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

Posted by [Tom1](#) on Thu, 19 Dec 2019 13:38:21 GMT

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Hi!

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
