

HOW TO FIND PASSWORDS USING WIRESHARK

Step 1: Downloading Wireshark to Your CPU

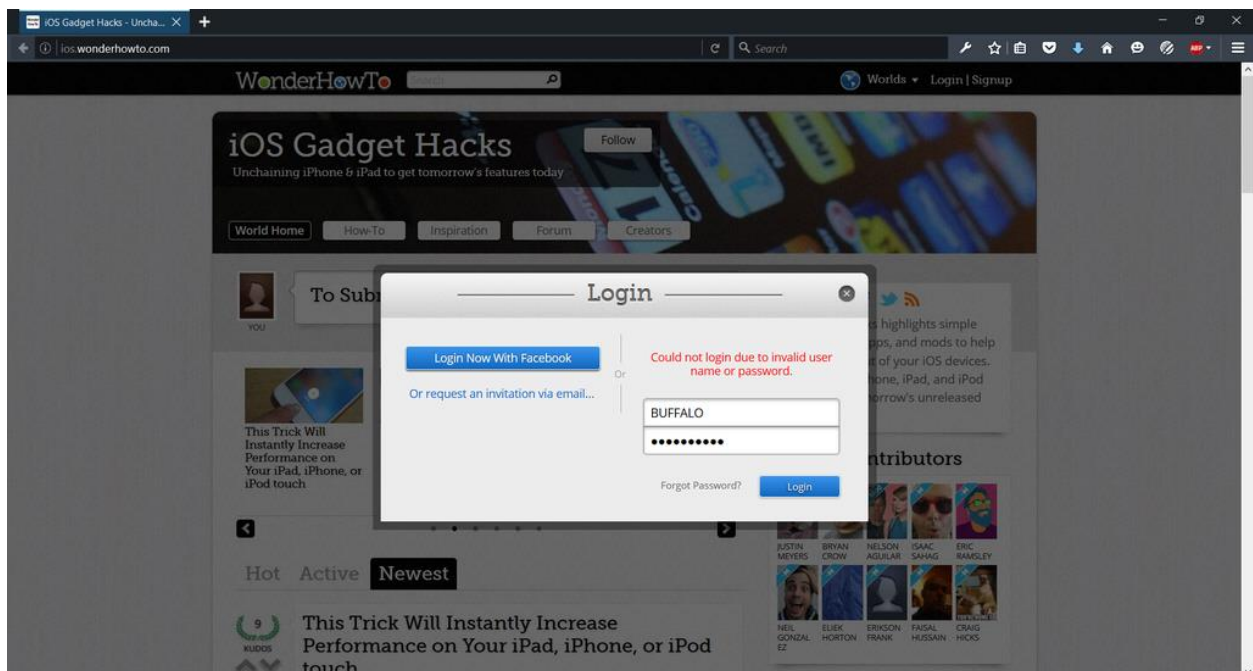
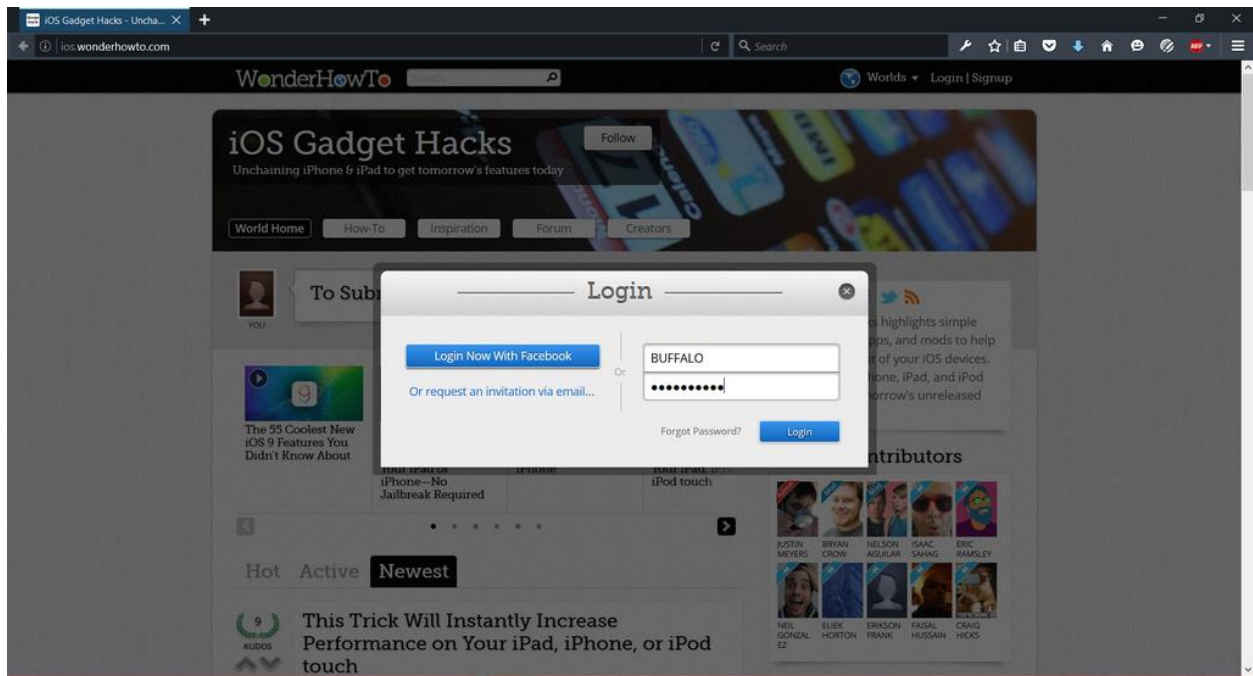
Step 2: How You Know a Website Uses HTTPS

