

Numerical Gecko User's Guide



General

Numerical Gecko is an Eclipse Plugin based on the popular Java tool Numerical Chameleon. Its purpose is to help Java developers increase their productivity when using the Eclipse IDE, by providing them with an efficient, easy to use conversion utility.

The plugin supports bi-directional conversions of many units in many different fields, and can seamlessly integrate the results into the Eclipse environment.

The tool is very user-friendly and intuitive to use and install, therefore the user's guide is quite short.

Downloading and Installing

- The latest version can be obtained from:
<http://sourceforge.net/projects/geckoplugin/>
- Unzip the .zip or .tar.gz file into ..\eclipse (so it'll reside under the folder ..\eclipse\plugins).
- Restart Eclipse. Go to Window -> Show View -> Other ...
- Choose the Numerical Gecko folder, and the Numerical Gecko view. The view will be opened:

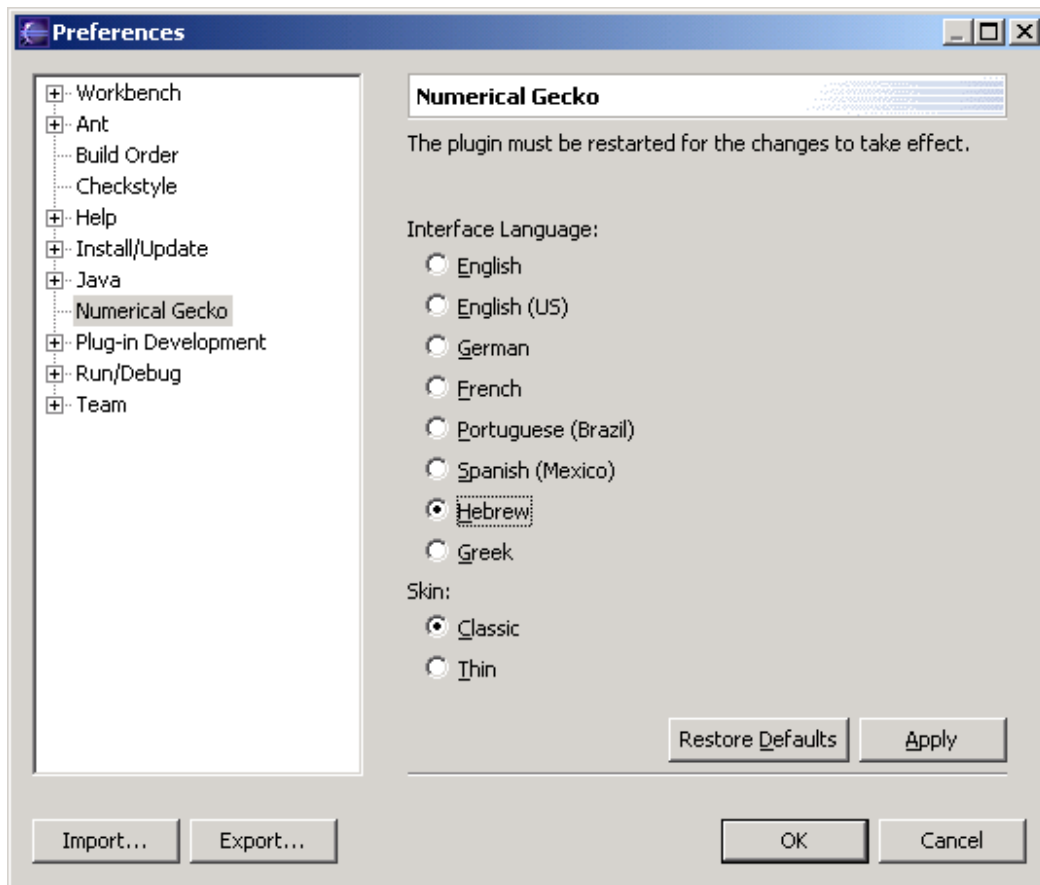
The screenshot shows the Eclipse IDE interface with the Numerical Gecko plugin view open. At the top, a code editor displays a Java class named 'Main' with a 'main' method containing a single line of code: 'int i = 99;'. Below the code editor is the Numerical Gecko view, which has a title bar and a close button. The view is divided into several sections: a 'Main' section with a 'Conversion' dropdown set to 'Radix 2-36' and a 'Source/Target' icon; a 'Source' section with a dropdown set to 'Radix 2 (Dual)' and a text input field; a 'Target' section with a dropdown set to 'Radix 2 (Dual)' and a text input field; and a bottom section with a 'Set significant figures' input set to '0' and a 'SCI' checkbox. A green status bar at the bottom of the view contains the text: 'The current category supports 35 units. Enter a value in textfield "Source".' The Eclipse IDE's 'Problems' and 'Numerical Gecko' tabs are visible at the very bottom.

