

Jaringan Komputer

Task 2



Nama : Fifi Hariyani

NIM : 09011181419031

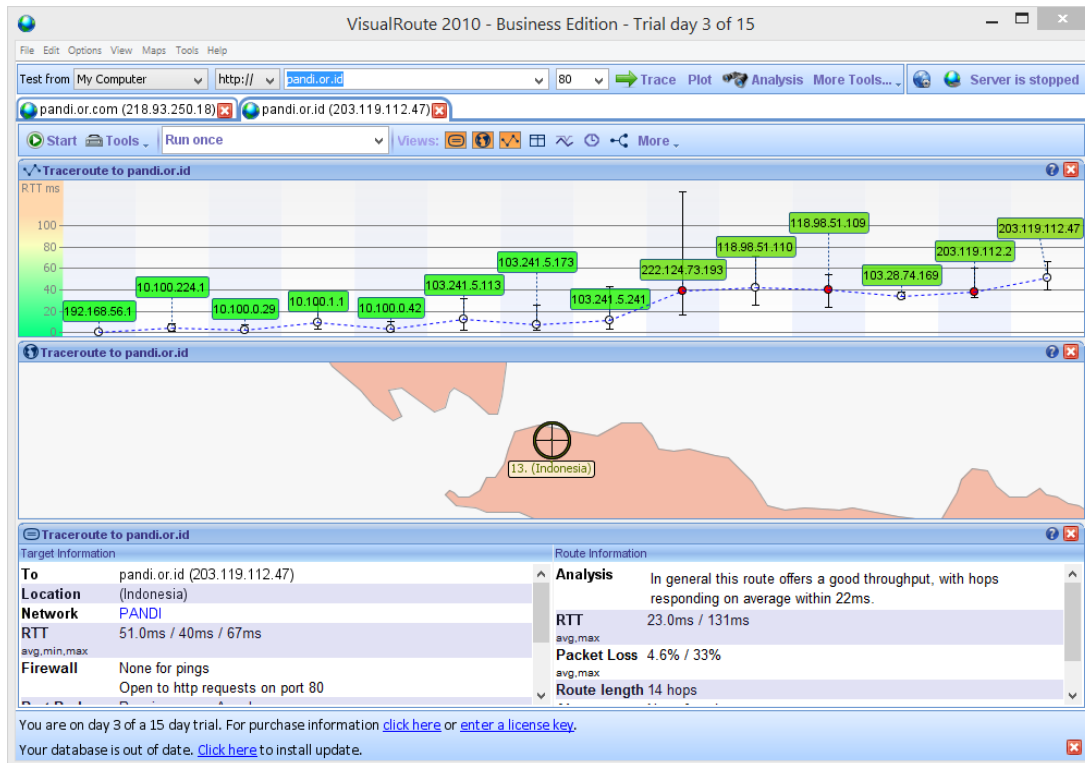
Jurusan Sistem Komputer

Fakultas Ilmu Komputer

Universitas Sriwijaya

2016

Website IIX (Indonesia Internet Exchange)



- Dengan Network.tools.com

IP 1 : Lookup failed: 192.168.56.1 No data
192.168.56.1 is from Other (XX) in region Unclassified

IP 2 : Lookup failed: 10.100.224.1 No data
10.100.224.1 is from Other (XX) in region Unclassified

IP 3 : Lookup failed: 10.100.0.29 No data
10.100.0.29 is from Other (XX) in region Unclassified

IP 4 : Lookup failed: 10.100.1.1 No data
10.100.1.1 is from Other (XX) in region Unclassified

IP 5 : Lookup failed: 10.100.0.42 No data
10.100.0.42 is from Other (XX) in region Unclassified

