
Subject: Re: MT and variables simple question
Posted by [ManfredHerr](#) on Tue, 10 Jun 2014 13:59:08 GMT
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My two cents:

Mutex locks are necessary only then when the "variable" is compound. For example the mentioned fifo. It must be guaranteed that the full fifo entry is written before a second thread can interrupt and read it. For simple variables like integers a.s.o. there is no need to protect because they are written and read in an "atomic" action. The writing thread cannot be interrupted during the write-operation.

In the case where only one thread writes the fifo and only one thread reads it this atomicity can be used by tricky programmers to get rid of the lock at all. They write the fifo entry completely before they increment the write index. So the reading thread will only become aware of the new entry when it is fully written. The same is with the reading thread. First the entry is read completely before the read index is incremented to allow for reuse.
