Subject: SetTimeCallback failure on arch=armv5l POSIX_PLATFORM
Posted by jlfranks on Tue, 24 Jun 2008 15:10:15 GMT
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We have discovered a flaw with SetTimeCallback on an armv5l architecture with the Linux 2007.1 distribution compiled w/ GNU 4.2 eabi.

We are not sure if it is a Upp problem or not because it works fine on i686 Linux.

The Upp Clock program is our simplified test example.

We set the target system clock raw ticks to (decimal) 1213999990 and watch it count up to 1213999999 and then roll to 1214000000, the Clock program timer callback stops being called.

We've also tested 1214999990 and see the same behavior when it rolls over from 1214999999 to 1215000000, the clock appears to stop, and the timer callback is not called.

We ran 'top' and it shows that there is basically no CPU usage by the Clock program -- so, it is not going cpu-bound.

If we restart the Clock program just past the roll-over, everything works great (until the next roll-over).

We are perplexed in that we don't really know where to look for the problem. Is there a mechanism in Upp that could cause this?

Where else should we look for the problem. Is X involved somehow?

Any suggestion on how to proceed would be greatly appreciated.

NOTE: we have used Upp extensivly on the arv5l architecture and have just discovered the problem. Everything else in Upp works as it should.

--jlf