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HTTP basic authentication using sockets in python

How to connect to a server using basic http auth thru sockets in python .I don't want to use urllib/urllib2 etc as my program does some low level socket I/O operations

python networking sockets basic-authentication

asked May 28 '10 at 13:50

 **abc def foo bar**
811 2 15 31

2 Answers

Probably the easiest place to start is using `makefile()` to get a simpler file-like interface to the socket.

```
import socket, base64


host= 'www.example.com'
path= '/'
username= 'fred'
password= 'bloggs'
token= base64.encodestring('%s:%s' % (username, password)).strip()

lines= [
    'GET %s HTTP/1.1' % path,
    'Host: %s' % host,
    'Authorization: Basic %s' % token,
    'Connection: close',
]

s= socket.socket()
s.connect((host, 80))
f= s.makefile('rwb', bufsize=0)
f.write('\r\n'.join(lines)+'\r\n\r\n')
response= f.read()
f.close()
s.close()
```

You'll have to do a lot more work than that if you need to interpret the returned response to pick out the HTML or auth-required headers, and handle redirects, errors, transfer-encoding and all that right. HTTP can be complex! Are you sure you need to use a low-level socket?

answered May 28 '10 at 14:50

 **bobince**
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Look e.g. at urllib's [sources](#), specifically the `http_error_401` function (and the dispatching around it of course): make the HTTP request, watch for a 401 response, extract its realm, check that its scheme is `basic`, try again with the user and password for that realm (cfr function `retry_http_basic_auth` in that same source file). Lots of work of course, but that's the price of programming "down to the bare metal" as you require.

answered May 28 '10 at 14:49

 **Alex Martelli**
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