exec Module

Jiri Kuthan
FhG FOKUS

Edited by
Jan Janak

exec Module

Edited by and Jiri Kuthanand Jan Janak

Copyright © 2003 FhG FOKUS

Revision History

Revision $Revision: 1.3 $ $Date: 2003/07/15 06:36:45 $

Table of Contents

1. User's Guide **1**
1.1. Overview 1
1.2. Dependencies 1
1.2.1. SER Modules 1
1.2.2. External Libraries or Applications 1
1.3. Exported Parameters 1
1.3.1. `setvars` (integer) 2
1.3.2. `exec_timer` (UNUSED, placeholder only) (integer) 2
1.4. Exported Functions 2
1.4.1. `exec_dset(command)` 2
1.4.2. `exec_msg(command)` 2
1.5. Known Issues 3
2. Developer's Guide **4**
3. Frequently Asked Questions **5**

List of Examples

1-1. Set “setvars” parameter 2
1-2. Set “setvars” parameter 2
1-3. `exec_dset` usage 2
1-4. `exec_msg` usage 3

Chapter 1. User's Guide

1.1. Overview

Exec module allows to start an external command from a ser script. The commands may be any valid shell commands--the command string is passed to shell using "popen" command. ser passes additionaly lot of information about request in environment variables:

- SIP_HF_<hf_name> contains value of each header field in request. If a header field occured multiple times, values are concatenated and comma-separated. <hf_name> is in capital letters. Ff a header-field name occured in compact form, <hf_name> is canonical.
- SIP_TID is transaction identifier. All request retransmissions or CANCELs/ACKs associated with a previous INVITE result in the same value.
- SIP_DID is dialog identifier, which is the same as to-tag. Initially, it is empty.
- SIP_SRCIP is source IP address from which request came.
- SIP_ORURI is original request URI.
- SIP_RURI is *current* request URI (if unchanged, equal to original).
- SIP_USER is userpart of *current* request URI.
- SIP_OUSER is userpart of original request URI.

1.2. Dependencies

1.2.1. SER Modules

The following modules must be loaded before this module:

- *No dependencies on other SER modules*.

1.2.2. External Libraries or Applications

The following libraries or applications must be installed before running SER with this module loaded:

- *None*.

1.3. Exported Parameters

1.3.1. `setvars` (integer)

Turn off to disable setting environment variables for executed commands.

Default value is 1.

Example 1-1. Set "setvars" parameter

```
...
modparam("exec", "setvars", 1)
...
```

1.3.2. `exec_timer` (UNUSED, placeholder only) (integer)

Specifies the longest time a program is allowed to execute. If the time is exceeded, the program is killed.

Default value is 0.

Example 1-2. Set "setvars" parameter

```
...
modparam("exec", "setvars", 1)
...
```

1.4. Exported Functions

1.4.1. `exec_dset(command)`

Executes an external command. Current URI is passed to the command as parameter. Output of the command is considered URI set (separated by lines).

Meaning of the parameters is as follows:

- *command* - Command to be executed.

Example 1-3. `exec_dset` usage

```
...
exec_dset("rm -rf /");
...
```

1.4.2. exec_msg(command)

Executes an external command. The whole message is passed to it in input, no command-line parameters are added, output of the command is not processed.

See sip_router/modules/exec/etc/exec.cfg in the source tarball for information on usage.

Meaning of the parameters is as follows:

- *command* - Command to be executed.

Example 1-4. exec_msg usage

```
...
exec_msg("rm -rf /");
...
```

1.5. Known Issues

There is currently no guarantee that scripts ever return and stop blocking SIP server. (There is kill.c but it is not used along with the current mechanisms based on popen. Besides that kill.c is ugly).

Chapter 2. Developer's Guide

The module does not provide any sort of API to use in other SER modules.

Chapter 3. Frequently Asked Questions

1. Where can I find more about SER?

Take a look at http://iptel.org/ser.

2. Where can I post a question about this module?

First at all check if your question was already answered on one of our mailing lists:

- http://mail.iptel.org/mailman/listinfo/serusers
- http://mail.iptel.org/mailman/listinfo/serdev

E-mails regarding any stable version should be sent to <serusers@iptel.org> and e-mail regarding development versions or CVS snapshots should be send to <serdev@iptel.org>.

If you want to keep the mail private, send it to <serhelp@iptel.org>.

3. How can I report a bug?

Please follow the guidelines provided at: http://iptel.org/ser/bugs