

Re: using Socket calls in OSdesign subproject

Source:

<http://www.tech-archive.net/Archive/WindowsCE/microsoft.public.windowsce.app.development/2009-03/msg00200>

- *From:* "Paul G. Tobey [eMVP]" <p space tobey no spam AT no instrument no spam DOT com>
 - *Date:* Tue, 31 Mar 2009 08:29:20 -0700
-

You don't want to restrict your bind(). That's more-restrictive and not what we want for purposes of making this work. As I said, YOUR CODE WORKS ON MY DEVICE. From that, I conclude that, if the network is set up correctly, the client is trying to connect to the wrong IP or, if the client is correct, the network is broken. You don't have the Windows CE firewall on your device?

I can't tell you how *your* device works. I think that, generally, the same IP used during EBoot is passed along to the VMini driver in Windows CE running on top of KITL, so nothing has to change, but maybe you aren't doing that. I can't remotely diagnose things at that level. Can the client ping your device's IP address? You should be able to find the IP address by getting a command prompt and using 'ipconfig /all', just as you would on the desktop.

Paul T.

"vinay" <vinay@xxxxxxxxxxxxxxxxxxxxxxxxxxxx> wrote in message news:9E3F5E46-887D-4E3E-B7D1-1A384DA032E9@xxxxxxxxxxxxxxxxxxxx

Hi,

I checked if there is any firewall between WinCE target and my client but even after disabling the firewall and using direct ethernet connection, still it doesn't work.

I tried to use the following IP address directly instead of INADDR?_ANY,

```
ocal.sin_family=AF_INET; //Address family
local.sin_addr.s_addr=inet_addr("192.168.16.10");// INADDR_ANY; //Wild
card
```

IP address

```
local.sin_port=htons(44444); //port to use
```

The IP address 192.168.16.10 has been configured in E-boot. In this case bind fails with error code 10049. This means the server is not able to bind

to this IP. Even though i'm able to ping to this IP, it is not binding and it

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returns.

If i Use INADDR_ANY, bind succeeds but the client is unable to connect and times out.

I would like to know, is it enough that, the IP address is configured at E-boot or at the WinCE Os level is it necessary to set the IP address? With these observations, it looks like the IP address is not properly set in WinCE!

Is there any way to check which IP address the server binds to when i use INADDR_ANY option? Please suggest.

thanks

"Paul G. Tobey [eMVP]" wrote:

I don't buy it. There's nothing wrong with that code. My guesses are:

1. Your client is not connecting to the right IP, the right port, etc.
2. Your Windows CE device is running the firewall and your port is blocked by the firewall.
3. There is a firewall between the client and the Windows CE device and that firewall is blocking the connection.

Paul T.

"vinay" <vinay@xxxxxxxxxxxxxxxxxxxxxxxxxxxx> wrote in message news:99B4D90C-3BD0-40E3-9BA4-6F5DB906E26D@xxxxxxxxxxxxxxxxxxxx

I'm sorry, the problem is my windows CE 6.0 Server code that i have shared is not working. It comes the point where the accept function is called and blocks at that point. It is not accepting any clients. The same server code i tried on windows XP and works fine. If it runs on winCE 6.0, it blocks on accept and doesn't accept any client sockets. My client is throwing error code 10060 when connect fails. This error code corresponds to "Client

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timedout to connect to server".I'm not sure why my WinCE server is not accepting any client connections!. This is the problem and i'm new to WinCE and need suggestions to debug and resolve the problem.

thanks

"Paul G. Tobey [eMVP]" wrote:

YOU HAVE NOT TOLD ME WHAT IS GOING WRONG! How am I supposed to solve a problem when I don't know the symptoms?

Paul T.

"vinay"

<vinay@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>

wrote in message

news:181C8B83-506C-4401-8DF4-719F69580AB9@xxxxxxxxxxxxxxxxxxxx

Hi Paul,

I need one more clarification regarding the current problem i'm facing.

Request you to please advice.

The ARM BSP i'm using supports NDIS 5.1 miniport driver. Is this enough

to get the TCP network functions working in WinCE 6.0?

There is one more option in the WinCE catalog view that, device drivers->Networking->Local Area networking devices and here we have driver

selection option for NIC's. Now my question is that, Should NDIS 5.1 miniport

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driver is enough
or i
need
to choose one of the NIC
driver also? Please suggest.

regards

"Paul G. Tobey [eMVP]"
wrote:

In fact, your
code runs
fine on my
device...

Paul T.

"Paul G.
Tobey
[eMVP]" <p
space tobey
no spam AT
no
instrument
no
spam
DOT
com> wrote
in message
news:eGwIHD9qJHA.5356@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

"doesn't
work"
is
useless
information.
The
code,
at
first
inspection,
looks
fine
to
me.
If
something
is

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failing,
get
the
error
code
and
tell
us
what
call
is
failing
and
what
WSAGetLastError()
returns
after
the
failure.

Paul
T.

