

# Using code completion to develop BeanShell scripts

You can use any text editor to develop a scripting language. However, a standard text editor lacks of code assistant features. Most scripting languages are loose type. For example, to define a variable in JavaScript, you need to type:

```
var a;
```

It is difficult to determine what type of "a" later in the source code. With BeanShell, you can use a variable without declaring it, for example:

```
a = new File("file.txt");
```

Or you can declare it first:

```
File a = new File("file.txt");
```

Java IDE does not officially support code completion for scripting languages. However, there is a workaround if you use BeanShell. First you need a Java IDE. If you do not have one, you can select NetBeans because it has the smallest file size. You can download the latest version of NetBeans at <http://www.netbeans.org/downloads/index.html>. The NetBeans Java SE package is enough. Second you need to set up a MagicDraw classpath.

To set up a classpath point in the MagicDraw library in NetBeans

1. Click **Tools > Libraries** on the main menu. The **Library Manager** dialog will open.
2. Click the **New Library** button. The **New Library** dialog will open.
3. Specify a library name, for example, MD16.6. The Library type must be **Class Libraries**.
4. Click **OK** to close the **New Library** dialog.
5. Select your new library in the Libraries tree.
6. Click the **Add JAR/Folder** button and add all the JAR files in **<MagicDraw>/lib**.
7. Click **OK** to close the **Library Manager** dialog.

To develop a BeanShell script in NetBeans

1. Click **File > New Project** on the main menu to create a Java application project. The **New Project** dialog will open.
2. Select **Java** in the **Categories** box and **Java Application** in the **Projects** box, and then follow the instructions.
3. Expand your project node in the **Project** window. The Libraries node will appear.
4. Right-click the Libraries node and select **Add Library** from the shortcut menu.
5. Select the MagicDraw library that you have previously created (see "To set up a classpath point in the MagicDraw library in NetBeans:") and click **Add Library**.
6. Click **File > New File** on the main menu to add a new Java file.
7. Select **Java** in the **Categories** box and **Empty Java File** in the **File Types** box, and then follow the instructions until finish.

You need to create a public static method in a Java file, for example, main() method, to follow the standard Java programming language. At the end of the file, insert a statement to call the static method. See the example in *create\_project\_elements.bsh* in the **<MagicDraw>/samples/product features/macros** directory.



The official filename extension for BeanShell is *.bsh*. However, you can add a *.java* file to the BeanShell scripting language.