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Changing GUI Language

To configure a different language for the plugin's user interface, go to Window -> Preferences and choose Numerical Gecko:

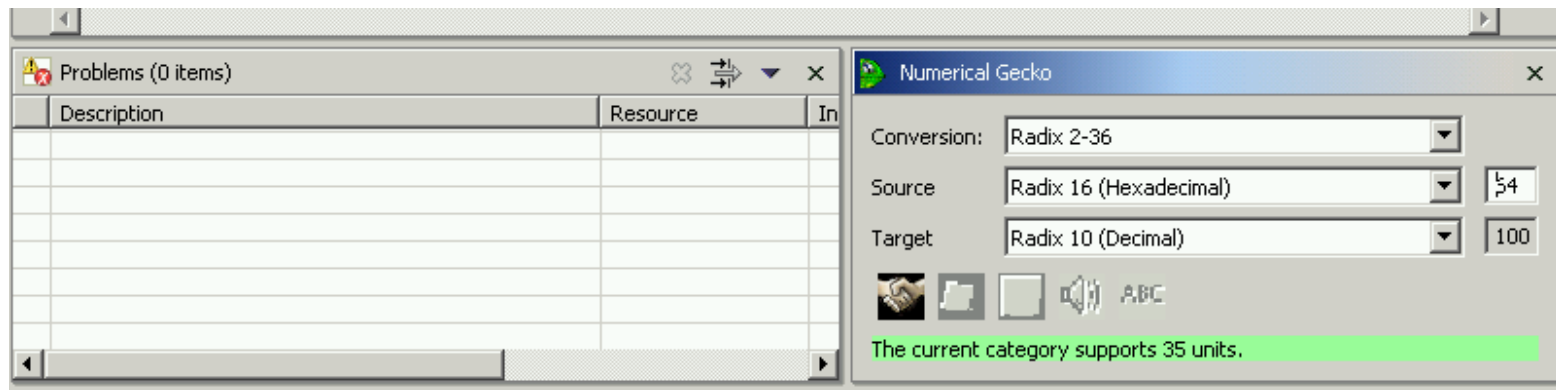


Select the desired language and click OK. You will have to reopen the plugin for the change to take effect.

Choosing a different skin

Configuring a different skin for the plugin's user interface is also done via the Preferences dialog (reopening of the plugin is required). Currently two skins are available: Classic (default) and Thin (an economical view):

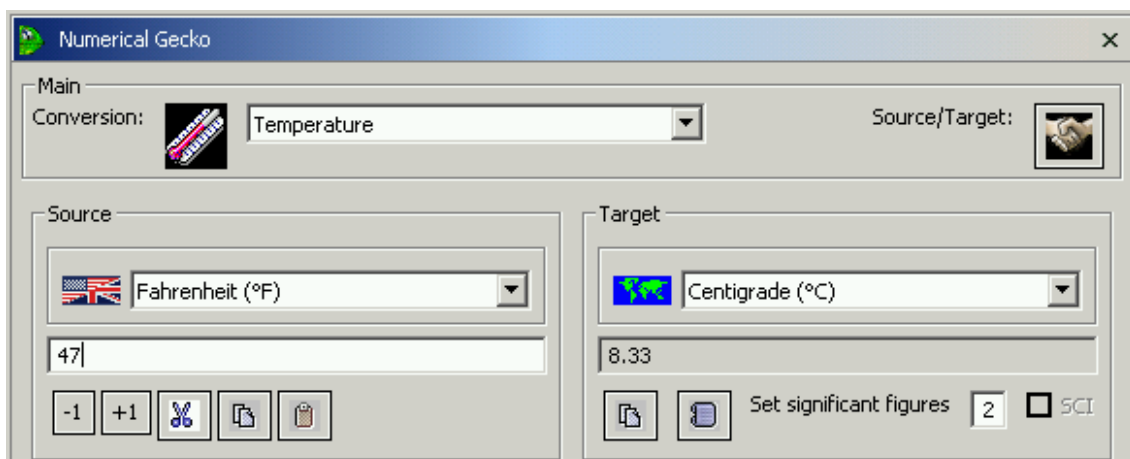
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Note: these settings are saved as preferences and will be used each time you reopen the plugin.

