Subject: Xmlize and double
Posted by pivica on Mon, 30 Jan 2006 06:55:48 GMT
View Forum Message <> Reply to Message

How to save and load double into xml. On way to save double is to convert him to String, but when loading I can't find a way to convert that String back to double.

```
class SomeClass
{
  double d;
  Vector<double> vd;

  void Xmlize(XmlIO xml)
  {
    String sd;
    Vector<String> svd;

    if (xml.IsStoring())
    {
      sd = AsString(d);
      int n = vd.GetCount();
      for (int i = 0; i < n; ++i)
        svd.Add(AsString(vd[i]));
    }

    xml
     ("d", sd)
     ("vd", svd)
    ;

    if (xml.IsLoading())
    {
    // now what???
    }
  }
}
```

Subject: Re: Xmlize and double
Posted by mirek on Mon, 30 Jan 2006 10:53:27 GMT
View Forum Message <> Reply to Message

Well, we should definitely add "xmlizers" for "double":

```
template<> inline String XmlAttrStore(const double& var)
{
 return AsString(var);
}

template<> inline void   XmlAttrLoad(double& var, const String& text)
{
 CParser p(text);
 if(p.IsDouble()) var = p.ReadDouble();
}

template<> inline
void Xmlize(XmlIO xml, double& var)
{
 xml.Attr("value", var);
}
```

In fact, it is just my ommision that I forgot to have them in Xmlize. They are now there...

This also shows one convenient way how convert String to double...

Mirek

Subject: Re: Xmlize and double
Posted by pivica on Mon, 30 Jan 2006 23:47:04 GMT
View Forum Message <> Reply to Message

Mirek thanks very much for your help.

Subject: Re: Xmlize and double
Posted by pivica on Mon, 06 Feb 2006 22:16:13 GMT
View Forum Message <> Reply to Message

There isn't CParser::IsDouble() method but there is IsNumber(). Is it OK to use it.

Xmlize for bool variables is missing. It's not big problem, just convert bool to int and back, but it would be nice to have it.

Subject: Problems with null doubles and Xmlize in 602b version.
Posted by pivica on Tue, 07 Feb 2006 15:55:46 GMT
View Forum Message <> Reply to Message

I've just downloaded 602b. Xmlize class for doubles works OK when numbers are not DOUBLE_NULL. But in application which I am developing user can leave empty EditDouble ctrls

and in that case double from that ctrls has DOUBLE_NULL value. When storing with Xmlize such double value has empty string value, but when trying to load it XmlError("expected floating point number") is raised.

For example:

```
class A
{
public:
 void Xmlize(XmlIO xml) { xml ("d", d); }
 double d;
};

//...

EditDouble ctrl;
ctrl.Clear();

A a;
a.d = ctrl; // Now d has DOUBLE_NULL value
StoreAsXMLFile(a, "a", "a.xml");
LoadFromXMLFile(a, "a.xml"); // return false!
```

"a.xml" after StoreAsXMLFile is something like this:

```
<a>
 <d value=""/>
</a>
```

Problem is in Xmlize.cpp in XmlAttrLoad(double& var, const String& text) method, XmlError is raised when text is empty.

```
template<> void XmlAttrLoad(double& var, const String& text)
{
 CParser p(text);
 if(!p.IsDouble())
  throw XmlError("expected floating point number");
 var = p.ReadDouble();
}
```

My temporary workaround is to determine if text is empty:

```
template<> void XmlAttrLoad(double& var, const String& text)
{
 CParser p(text);
 /////
 if (text.IsEmpty())
```

```
 {
  var = DOUBLE_NULL;
  return;
 }
 /////
 if(!p.IsDouble())
  throw XmlError("expected floating point number");
 var = p.ReadDouble();
}
```

Same problem maybe exist in XmlAttrLoad(int& var, const String& text) and XmlAttrLoad(dword& var, const String& text). They are also throwing XmlError.

Subject: Re: Problems with null doubles and Xmlize in 602b version.
Posted by mirek on Tue, 07 Feb 2006 19:15:43 GMT
View Forum Message <> Reply to Message

Hm, stupid me. NULL is something I have not considered there....

Thanks.

Mirek

Subject: Re: Problems with null doubles and Xmlize in 602b version.
Posted by mirek on Tue, 07 Feb 2006 19:35:41 GMT
View Forum Message <> Reply to Message

Should be now fixed (and "bool" added).

Mirek
