

```
Wireshark · Follow TCP Stream (tcp.stream eq 32) · any
 ......c...L4..G&88.dG.....xu/....zZN...4.(.'......9.3.....=.<.5./.,.
 +.$.#.
         .j.@.8.2.
 ....S......go.microsoft.com......
 .....U...Q....]..%....d.../l.`..Z.DOWNGRD.
 .../.i..
 .4(.
Z...4o.)..n. ...f....
 .....q.d.of.xM....r.+....0
         *.H..
 .....0>1.0...U.
 ..INetSim1.0...U....Development1.0...U....inetsim.org0..
221205134223Z.
321202134223Z0>1.0...U.
 ..INetSim1.0...U....Development1.0...U....inetsim.org0.."0
         *.H..
 . . . . . . . . . . . 0 . .
 .....IH =...J.a...m.d5;k.E.L^.A8.\....)0"...q..-...r...x..../C....Km%w..ek..
2.i.H....
 ..S.m.\h....`....@.V....O.*G=..g.PSV.7d*+.j....{x.T5.
 [V.J...../.t)EA.."..Z.p.,;.....$...|...e..=).....1.....U./..#.>-...=.......
0.`B9{.U.....d...j.t7..P....N.fd....k..u>......S000...U.....Rh....
*.H..
.....+ac>....s^....VC..B%D..R...8...m.+.r...
 ..N&tH9n.....}....(.~m(.....t'>..#>$q.qF.....6$.......`..f.F....!...}
KB.....!J.G.W...RMNK.....)....N_dY...1..-...v....@.R?.N.~.#m|F...}
Gh.t'..q.m.#.K$2p..%....;8.....c..
<...lI.M..G.....?.\F.;.
Packet 464. 2 client pkts, 3 server pkts, 3 turns. Click to select.
Entire conversation (2,352 bytes)
                              Show data as ASCII

✓ Stream 32 ©

Find:
                                                                    Find Next
                                                                     Help
               Filter Out This Stream
                                 Print
                                         Save as...
                                                    Back
                                                            Close
```

```
Wireshark · Packet 478 · any
→ Linux cooked capture v1

    Address Resolution Protocol (reply)

    Hardware type: Ethernet (1)
    Protocol type: IPv4 (0x0800)
     Hardware size: 6
     Protocol size: 4
     Opcode: reply (2)
    Sender MAC address: PcsCompu_9c:4c:27 (08:00:27:9c:4c:27)
     Sender IP address: 192.168.32.100
    Target MAC address: PcsCompu_58:60:a5 (08:00:27:58:60:a5)
     Target IP address: 192.168.32.101
 0000 00 04 00 01 00 06 08 00 27 9c 4c 27 42 df 08 06
                                                          00 01 08 00 06 04 00 02 08 00 27 9c 4c 27 c0 a8
 0020 20 64 08 00 27 58 60 a5 c0 a8 20 65
                                                           d··'X`· e

✓ Show packet bytes

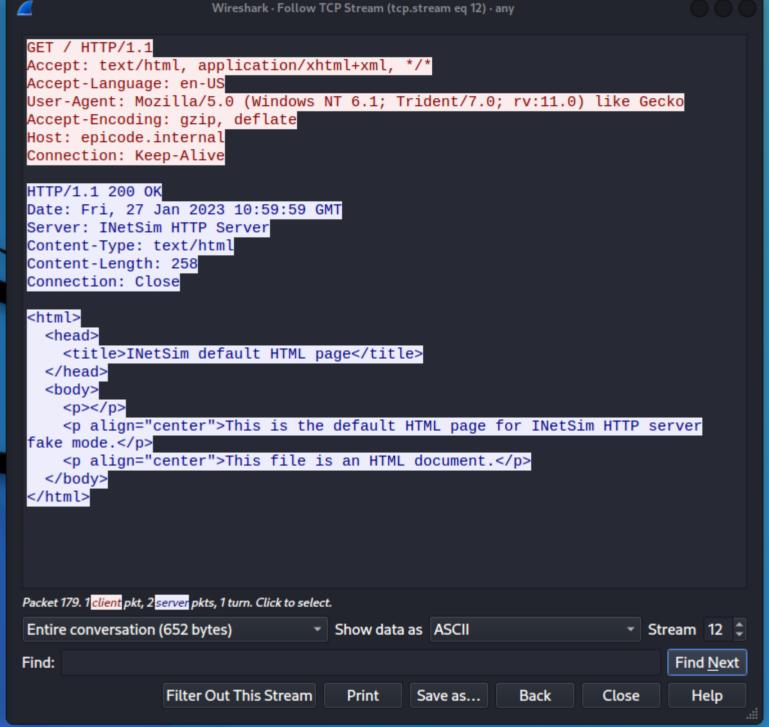
                                                                                 Close
                                                                                           Help
```







Wireshark · Follow TCP Stream (tcp.stream eq 32) · any \bigcircc...L4..G&88.dG.....xu/....zZN...4.(.'......9.3.....=.<.5./.,. .j.@.8.2.S......go.microsoft.com...... ../.i.. .4(. Z...4o.)..n._...f.....q.d.of.xM....r.+....0 *.H..0>1.0...U. .INetSim1.0...U....Development1.0...U....inetsim.org0.. 221205134223Z. 321202134223Z0>1.0...U. .INetSim1.0...U....Development1.0...U....inetsim.org0.."0 *.H..IH =...J.a...m.d5;k.E.L^.A8.\....)0"...q..-...r...x..../C....Km%w..ek.. ..S.m.\h...`....@.V....O.*G=..g.PSV.7d*+.j....{x.T5. [V.J...../.t)EA.."..Z.p.,;.....\$...|...e..=).....1....U./..#.>-...=...... 0.`B9{.U.....d...j.t7..P....N.fd....k..u>......S000...U.....Rh.... %h..hAO..?....0...U.#..0...Rh....%h..hAO..?...0...U......0...0 *.H..+ac>...s^....VC..B%D..R...8...m.+.r... ..N&tH9n....}....(.~m(.....t'>..#>\$q.qF.....6\$.......`..f.F....!...} KB.....!J.G.W...RMNK.....)...N_dY...1..-...v....@.R?.N.~.#m|F...} Gh.t'..q.m.#.K\$2p..%....;8.....c.. <..lI.M..G.....?.\F.;. ..m.N."{.................. 2 client pkts, 3 server pkts, 3 turns. Entire conversation (2,352 bytes) ✓ Stream 32 © ▼ Show data as ASCII Find: Find Next Filter Out This Stream Print Save as... Back Close Help



















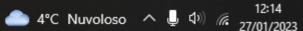












-Risposta punto 3

la principale differenza tra http e https risiede nella maggiore sicurezza che quest'ultima variante di protocollo offre rispetto alla prima. Infatti se nell'http lo scambio di risorse tra client e server avviene "in chiaro", nell'https la comunicazione è protetta grazie all'impiego di determinati certificati come quello SSL che garantiscono:

- -l'identità dei dati e la loro riservatezza
- -la cifratura del traffico
- -la verifica di integrità del traffico.

Come si evince nella terza immagine a sinistra abbiamo il traffico intercettato utilizzando il protocollo https mentre a destra quello http.

Un'ulteriore differenza tra i due protocolli è l'utilizzo di una differente porta standard, in particolare http sfrutta la porta 80, mentre quello https utilizza la porta 443.