the information in HTTPS packets because some bright people found it useful to protect this information and this is a good thing. Major websites all have encrypted packets and it would be foolish to bother with them, especially if the only thing you have read is this how to. Above are some websites that use HTTPS and you know this because there is a little green lock and the website starts with HTTPS not HTTP.

Step 3: Finding a Password

First one must identify an unprotected website and make a log on attempt - either successful or unsuccessful. It is **VERY IMPORTANT** that you click the capture button in the upper left corner of wire shark and have it run while you make the logon attempt. In the second step we will follow this packet and track it down using wire shark.





Step 6: Finding a Password (Continued)

The second step to finding the packets that contain login information is to understand the protocol to look for. HTTP is the protocol we will be dealing with when looking for passwords. Wireshark comes with the option to filter packets. In the filter box type "http.request.method == POST". By filtering this you are now only looking at the post

packet for HTTP. This drastically narrows the search and helps to slow down the traffic by minimizing what pops up on the screen. Then at the far right of the packet in the info section you will see something like ".login" or "/login". You can see exactly what I am talking about if you follow the pictures above. Then you will right click on it and go down to "FOLLOW" then to "TCP STREAM". Once you get there look in the red text paragraphs and try to find what I was able to locate in the picture. And you have just located the password and username you have entered on the unprotected login page - whether or not the password and username are correct are irrelevant.

The image shows a Wireshark packet capture window. The top pane displays a list of network packets. Packet 15 is highlighted, showing an HTTP POST request to `/ajax/getlogininfo?rt=json&rn=145395564130529.5459283870458` with a content type of `application/x-www-form-urlencoded`. The bottom pane shows the details of this packet, including the Ethernet II header, Internet Protocol Version 4 header, and the Hypertext Transfer Protocol body. The body contains a JSON object with fields like `username` and `password`. The packet is captured on interface 0, and the source and destination IP addresses are 192.168.1.103 and 8.26.65.101, respectively.

