Subject: How to break the server loop? Posted by akebee on Wed, 06 May 2015 12:25:40 GMT

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```
for(;;) {
TcpSocket s;
if(s.Accept(server)) {
   }
```

In the server loop, the s.Accept will blocked the thread, So how to exit thread when program-quit ?

Subject: Re: How to break the server loop? Posted by dolik.rce on Wed, 06 May 2015 18:15:33 GMT

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Hi akabee

```
akebee wrote on Wed, 06 May 2015 14:25 for(;;) {
TcpSocket s;
if(s.Accept(server)) {
  }
```

In the server loop, the s.Accept will blocked the thread, So how to exit thread when program-quit ?

On POSIX systems, the easiest way is probably using signals. You can terminate your program by calling kill(pid, signal). Everything your server is doing, including Accept will be interupted. If you need to perform clean-up tasks etc. on shutdown, you can install signal-handler function, that will be called. To register the handler, signal(sig, function) is used.

You can look at Skylark package, how it is done there. The kill function is called here, The signal handler is installed just a few lines below.

Alternatively, you can use non-blocking Accept(), if I am not mistaken, it should be enough to just call TcpSocket::Timeout(0). I never used it personally, so you should probably check the documentation first, there are some additional hints;)

Best regards, Honza

Subject: Re: How to break the server loop? Posted by akebee on Thu, 07 May 2015 06:05:27 GMT

Hi dolik.rce :roll:

Im not in POSIX, its Windows.

Now i send a request to my server socket when program-quit, if recieved the specific request the server thread will break and exit.

Is this a good solution?

Subject: Re: How to break the server loop?

Posted by dolik.rce on Thu, 07 May 2015 06:36:02 GMT

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akebee wrote on Thu, 07 May 2015 08:05Hi dolik.rce :roll:

Im not in POSIX, its Windows.

Now i send a request to my server socket when program-quit, if recieved the specific request the server thread will break and exit.

Is this a good solution?

It's 'possible' solution :) Depends on your actual needs. The biggest problem with this solution is, that anyone can remotelly shut down your server, so it is definitelly good for public projects (unless there is reliable authetication & authorization). But for small projects it might be ok, I've used it in past too :)

If you wan't something better I'd suggest you to try reading about the timeouts in TcpSocket. If you set timeout to reasonably small value (or 0, to make it nonblocking, as I suggest previously), shutting the server down should take just slightly longer than the timeout value. This should work well on any platform, including windows.

Honza

Subject: Re: How to break the server loop?

Posted by akebee on Mon, 11 May 2015 07:21:47 GMT

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TimeOut(0) will causes a high CPU usage because the Infinite loops

:twisted:

Subject: Re: How to break the server loop?

Posted by ManfredHerr on Mon, 11 May 2015 15:26:34 GMT

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If there is nothing to do you can yield the CPU by sleep(1).

Subject: Re: How to break the server loop?

Posted by akebee on Wed, 13 May 2015 03:10:55 GMT

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nice:d

Subject: Re: How to break the server loop?

Posted by nineilson on Wed, 23 Mar 2016 21:58:14 GMT

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For any thread the best way to close it is from within the thread that I have found after many hours of research. That is using C++ or Java