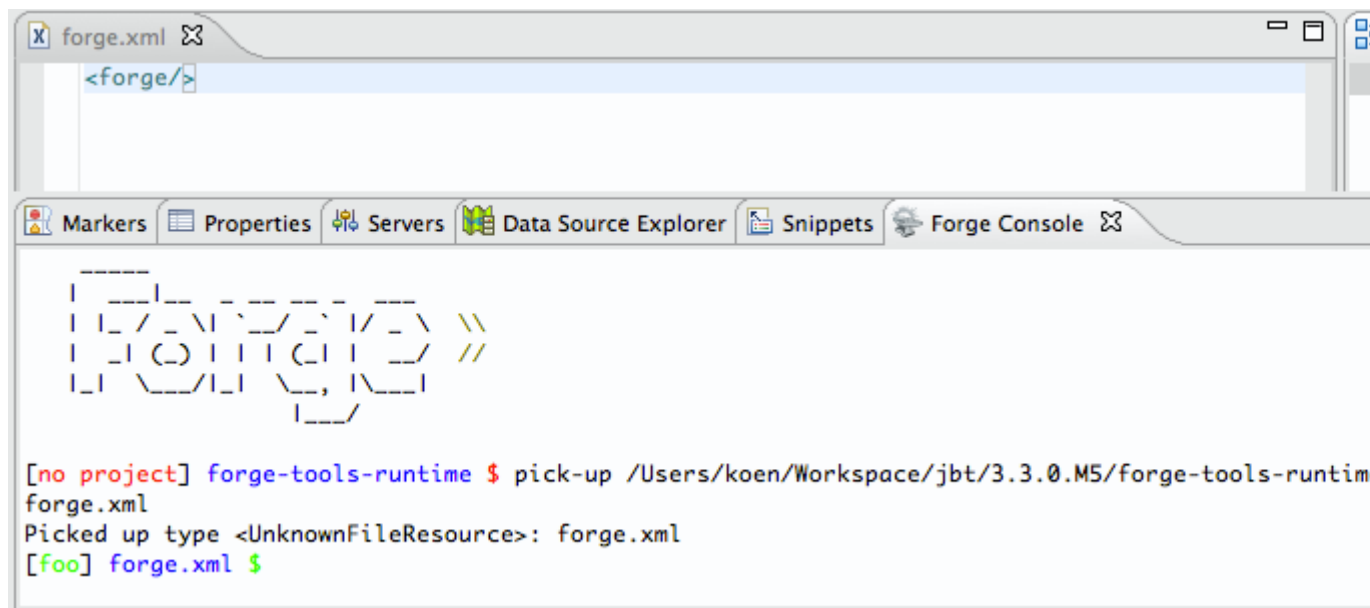


Figure 2.8. Executing the menu option on a file

If you close the **Forge Console** view, Forge will continue to run in the background. Re-opening the **Forge Console** view will display the latest Forge state.

To stop Forge, click on the red square in the **Forge Console**.

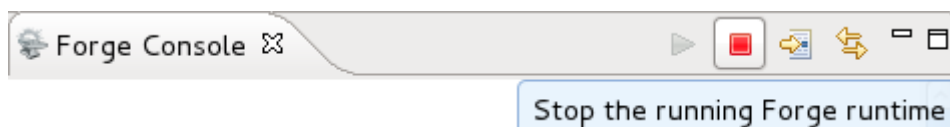


Figure 2.9. Stopping Forge

Project commands

Outlined in this chapter are the commands you will use most often when developing projects with the Forge runtime.

3.1. Creating a new project

The command `new-project` allows you to create a new project and have it automatically imported into your workspace.

The format of the command is:

```
new-project --named example --topLevelPackage com.example
```

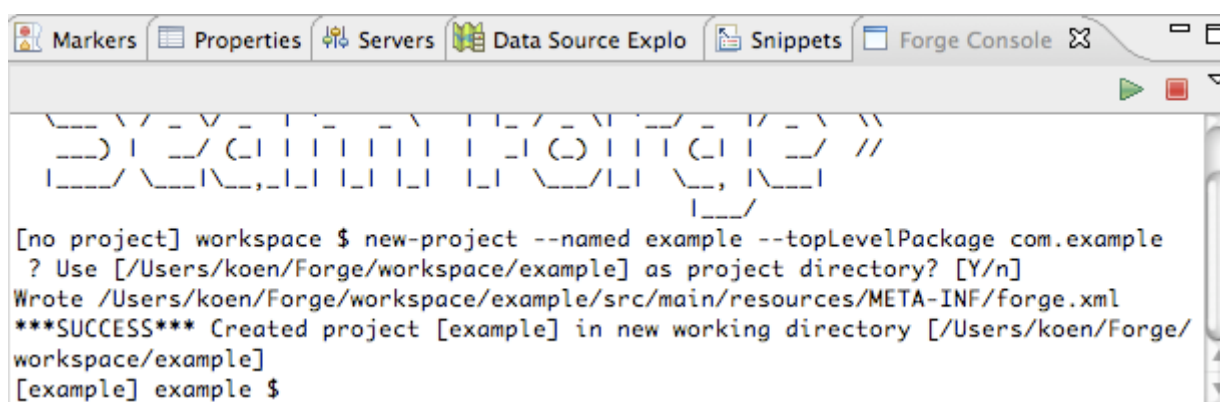


Figure 3.1. new-project command execution

Once the command has been executed, the new project will appear in your **Project Explorer**.