"vinay"
<vinay@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>
wrote
in
message

news:034BFFF0-0A61-49D6-9718-46819352E07D@xxxx

Hi
All,

The
following
is
the
Winsock
server
code
that
i
am
using.
This
works
fine
in
windows
and
tested

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with
a
winsock
client.
The
same
code
doesn't
work
in
WinCE.
It
comes
to
the
level
of
accepting
socket
and
blocks
there.
The
client
trying
to
connect
to
this
server
times
out
and
is
unable
to
connect.
Please
help.

The
TCP
server
code

RETAILMSG(1,
(L"CMainWindow::Socket:
Staring
TCP
server
code

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```
here..\r\n"));
SOCKET
server;
WSADATA
wsaData;
sockaddr_in
local;
WORD
version
=
MAKEWORD(
2,
2);
int
wsaret=WSAStartup(version,&wsaData);
//WSAStartup
returns
zero
on
success.
//If
it
fails
we
exit.
if(wsaret!=0)
{
RETAILMSG(1,
(L"CMainWindow::Socket:
SWSAStartup
FAILS..\r\n"));
return
FALSE;
}
//Now
we
populate
the
sockaddr_in
structure
local.sin_family=AF_INET;
//Address
family
local.sin_addr.s_addr=INADDR_ANY;
//Wild
card
IP
address
local.sin_port=htons((u_short)1234);
//port
to
```

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```
use
//the
socket
function
creates
our
SOCKET
server=socket(AF_INET,SOCK_STREAM,0);
//If
the
socket()
function
fails
we
exit
if(server==INVALID_SOCKET)
{
RETAILMSG(1,
(L"CMainWindow::Socket:
Socket
creation
FAILS..\r\n"));
return
FALSE;
}
else
RETAILMSG(1,
(L"CMainWindow::Socket:
Socket
creation
success..\r\n"));

if(bind(server,(sockaddr*)&local,sizeof(local))!=0)
{
RETAILMSG(1,
(L"CMainWindow::Socket:
Socket
bind
FAILS..\r\n"));
return
FALSE;
}
else
RETAILMSG(1,
(L"CMainWindow::Socket:
Socket
bind
success..\r\n"));

if(listen(server,10)!=0)
```

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```
{
RETAILMSG(1,
(L"CMainWindow::Socket:
Socket
listen
FAILS..\r\n"));
return
FALSE;
}
//we
will
need
variables
to
hold
the
client
socket.
//thus
we
declare
them
here.
SOCKET
client;
sockaddr_in
from;
int
fromlen=sizeof(from);

while(true)//we
are
looping
endlessly
{
//accept()
will
accept
an
incoming
client
connection
char
temp[512];
RETAILMSG(1,
(L"CMainWindow::Socket:
Socket
Accept
loop..\r\n"));
client=accept(server,(struct
sockaddr*)&from,&fromlen);
```

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```
if(client
==
INVALID_SOCKET
)
{
RETAILMSG(1,
(L"CMainWindow::Socket:
Socket
Accept
FAILS..\r\n"));
//close
the
client
socket
closesocket(client);
}
else
{
RETAILMSG(1,
(L"CMainWindow::Socket:
Socket
Accept
success..\r\n"));
sprintf(temp,"Your
IP
is
%s\r\n",inet_ntoa(from.sin_addr));
//we
simply
send
this
string
to
the
client
RETAILMSG(1,
(L"CMainWindow::Socket:
Send
IP
address
to
client
here..\r\n"));
send(client,temp,strlen(temp),0);
break;
}
}

closesocket(server);
WSACleanup();
```

end
of
server
code

regards

"Luca
Calligaris"
wrote:

does
yor
OS
design
include
winsock
support
(catalog
item
under
Communication
services
and
networking\networking-general)?are
you
linking
your
project
to
ws2.lib?

Luca
Calligaris
(MVP-Windows
Embedded)
<http://geekswithblogs.net/WindowsEmbedded>
l.calligaris.nospam@xxxxxxxxxxxxxxxxxxxxx
www.eurotech.it

"vinay"
<vinay@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>
ha
scritto
nel
messaggio
<news:A1DAC36A-E931-4174-8DEC-989A>

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Hi,

I
am
Creating
WinCE
6.0
R2.
OSdesign
using
ARMV4I
BSP
for
a
ARM
target.

I
am
using
VS2005
with
Platform
builder
plugin.

I
have
created
an
OSdesign
subproject
in
this
solution
framework
and
would
like
to
use
the
SOCKET
functions
in
the
subproject.

I
tried
with
both
winsock
and

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winsoc2
but
the
linker
is
throwing
error
no
LNK2019.
Now
my
question
is
that,

1.
Can
i
use
winsoc
or
anyother
socket
API's
in
my
OSdesign
subproject?
how?

2.
Where
should
i
look
for
the
required
socket
library
and
header
files?

3.
Where
does
the
winsoc
library
gets
installed?
Is

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it
during
winCe
installation?

Please
suggest.

thanks