
Subject: Re: ARM threadind does not work
Posted by [Didier](#) on Sat, 15 Dec 2012 21:20:57 GMT
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Ok, I found a correction,

The correction only shows where the problem is: incorrect management of 'sMutexLock' initialization by several threads at the same time

A clean correction is still to be found : I think a refactoring of StaticMutex will be necessary for this (the correction is only valid for POSIX systems)

This is not the first time Upp stumbles on the same problem : there is another case stated on the forum:

http://www.ultimatepp.org/forum/index.php?t=msg&goto=15998&&srch=sMutexLock#msg_15998

Core/Mt.cpp L14

BEFORE:

```
static Mutex& sMutexLock()
{
    static Mutex *section=0;
    if(!section) {
        static byte b[sizeof(Mutex)];
        section = new(b) Mutex;
    }
    return *section;
}
```

AFTER

```
static Mutex *_sMutexLock_section=0;
static void _sMutexLock()
{
    if(!_sMutexLock_section) {
        static byte b[sizeof(Mutex)];
        _sMutexLock_section = new(b) Mutex;
    }
}
```

```
static Mutex& sMutexLock()
{
    static pthread_once_t sMutexLock_is_initialized = PTHREAD_ONCE_INIT;
    (void) pthread_once(&sMutexLock_is_initialized, _sMutexLock);
    return *_sMutexLock_section;
}
```