

---

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 code, but I am not quite sure how it is 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 code, but I am not quite sure how it is related to TcpSocket instance?

I started making a plugin for Selenium WebDriver 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

---