Using The Plugin

Most conversions are simply done by typing the text to convert in the *Source* field. Conversion is done simultaneously:



Other possible options are: increasing or decreasing the source value by 1, cut, copy & paste of source value, copying the target value, sending the target value to the active editor, setting the significant figures of the target and seeing the results in a scientific form (the *SCI* checkbox). These options are available as the buttons below the source and target fields in the Classic skin.

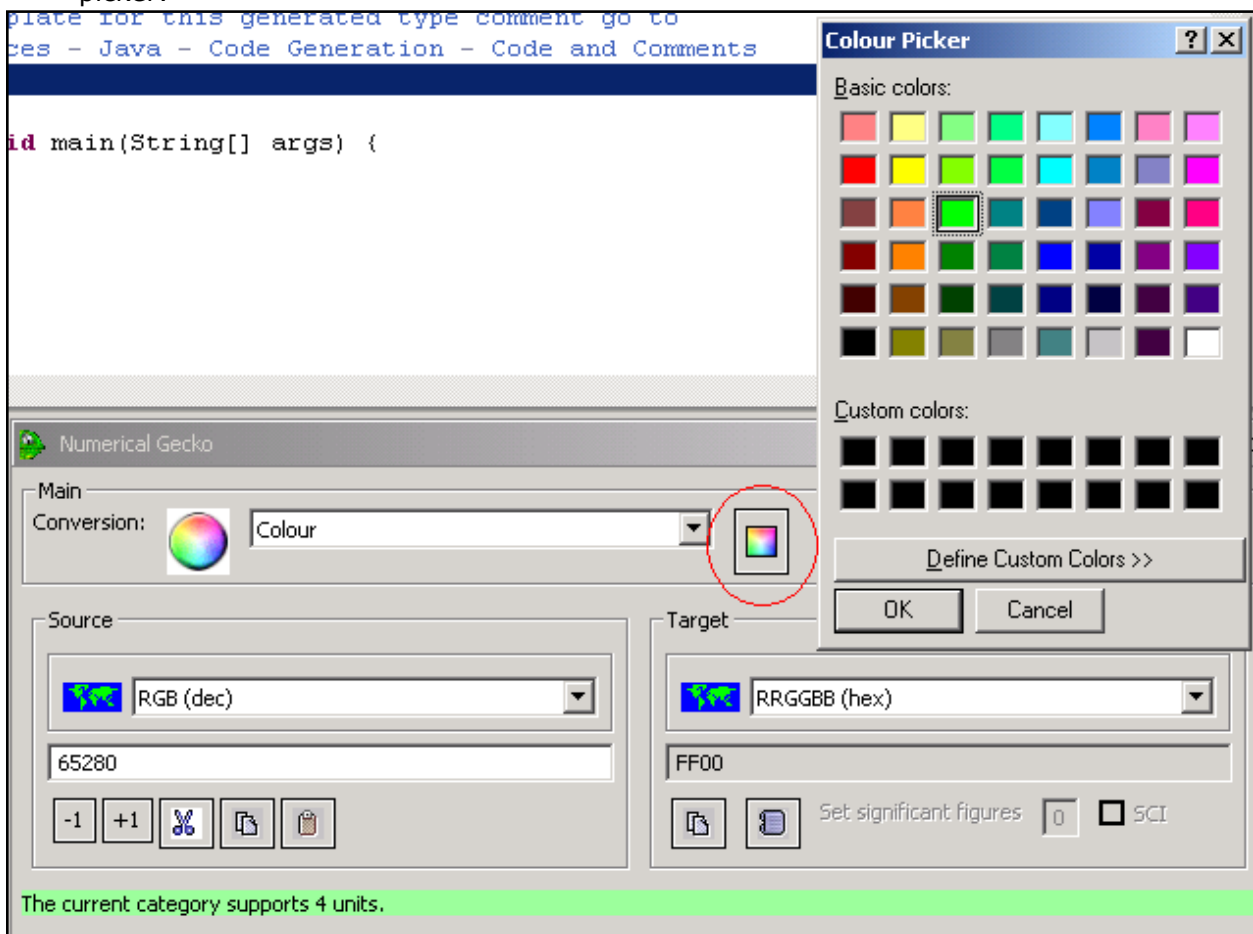
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It is also possible to switch between source and target values by clicking the switch button.

