
Subject: Re: Discord bot 404 error using WebSocket, any ideas?

Posted by [jjacksonRIAB](#) on Thu, 31 May 2018 05:05:34 GMT

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OK, so it successfully upgrades if I use

```
ws.Connect("https://gateway.discord.gg", "gateway.discord.gg", true, 443);
```

instead of

```
ws.Connect("wss://gateway.discord.gg")
```

The browser plugin I used appears to automatically be converting all WSS GET requests from wss:// to https:// while U++ does not. I don't see where the standards say this conversion is a conformant behavior but it's happening anyway. What would be the fix in U++ source? I could change it to:

```
bool WebSocket::Connect(const String& url)
{
    const char *u = url;
    bool ssl = memcmp(u, "wss", 3) == 0;
    const char *t = u;
    while(*t && *t != '?')
        if(*t++ == '/' && *t == '/') {
            u = ++t;
            break;
        }
    t = u;
    while(*u && *u != ':' && *u != '/' && *u != '?')
        u++;
    String host = String(t, u);
    int port = ssl ? 443 : 80;
    if(*u == ':')
        port = ScanInt(u + 1, &u);

    String uri = url;

    if(port == 443) {
        uri.Replace("wss://", "https://");
    }
    else if(port == 80) {
        uri.Replace("ws://", "http://");
    }

    return Connect(uri, host, ssl, port);
}
```

But I don't know if this is the "correct" conformant behavior or if the fix belongs deeper in the U++ source. I'm not a network protocol guy.
