Subject: DLLs
Posted by darki699 on Fri, 17 Oct 2008 06:46:02 GMT
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I usually program in VC++ or VC#
Lately I tried UPP and liked it since it resolves the annoying GUI building frustration.

One thing troubles me tho...

I can't seem to attach DLLs to a UPP project.

For example, I created a crawler in c# and I tried to attach it to the UPP GUI code I created by making the crawler "MediaInfo.dll"

In VC++ you only need to attach the namespace such as

#using<MediaInfo.dll>

but in UPP????

Since #using is not valid without the /clr option, and upp is not using the managed c++ options, how can i change this?

In other words, is there any way to attach my dll?

Subject: Re: DLLs
Posted by Mindtraveller on Fri, 17 Oct 2008 07:48:46 GMT
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Static binding is aavilable through attaching DLL`s .lib file if you have one. Dynamic binding is discussed in this topic.

Subject: Re: DLLs
Posted by zsolt on Fri, 17 Oct 2008 11:23:32 GMT
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The problem is that you want to use a .NET DLL from native C++ code. It is not so trivial, I think. You have to study MSDN.

Subject: Re: DLLs
Posted by darki699 on Fri, 17 Oct 2008 16:12:54 GMT
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C# is using classes rather than functions in the dll file.
So I didn't quite understand how *.dli file could solve my problem since it's function based and not class based.

C# actually creates a *.class file name (like in java), so I need to access a class Crawler in some way by linking my MediaLink.dll .

To be more specific, in managed VC++ I would normally type:

```
#include <iostream>
#using   <mscorlib.dll>
#using   <MediaLink.dll> // name of the dll which contains the C# code for the Crawler class

using namespace System;
using namespace System::Collections;
using namespace std;

void main(void)
{
 Crawler c;
       c.CrawlToSite("http://www.ultimatepp.org/forum/");
}
```

But how can I create a DLI file for something like this?

Subject: Re: DLLs
Posted by Mindtraveller on Fri, 17 Oct 2008 16:40:20 GMT
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You can`t. If you want to import CLR classes (not native functions) I don`t know how to help you, sorry.
Hope google will help on searching.

Subject: Re: DLLs
Posted by zaurus on Sat, 18 Oct 2008 15:28:43 GMT
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I had a similar problem some time ago, when I had to integrate a third party .NET DLL. After many days and nights googleing I found that there is a way by acessing the DLL via DCOM.

In your .NET DLL you need to expose an Interface.

```
using System.Runtime.InteropServices;
```

```
namespace TestClass
{
   [InterfaceType(ComInterfaceType.InterfaceIsDual)]
   public interface ITestInterface
   {
      bool Function1OfDLL(string sParameter);
      string Function2OfDLL(string sAnotherParameter);
   }
   public class TestClass : ITestInterface
   {
      public TestClass()
      {
         //Init code;
      }

      bool Function1OfDLL(string sParameter);
      {
         //Do something here
      }
      string Function2OfDLL(string sAnotherParameter);
      {
         //Do something here
      }
    }
}
```

Then you need to register your DLL with "RegAsm.exe TestDLL.dll". The RegAsm tool is part of the .NET-Framework.

In VC++ 6.0 is goes like this to access the DLL. Something similar should be possible in U++.

```
#import "TestDLL.tlb"
using namespace TestClass;
HRESULT hr = CoInitialize(NULL);
ITestInterface* m_DLL;
m_DLL = NULL;
CLSID clsid;
REFIID refiid =  __uuidof(ITestInterface);
hr = CLSIDFromProgID(OLESTR("TestDLL.TestClass"), &clsid);
hr = CoCreateInstance(clsid, NULL, CLSCTX_ALL, refiid, (LPVOID*) &m_DLL);
```

Access functions of DLL.

```
m_DLL->Funtion1OfDLL();
```

To close connection with DLL do this.

```
m_DLL->Release();
CoUninitialize();
```

I hope this helps.

Good luck.

Zaurus

Subject: Re: DLLs
Posted by tojocky on Tue, 25 Nov 2008 09:31:06 GMT
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Good article for plug-in architecture is here!
If is other better ideas... I will be glad to discuss about this!