IP 6 : 103.241.5.113 is from Indonesia (ID) in region Southern and Eastern Asia

Input: 103.241.5.113

canonical name: host-103.241.5.113.unsri.ac.id

Registered Domain: unsri.ac.id

IP 7 : 103.241.5.173 is from Indonesia (ID) in region Southern and Eastern Asia

Input: 103.241.5.173

canonical name: noc-idl.unsri.ac.id

Registered Domain: unsri.ac.id

IP 8 : 103.241.5.241 is from Indonesia (ID) in region Southern and Eastern Asia

Input: 103.241.5.241

canonical name: ip-241-5.unsri.ac.id

Registered Domain: unsri.ac.id

IP 9 : 222.124.73.193 is from Indonesia (ID) in region Southern and Eastern Asia

Input: 222.124.73.193

canonical name: 193.subnet222-124-73.p2p.telkom.net.id

Registered Domain: telkom.net.id

IP 10 : 118.98.51.110 is from Indonesia (ID) in region Southern and Eastern Asia

Input: 118.98.51.110

canonical name: 110.subnet118-98-51.astinet.telkom.net.id

Registered Domain: telkom.net.id

IP 11 : 118.98.51.109 is from Indonesia (ID) in region Southern and Eastern Asia

Input: 118.98.51.109

canonical name: 109.subnet118-98-51.astinet.telkom.net.id

Registered Domain: telkom.net.id

IP 12 : 103.28.74.169 is from Indonesia (ID) in region Southern and Eastern Asia

Input: 103.28.74.169

canonical name: pandi-as56088.iix.net.id

Registered Domain: iix.net.id

IP 13 : Lookup failed: 203.119.112.2 No data

203.119.112.2 is from Indonesia (ID) in region Southern and Eastern Asia

IP 14 : 203.119.112.47 is from Indonesia (ID) in region Southern and Eastern Asia

