

# **Erk Plugins**

How to write plugins for the Erk IRC Client

An Erk plugin is a Python 3 class that inherits from erk.Plugin.

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# **Installing Erk Plugins**

Erk plugins "live" in a directory named "plugins", in the main Erk installation directory. To install a plugin, simply place it in the "plugins" directory.

# **Uninstalling Erk Plugins**

Delete (or otherwise remove) the plugin file from the "plugins" directory.

# Writing an Erk Plugin

The first step is creating a new Python 3 class that inherits from **erk.Plugin**. To get access to this class, import it from Erk:

```
1 from erk import *
```

Then, create the rest of the class. The following plugin will no *nothing*, but it's a complete example that shows what a plugin should look like:

```
1 from erk import *
2
3 class ExamplePlugin(Plugin):
4
        def __init__(self):
 5
             self.name = "An Example Plugin"
             self.description = "Example plugin for documentation"
6
7
8
        def load(self):
9
             pass
10
        def unload(self):
11
12
             pass
13
14
        def input(self,client,name,text):
15
             pass
16
17
        def public(self,client,channel,user,message):
18
             pass
19
20
        def private(self,client,user,message):
21
             pass
```

# **Plugin Attributes**

Plugins have only two *required* attributes: **name** and **description**. Plugins can also possess four other optional attributes: **author**, **version**, **source**, and **website**.

#### name

This is the name of the plugin. It must be unique (that is, no other loaded plugin can use the same name). It can contain spaces. All plugins are required to have a **name** attribute.

### description

This describes the plugin. It can also contain spaces, but it does not have to be unique. All plugins are required to have a **description** attribute.

#### author

The name of the person (or persons) who created/maintain the plugin.

#### version

A string representing the plugin's version.

#### source

A URL to where users can obtain the source code or information about the source code of the plugin.

#### website

A URL where users can obtain the plugin, information about the plugin, or information about the person (or persons) who wrote the plugin.

# **Plugin Methods**

There are five methods a plugin can have; they are not required to have any specific methods, but *they must have at least one of the methods* to be a valid plugin.

Most of the methods are passed an instance of twisted.words.protocols.irc.IRCClient as a first argument. This is the instance that Erk uses to communicate with the IRC connection associated with the event or window that triggered the method's execution. At this time, Erk uses version 19.2 of Twisted; the documentation for this object can be found at <a href="https://twistedmatrix.com/documents/current/api/twisted.words.protocols.irc.IRCClient.html">https://twistedmatrix.com/documents/current/api/twisted.words.protocols.irc.IRCClient.html</a>. The instance has been modified so that any outgoing messages are displayed in the client (so, if you use the msg() method to send a PRIVMSG command, the message sent will be displayed in the appropriate channel or private chat window).

#### load

Arguments None

**Description** This method is executed as soon as the plugin is loaded into memory.

#### unload

Arguments None

**Description** This method is executed when the plugin is unloaded from memory; if not otherwise unloaded, this method is executed when Erk shuts down.

#### input

Arguments client (instance of twisted.words.protocols.irc.IRCClient), name (string), text (string)

Description This method is executed whenever a user enters text into the Erk IRC client and presses enter. name contains the "name" of the window the text was entered into. If entered into a non-chat server console, name will be set to "Server"; other wise, name will contain the name of the channel the text was entered into (if entered into a channel chat window) or the name of a user (if entered into a private chat window). text contains the text that was entered into the window.

This method is intended to be used to implement new commands for the Erk client. To prevent any further processing of user input, have this method return **True**. Be careful with this. It's trivially easy to implement a plugin that can prevent any user input at all:

```
1 def input(self,client,name,text):
2    return True
```

Only return **True** if no further processing of the text is required; for example, when implementing a custom command, returning **True** prevents the user's command input being sent to the server as a PRIVMSG.

### public

Arguments client (instance of twisted.words.protocols.irc.IRCClient), channel (string), user (string), message (string)

This method is executed when the Erk client receives a public (channel) chat message. channel contains the name of the channel the chat originated from. user contains information about the user that sent the message; this is presented in the format provided by the server: nickname!username@hostname. message contains the contents of the message sent.

### private

Arguments client (instance of twisted.words.protocols.irc.IRCClient), user (string), message (string)

**Description** This method is executed when the Erk client receives a private chat message. **user** contains information about the user that sent the message; this is presented in the format provided by the server: **nickname!username@hostname**. **message** contains the contents of the message sent.

#### **Built-In Methods**

Plugins also contain several built-in methods to interact with the Erk IRC client.

#### info

Arguments None Returns String

**Description** Returns a string containing the application name and version of the Erk IRC client.