
Subject: TcpSocket in Array

Posted by [Zbych](#) on Thu, 06 Sep 2012 13:41:09 GMT

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Hi,

In my application I would like to keep all open sockets in an Array. The problem is that when I add (or maybe I should say 'move') TcpSocket to Array and TcpSocket gets out of scope, program crashes. Destructor tries to call ssl->Close() and ssl pointer has value 1.

```
CONSOLE_APP_MAIN
```

```
{  
    Array<TcpSocket> a;
```

```
  
    {  
        TcpSocket s;  
        a.Add(s);  
    }//<---- crash
```

```
  
    //rest of code that uses TcpSockets collected in Array  
}
```

The question is how should I add TcpSockets to Array to avoid this error?

Subject: Re: TcpSocket in Array

Posted by [omari](#) on Thu, 06 Sep 2012 14:09:26 GMT

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```
CONSOLE_APP_MAIN
```

```
{  
    Array<TcpSocket> a;
```

```
  
    {  
        TcpSocket& s = a.Add();
```

```
    }
```

```
}
```

Subject: Re: TcpSocket in Array
Posted by [Zbych](#) on Thu, 06 Sep 2012 15:14:38 GMT
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I know this way, but want to keep in array only those sockets that are already accepted/open (another thread uses them for communication).

Subject: Re: TcpSocket in Array
Posted by [omari](#) on Thu, 06 Sep 2012 17:11:25 GMT
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```
CONSOLE_APP_MAIN
{
    Array<TcpSocket> a;

    {
        TcpSocket s;

        if(..)
            a.Add() = s;
    }
}
```

Note: the destructor TCPSocket can cause problems.

if this is the case, I recomande the first solution:

```
CONSOLE_APP_MAIN
{
    Array<TcpSocket> a;

    {
        TcpSocket& s = a.Add();

        if (! ..)
            a.Remove(a.GetCount()-1);
    }
}
```

}

Subject: Re: TcpSocket in Array
Posted by [mirek](#) on Fri, 07 Sep 2012 08:23:30 GMT
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This would not work, as TcpSocket does not have any form of "copy".

Actually, this is sort of bug I have to fix (make copy constructor private).

If you really insist, you can use something like:

```
Array<TcpSocket> a;  
TcpSocket *s = new TcpSocket;  
s->...  
if(...)  
    a.Add(s);  
else  
    delete s;
```

anyway, that includes "new" which is not really "U++ish".

Other options:

```
One<TcpSocket> s;  
s.Create();  
s->...  
if(...)  
    a.Add(s.Detach());  
// avoids need to delete (which you can forget to do ;)
```

```
TcpSocket& s = a.Add();  
...  
if(!...)  
    a.Drop();
```

Mirek

Subject: Re: TcpSocket in Array
Posted by [Zbych](#) on Mon, 10 Sep 2012 11:42:04 GMT
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Thank you both for suggestions. I guess that One<...> is the simplest solution in my case.
