

Introduction

eric4 is an integrated development environment for the Python programming language. It can be used to debug code that is run by the mod_python module for the Apache web server. This document assumes mod_python is installed and Apache is configured to use it; please see the installation chapter of the mod_python manual for information on how to install it.

Since eric4's debugger support is single threaded, only one http request can be debugged at a time. A new debugging session is created for each request and the session is ended when the request processing ends. This is true for requests processed by a single Python module and it is true for requests processed by multiple Python modules in the same Apache process and its child processes. It is recommended that only one person debug mod_python based modules per Apache instance.

Before you are able to use eric4 to debug mod_python modules you have to patch the mod_python installation. In order to do this, simply run the script patch_modpython.py contained in the eric4 distribution. This changes the file apache.py of mod_python to use the eric4 debugger instead of Pdb.

Quick Start

- Enable passive listening in eric4 by choosing Settings -> Preferences -> Debugger -> General -> Passive Debugger Enabled. Usually the port setting can be left unchanged. The eric4 IDE needs to be restarted for this preference to take effect.
- Ensure you have a .htaccess file in the directory containing the module to be debugged. The .htaccess file should have a line containing „PythonEnablePdb On“. This will make the module connect to the eric4 IDE the next time the relevant URL is loaded in a browser.
- Add the line „apache.initDebugger('/Path/To/Your/script.py') right after the line importing apache.py.
- Load the URL to the Python script to trigger the module's execution.
- If everything works ok, eric4 will show the file given in the startDebugger call above in an editor and highlight the statement after this call.
- Now use the debugging commands to step through your script.

Example

.htaccess

```
AddHandler python-program .py
PythonHandler modpython_dbg
PythonDebug On
PythonEnablePdb On
```

modpython_dbg.py

```
from mod_python import apache

apache.initDebugger('/Path/To/modpython_dbg.py')

def handler(req):
    req.content_type = "text/plain"
    req.send_http_header()
    req.write("Hello World!\n")

    return apache.OK
```