
Subject: Callbacks with 'Disable' feature

Posted by [kohait00](#) on Thu, 07 Oct 2010 07:43:34 GMT

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hi all

Callbacks so far only have the Clear() behaviour. sometimes it is good to simply 'pause' its function, but later be able to reactivate them.. (without need to know where the callback goes to..class independant

so what about a Enable() / Disable() methodpair..??

Subject: Re: Callbacks with 'Disable' feature

Posted by [kohait00](#) on Thu, 07 Oct 2010 09:39:07 GMT

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maybe sth as simple as this..

```
template <class P1>
class Callback1 : Moveable< Callback1<P1> > {
    Callback1Action<P1> *action;
    bool act;

    void Retain() const { if(action ) AtomicInc(action->count); }
    void Release()      { if(action  && AtomicDec(action->count) == 0) delete action; }

    bool operator==(const Callback1&);
    bool operator!=(const Callback1&);

public:
    typedef Callback1 CLASSNAME;

    Callback1& operator=(const Callback1& c);
    Callback1(const Callback1& c);
    void Clear()      { Release(); action = NULL; }

    void Enable(bool b = true) { act = b; }
    void Disable() { Enable(false); }
    bool Enabled() const { return act; }

    operator bool() const      { return action && action->IsValid(); }
    void Execute(P1 p1) const   { if(act && action) action->Execute(p1); }
    void operator()(P1 p1) const { Execute(p1); }

    explicit Callback1(Callback1Action <P1> *newaction) { act = true; action = newaction; }
    Callback1() { act = true; action = NULL; }
    Callback1(_CNULL) { act = true; action = NULL; }
```

```
~Callback1();

static Callback1 Empty() { return CNULL; }

};
```

Subject: Re: Callbacks with 'Disable' feature
Posted by [kohait00](#) on Thu, 07 Oct 2010 09:44:58 GMT
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BTW: in Callback.h:161 is missing the Execute() definition for Gate4<>. here comes with act already placed..

```
template <class P1, class P2, class P3, class P4>
bool Gate4<P1, P2, P3, P4>::Execute(P1 p1, P2 p2, P3 p3, P4 p4) const {
    return (void *)action == (void *)1 ? true : (act && action) ? action->Execute(p1, p2, p3, p4) : false;
}
```

Subject: Re: Callbacks with 'Disable' feature
Posted by [kohait00](#) on Mon, 11 Oct 2010 14:52:25 GMT
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any comments on this?

Subject: Re: Callbacks with 'Disable' feature
Posted by [dolik.rce](#) on Mon, 11 Oct 2010 17:34:46 GMT
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Hi kohait,

The only comment I can give you is that I actually never needed such thing. I think there are two possible cases: 1) You need to disable some specific callbacks, or 2) you need to disable callback on a specific place of your code. Both are very easily solvable even without Callback::Disable(). For 1) it is just adding "if(DoNotExecuteNow) return;" on the beginning of the callback functions you might need to disable. For the second case, it would be similar, but the if would be outside of the call, something like "if(!DoNotExecuteNow) WhenSomething();".

IMHO there is not much need for changes. Actually I never even used the Clear() method

Best regards,

Honza

Subject: Re: Callbacks with 'Disable' feature
Posted by [kohait00](#) on Tue, 12 Oct 2010 08:15:52 GMT
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i'd be a solution ofcourse, in places where u need it. but just as Clear() it could be a helper in the cases where needed..
it was only a proposal..thanks for comment

cheers

Subject: Re: Callbacks with 'Disable' feature
Posted by [kohait00](#) on Wed, 13 Oct 2010 07:44:23 GMT
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what about the missing fix? i removed the act && action..Quote:
Callback.h:161 is missing the Execute() definition for Gate4<>

i'm wondering that noone has needed it so far

```
template <class P1, class P2, class P3, class P4>
bool Gate4<P1, P2, P3, P4>::Execute(P1 p1, P2 p2, P3 p3, P4 p4) const {
    return (void *)action == (void *)1 ? true : action ? action->Execute(p1, p2, p3, p4) : false;
}
```

Subject: Re: Callbacks with 'Disable' feature
Posted by [kohait00](#) on Tue, 19 Oct 2010 08:18:21 GMT
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dont forget the fix above, or should i post it in an extra thread?

Subject: Re: Callbacks with 'Disable' feature
Posted by [mirek](#) on Tue, 19 Oct 2010 13:32:39 GMT
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Thank you for the fix, good catch, applied.

Mirek
