
Subject: AsyncWork, IsFinished() may not be working properly

Posted by [Oblivion](#) on Wed, 28 Mar 2018 17:17:20 GMT

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Hello,

Either I am doing something wrong, or AsyncWork/CoWork's IsFinished() method is not working properly (Tested on latest Upp/GCC/Linux kernel).

It always returns true;

Here is a simple test code to show the problem:

```
#include <Core/Core.h>

using namespace Upp;

CONSOLE_APP_MAIN
{
    StdLogSetup(LOG_FILE|LOG_COUT);

    Array<AsyncWork<void>> workers;

    for(int i = 0; i < 4; i++) {
        workers.Add() = Async([=]{ LOG("Started, worker #" << i); for(;;); });
    }
    Sleep(5000);

    // while(!workers.IsEmpty())
    for(int i = 0; i < workers.GetCount(); i++) {
        auto& w = workers[i];
        if(w.IsFinished())
            LOG("Stopped, worker #" << i); // <<- Called, when it shouldn't.
    }
}
```

In the above test code, workers are supposed to run forever. So IsFinished should (?) return false. But when I check them with IsFinished() method, I get positive results every time.

Am I doing something wrong?

Here is the log:

CoWork constructed 7f86caf82060
Do0, loop: false, previous todo: 0
Pool::InitThreads: 8
CoWork thread #0 started
CoWork thread #1 started
CoWork thread #2 started
CoWork thread #3 started
CoWork thread #4 started
CoWork thread #5 started
CoWork thread #6 started
CoWork thread #7 started
#1 Waiting for job
Adding job
Releasing thread waiting for job, waiting threads: 1
#1 Waiting ended
#1 Job acquired
DoJob (CoWork 7f86caf82060)
Started worker #0
#4 Waiting for job
CoWork constructed 7f86caf82140
Do0, loop: false, previous todo: 0
#5 Waiting for job
#0 Waiting for job
#3 Waiting for job
#6 Waiting for job
#7 Waiting for job
#2 Waiting for job
Adding job
Releasing thread waiting for job, waiting threads: 7
CoWork constructed 7f86caf82220
Do0, loop: false, previous todo: 0
#4 Waiting ended
#4 Job acquired
DoJob (CoWork 7f86caf82140)
Started worker #1
Adding job
Releasing thread waiting for job, waiting threads: 6
CoWork constructed 7f86caf82300
Do0, loop: false, previous todo: 0
Adding job
Releasing thread waiting for job, waiting threads: 6
#0 Waiting ended
#0 Job acquired
DoJob (CoWork 7f86caf82300)
Started worker #3
#5 Waiting ended
#5 Job acquired

DoJob (CoWork 7f86caf82220)
Started worker #2
Stopped worker #0
Stopped worker #1
Stopped worker #2
Stopped worker #3
CoWork Cancel0
WaitForFinish (CoWork 7f86caf82060)
//...

Best regards,
Oblivion
