Subject: Re: ARM threadind does not work
Posted by Didier on Fri, 28 Dec 2012 13:40:24 GMT

Hy Mirek,

Quote:First of all, static variables are by definition initialized to zero.

While this is true when compiling in debug mode, it is not true with all compilers when compiled with O2 or O3 so I'm used to not counting on the default init of variables

Quote: IMO can result in creating race condition, as the setting this explicit zero might be postponed to the time sMutexLock is called for the first time.
For me static vars are initialised a exe startup (before app starts) and if there could be a race condition then the code can not work properlly (see pthread man and the reason of pthread_once_t existence)

Quote:Anyway, all of that is sort of irrelevant: As you can see, INITBLOCK should ensure that sMutexLock is called at least once before APP_MAIN starts, ergo it should be already initialized when the first thread has chance screw things up.
That's what i also thought when first ran into the bug (so when I saw the inititalisation problem, I thought I had solutionned the problem ... but that was not the case   ), but after some reading and trying pthread_once_t the issue was corrected.

I agree that this bug has to find a valid correction (my pacth only deals with one use of StaticMutex ... there are others.

I didn't try to debug the internals for now (lack of time).
I'll try to do it next week.