
Subject: How to serialize a new data type

Posted by [koldo](#) on Wed, 23 Oct 2019 08:58:10 GMT

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I am lost. This sample to serialize a std::complex compiles in MSVC but gets this error with MinGW:

error: 'struct std::complex<double>' has no member named 'Jsonize'

#include <Core/Core.h>

using namespace Upp;

```
template <class T>
void Jsonize(JsonIO& io, std::complex<T>& var) {
    T re, im;
    if (io.IsStoring()) {
        re = var.real();
        im = var.imag();
    }
    io("re", re)("im", im);
    if (io.IsLoading()) {
        var.real(re);
        var.imag(im);
    }
}
```

```
struct Demo {
    std::complex<double> val;
    void Jsonize(JsonIO& io) {io("val", val);}
};
```

```
CONSOLE_APP_MAIN
{
    Demo demo;
    demo.val = std::complex<double>(1, 2);
    StoreAsJsonFile(demo, "filename.json");
}
```

Subject: Re: How to serialize a new data type

Posted by [Oblivion](#) on Wed, 23 Oct 2019 11:46:26 GMT

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Hello Koldo,

On Linux with GCC I get the same error. The problem seems to be namespace.
Try this one: :)

```
#include <Core/Core.h>

namespace Upp { // <--

template<class T>
void Jsonize(JsonIO& io, std::complex<T>& var)
{
    T re, im;
    if (io.IsStoring()) {
        re = var.real();
        im = var.imag();
    }
    io("re", re)("im", im);
    if (io.IsLoading()) {
        var.real(re);
        var.imag(im);
    }
}
}
```

```
using namespace Upp;
```

```
struct Demo {
    std::complex<double> val;
    void Jsonize(JsonIO& io)
    {
        io("val", val);
    }
};
```

```
CONSOLE_APP_MAIN
{
    Demo demo;
    demo.val = std::complex<double>(1, 2);
    StoreAsJsonFile(demo, "filename.json");
}
```

This works on GCC and CLANG (on Linux).

Best regards,
Oblivion

Subject: Re: How to serialize a new data type
Posted by [koldo](#) on Wed, 23 Oct 2019 14:21:06 GMT

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You are totally right. Thank you very much!

Subject: Re: How to serialize a new data type
Posted by [mirek](#) on Thu, 24 Oct 2019 07:02:47 GMT

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BTW, Jsonize and similar stuff (Serialize, GetHashCode...) is the reason for existence of Complex.

Subject: Re: How to serialize a new data type
Posted by [koldo](#) on Thu, 24 Oct 2019 08:14:12 GMT

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OK. I will use it.
