

## Re: Socket communication on multihomed box

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*Source:*

<http://www.tech-archive.net/Archive/Development/microsoft.public.win32.programmer.networks/2006-06/msg00065>

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- *From:* [ne.seri@xxxxxxxx](mailto:ne.seri@xxxxxxxx)
  - *Date:* 7 Jun 2006 06:05:46 -0700
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Thanks,

I'll give it a shot

Arkady Frenkel wrote:

Check if metric of USB ( with "route print" in dos box ) is less than LAN  
set metric for LAN less than USB, if they equal move  
LAN route before USB  
Arkady

<ne.seri@xxxxxxxx> wrote in message  
[news:1149295707.903951.188450@xx](mailto:news:1149295707.903951.188450@xx)

In short, I'm building a kind of server which is supposed to handle open connections with clients. E.g. client connects to the server, the connection stays open, client sends a request to the server, server reasons, and so on...

The thing is that connection **MUST** always stay open. I'm using C++, and as for sockets, I'm using native syscalls, not MFC. I'm using stream sockets for communication.

Another thing is that it should work both under Linux and Windows. The code is pretty portable except the part with sockets and threads. I created wrapper classes that implement syscalls for handling threads and sockets, which have the same interface for the rest of my code, but implement a bit differently under Windows and Linux (of course :). However this is not the problem. It's working just fine for both OSes.

The problem I have are the sockets. Everything was working just fine until I recently installed an USB bluetooth adapter to my computer (Windows). Now, the program won't even connect using a connect() syscall. It returns with an error: 10061 - WSAECONNREFUSED.

Let me also mention that the program is working just fine both on another Windows box, and another Linux box (Mandrake 10).

As I dig a bit deeper, I found out that my computer now has two network

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adapters – using `gethostbyname()`. The first one is Bluetooth (192.168.2.1), the second one is LAN (192.168.1.88), and I guess that this is what's causing the problems. Of course, I confirmed this with `ipconfig` command.

My program is supposed to communicate using LAN interface of course, but it just doesn't, so it seems to me.

Another thing is when I try to connect to Windows from a Linux box (Linux is 192.168.1.98). The Windows program detects the incoming connection in `accept()`. It creates another socket for communication. But when it comes to receiving data it just goes crazy... It receives data with `recv()` syscall. I can clearly see the data received in buffer using a debugger, but `recv()` returns with some strange number (e.g. -8362460 ???) instead of returning with the number of bytes received, or 0, or -1, right?

Sometimes it returns with -1, and the error is the same 10061 – `WSAECONNREFUSED`.

Let me mention another thing, everything else (that uses sockets) seems to work on this Windows box with bluetooth adapter. IE, Outlook, Skype, eMule, putty, Total Commander (FTP), Editplus (FTP and SFTP), FlashGet...

Has anybody got any ideas what could cause such a strange behaviour? I even tried the basic examples I first downloaded when I started with this program. The server/client programs that exchange a few bytes and terminate. But they also fail now – was working before.

I read that you can make sockets to use a specific network interface for connection. How can I try this out? Has anybody got some sample code for this?

I'm just going nuts with this. I can't find a solution for this behavior.

Thanks in advance,  
Goran