Subject: Serial.cpp for 64bit
Posted by nlneilson on Fri, 03 Aug 2012 12:53:23 GMT
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I have been using the serial.h and .cpp that was referenced in the forum which works good on 32bit but not 64bit.

Serial.cpp has
#ifdef PLATFORM_WIN32

Has someone used Serial files that work on 64bit in upp and preferably that the .exe will work on 32bit AND 64bit.

Subject: Re: Serial.cpp for 64bit
Posted by nlneilson on Mon, 06 Aug 2012 06:40:13 GMT
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An update on the problem after debugging with MSC9.

In my upp app there is hard coded on a known port:
  CommPort.Open(11,57600);

In Serrial.cpp
bool SerialPort::Open(int nPort, int nBaud)
The nPort and nBaud both have bogus numbers like:
59380608 and 80019228

Building with MSC9x64 Optimal there are no errors but will not open ports.
MSC9x64 Debug will build but will not with Run (in debugger)

Subject: Re: Serial.cpp for 64bit
Posted by jerson on Mon, 06 Aug 2012 08:49:50 GMT
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Hi Neil

I am not sure if I am able to help. I have used the serial files and made changes to suit my needs. See if this helps you. I am able to use these on WinXP and also Win7 64b edition. I am not sure if I need to compile these differently, but the normal tdm-mingw compile works for both platforms.

Attached my modbus serial files. Not ideal stuff as I am quite new to C++ and also U++. But, it works.

Regards
Jerson

File Attachments

1) ModbusComm.zip, downloaded 881 times

Subject: Re: Serial.cpp for 64bit
Posted by nlneilson on Mon, 06 Aug 2012 09:32:54 GMT
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Hi Jerson

Thanks as I will try it.

You were a big help on this thread also:
http://www.ultimatepp.org/forum/index.php?t=msg&goto=298 39&&srch=Jerson#msg_29839

I will post how ModbusComm.zip works.

Subject: Re: Serial.cpp for 64bit
Posted by nlneilson on Tue, 07 Aug 2012 04:04:32 GMT
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Hi Jerson

I replaced the Serial.h and Serial.cpp in my app and tried it.
The data passed needs to be a string rather than int.
That is what was done in Python, Java and a previous C++ app.
I will make the changes to my app.

I fired up an older laptop and found a C++ project using the Eclipse C++.

Here is a .zip that includes the src and the SerialCom.h and .cpp.
It also has a compiled COMcheck1.exe which works on 32bit and 64bit. I am not sure if that was made with the same project.
Note that this is probably only for Windows.
http://www.nlneilson.com/apps/GPS4.zip

The serial code may be easier than the code you have and you may be able to get ideas from. I like to stay away from pointers.
But since your code works with Linux I will try that.

Subject: Re: Serial.cpp for 64bit
Posted by mirek on Sat, 25 Aug 2012 11:31:49 GMT
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Would it be possible to add serial port handling to bazaar in some form?

Mirek

Subject: Re: Serial.cpp for 64bit
Posted by nlneilson on Sat, 25 Aug 2012 14:42:55 GMT
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That would be great if it was incorporated in upp.

M$VC has good serial code, it may be tied in with their managed CL or whatever. Python has a good PySerial.

The code I am tinkering with works on WinXP but not Win7 32bit or 64bit. I am just getting a last error dwWord 6 which I have no idea what that is. A M$VC app just to check the ports works as well as the Sirfdemo, Python, ...

I am having the same problem with Jerson's code.

Subject: Re: Serial.cpp for 64bit
Posted by nlneilson on Tue, 28 Aug 2012 19:51:35 GMT
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As previously mentioned:
http://www.nlneilson.com/apps/GPS4.zip

COMcheck1.exe dated 2008
This works on WinXP and Win7 32bit and 64bit.
It checks the ports that can be opened and then the baud rate.
It then parses the GPGGA NMEA sentence and prints it out.

Checking COM: 1 2 3 4 5 6 7 8 9 10 11 COM 11: opened
12 COM 12: opened
13 14 15 16 17 18 19 20

COM 11: check baud rate

COM 12: check baud rate

COM 11 at 57600
$GPGGA,223705.631,3412.7486,N,11911.6111,W,1,06,1.0,-24.5,M,-33.8,M,0.0,0000*5E
Lat 34.21248 Lon -119.19352 Alt 30ft GPS fix, # of Sat. 6

COM 12 at 57600
$GPGGA,223706.395,3412.7444,N,11911.6102,W,1,06,2.6,-14.3,M,-33.8,M,0.0,0000*5A
Lat 34.21241 Lon -119.19350 Alt 63ft GPS fix, # of Sat. 6

11.408 sec
N.L. Neilson (c)

It will check as many GPS receivers that are plugged in.

This may have been made with M$VC as the code in the GPS4 folder is from 2010 and doesn't seem to relate to the COMcheck1.exe

From the Serial.cpp from Jerson and nixnixnix this fails in Win7 but works OK with WinXP
```
 if( !SetCommState( m_hIDComDev, &dcb ) ||
  !SetupComm( m_hIDComDev, 10000, 10000 ) ||
```

If someone works on a project for bazaar I would be glad to help with parsing or whatever.

edit: fixed link for GPS4.zip

Subject: Re: Serial.cpp for 64bit
Posted by nlneilson on Tue, 28 Aug 2012 20:59:31 GMT
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I found the folder the COMcheck code is in. It also has COMcheck2 that fixed a few glitches in COMcheck1.
http://www.nlneilson.com/wwposts/COMcheck.zip

Windows has:
using namespace System::IO::Ports;

If upp had something similar or could access that it would help.

edit: I just built the app again with the above code on Win7 64bit with M$VC 10 with the /clr option.
 I would like to connect to serial port in U++.

Subject: Re: Serial.cpp for 64bit

Posted by nlneilson on Tue, 28 Aug 2012 21:27:25 GMT
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http://www.ultimatepp.org/forum/index.php?t=msg&goto=298 39&&srch=Jerson#msg_29839

koldo wrote on Thu, 19 August 2010 23:23jeremy_c wrote on Fri, 20 August 2010 01:30Where can one find wxSerial? It seems to be hiding from me :-/

Jeremy
Hello Jeremy

wxSerial refers to wxWindows serial support. It cannot be used here.

I am not sure about the status of the serial support in U++. Now it seems to be:

- nixnixnix has included in Forum (in this post) a serial class for Linux and Windows
- jerson has done a class for Windows to be posted
- Mindtraveller has done a more complete class but is part of a closed source package

"wxSerial refers to wxWindows serial support. It cannot be used here."

It would be good to have serial support included in U++.

Subject: Re: Serial.cpp for 64bit
Posted by nlneilson on Fri, 31 Aug 2012 04:27:20 GMT
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First step.

After time searching found this:
http://stackoverflow.com/questions/3783842/converting-a-stri
ng-to-lpcwstr-for-createfile-to-address-a-serial-port

With that example this portion of the code works OK on Win7 64bit in U++.

```
    std::wstring comID = L"\\\\.\\COM11";
    HANDLE hSerial;
    hSerial = CreateFileW(comID.c_str(),
 GENERIC_READ | GENERIC_WRITE,
            ...
```

using namespace System::IO::Ports; is not required

I don't know about c_str(), LPCWSTR, or value (pointer to const wchar_t). There may be an easier way if/when included in U++.