

Re: Maximum sockets

Source:

<http://www.tech-archive.net/Archive/Development/microsoft.public.win32.programmer.networks/2005-02/0286.html>

From: Michael K. O'Neill (*mikeathon2000_at_nospam.hotmail.com*)

Date: 02/10/05

Date: Thu, 10 Feb 2005 09:14:33 -0800

"Phil Frisbie, Jr." <phil@hawksoft.com> wrote in message
news:esIE5FwDFHA.3368@TK2MSFTNGP10.phx.gbl...

> <snip>

> Yes, you found your problem, even if you did not understand that answer!

When

> you call connect() Windows assigns it to a unused port. The problem is

that by

> default Windows only uses the ports from 1024 through 5000. When you close
a TCP

> socket, it stays in the CLOSE_WAIT for about two minutes, so you can only

> connect and close less than 3976 sockets every two minutes.

>

> --

> Phil Frisbie, Jr.

> Hawk Software

> <http://www.hawksoft.com>

>

I thought the WSAEADDRINUSE error occurred only when a connection was attempted on the same four-tuple (i.e., on the exact same IP and port for both the client and server). If that's correct, then it's not entirely accurate to say "you can only connect and close less than 3976 sockets every two minutes." It would be more accurate to say "you can only connect and close less than 3976 sockets every two minutes between the same two machines".

This MSDN KB article talks about the issue, although in the context of a very specific problem: "PRB: "WSAEADDRESSINUSE" Error Message When You Try to Connect Through an Anonymous Port After You Increase the IMAP Connection Limit" at <http://support.microsoft.com/default.aspx?scid=kb:en-us:319502> .

I had seen this article before, but it was hard to find it again since someone had misspelled WSAEADDRINUSE (it's not "WSAEADDRESSINUSE" as spelled in the article).

Incidentally, I think that "ephemeral port" is often called "anonymous port" in Winsock-world.

microsoft.public.win32.programmer.networks: Re: Maximum sockets

In any event, in a nutshell, could you explain how your library overcomes the "1024 to 5000" port range limitation without a registry edit? Do you close the socket with SO_REUSEADDR, or maybe assign port numbers yourself?

Mike