Input: 203.119.112.47

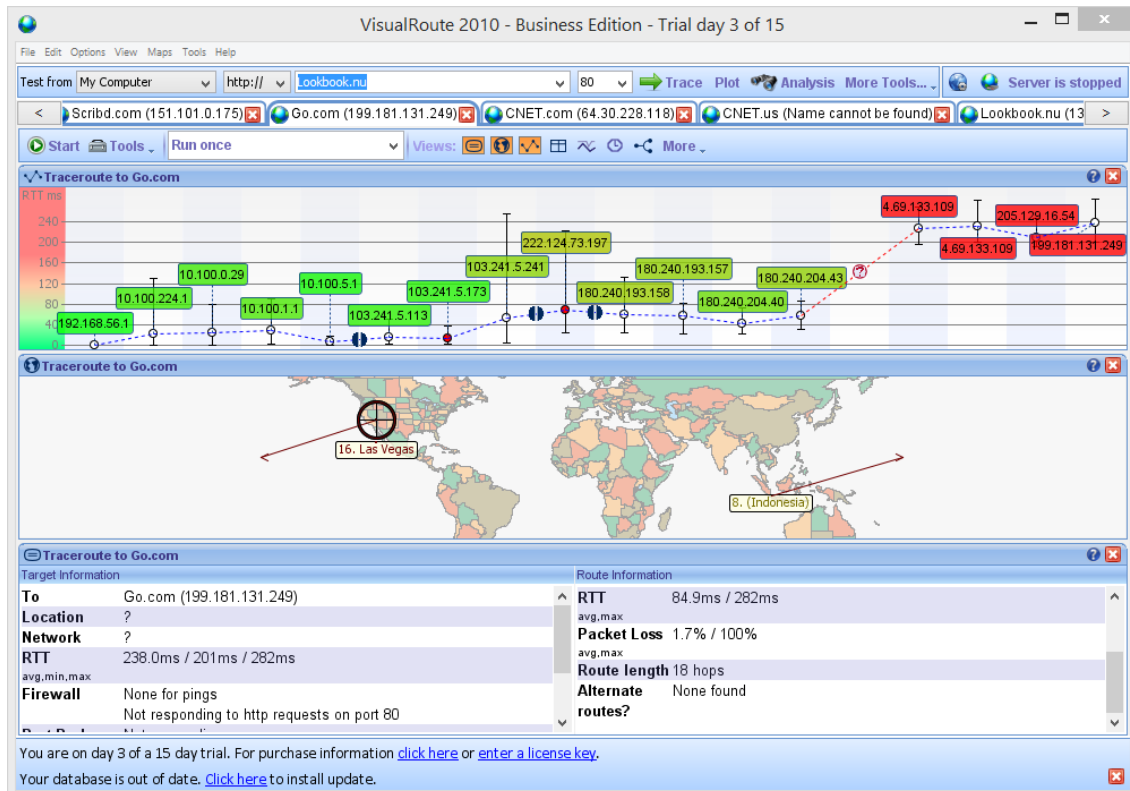
canonical name: users.pandi.id

Registered Domain: pandi.id

- Dengan Perintah Tracert

```
C:\windows\system32\cmd.exe
C:\Users\Fifi>tracert pandi.or.id
Tracing route to pandi.or.id [203.119.112.47]
over a maximum of 30 hops:
  0  163 ms    95 ms    192 ms  hotspot-id1.ilkom.unsri.ac.id [10.100.224.1]
  1  2 ms      16 ms    36 ms   29.subnet-10-100-0.ilkom.unsri.ac.id [10.100.0.29]
  2  3 ms      3 ms     4 ms    10.100.1.1
  3  89 ms     156 ms   91 ms   42.subnet-10-100-0.ilkom.unsri.ac.id [10.100.0.42]
  4  125 ms    6 ms     4 ms    host-103.241.5.113.unsri.ac.id [103.241.5.113]
  5  10 ms     7 ms     2 ms    noc-id1.unsri.ac.id [103.241.5.173]
  6  120 ms    7 ms     10 ms   ip-241-5.unsri.ac.id [103.241.5.241]
  7  *         17 ms    52 ms   193.subnet222-124-73.p2p.telkom.net.id [222.124.73.193]
  8  35 ms     17 ms    20 ms   110.subnet118-98-51.astinet.telkom.net.id [118.98.51.110]
  9  *         22 ms    29 ms   109.subnet118-98-51.astinet.telkom.net.id [118.98.51.109]
 10  32 ms     32 ms    35 ms   pandi-as56008.iix.net.id [103.28.74.169]
 11  *         36 ms    *       203.119.112.2
 12  33 ms     34 ms    34 ms   users.pandi.id [203.119.112.47]
Trace complete.
C:\Users\Fifi>tracert -d pandi.or.id
Tracing route to pandi.or.id [203.119.112.47]
over a maximum of 30 hops:
  0  175 ms    100 ms   23 ms   10.100.224.1
  1  3 ms      3 ms     6 ms    10.100.0.29
  2  6 ms      4 ms     6 ms    10.100.1.1
  3  6 ms      3 ms     4 ms    10.100.0.42
  4  10 ms     3 ms     8 ms    103.241.5.113
  5  7 ms      5 ms     3 ms    103.241.5.173
  6  5 ms      6 ms     7 ms    103.241.5.241
  7  24 ms     12 ms    14 ms   222.124.73.193
  8  18 ms     29 ms    44 ms   118.98.51.110
  9  40 ms     24 ms    21 ms   118.98.51.109
 10  32 ms     38 ms    34 ms   103.28.74.169
 11  *         77 ms    102 ms  203.119.112.2
 12  45 ms     *        40 ms   203.119.112.47
Trace complete.
C:\Users\Fifi>
```

Website US



- Dengan Network.tools.com

IP 1 : Lookup failed: 192.168.56.1 No data
192.168.56.1 is from Other (XX) in region Unclassified

IP 2 : Lookup failed: 10.100.224.1 No data
10.100.224.1 is from Other (XX) in region Unclassified

IP 3 : Lookup failed: 10.100.0.29 No data
10.100.0.29 is from Other (XX) in region Unclassified

IP 4 : Lookup failed: 10.100.1.1 No data
10.100.1.1 is from Other (XX) in region Unclassified

IP 5 : Lookup failed: 10.100.5.1 No data
10.100.5.1 is from Other (XX) in region Unclassified

IP 6 : 103.241.5.113 is from Indonesia (ID) in region Southern and Eastern Asia

Input: 103.241.5.113
canonical name: host-103.241.5.113.unsri.ac.id
Registered Domain: unsri.ac.id

