
Subject: Re: What is the best way to create a Semaphore with timeout?

Posted by [mirek](#) on Thu, 19 Dec 2019 16:05:51 GMT

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Tom1 wrote on Thu, 19 December 2019 14:38Hi!

That was fast! Thanks Mirek!!

Now to the Fifo implementation. Does this look right from the point of mutex synchronization? I know this 'appears to work when testing' but I'm new with ConditionVariable, so I'm a bit uncertain if my usage of it is correct. I.e. Will multiple receiving threads calling StringFifo::Get() be correctly served so that each and every String will get read exactly once?

```
class StringFifo: public BiVector<String>{
    ConditionVariable cv;
    Mutex mtx;

public:
    StringFifo(){

    }

    void Put(const String &s){
        mtx.Enter();
        AddTail(s);
        cv.Signal();
        mtx.Leave();
    }

    String Get(int timeout_ms=-1){
        mtx.Enter();
        if(GetCount() || (cv.Wait(mtx,timeout_ms) && GetCount())){
            String r=PopHead();
            mtx.Leave();
            return r;
        }
        else{
            mtx.Leave();
            return String::GetVoid();
        }
    }
};
```

Thanks and best regards,

Tom

Sounds good.

Unfortunately, I have removed -1 logic from your code, so that will make it more complicate. I guess I will put it back after all.