Special Conversions

- When choosing the `Color` category, the wanted color can be chosen by a color picker:



The screenshot shows the Numerical Gecko application window. At the top, there is a code editor with the following code:

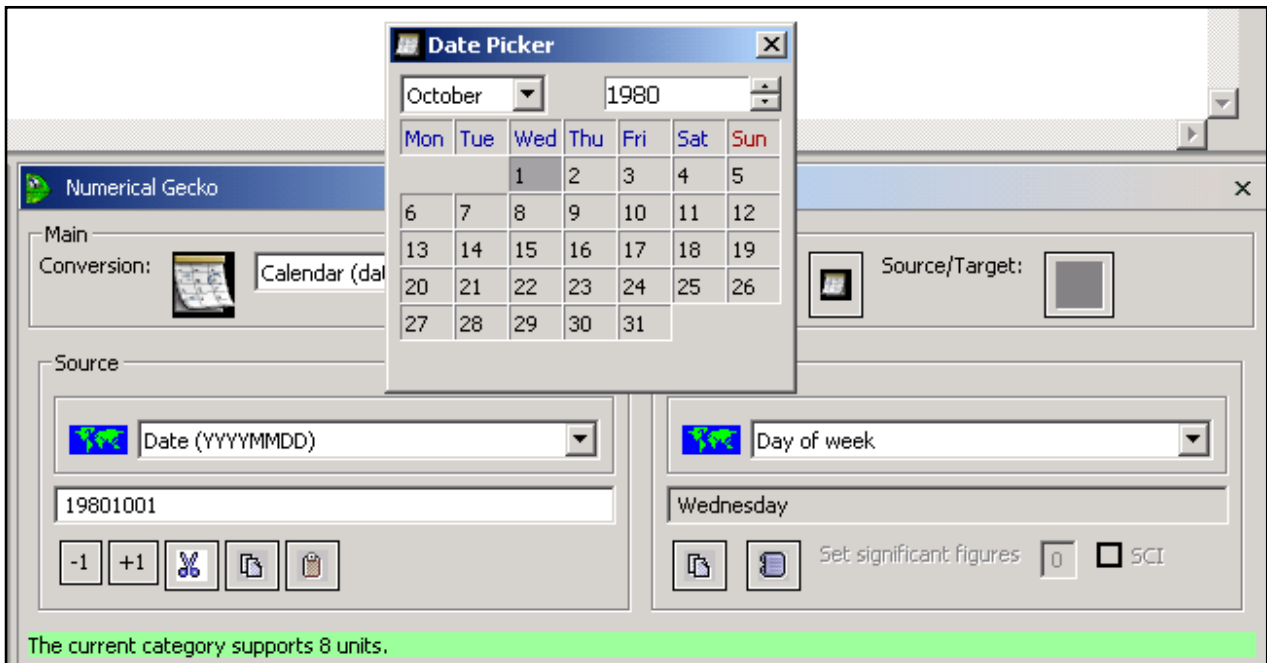
```
template for this generated type comment go to  
ces - Java - Code Generation - Code and Comments  
  
id main(String[] args) {
```

Below the code editor, the application's main interface is visible. The 'Main' section shows a 'Conversion:' dropdown menu set to 'Colour'. A color picker icon is circled in red. The 'Source' section shows a dropdown menu set to 'RGB (dec)' with the value '65280'. The 'Target' section shows a dropdown menu set to 'RRGGBB (hex)' with the value 'FF00'. A status bar at the bottom indicates 'The current category supports 4 units.'

