
Subject: Re: Some Shocking Facts You Probably Didn't Want to Know about U++ Framework...

Posted by [mirek](#) on Mon, 09 Nov 2020 21:05:58 GMT

[View Forum Message](#) <> [Reply to Message](#)

Tom1 wrote on Mon, 09 November 2020 20:46Hi Mirek!

Thanks!! Great article!

Although I started learning U++ 2006, I'm still learning... : An Array can actually hold objects of inherited classes! This was interesting and very useful for my needs. However, I could not figure out how to make serialization/deserialization of this work correctly. Here's my failed test of that:

```
using namespace Upp;
class A{
public:
    int a;
    A(){
        a=1;
        Cout() << "A+\n";
    }

    virtual ~A(){
        Cout() << "A-\n";
    }

    virtual void Serialize(Stream &s){
        s % a;
    }

    virtual void Print(){
        Cout() << "A: " << a << "\n";
    }
};

class B: public A{
public:
    int b;
    B(){
        b=2;
        Cout() << "B+\n";
    }

    ~B(){
        Cout() << "B-\n";
    }

    virtual void Serialize(Stream &s){
```

```

A::Serialize(s);
s % b;
}

virtual void Print(){
    Cout() << "B: " << a << ", " << b << "\n";
}
};

CONSOLE_APP_MAIN{
    Array<A> v;

    v.Create<A>();
    v.Create<B>();
    v.Create<B>();
    v.Create<A>();

    Cout() << "Printing array...\n";
    for(int i=0;i<v.GetCount();i++) v[i].Print();

    Cout() << "Storing to file...\n";
    StoreToFile(v,GetHomeDirFile("Test.bin"));
    Cout() << "Clearing...\n";

    v.Clear();

    Cout() << "Loading from file...\n";
    LoadFromFile(v,GetHomeDirFile("Test.bin"));
    Cout() << "Loaded from file...\n";

    Cout() << "Printing array...\n";
    for(int i=0;i<v.GetCount();i++) v[i].Print();
}

```

What is the correct way to do this?

Seriously, you cannot... Sorry that I might have created that impression.

I mean, you definitely can solve this, but not with out-of-box `Array::Serialize`. You need to provide your own serialization there and store the type on saving, load on loading.

In reality, this is not needed very often...

Mirek