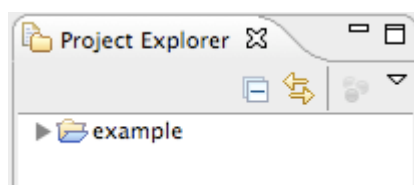


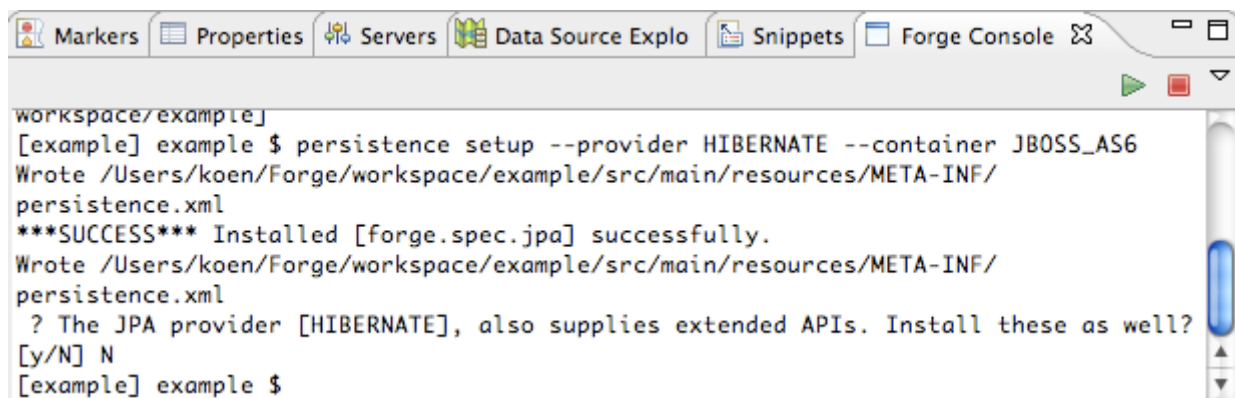
Figure 3.2. New project in Project Explorer

3.2. Adding persistence

Persistence can be added to a project through the use of the command `persistence setup`.

The format of the command is:

```
persistence setup --provider HIBERNATE --container JBOSS_AS6
```



```
workspace/example]
[example] example $ persistence setup --provider HIBERNATE --container JBOSS_AS6
Wrote /Users/koen/Forge/workspace/example/src/main/resources/META-INF/
persistence.xml
***SUCCESS*** Installed [forge.spec.jpa] successfully.
Wrote /Users/koen/Forge/workspace/example/src/main/resources/META-INF/
persistence.xml
? The JPA provider [HIBERNATE], also supplies extended APIs. Install these as well?
[y/N] N
[example] example $
```

Figure 3.3. persistence setup command execution

Once the command has been executed a new file will have been created called `persistence.xml`. The file will appear under your project in the **Project Explorer**, and will automatically open in an editor.