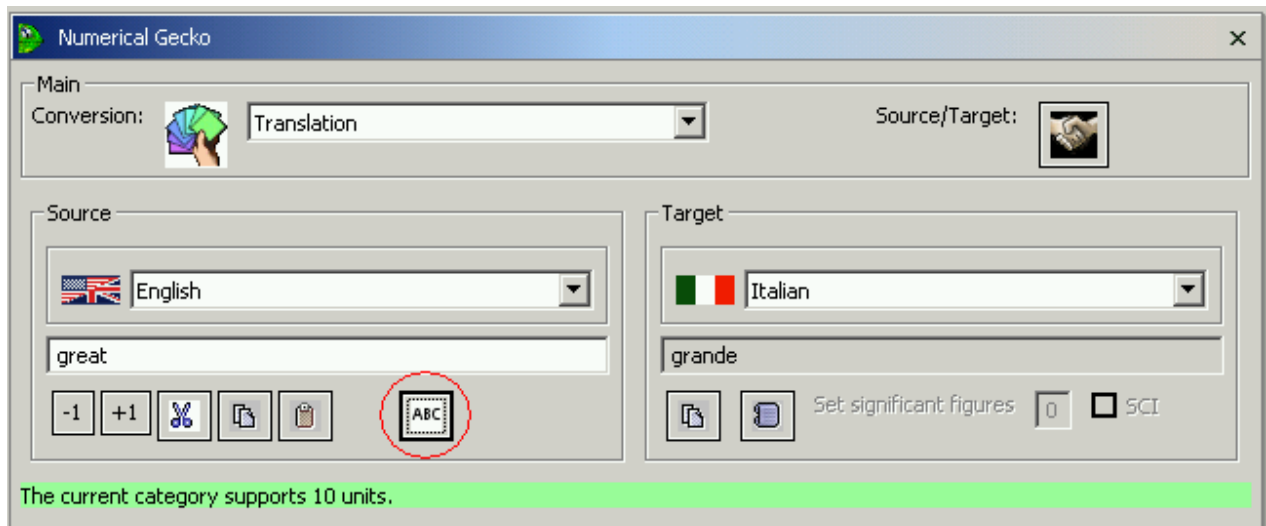
The 'Colour Picker' dialog box is open, showing a grid of 'Basic colors' and a section for 'Custom colors'. The 'Colour' category is selected in the main interface, and the color picker is open, showing a grid of colors. The 'Colour' category is selected in the main interface, and the color picker is open, showing a grid of colors.

- When choosing the `Calendar (date)` category, the wanted date can be chosen by a date picker:

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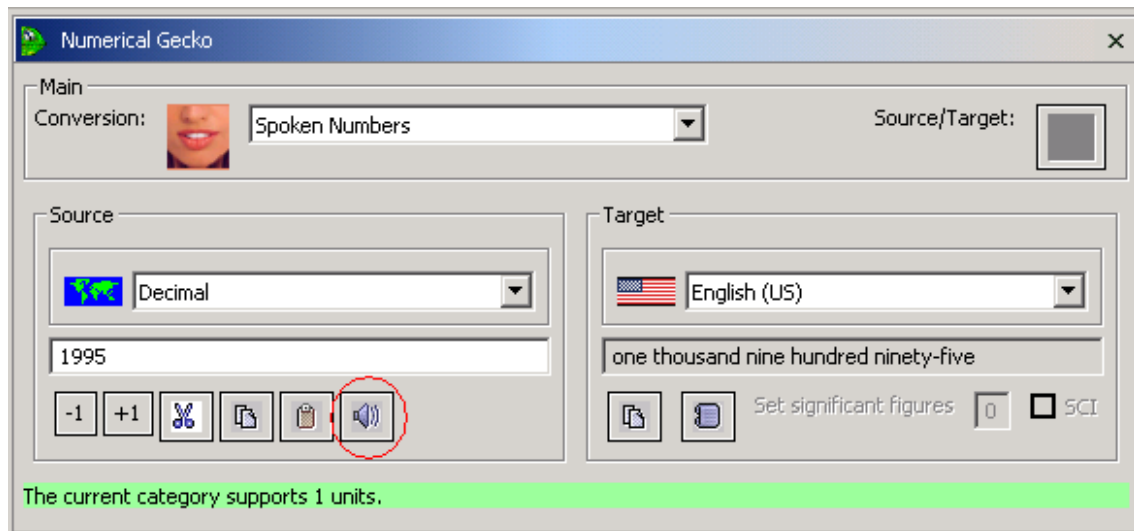


