Subject: Array container does only serialize base classes
Posted by hans on Wed, 26 Apr 2006 07:38:59 GMT

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Hi,
the Array container class does not recreate the derived classes when Serialize() for load is called, only the base classe.

Either it should recreate the derived class, which requires some kind of class factory, like MFC dyncreate. Or it should ASSERT on save if a derived class object is in the Array.

Subject: Re: Array container does only serialize base classes
Posted by mirek on Wed, 26 Apr 2006 07:47:29 GMT

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hans wrote on Wed, 26 April 2006 03:38Hi,
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Either it should recreate the derived class, which requires some kind of class factory, like MFC dyncreate. Or it should ASSERT on save if a derived class object is in the Array.

Yes, this is correct. I vote for ASSERT, however, at the moment I am not sure how condition should look like? Maybe typeinfo name equality?

Mirek

Subject: Re: Array container does only serialize base classes
Posted by hans on Wed, 26 Apr 2006 08:28:39 GMT

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Hi,
Typeinfo requires having virtual functions in the class, which is
a big restriction. Perhaps only document it.

Subject: Re: Array container does only serialize base classes
Posted by mirek on Wed, 26 Apr 2006 08:39:39 GMT

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Done

Mirek

Subject: Re: Array container does only serialize base classes
Posted by gprentice on Wed, 26 Apr 2006 10:34:22 GMT
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<speculating>
Not exactly sure what Array class does, as I haven't learnt NTL or concepts like "pick" yet (shame on me), but according to Array documentation, Array owns its contained objects, so maybe that means the class needs a virtual destructor anyway, otherwise the derived destructor is never called ??
Even if typeinfo failed to detect a derived type for some cases, it might help other cases, and a mechanism for disabling the runtime assert is probably easy to provide.
</speculating>

Graeme

Subject: Re: Array container does only serialize base classes
Posted by mirek on Wed, 26 Apr 2006 11:07:55 GMT
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gprentice wrote on Wed, 26 April 2006 06:34
<speculating>
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Even if typeinfo failed to detect a derived type for some cases, it might help other cases, and a mechanism for disabling the runtime assert is probably easy to provide.
</speculating>

Graeme

I think you are right...

Just to make it clear, Array can and often is used in non-polymorphic situations too (e.g. for non-Moveable objects), then the virtual destructor really is not needed.

Mirek