No.	Time	Source	Destination	Protocol	Length	Info
15	3.000000	192.168.1.103	8.26.65.101	HTTP	820	POST /ajax/getlogininfo?rt=json&rn=145395564130529.5459283870458 HTTP/1.1 (application/x-www-form-urlencoded)
20	3.000000	8.26.65.101	192.168.1.103	HTTP	556	HTTP/1.1 200 OK (text/html)
40	10.000000	192.168.1.103	23.21.71.237	HTTP	661	GET /ping?hwonderhowto.com&u=CIB_R11-9F-CeZrxm&d=ios.wonderhowto.com&g=3214&g0=world%20Home%2CScience%20Tech%2CElectronics%2Cios%2Csoft...
47	10.000000	23.21.71.237	192.168.1.103	HTTP	267	HTTP/1.1 200 OK (GIF89a) (image/gif)
157	21.000000	192.168.1.115	239.255.255.250	SSDP	326	NOTIFY * HTTP/1.1
158	21.000000	192.168.1.115	239.255.255.250	SSDP	317	NOTIFY * HTTP/1.1
159	21.000000	192.168.1.115	239.255.255.250	SSDP	391	NOTIFY * HTTP/1.1
170	24.000000	192.168.1.103	8.26.65.101	HTTP	747	POST /ajax/loginformpost?rt=json&rn=1453955664130529.5459283870458 HTTP/1.1 (application/x-www-form-urlencoded)
171	24.000000	8.26.65.101	192.168.1.103	HTTP	1410	HTTP/1.1 200 OK (application/json)
175	25.000000	192.168.1.103	23.21.71.237	HTTP	661	GET /ping?hwonderhowto.com&u=CIB_R11-9F-CeZrxm&d=ios.wonderhowto.com&g=3214&g0=world%20Home%2CScience%20Tech%2CElectronics%2Cios%2Csoft...
178	25.000000	23.21.71.237	192.168.1.103	HTTP	267	HTTP/1.1 200 OK (GIF89a) (image/gif)
184	26.000000	192.168.1.103	23.21.71.237	HTTP	773	GET /ping?hwonderhowto.com&u=CIB_R11-9F-CeZrxm&d=ios.wonderhowto.com&g=3214&g0=world%20Home%2CScience%20Tech%2CElectronics%2Cios%2Csoft...
185	26.000000	23.21.71.237	192.168.1.103	HTTP	267	HTTP/1.1 200 OK (GIF89a) (image/gif)
244	48.000000	192.168.1.103	23.21.71.237	HTTP	645	GET /ping?hwonderhowto.com&u=CIB_R11-9F-CeZrxm&d=ios.wonderhowto.com&g=3214&g0=world%20Home%2CScience%20Tech%2CElectronics%2Cios%2Csoft...
246	48.000000	23.21.71.237	192.168.1.103	HTTP	267	HTTP/1.1 200 OK (GIF89a)
249	48.000000	192.168.1.119	192.168.1.103	HTTP	299	HTTP/1.1 304 Not Modified
251	41.000000	192.168.1.103	192.168.1.119	HTTP	155	GET /EventMgmt/EventTable?timeout=1200 HTTP/1.1

> Frame 15: 820 bytes on wire (6560 bits), 820 bytes captured (6560 bits) on interface 0
> Ethernet II, Src: IntelCor_df:48:e6 (80:86:f2:df:48:e6), Dst: Cisco-Li_1e:fb:f6 (58:6d:8f:1e:fb:f6)
> Internet Protocol Version 4, Src: 192.168.1.103, Dst: 8.26.65.101
> Transmission Control Protocol, Src Port: 52587 (52587), Dst Port: 80 (80), Seq: 2, Ack: 1, Len: 766
> Hypertext Transfer Protocol
> HTML Form URL Encoded: application/x-www-form-urlencoded

```
0000  58 6d 8f 1e fb f6 80 86 f2 df 48 e6 08 00 45 00  X.....H...E.
0010  03 26 13 50 40 00 80 06 d8 f3 c0 a8 01 67 08 1a  .R.PB.....G.
0020  41 65 cd 60 00 50 26 0a a5 6e db 09 3e 93 50 18  Ae.kPB..n..>P.
0030  fa f0 5e 1b 00 00 50 4f 53 54 20 2f 61 6a 61 78  .....PO ST /ajax
0040  2f 67 65 74 6c 6f 67 69 6e 73 69 67 6e 75 70 66  /getlogi nsignupf
0050  6f 72 6d 2f 3f 72 74 3d 6a 73 6f 6e 26 72 6e 3d  orm/?rt= json&rn=
0060  31 34 35 33 39 35 35 36 34 33 31 34 30 34 30 31  14539556 43140401
0070  2e 33 37 35 33 35 33 30 36 34 36 31 31 36 20 48  .3753530 646116 H
0080  54 54 50 2f 31 2e 31 0d 0a 48 6f 73 74 3a 20 69  TTP/1.1. .Host: i
```