- When choosing the Translation category, conversion isn't done while typing the text to translate. Click the translation button to translate:



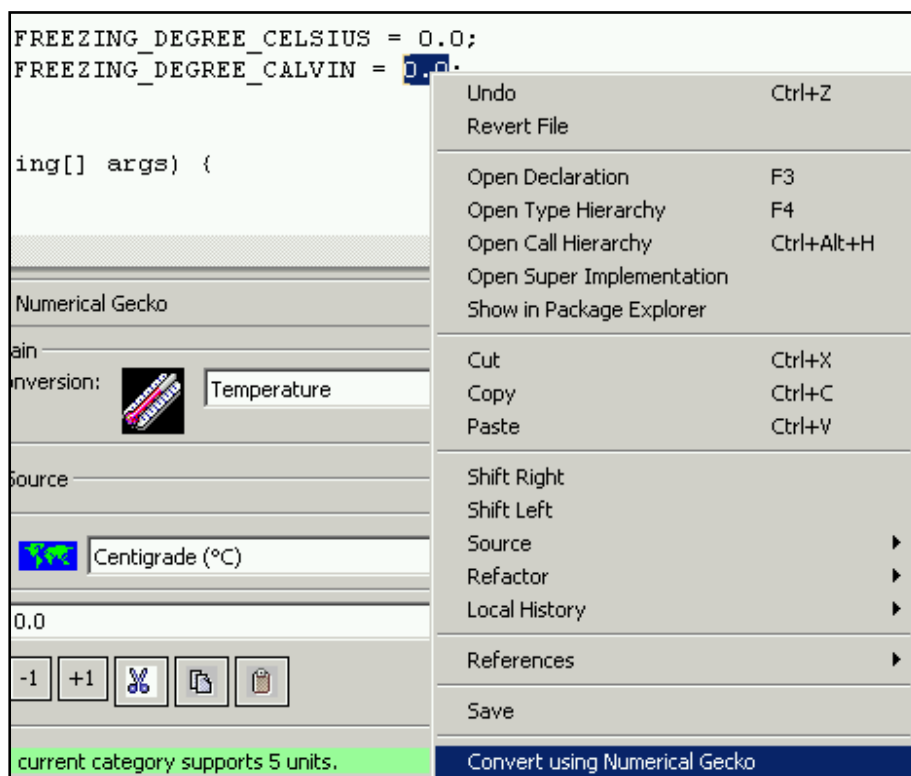
- When choosing the Spoken Numbers category, click the sound button to play the text:

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Using NG Effectively

To quickly convert a text from the active editor, select it, right click and choose "Convert using Numerical Gecko":



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Then click the "paste into editor" button:

```
ole FREEZING_DEGREE_CELSIUS = 0.0;
ole FREEZING_DEGREE_CALVIN = 273.15;

(String[] args) {
```

The screenshot shows the Numerical Gecko application window. At the top, a code editor contains two lines of code: `ole FREEZING_DEGREE_CELSIUS = 0.0;` and `ole FREEZING_DEGREE_CALVIN = 273.15;`. Below the code editor is the main interface. The "Main" section has a "Conversion:" label with a "Temperature" dropdown menu. To the right is a "Source/Target:" label with a small icon. The "Source" section has a "Centigrade (°C)" dropdown menu and a text input field containing "0.0". Below this are buttons for "-1", "+1", a scissors icon, a document icon, and a trash icon. The "Target" section has a "Kelvin (K)" dropdown menu and a text input field containing "273.15". Below this are buttons for a document icon, a trash icon, and a "Set significant figures" label with a dropdown menu showing "2" and a checkbox labeled "SCI". A "paste into editor" button is located at the bottom right of the interface. A green bar at the bottom of the window contains the text: "The current category supports 5 units."