Subject: Find an available/free port - code snippet
Posted by Mountacir on Fri, 31 Dec 2021 12:18:47 GMT
View Forum Message <> Reply to Message

Hello,

I needed to get an available/free port for localhost, so I used the code below with a derived TcpSocket class.
I'm wondering if it is possible to implement it in TcpSocket?

```
int TcpSocket::GetFreePort(){

 socklen_t addrLen;
 int s  = ::socket(AF_INET, SOCK_STREAM, 0);

   if (s == -1) {
      LOG("Failed to create socket");
   }

 sockaddr_in sin;
 sin.sin_family = AF_INET;
 sin.sin_port = 0;

 //  INADDR_ANY as the default parameter?
 //sin.sin_addr.s_addr = htonl(INADDR_ANY);
 sin.sin_addr.s_addr = inet_addr("127.0.0.1");

 if (bind(s, (const sockaddr *)&sin, sizeof(sin)) == -1) {
      LOG("Failed to bind");
   }
   addrLen = sizeof(sin);
   if (getsockname(s, (struct sockaddr *)&sin, &addrLen) == -1) {
      LOG("getsockname() failed");
   }
   LOG("port : " << sin.sin_port);

 return sin.sin_port;
}
```

Thanks!

Subject: Re: Find an available/free port
Posted by mirek on Sat, 22 Jan 2022 18:14:26 GMT
View Forum Message <> Reply to Message

Ausin2029 wrote on Fri, 31 December 2021 13:18Hello,

I needed to get an available/free port for localhost, so I used the code below with a derived TcpSocket class.
I'm wondering if it is possible to implement it in TcpSocket?

```
int TcpSocket::GetFreePort(){

 socklen_t addrLen;
 int s  = ::socket(AF_INET, SOCK_STREAM, 0);

   if (s == -1) {
      LOG("Failed to create socket");
   }

 sockaddr_in sin;
 sin.sin_family = AF_INET;
 sin.sin_port = 0;

 //  INADDR_ANY as the default parameter?
 //sin.sin_addr.s_addr = htonl(INADDR_ANY);
 sin.sin_addr.s_addr = inet_addr("127.0.0.1");

 if (bind(s, (const sockaddr *)&sin, sizeof(sin)) == -1) {
      LOG("Failed to bind");
   }
   addrLen = sizeof(sin);
   if (getsockname(s, (struct sockaddr *)&sin, &addrLen) == -1) {
      LOG("getsockname() failed");
   }
   LOG("port : " << sin.sin_port);

 return sin.sin_port;
}
```

Thanks!

This is a good snippet of core, but I am not quite sure how is it related to TcpSocket instance?

Subject: Re: Find an available/free port
Posted by Mountacir on Sun, 23 Jan 2022 06:56:06 GMT
View Forum Message <> Reply to Message

Quote:This is a good snippet of core, but I am not quite sure how is it related to TcpSocket instance?

I started making a plugin for Selenium WebDrivers and i used TcpSocket for the communication. So instead of relying on the default port used by each Driver or randomly assigning one, i made the above code work with TcpSocket.

Should I remove this post and repost in "U++ users applications in progress..." as just a useful code snippet?

Thanks

Subject: Re: Find an available/free port
Posted by Klugier on Sun, 23 Jan 2022 18:06:08 GMT
View Forum Message <> Reply to Message

Hello Ausin,

I moved your topic to "U++ users applications in progress and useful code snippets, including reference examples!" subforum.

Klugier