

## Plugin Creation

All plugins must implement the plugin interface, which contains the following methods.

### *setup(self, rooms, events, queue)*

This method is called once upon loading or reloading plugins. It provides the plugin with access to the list of rooms and the items they contain (along with the user-defined rules) and the queue to add item commands to.

### *teardown(self)*

This method is called once upon deleting or reloading a plugin.

### *getPage(self, path)*

This method is called when a user opens an iframe to view the plugin in. The path argument is the remaining path in the URL after the plugins/pluginName. By default, this will be “None” in Python since the initial page loaded will be <http://localhost:9090/plugins/pluginName> but this allows developers to use links to any deeper paths needed so long as they handle the path.

### *notify(self, ip, trigger)*

This method is called whenever the state of the house changes. Please see the ECA documentation for a more thorough description of the trigger parameters that will be passed through.

### *getName(self)*

This method should return the name of the plugin, which should match the URL the user uses to access it. **NOTE: Until further development, plugin .zip folders should be named after this too.**

## Example Plugin

This example plugin simply loads BBC weather whenever the user loads it. Note the change of file path in the imports so that the plugin is able to import the Plugin class and subclass it.

```
import os
parentdir =
os.path.dirname(os.path.dirname(os.path.dirname(os.path.abspath(__file__))))
os.sys.path.insert(0, parentdir)
from pluginManager import Plugin

class Weather(Plugin):
    def setup(self, rooms, events, queue):
        pass

    def getName(self):
        return "weather"

    def getPage(self, path):
        with open('./plugins/weather/page.html', 'r') as
content_file:
            return content_file.read()
```

```
def teardown(self):
    pass

def notify(self, ip, trigger):
    pass
```

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
  <head>
    <link type="text/css" rel="stylesheet" href="../plugin.css"
/>
  </head>
  <body>
    <iframe style="width: 100%; height: 100%; border: none;"
src="http://www.bbc.co.uk/weather/"></iframe>
  </body>
</html>
```

## Further Notes

- Any threads created in a plugin should be a daemon
- Plugins should add actions to the queue rather than directly on an item
- It is advised that any html returned by a plugin uses the CSS found at ./plugins/plugin.css