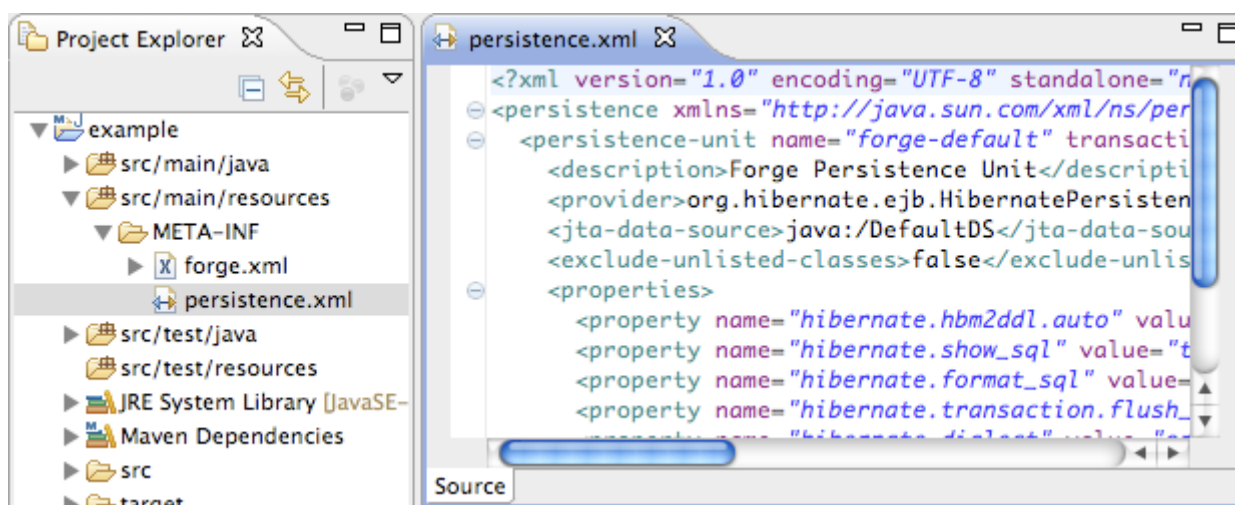


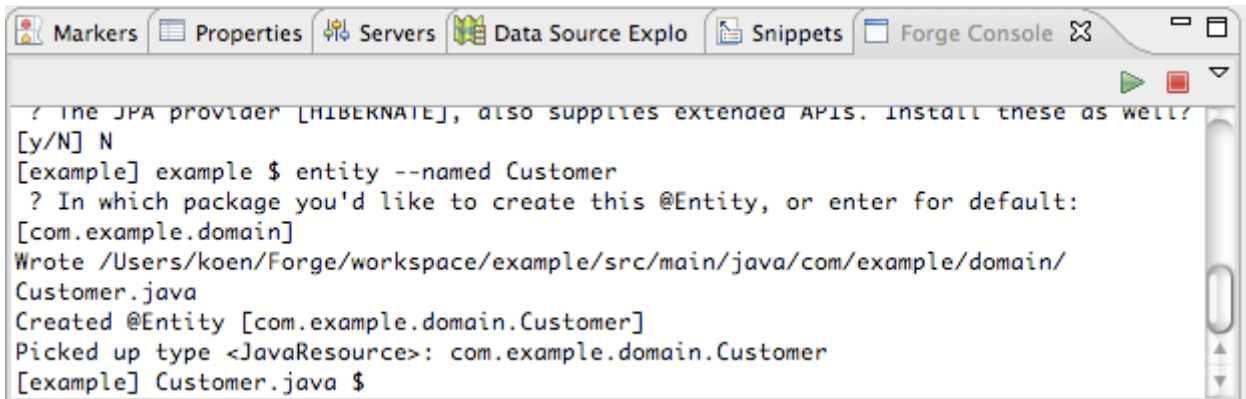
Figure 3.4. persistence.xml file open in an editor

3.3. Creating a new entity

A new entity can be created for a project by using the command `entity`.

The format of the command is:

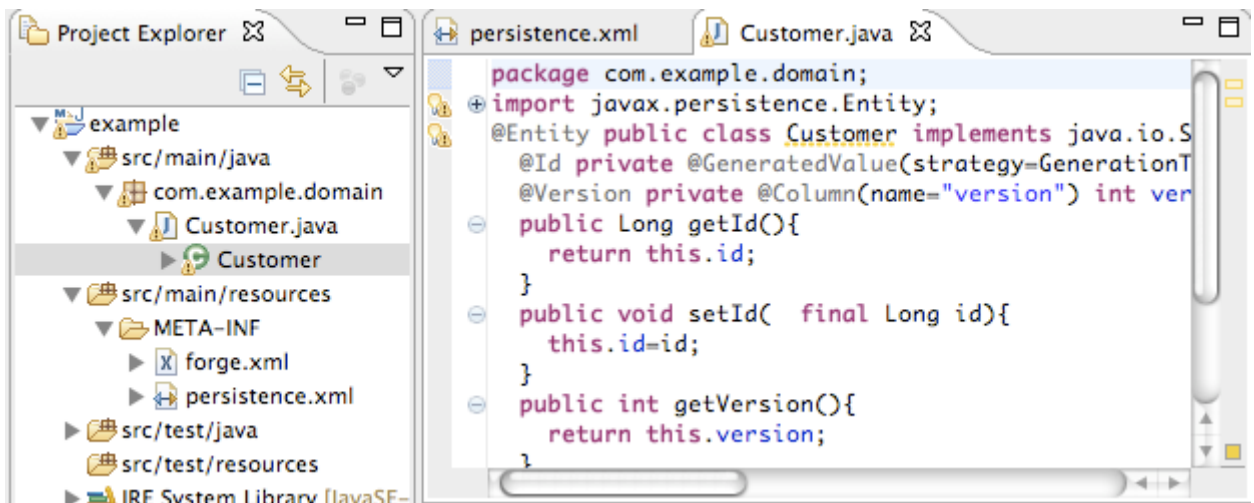
```
entity --named Customer
```



```
? The JPA provider [HIBERNATE], also supplies extended APIS. Install these as well?
[y/N] N
[example] example $ entity --named Customer
? In which package you'd like to create this @Entity, or enter for default:
[com.example.domain]
Wrote /Users/koen/Forge/workspace/example/src/main/java/com/example/domain/
Customer.java
Created @Entity [com.example.domain.Customer]
Picked up type <JavaResource>: com.example.domain.Customer
[example] Customer.java $
```

Figure 3.5. entity command execution

Once the command has been executed a new entity will have been created. The entity will appear under your project's domain in the **Project Explorer**, and the Java file will automatically open in an editor.



```
package com.example.domain;
import javax.persistence.Entity;
@Entity public class Customer implements java.io.Serializable {
    @Id private @GeneratedValue(strategy=GenerationType.IDENTITY)
    @Version private @Column(name="version") int version;
    public Long getId(){
        return this.id;
    }
    public void setId( final Long id){
        this.id=id;
    }
    public int getVersion(){
        return this.version;
    }
}
```

Figure 3.6. Entity Java file open in an editor

3.4. Creating a new field

A new field can be created for an entity by using the command `field string`.

