strongSwan - Bug #479

test_utils 5.1.2~dr2 failure on powerpc

02.01.2014 23:46 - Jonathan Davies

Status:	Closed	**Start date:**	02.01.2014
Priority:	High	**Due date:**	
Assignee:	Tobias Brunner	**Estimated time:**	0.00 hour
Category:	testing		
Target version:	5.1.2		
Affected version:	dr|rc|master	**Resolution:**	Fixed

Description

In addition to test_chuck, test_utils is also failing on powerpc:

```
  Running suite 'utils':
    Running case 'objects': +
    Running case 'return functions': +
    Running case 'timeval_add_ms': +
    Running case 'htoun,untoh': ++
    Running case 'round': +
    Running case 'string helper': +++++++++
    Running case 'memxor': ++
    Running case 'memstr': ++++++++++++
    Running case 'translate': ++++++++++++
    Running case 'printf_hooks': +-+-+-+++++++++++++++++
      Failure in 'test_time_printf_hook': buf != time_data[_i].out ("--- -- --:--:-- ----" != "---
-- --:--:-- UTC ----") (suites/test_utils.c:411, i = 1)
      Failure in 'test_time_printf_hook': buf != time_data[_i].out ("Jan 01 01:00:01 1970" != "Jan
 01 00:00:01 UTC 1970") (suites/test_utils.c:411, i = 3)
      Failure in 'test_time_printf_hook': buf != time_data[_i].out ("Jul 01 15:43:16 2012" != "Jul
 01 13:43:16 UTC 2012") (suites/test_utils.c:411, i = 5)
    Running case 'mark_from_string': ++++++++++++++++
  Passed 10/11 'utils' test cases
```

Full build log:
https://launchpadlibrarian.net/161458607/buildlog_ubuntu-trusty-powerpc.strongswan_5.1.2~dr2-0ubuntu1_FAILEDTOBUILD.txt.gz

Associated revisions

Revision 13f2d3a2 - 06.01.2014 15:30 - Tobias Brunner

utils: Fix %T printf hook on big-endian systems

The cast to a bool* cut of the actual value on big-endian systems
if bool was shorter than int because the bool argument to printf gets
promoted to an int.

Fixes #479.

History

#1 - 06.01.2014 15:45 - Tobias Brunner

- Tracker changed from Issue to Bug

- Category set to testing

- Status changed from New to Resolved

- Assignee set to Tobias Brunner

- Target version set to 5.1.2

- Resolution set to Fixed

The call in the test case, and in other places where the custom printf-specifier %T is used, is as follows:

```
len = snprintf(buf, sizeof(buf), "%T", &time_data[_i].in, time_data[_i].utc);
```

Where the second argument after the format string is of type bool, which gets automatically promoted to an int.

The problem is that the callback function for this custom printf specifier did this:

```
bool utc = *((bool*)(args[1]));
```

It assumes it gets a pointer to a bool, which is incorrect and is an issue on big-endian machines with bool shorter than int (most commonly the case) where the actual value got cut off by the cast.

Fixed with the associated commit.

#2 - 28.02.2014 08:38 - Tobias Brunner

- Status changed from Resolved to Closed