Wicked Shell - Documentation

Version 2.0.0

(Work in progress)

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Part I. Quick Guide

Chapter 1. Introduction

1.1. What is Wicked Shell?

Before I start to explain how Wicked Shell works, I'd like to take a word about what Wicked Shell is and what not. Wicked Shell is an eclipse plugin which functions as mediator between a Runtime process and a SWT Text widget. That means the output of the Runtime process is transferred to the widget and the text typed in the widget is transferred to the process as input. So Wicked Shell is not an actual shell but only uses an existing shell implementation.

1.2. Overview of functionality

As I said, Wicked Shell is an eclipse plugin. After installation, your eclipse distribution offers two more views. The Shell - View provides the access to the used shell implementation. You see the output of the shell and you can type your commands. As a funky feature, a command completion is provided. There are different types of completions.

- Active folder completions

    These completions are computed by inspecting the active folder for executable files.

- System path completions

    These completions are computed by inspecting the system path.

- Static completions

    These completions are static and may be adjusted in the Preferences Page.

- Cascading completions

    These completions are computed depending on a command or folder prefix entered as command.

You may configure on the preferences page which entries are suggested in the command completion. If the shell reports errors, these are additionally printed to the ShellErrorDisplay which can be open from the Shell - View's menubar. The menubar as well offers action to restart the current shell or open an additional Shell - View.

The second view is the Batch Files - View which offers a quite simple list to manage often used executables. These files may be listed here and then directly executed in the Shell - View. You may also define parameters for execution. The Batch - View shows also the content of the selected batch file in the list.

1.3. Support and Feature Requests

Wicked Shell works pretty well, from my point of view :-). But there might be something missing to make it suitable for you. If so, do everyone a favour and post a feature request. To do that, go to http://sourceforge.net/projects/wickedshell/. If you find any bugs, please report it as well at Sourceforge. Any other comments (even positiv ones) are welcome as well.

Chapter 2. Getting started

2.1. Download

The fact that you read this manual states that you have already discovered the Wicked Shell project home at http://sourceforge.net/projects/wickedshell/. But anyway, this section is mandatory in a manual, isn't it? OK, the binaries and sources of the Wicked Shell eclipse plugin are available at the download area. In the future, an update site will be available.

2.2. Installation

Once you have downloaded the plugin, just extract it into your eclipse distribution directory. If you download and install an update of Wicked Shell (e.g. from 1.2.0 to 1.3.0), you might find it necessary to start your eclipse worbench with the -clean parameter the first time after installation. If you discover a SerialisationException on startup, please file a bug with the error text, I know the problem and I'll try to help. I haven't found a solution to avoid that phenomenon though.

2.3. Wicked Shell

After the startup of your eclipse distribution, you'll find the two views described in the introduction. If you want to adjust the command completion or select another shell to be used instead of the default shell for your OS, just use the preferences page. Currently, only Windows is 'really' supported. I wrote a Shell descriptor for Linux bash as well, but it is not well tested. Therefor, for Linux in particular, I am always happy to get feedback, even positiv.

If you decide to select a different Shell than the default, please ensure it to be installed.

Chapter 3. Cygwin and MSYS

3.1. Choosing another shell

Wicked Shell uses a default shell for different OS. Currently, this is bash for Linux and Cmd.exe for Microsoft Windows. Additionally, Cygwin and MSYS can be used with Wicked Shell when using Microsoft Windows. To do so, open the preferences page and select the shell you want. For Linux, only bash is currently provided.

3.2. Configuration

When using Cygwin or MSYS, a little speciality comes in. Both consider their installation directory as the system's root directory. Therefor you need to define this installation directory at the preferences page. It's necessary as Wicked Shell needs this information for providing a command completion.

Cygwin as well as MSYS allows configure the style of the prompt. Both use as well as the common Linux bash the enviromental value PS1. If you leave this value at it's default, Wicked Shell's ShellView will look quite funny as ther will occure ASCII escape characters which cannot be displayed by the SWT Text widget. So you need to define a Wicked Shell compatible prompt in order to get a readable prompt and have a command completion. There are a couple of options you can choose, I myself prefer a two line prompt: One to display all my favorite information which I am used from my Linux bash like time, user and host. The second line provides the necessary information for Wicked Shell. The current full path and the separator '& ' which both are required as last line. To define the PS1 value simply type `PS1=\\t' '\\u'@'\\H\\r\\n\\w' $ '` as command in the ShellView, this will result in the prompt described above. Please refer to the manual for bash/sh for other prompt content. You might as well automate the setting of the prompt. With Cygwin, just add the PS1 dfinition to the `.bashrc` file in your cygwin user's home directory. MSYS allows the editing of the `profile` file in the etc folder of the MSYS root so you just add the PS1 definition there.

Chapter 4. Extension Points

4.1. Why offer an Extension Point ?

Well, the first feature request, that came in, were requests for other shells to be integrated. So what could be better than enable everyone to integrate his or her favorite shell. Defining a so called descriptor for your own shell is quite easy, lets have a look.

4.2. Shell Descriptors

I mentioned it before, Wicked Shell is not a real shell. To make the text transfer work, both starems, inpu - and outputstream, need to be configured. This configuration is called ShellDescriptor. Wicked Shell offers the extension point *net.sf.wickedshell.shell* to define a descriptor.Please take a look at the extension point description for further details. Each aspect of the definition is explained.