
Subject: AString::Compare missing explicit return value
Posted by [rainbowsally](#) on Tue, 23 Dec 2014 09:56:31 GMT
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For x86-based C/C++, the eax/rax register is usually returned by default (for int types) and this is probably the register holding 'q' below, but it can't be counted on.

File: uppsrc/Core/AString.hpp

```
template <class B>
int AString<B>::Compare(const tchar *b) const
{
    const tchar *a = B::Begin();
    const tchar *ae = End();
    for(;;) {
        if(a >= ae)
            return *b == 0 ? 0 : -1;
        if(*b == 0)
            return 1;
        int q = cmpval__(*a++) - cmpval__(*b++);
        if(q)
            return q;
    }
    // -rs added 1 line to explicitly return q(=0)
    return 0;
}
```

Subject: Re: AString::Compare missing explicit return value
Posted by [dolik.rce](#) on Tue, 23 Dec 2014 13:53:13 GMT
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Hi rainbowsally,

There was nothing wrong with the function. If you look carefully, you'll find out that the line you added will actually never be called. There is no way the code evaluation could get out of the infinite for-loop, other than one of the first three return statements.

So even though some compilers might warn about missing return statement, there is actually no problem or undefined behavior in this function.

Best regards,
Honza

Subject: Re: AString::Compare missing explicit return value
Posted by [rainbowsally](#) on Wed, 24 Dec 2014 03:42:50 GMT
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Hi Honza.

Yer right. Thanks. I'll un-fix my version.

dolik.rce wrote on Tue, 23 December 2014 14:53Hi rainbowsally,

There was nothing wrong with the function. If you look carefully, you'll find out that the line you added will actually never be called. There is no way the code evaluation could get out of the infinite for-loop, other than one of the first three return statements.

So even though some compilers might warn about missing return statement, there is actually no problem or undefined behavior in this function.

Best regards,
Honza