The format of the command is:

```
field string --named firstName
```

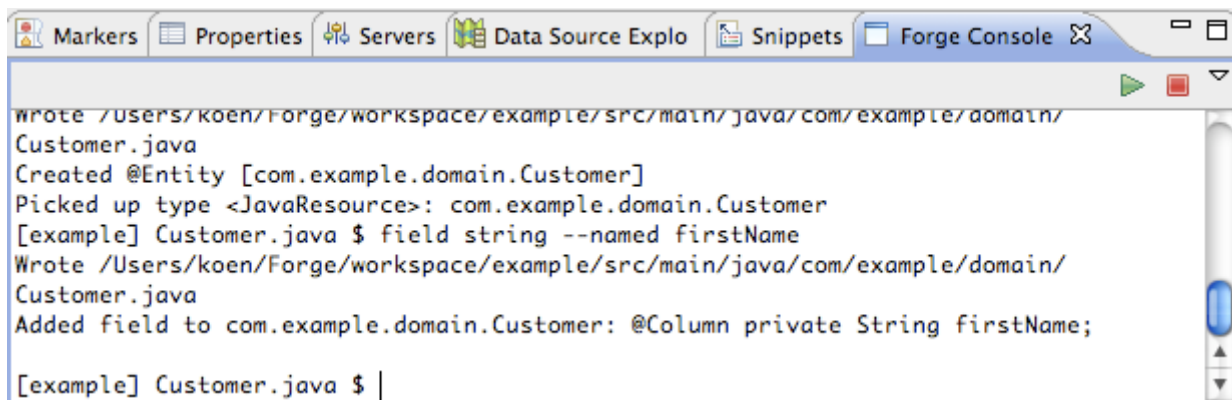


Figure 3.7. field string command execution

Once the command has been executed a new field will have been created in the selected entity. The field will appear in the Java editor and in the **Outline** view.

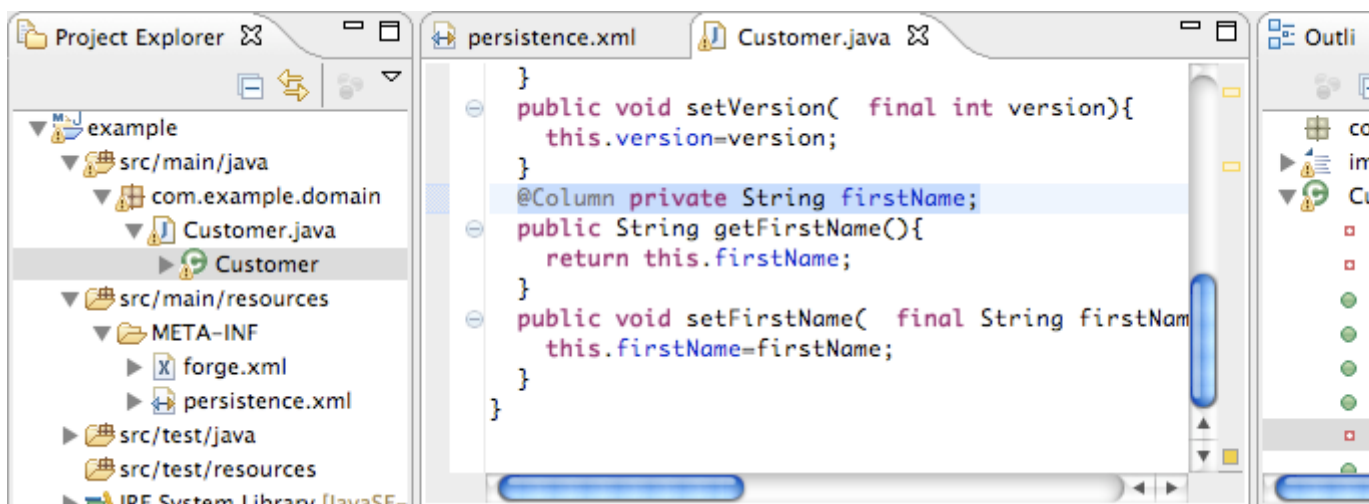


Figure 3.8. Field entry displayed in the entity file, within the Java editor

General commands

Outlined in this chapter are general commands for interacting with the Forge runtime, your projects and the workspace.

4.1. Opening a file or folder

The command `open` allows you to open a file or folder.