Wi-Fi

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

http

No.	Time	Source	Destination	Protocol	Length	Info
15	3.11	192.168.1.103	8.26.65.101	HTTP	820	POST /ajax/getloginsignupform?rt=json&rn=1453955643140401.3753530646116 HTTP/1.1 (application/x-www-form-urlencoded)
20	3.11	8.26.65.101	192.168.1.103	HTTP	556	HTTP/1.1 200 OK (text/html)
40	10.10	192.168.1.103	23.21.71.237	HTTP	661	GET /ping?hwonderhowto.com&q=2f&u=CIB_R11-9F-CeZrXm&d=ios.wonderhowto.com&g=3214&g0=world&20Home%2CScience%20Tech%2CElectronics%2Cios%2Csoft...
47	10.10	23.21.71.237	192.168.1.103	HTTP	267	HTTP/1.1 200 OK (GIF89a) (GIF89a) (image/gif)
157	21.1	192.168.1.115	239.255.255.250	SSDP	326	NOTIFY * HTTP/1.1
158	21.1	192.168.1.115	239.255.255.250	SSDP	317	NOTIFY * HTTP/1.1
159	21.1	192.168.1.115	239.255.255.250	SSDP	391	NOTIFY * HTTP/1.1
170	24.1	192.168.1.103	8.26.65.101	HTTP	747	POST /ajax/login HTTP/1.1 (application/x-www-form-urlencoded)
171	24.1	8.26.65.101	192.168.1.103	HTTP	1410	HTTP/1.1 200 OK
175	25.1	192.168.1.103	23.21.71.237	HTTP	661	GET /ping?hwonderhowto.com&q=2f&u=CIB_R11-9F-CeZrXm&d=ios.wonderhowto.com&g=3214&g0=world&20Home%2CScience%20Tech%2CElectronics%2Cios%2Csoft...
178	25.1	23.21.71.237	192.168.1.103	HTTP	267	HTTP/1.1 200 OK
184	26.1	192.168.1.103	23.21.71.237	HTTP	773	GET /ping?hwonderhowto.com&q=2f&u=CIB_R11-9F-CeZrXm&d=ios.wonderhowto.com&g=3214&g0=world&20Home%2CScience%20Tech%2CElectronics%2Cios%2Csoft...
185	26.1	23.21.71.237	192.168.1.103	HTTP	267	HTTP/1.1 200 OK
244	40.1	192.168.1.103	23.21.71.237	HTTP	645	GET /ping?hwonderhowto.com&q=2f&u=CIB_R11-9F-CeZrXm&d=ios.wonderhowto.com&g=3214&g0=world&20Home%2CScience%20Tech%2CElectronics%2Cios%2Csoft...
246	40.1	23.21.71.237	192.168.1.103	HTTP	267	HTTP/1.1 200 OK
249	40.1	192.168.1.119	192.168.1.103	HTTP	299	HTTP/1.1 304 Not Modified
251	41.1	192.168.1.103	192.168.1.119	HTTP	155	GET /EventMgmt/ HTTP/1.1
307	53.1	192.168.1.1	239.255.255.250	SSDP	316	NOTIFY * HTTP/1.1
312	55.1	192.168.1.103	23.21.71.237	HTTP	635	GET /ping?hwonderhowto.com&q=2f&u=CIB_R11-9F-CeZrXm&d=ios.wonderhowto.com&g=3214&g0=world&20Home%2CScience%20Tech%2CElectronics%2Cios%2Csoft...
317	55.1	23.21.71.237	192.168.1.103	HTTP	267	HTTP/1.1 200 OK

