
Subject: Non-Blocking socket example
Posted by [benedetta](#) on Thu, 03 Aug 2006 17:23:29 GMT
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Hi to all!

I'm a new user of "ultimate++" and i need to create a simple non blocking application!

Can some1 attach an exsample?

Thx to all!

Subject: Re: Socket non block
Posted by [lundman](#) on Wed, 18 Apr 2007 07:33:52 GMT
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Heh only just saw this, but well, probably too late, but we used my own "lion" library with U++ to do everything nonblocking, and platform independent.

But that was a little bit cheating, in that we setup a U++ timer to call the lion code periodically.

<http://www.lundman.net/wiki/index.php/LiON>

Subject: Re: Socket non block
Posted by [fallingdutch](#) on Wed, 18 Apr 2007 08:40:23 GMT
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You can use UPP-Sockets nonblocking

you need the Package "Web" and "Web/SSL" if you need SSL support

Then these two functions create sockets for you.

```
bool ServerSocket(Socket& socket, int port, bool nodelay = true, int listen_count = 5, bool is_blocking = true);
```

```
bool ClientSocket(Socket& socket, const char *host, int port, bool nodelay = true, dword *my_addr = NULL, int timeout = DEFAULT_CONNECT_TIMEOUT, bool is_blocking = true);
```

Set "is_blocking" to false.

Socket::Wait is a call to select

Bas

Subject: Socket example?

Posted by [lectus](#) on Thu, 09 Aug 2007 18:59:16 GMT

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Hello!

I want to develop a client/server socket application.

Ultimate++ GUI is very suitable for the task, especially the array control.

I need to use sockets that do not block the GUI.

I know there is Web/Socket.h, can anyone give me one simple client and server source code example? I can't seem to find it nowhere in documentation.

Thanks!

Subject: Re: Socket example?

Posted by [bonami](#) on Fri, 10 Aug 2007 02:55:20 GMT

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<http://msdn2.microsoft.com/en-us/library/aa371713.aspx>

win32 & COM->networking->windows socket 2 or something

Subject: Re: Socket example?

Posted by [lectus](#) on Fri, 10 Aug 2007 03:57:40 GMT

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I think you misunderstood me.

I really want source examples for using the U++ Web/Socket.h classes.

Subject: Re: Socket example?

Posted by [bonami](#) on Fri, 10 Aug 2007 06:16:18 GMT

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O yeah. I did not notice it. I suppose it is mainly for http or ftp, since it's WEB and for streams only.

uppsrc's web/tserve is a U++ project, you might wanna take a look @ it. i did not look carefully. and there's a plugin/ftp

i seem to redoing this kind of thing but i use UDP, too, in my project

Subject: Re: Socket example?
Posted by [lectus](#) on Mon, 13 Aug 2007 14:58:21 GMT
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Anyone?

Subject: Re: Socket example?
Posted by [fudadmin](#) on Mon, 13 Aug 2007 16:34:21 GMT
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Would about this thread:
http://www.ultimatepp.org/forum/index.php?t=msg&goto=4381&&srch=block+socket#msg_4381
?

Subject: Re: Socket example?
Posted by [lectus](#) on Mon, 13 Aug 2007 19:00:11 GMT
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I still don't understand how to use the socket classes.
(Sorry, I'm newbie at C++. Used C before. Now moving to C++ and Ultimate++ framework).
Could you give me an example of ServerSocket and ClientSocket?
Thanks

I'm building a client/server application. U++ is perfect for the GUI, but I'd like to use the Sockets classes, so I don't need to use the lower level Winsock directly.
U++ GUI + Sockets classes + the simple compression library zlib, all these already in U++, will be enough for my application.

Thank you again.

Subject: Re: Socket example?
Posted by [fudadmin](#) on Mon, 13 Aug 2007 20:52:30 GMT
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It's difficult to guess what you need and what you know. Please ask "smaller" questions and give some more background.
Have you studied U++ examples httpcli etc.?
Or, I'd strongly suggest start programming and post your packages here (you can check forlano first posts here who came from C background...). Also add comments with pseudo-code.

Subject: Re: Socket example?

Posted by [mezise](#) on Mon, 13 Aug 2007 21:32:08 GMT

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lectus wrote on Mon, 13 August 2007 21:00

Could you give me an example of ServerSocket and ClientSocket?

Searching through upp sources for ServerSocket and ClientSocket you may find e.g.:

- \uppsrc\Web\httpsrv.cpp(251)
- \uppsrc\Web\httpcli.cpp(120)
- \uppsrc\Web\smtp.cpp(176)

In examples there are cmdsrv and imsrv packages using HttpServer class and there is httpcli package using HttpClient.

Maybe that will help.

Michal

Subject: Re: Socket example?

Posted by [lectus](#) on Tue, 14 Aug 2007 02:06:57 GMT

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Well, I've checked the http examples. But I really need pure sockets, that I can implement my own protocol.

I really code use winsock.h, but the class from U++ would be more suitable once I learn how to use it. So, I search for examples.

I'll give more details:

The program will be a program to share files bewtween PCs over the internet using TCP/IP.

It will be a very simple P2P, able to comunicate between 2 machines, both sending and receiving files from each other.

Both connect via IP and Port using TCP sockets.

I'll use an array control to show the data of the files, like name, size, progress of download/upload, etc.

I'll have also a bunch of buttons and check boxes.

Pretty simple GUI. But array control from U++ will make it a powerful and easy to use application.

Thanks

Subject: Re: Socket example?