The format of the command is:

```
open foo/pom.xml
```

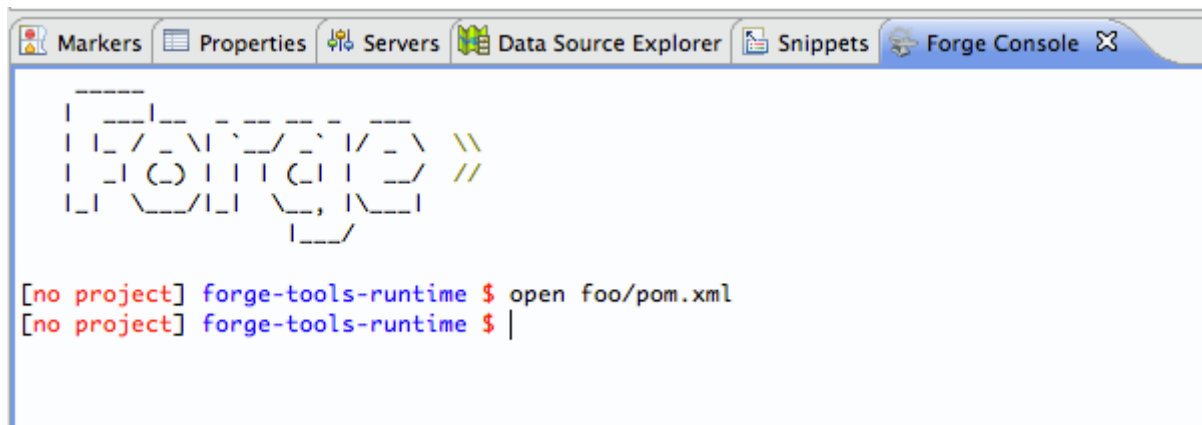


Figure 4.1. open command execution

Using the command to open a file will open it in an editor. Executing the command on a folder in your workspace will expanded the folder in the Project Explorer view. If the resource is a folder outside the workspace it will be selected and expanded in the Remote Systems view.

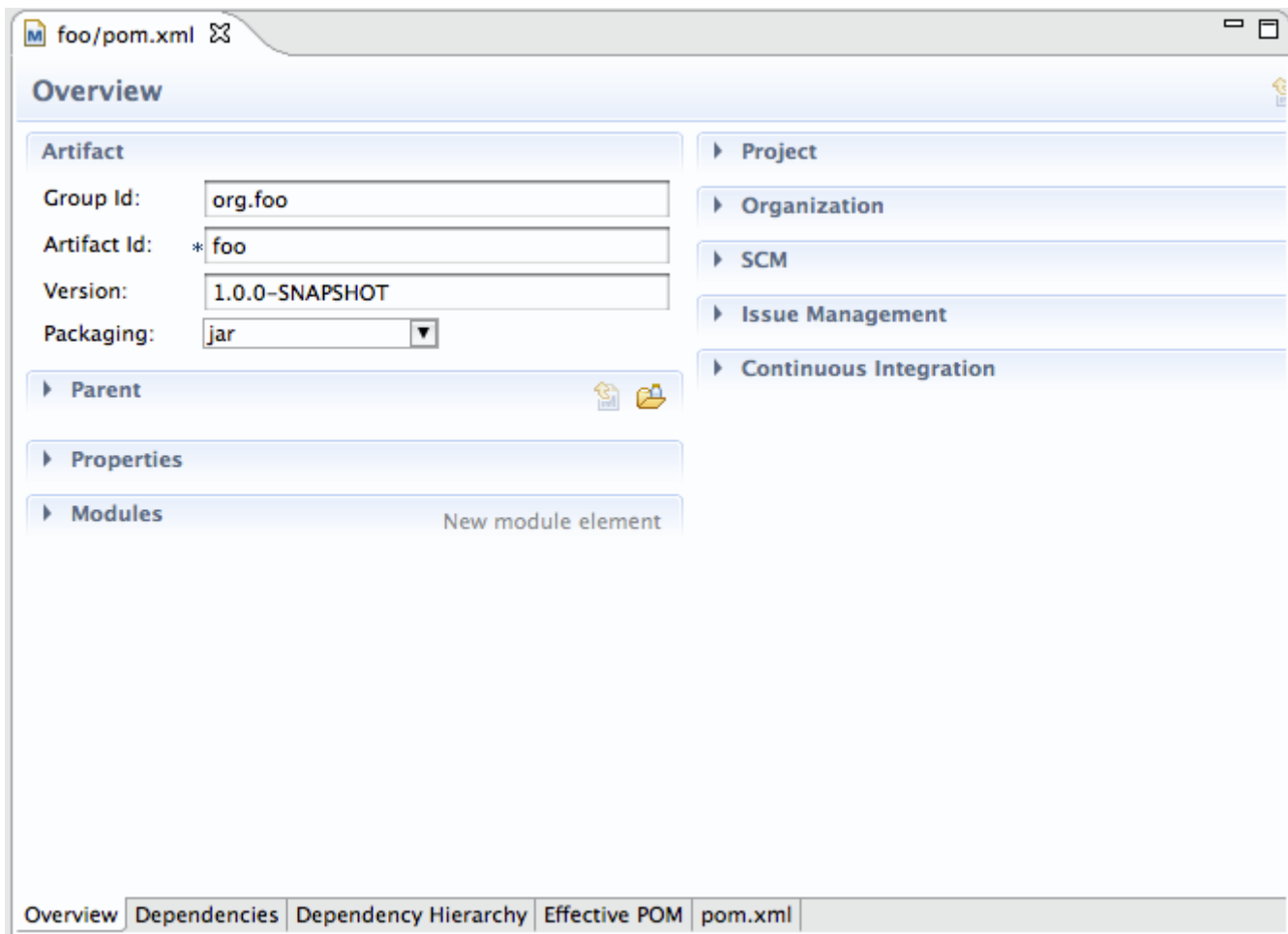


Figure 4.2. File opened

4.2. The pick-up command

The command `pick-up` allows you to view the contents of a directory or navigate to a file and automatically open it.

