Subject: Lost socket error (and how to get it)
Posted by koldo on Tue, 02 Jul 2013 08:47:51 GMT
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Hello all

When calling TcpSocket::Connect() the error code is lost. Take a look to actual function and comments:

```
bool TcpSocket::RawConnect(addrinfo *arp)
{
 if(!arp) {
  SetSockError("connect", -1, "not found");
  return false;
 }
 for(int pass = 0; pass < 2; pass++) {
  addrinfo *rp = arp;
  while(rp) {
   if(rp->ai_family == AF_INET == !pass && // Try to connect IPv4 in the first pass
      Open(rp->ai_family, rp->ai_socktype, rp->ai_protocol)) {
    if(connect(socket, rp->ai_addr, (int)rp->ai_addrlen) == 0 ||
       GetErrorCode() == SOCKERR(EINPROGRESS) || GetErrorCode() ==
SOCKERR(EWOULDBLOCK)
    ) {
     mode = CONNECT;
     return true;
    }
    Close();  // Error is cleaned
   }
   rp = rp->ai_next;
  }
    }
 SetSockError("connect", -1, "failed");  // Here is not reported
 return false;
}
```
A possible solution to get the error could be:
- int errorCode
- errorCode = GetErrorCode() just before Close()
- Including TcpSocketErrorDesc(errorCode) in SetSockError();

Subject: Re: Lost socket error (and how to get it)
Posted by nlneilson on Tue, 02 Jul 2013 17:43:40 GMT
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This is my client code:

#ifndef _ConnSock_ConnSock_h_

```
#define _ConnSock_ConnSock_h_

#include <Core/Core.h>

using namespace Upp;

String snd(String r, int a){
 TcpSocket s;
 if(!s.Connect("127.0.0.1", 11811)) {
    return "x";
 }

 s.Put(r + "\n\0");
 if(a==1){
    String st = s.GetLine();
    return st;
 }
 return "y";
}
#endif
```

As far as any error in connecting:
```
 if(!s.Connect("127.0.0.1", 11811)) {
    return "x";
 }
```

Subject: Re: Lost socket error (and how to get it)
Posted by mirek on Tue, 02 Jul 2013 18:46:56 GMT
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koldo wrote on Tue, 02 July 2013 04:47Hello all

When calling TcpSocket::Connect() the error code is lost. Take a look to actual function and comments:

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bool TcpSocket::RawConnect(addrinfo *arp)
{
 if(!arp) {
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  return false;
 }
 for(int pass = 0; pass < 2; pass++) {
  addrinfo *rp = arp;
  while(rp) {
```

```
    if(rp->ai_family == AF_INET == !pass && // Try to connect IPv4 in the first pass
       Open(rp->ai_family, rp->ai_socktype, rp->ai_protocol)) {
      if(connect(socket, rp->ai_addr, (int)rp->ai_addrlen) == 0 ||
         GetErrorCode() == SOCKERR(EINPROGRESS) || GetErrorCode() ==
SOCKERR(EWOULDBLOCK)
      ) {
       mode = CONNECT;
       return true;
      }
      Close();  // Error is cleaned
    }
    rp = rp->ai_next;
  }
    }
 SetSockError("connect", -1, "failed");  // Here is not reported
 return false;
}
```

A possible solution to get the error could be:
- int errorCode
- errorCode = GetErrorCode() just before Close()
- Including TcpSocketErrorDesc(errorCode) in SetSockError();

I am not so sure about this: note that it is doing two passes, tries to connect ipv4 first, then ipv6. Which error is relevant?

Mirek

Subject: Re: Lost socket error (and how to get it)
Posted by koldo on Wed, 03 Jul 2013 06:46:10 GMT

Hello all

I have not been very clear explaining the problem. Sorry

Actual RawConnect() function do not report the real cause of the error. This is due to:
- It just do a SetSockError("connect", -1, "failed");
- As Close() is called every connection try, the error cause is deleted, so no function out of RawConnect() can know it.

A way to improve the function could be to get the source of the problem with GetErrorCode() and TcpSocketErrorDesc() before doing the Close().

In my case I had a buffer overflow error (WSAENOBUFS in Windows). The only way I had to know it was patching the function. Without knowing a problem root cause it is difficult to solve it

Subject: Re: Lost socket error (and how to get it)
Posted by koldo on Mon, 05 Aug 2013 10:23:11 GMT
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Hello Mirek

Could you manage this ?

Subject: Re: Lost socket error (and how to get it)
Posted by mirek on Mon, 05 Aug 2013 11:13:36 GMT
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Sorry for the delay... I just want to have the correct solution.

Issue is still the same: There are more attempts to connect (there is the loop..). Which error is relevant?

Frankly, perhaps we should return just first one. Or maybe detect that the site does not support ipv4, then report error for ipv6, otherwise ipv4. I do not know... (that is why I have not acted then).

Mirek

Subject: Re: Lost socket error (and how to get it)
Posted by koldo on Mon, 05 Aug 2013 14:15:21 GMT
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Hello Mirek

You may return just both errors:

strError << TcpSocketErrorDesc(errorCode1) << "\n" << TcpSocketErrorDesc(errorCode2);
SetSockError("connect", -1, strError);

It would work like now but at least we would get an error description .

Subject: Re: Lost socket error (and how to get it)
Posted by mirek on Sun, 11 Aug 2013 16:17:58 GMT
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koldo wrote on Mon, 05 August 2013 10:15Hello Mirek

You may return just both errors:

strError << TcpSocketErrorDesc(errorCode1) << "\n" << TcpSocketErrorDesc(errorCode2);

SetSockError("connect", -1, strError);

It would work like now but at least we would get an error description .

OK, sounds reasonable, done.

Subject: Re: Lost socket error (and how to get it)
Posted by koldo on Fri, 23 Aug 2013 14:35:40 GMT
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Thank you!