Posted by [fudadmin](#) on Wed, 15 Aug 2007 02:51:02 GMT

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Could this help as a starting point for your server part:

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

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

```
using namespace Upp;
```

```
#define LAYOUTFILE <P2PSocket/P2PSocket.lay>
```

```
#include <CtrlCore/lay.h>
```

```
class SocketApp : public WithMainLay<TopWindow> {
```

```
    Socket sock;
```

```
public:
```

```
    void SSwitch();
```

```
    typedef SocketApp CLASSNAME;
```

```
    SocketApp();
```

```
};
```

```
void SocketApp::SSwitch()
```

```
{
```

```
    if (ssw==0) {
```

```
        sock.Close();
```

```
        PromptOK("4662 socket server CLOSED. You can check it with nmap command");
```

```
    }
```

```
    else if (ssw==1) {
```

```
        ServerSocket(sock, 4662, true, 5, false);
```

```
        PromptOK("4662 socket server OPENED. You can check it with nmap command");
```

```
    }
```

```
    else
```

```
        PromptOK("Warning: check your switch inits!");
```

```
}
```

```
SocketApp::SocketApp()
```

```
{
```

```
    CtrlLayout(*this, "P2PSocket Server");
```

```
    ssw.SetLabel(0, "STOP 4662");
```

```
    ssw.SetLabel(1, "START 4662");
```

```
    ssw=0;
```

```
    ssw.WhenAction = THISBACK(SSwitch);
```

```
    Sizeable().Zoomable();
```

```
}
```

```
GUI_APP_MAIN
```

```
{
```

```
    SocketApp().Run();
```

```
}
```

```
P2PSocket.lay:
LAYOUT(MainLay, 400, 200)
ITEM(Switch, ssw, HSizePosZ(144, 172).VSizePosZ(68, 96))
END_LAYOUT
```

Subject: Re: Socket example?
Posted by [fallingdutch](#) on Wed, 15 Aug 2007 06:29:24 GMT
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have a look at the downloads of my hp or at this post and check the XML-RPC source, it is out of date, a new one will come soon, but i guess it shows how to use sockets of Upp

Bas

Subject: Re: Socket example?
Posted by [lectus](#) on Wed, 15 Aug 2007 18:33:10 GMT
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fudadmin: Thanks! That was a good starting point.
I'm connecting to 4662 port using telnet to check the connection.
I try sock.Write("Welcome!\r\n") and String data sock.Read(Null, 250), for writing and reading strings, but it seems to not be working.
What's right way to read and write lines from/to the client?
ReadRaw() looks OK for files. What about strings with \n at the end?

Thanks!

I tried this:

```
void test::BtngetPush()
{
    sock.Write("Welcome!\r\n");
    String data = sock.ReadUntil('\n', Null, 1000000);
    editdata <=<= data;
}
```

While btnget is a button, that when clicked should executed that code. editdata is EditString control. But that is not working. =\

Subject: Re: Socket example?
Posted by [fudadmin](#) on Thu, 16 Aug 2007 06:12:41 GMT

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Well, first of all, U++ is cross-platform, so don't use M\$ stupid things "\r\n" (look in forums for info on this).

Second, Uvs2 package has some useful things like file parts transfer, compression etc.

Third, sorry, I'm off till Sunday (probably).

Subject: Re: Socket example?

Posted by [mirek](#) on Fri, 17 Aug 2007 17:21:22 GMT

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lectus wrote on Wed, 15 August 2007 14:33

What's right way to read and write lines from/to the client?

ReadRaw() looks OK for files. What about strings with \n at the end?

Well, "\n" / "\r\n" stupidity....

U++ way is to not to try some sort of automatic "text" translations (like those special binary/text modes in C fopen etc..) in streams.

In most cases, we prefer to manually supply '\r' on output and ignore it on input (only watch for '\n').

Mirek

Subject: Re: Socket example?

Posted by [fudadmin](#) on Sun, 19 Aug 2007 12:23:46 GMT

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luzr wrote on Fri, 17 August 2007 18:21lectus wrote on Wed, 15 August 2007 14:33

What's right way to read and write lines from/to the client?

ReadRaw() looks OK for files. What about strings with \n at the end?

Well, "\n" / "\r\n" stupidity....

U++ way is to not to try some sort of automatic "text" translations (like those special binary/text modes in C fopen etc..) in streams.

In most cases, we prefer to manually supply '\r' on output and ignore it on input (only watch for '\n').

Mirek

Mirek, could you put that into FAQ's "about endlines" (or similar), please?

This really looks like the third STUIPHIC way, then.
STrange Unexpected soPHisticated speciflC

lectus, sorry for trying to confuse you about those endlines.

Subject: Re: Socket example?
Posted by [lectus](#) on Sun, 19 Aug 2007 15:23:59 GMT
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Hello!
I know about \r\n vs \n, but I'm building mainly for Windows.
Also, I really asked about how to read/write line-buffered data from/to sockets, instead of
byte-buffered raw data?

Thanks

Subject: Re: Socket example?
Posted by [fudadmin](#) on Sun, 19 Aug 2007 23:58:48 GMT
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lectus, I wrote a complete compilable starter package for you. There are on forums here some
sticky pieces about posting compilable packages. Or do you think we must spend time recovering
the missing pieces of void test::BtngetPush()

```
{  
sock.Write("Welcome!\r\n");  
String data = sock.ReadUntil('\n', Null, 1000000);  
editdata <=<= data;  
}?
```

Edit: Sorry if that sounds rude (or is it better not to respond like on other forums?) for the sake of
forums quality...

P.S. And please format code as code. And if something doesn't work say what doesn't work. And,
please, post your package.

Subject: Re: Socket example?
Posted by [fudadmin](#) on Mon, 20 Aug 2007 19:24:25 GMT
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lectus, could you check this on Windows?:
<http://www.ultimatepp.org/forum/index.php?t=msg&th=2656&start=0&>