The format of the command for a directory is:

```
pick-up foo/
```

Executing the command on a directory will write the contents of the directory to the screen.

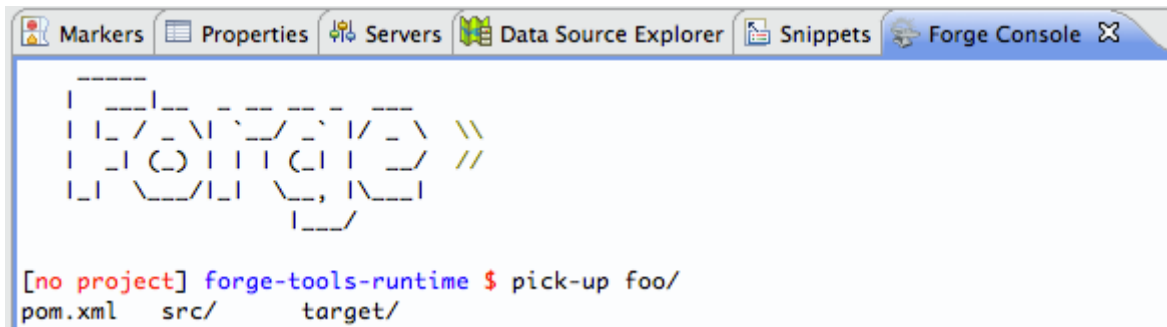


Figure 4.3. open command execution

The format of the command for a file is:

```
pick-up foo/pom.xml
```

Using the command to open a file will open it in an editor.

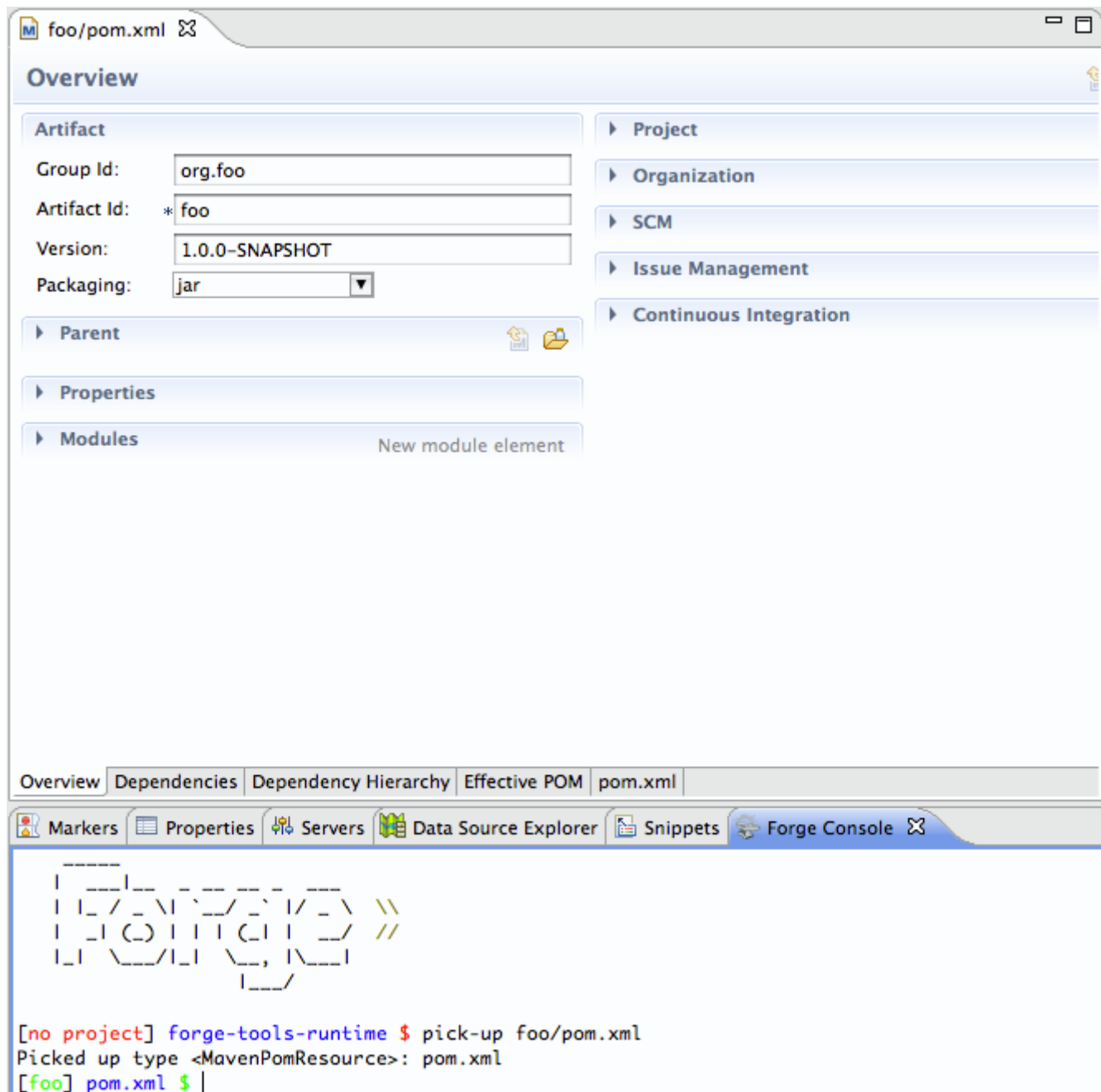


Figure 4.4. File opened

Preferences

Forge preferences can be accessed by navigating to **Window** → **Preferences** → **Forge**.

