
Subject: Re: Anonymous delegates
Posted by [Zardos](#) on Wed, 05 Dec 2007 20:33:43 GMT
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luzr wrote on Wed, 05 December 2007 15:33Zardos wrote on Wed, 07 November 2007 21:17If you use it, please be aware it's still only a macro.

To illustrate the fundamental problem a simple example:

```
Vector<int> CreateResultVector() {  
    Vector<int> r;  
    r.Add(1);  
    r.Add(2);  
    r.Add(3);  
    return r;  
}
```

...

```
foreach(int e, CreateResultVector())  
    DUMP(e);
```

Basically the code is stupidly translated to something like this:

```
for(int i = 0; i < CreateResultVector().GetCount(); i++)  
    DUMP(CreateResultVector()[i]);
```

... CreateResultVector is called multiple times!

But this is probably not what you would expect from a real foreach build into the language!

Curiously, this is exactly what I would expect... (I mean, called multiple times).

Mirek

Yes, but you are a very experienced c++ programmer. You know "foreach" is a macro and simply expect "macro behaviour".

If a "foreach" would be available in c++ it would probably evaluate CreateResultVector only once like in C#, Python or Ruby.

For example the following ruby code evaluates create_result_vector only once:

```
def create_result_vector
```

```
[1, 2, 3]  
end
```

```
for e in create_result_vector do  
  puts e  
end
```

- Ralf