> Frame 170: 747 bytes on wire (5976 bits), 747 bytes captured (5976 bits) on interface
> Ethernet II, Src: IntelCor_dfc48:e6 (80:86:f2:df:48:e6), Dst: Cisco_Li_1e:fb:f6 (58:94:d9:1e:fb:f6)
> Internet Protocol Version 4, Src: 192.168.1.103, Dst: 8.26.65.101
> Transmission Control Protocol, Src Port: 52587 (52587), Dst Port: 80 (80), Seq: 768, Ack: 1963, Len: 693
> Hypertext Transfer Protocol
> HTML Form URL Encoded: application/x-www-form-urlencoded

0000 58 6d 8f 1e fb 80 86 f2 df 48 e6 00 00 45 00 X.....H...E.
0010 02 dd 13 55 40 00 00 06 d9 37 c0 a8 01 67 08 1a ...U...7...g..
0020 41 65 cd 6b 00 50 26 0a a9 6c db 09 46 3d 50 18 Ae.k.P...l..F.P.
0030 f8 fa a6 6c 00 00 50 4f 53 54 20 2f 61 6a 61 78 ...l..PO ST /ajax
0040 2f 6c 6f 69 6e 66 6f 72 6d 70 6f 73 74 2f 3f /login?mpost?
0050 72 74 3d 6a 73 6f 6e 26 72 6e 3d 31 34 35 33 39 rt=json&rn=14539
0060 35 35 36 36 34 31 33 30 35 32 39 2e 35 34 35 39 55664130 529.5459
0070 32 38 33 38 37 30 34 35 38 20 48 54 54 50 2f 31 28387045 8 HTTP/1
0080 2e 31 0d 0a 48 6f 73 74 3a 20 69 6f 73 2e 77 6f ..Host : ios.wo

Packets: 343 · Displayed: 20 (5.8%) Profile: Default

Wi-Fi

Wireshark - Follow TCP Stream (tcp.stream eq 3) - wireshark.pcapng_ABA1DE72-8025-4968-BA71-CAB092F40D79_20160127203359_a00772

POST /ajax/getloginsignupform?rt=json&rn=1453955643140401.3753530646116 HTTP/1.1
Host: ios.wonderhowto.com
User-Agent: Mozilla/5.0 (Windows NT 10.0; WOW64; rv:45.0) Gecko/20100101 Firefox/45.0
Accept: /*
Accept-Language: en-US,en;q=0.5
Accept-Encoding: gzip, deflate
X-Request-Length: 745
Content-Type: application/x-www-form-urlencoded
X-Requested-With: XMLHttpRequest
Referer: http://ios.wonderhowto.com/
Content-Length: 44
Cookie: _ga=GAL.2.973813443.1453873221._cb_ls=1; _chartbeat2=CIB_R11-9F-CeZrXm.1453873228973.1453955575484.11; _gat=1; _chartbeat5=1024,273,32f,http342f&2fios.wonderhowto.com&2f,D914C3DgH3_FcP30F0D0=d-jhQdQp3,body&2fdlv&58530&2fdlv&581&50&2f&581&50&c
Connection: keep-alive

200 OK
Cache-Control: private
Content-Type: text/html; charset=utf-8
Content-Encoding: gzip
Vary: Accept-Encoding
Server: Microsoft-IIS/8.5
X-AspNetMvc-Version: 4.0
X-AspNet-Version: 4.0.30319
X-Server-Name: APP2
X-UA-Compatible: IE=Edge,chrome=1
Date: Thu, 28 Jan 2016 04:33:47 GMT
Content-Length: 1635