From the main Forge preference page you can set how Forge should be started. If you select to **Start Forge when Eclipse starts** Forge will automatically run on launch. Setting the option to **Start Forge in Debug Mode** will force Forge to debug mode every time it is started.

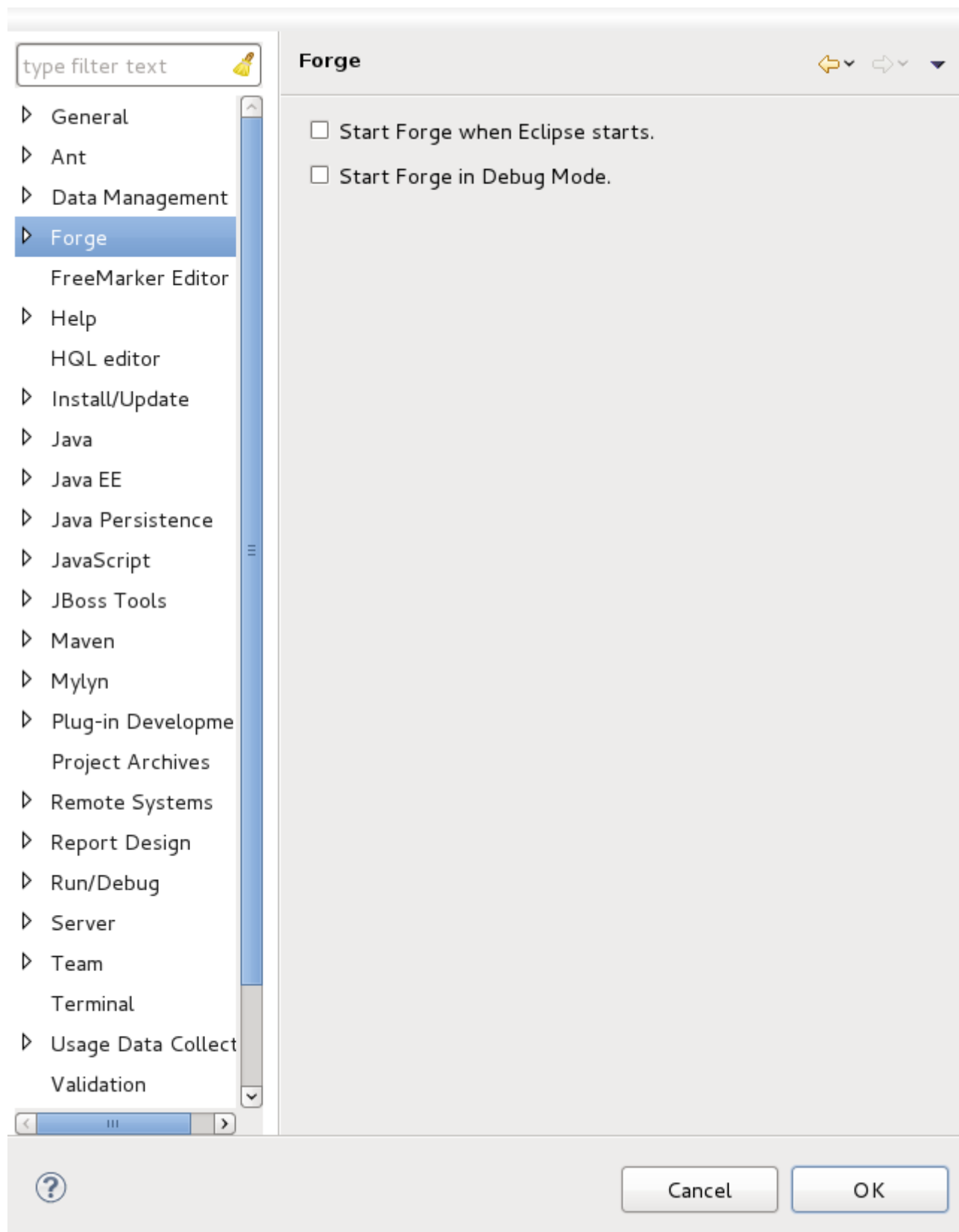


Figure 5.1. Forge preferences page

Selecting **Installed Forge Runtimes** from the preferences menu will display the currently installed Forge runtimes and their location. the Forge runtime shipped with Forge Tools displays with the name *embedded*.

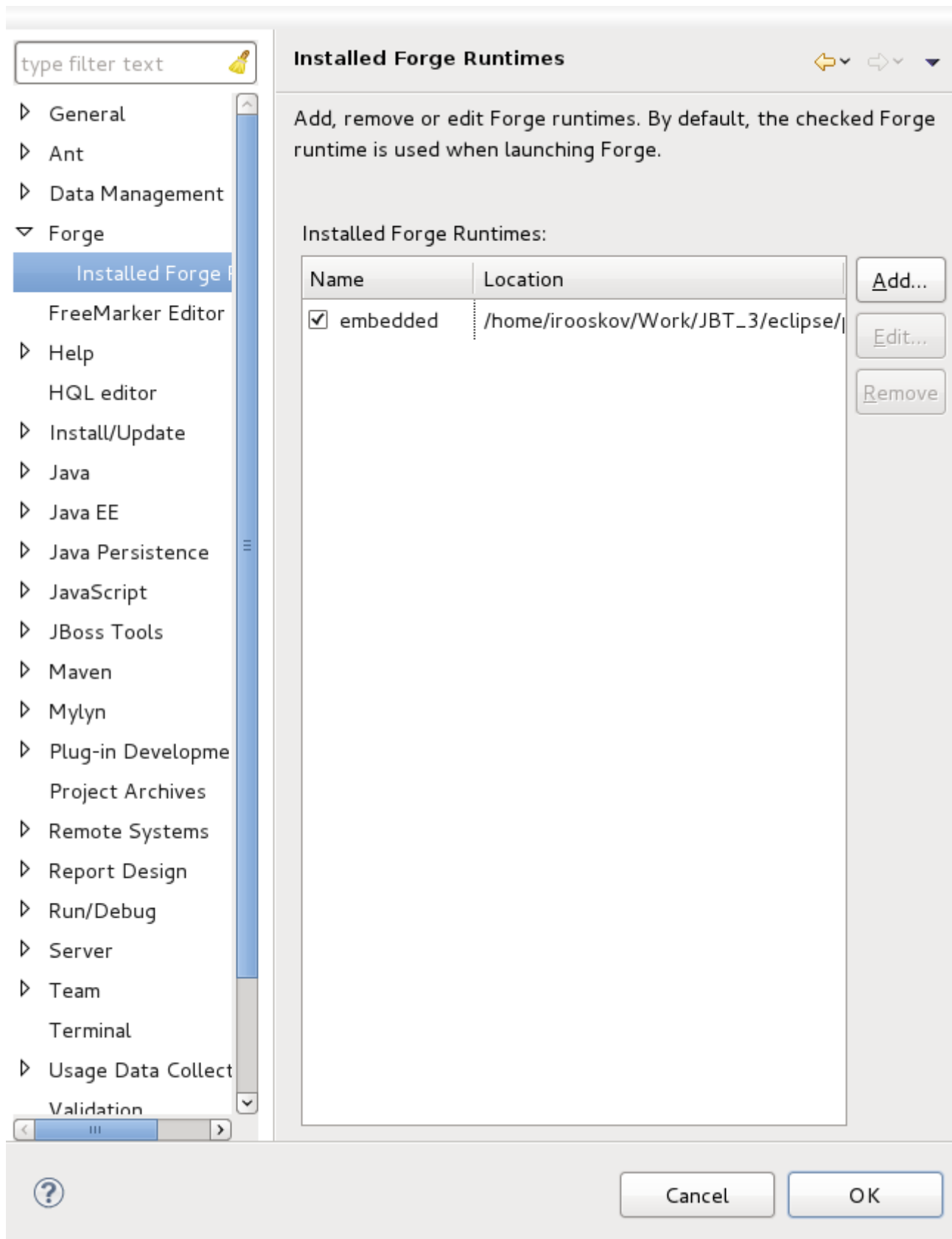
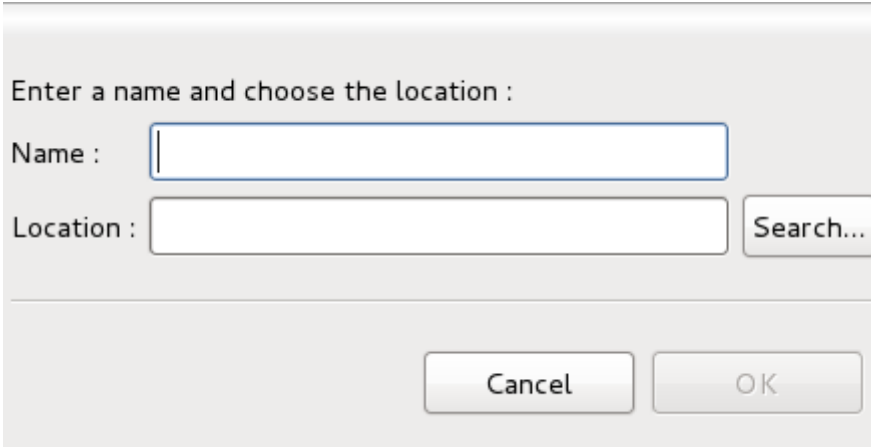


Figure 5.2. Forge runtime preferences page

You can have more than one Forge runtime installed at once. To install an alternate runtime to the one provided click on the **Add** button.

To add a new Forge runtime you will need to specify a name and provide the runtime location. Once the fields have been completed, click the **OK** button to return to the **Installed Forge Runtimes** page. Once successfully installed, the new Forge runtime will appear in the **Installed Forge Runtimes** list.



Enter a name and choose the location :

Name :

Location :

Figure 5.3. Adding a new Forge runtime