.....X.p.6.....T.....9.....1.0.....X.n(RGbrv).8EK.e9.....F.....13..0..4.....aB
.../pTR...7C.3...V4...F...L...g...yHd...6...*
...J.0.yD.D.VG...\$...q...Xs.Y.....P.Q.....[...F.1.....F
.B.RL...#V.HZH...9...%DS...et...W...+3*%X
b...E...74...S...b...F...Z...et...0...C.p
/2...a.LpM(G...L.X...0.....9.....H...jfw...H...I.b"...htr...h4
...00.0...F...M.V...qcb...S...u.3.U...*3...3...("UB...U...\$...Y...g"/J...)
.....7.rab...JL...O...xM...0.y...0.....1.....I.....Qu.F:pH.Y...R.L...u...2.....M
%H...S...v...p8<...P...n.Ak.U.[K.P;
...8...3a.v%...[.R..I.6.1.Z...[.?.?..V...["3.X.....34>f..
T...C.t...96...3.L.9)S...c.Dk1.z6...Z...ze...].j...{...0.S}...f...ijs...6U...tUE.8...sy...*.U.y...
4r...z5...Pj...+...I.....ft...UK...{...E...?+...{R.B...f.J.t/Z...Z...}...*4X..
...Kp...X.50.p42,yX...s.n.D.M.V...R...Z...Vj...U...V...Tqm...{...W...K.T.Vf...n.Ku.J...u...
{...DP......D.v.T...Mebe%o.Dj].U...9.kh'.7.?'...X...Hb.y...>g...v...t@]T..
h...o...h.c.r...%0...SST...N.6:F...B.MS.%c...C.Hi+..
Packed 18 client packet(s) from packet(s). Click to select.

Entire conversation (4778 bytes) Show data as ASCII Stream 3 Find Find Next

Packets: 358 · Displayed: 22 (6.1%) Profile: Default

Wireshark - Follow TCP Stream (tcp.stream eq 3) - wireshark_pcapng_ABA1DE72-B025-496B-BA71-CAB092F40D79_20160127203359_a00772

Host: ios.wonderhowto.com
User-Agent: Mozilla/5.0 (Windows NT 10.0; WOW64; rv:45.0) Gecko/20100101 Firefox/45.0
Accept: */*
Accept-Language: en-US,en;q=0.5
Accept-Encoding: gzip, deflate
X-Request-Length: 653
Content-Type: application/x-www-form-urlencoded
X-Requested-With: XMLHttpRequest
Referer: http://ios.wonderhowto.com/
Content-Length: 112
Cookie: _ga=GA1.2.973813443.1453873221; _chartbeat2=CIB_R11-9F-CeZrxm.1453873228973.145395575484.11; _gat=1
Connection: keep-alive

Cache-Control: private
Content-Type: application/json; charset=utf-8
Content-Encoding: gzip
Vary: Accept-Encoding
Server: Microsoft-IIS/8.5
X-AspNet-Version: 4.0
X-AspNet-Version: 4.0.30319
Set-Cookie: _ga=; domain=.wonderhowto.com; expires=Wed, 28-Jan-2015 04:34:47 GMT; path=/; HttpOnly
Set-Cookie: _chartbeat2=; domain=.wonderhowto.com; expires=Wed, 28-Jan-2015 04:34:47 GMT; path=/; HttpOnly
Set-Cookie: _gat=; domain=.wonderhowto.com; expires=Wed, 28-Jan-2015 04:34:47 GMT; path=/; HttpOnly
X-Server-Name: APP95
X-UA-Compatible: IE=Edge,chrome=1
Date: Thu, 28 Jan 2016 04:34:46 GMT
Content-Length: 611

Username=BUFFALO&Password=BUFFALO123X-Requested-With=XMLHttpRequestHTTP/1.1 200 OK

Stream 3
Find: Find Next
Packets: 425 - Displayed: 28 (6.6%)
Profile: Default