IP 7 : 103.241.5.173 is from Indonesia (ID) in region Southern and Eastern Asia

Input: 103.241.5.173
canonical name: noc-idl.unsri.ac.id
Registered Domain: unsri.ac.id

IP 8 : 103.241.5.241 is from Indonesia (ID) in region Southern and Eastern Asia

Input: 103.241.5.241
canonical name: ip-241-5.unsri.ac.id
Registered Domain: unsri.ac.id

IP 9 : 222.124.73.197 is from Indonesia (ID) in region Southern and Eastern Asia

Input: 222.124.73.197
canonical name: 197.subnet222-124-73.p2p.telkom.net.id
Registered Domain: telkom.net.id

IP 10 : Lookup failed: 180.240.193.158 No data
180.240.193.158 is from Singapore (SG) in region Southern and Eastern Asia

IP 11 : Lookup failed: 180.240.193.157 No data
180.240.193.157 is from Singapore (SG) in region Southern and Eastern Asia

IP 12 : Lookup failed: 180.240.204.40 No data
180.240.204.40 is from Singapore (SG) in region Southern and Eastern Asia

IP 13 : Lookup failed: 180.240.204.43 No data
180.240.204.43 is from Singapore (SG) in region Southern and Eastern Asia

IP 14 : 4.69.133.109 is from United States (US) in region North America
Input: 4.69.133.109

canonical name: ae-1-4.bar1.lasvegas1.level3.net

Registered Domain: level3.net

IP 15 : 4.69.133.109 is from United States (US) in region North America

Input: 4.69.133.109

canonical name: ae-1-4.bar1.lasvegas1.level3.net

Registered Domain: level3.net

IP 16 : 205.129.16.54 is from United States (US) in region North America

Input: 205.129.16.54

canonical name: disney-inte.bar1.lasvegas1.level3.net

Registered Domain: level3.net

IP 17 : Lookup failed: 199.181.131.249 No data

199.181.131.249 is from United States (US) in region North America

- Dengan perintah Tracert

```

C:\windows\system32\cmd.exe
(c) 2013 Microsoft Corporation. All rights reserved.
C:\Users\Fifi>tracert go.com
Tracing route to go.com [199.181.131.249]
over a maximum of 30 hops:
  0  1      66 ms      1 ms      2 ms      hotspot-idl.ilkom.unsri.ac.id [10.100.224.1]
  1  2      2 ms       1 ms      2 ms      29.subnet-10-100-0.ilkom.unsri.ac.id [10.100.0.29]
  2  3      4 ms       7 ms      7 ms      10.100.1.1
  3  4     121 ms     100 ms    190 ms    10.100.5.1
  4  5      36 ms     102 ms    *         host-103.241.5.113.unsri.ac.id [103.241.5.113]
  5  6     106 ms     91 ms     4 ms      noc-idl.unsri.ac.id [103.241.5.173]
  6  7      5 ms      4 ms      6 ms      ip-241-5.unsri.ac.id [103.241.5.241]
  7  8      50 ms     31 ms     64 ms     197.subnet222-124-73.p2p.telkom.net.id [222.124.73.197]
  8  9     108 ms     37 ms     40 ms     180.240.193.158
  9 10     143 ms     100 ms    22 ms     180.240.193.157
 10 11      24 ms     45 ms     41 ms     180.240.204.40
 11 12      26 ms     33 ms     49 ms     180.240.204.43
 12 13      *          *          *          Request timed out.
 13 14      *          298 ms    188 ms    ae-1-4.bar1.lasvegas1.level3.net [4.69.133.109]
 14 15     190 ms     203 ms    195 ms    ae-1-4.bar1.lasvegas1.level3.net [4.69.133.109]
 15 16     207 ms     190 ms    211 ms    disney-inte.bar1.lasvegas1.level3.net [205.129.16.54]
 16 17     211 ms     214 ms    262 ms    199.181.131.249
Trace complete.
C:\Users\Fifi>tracert -d go.com
Tracing route to go.com [199.181.131.249]
over a maximum of 30 hops:
  0  1      44 ms     101 ms     4 ms     10.100.224.1
  1  2      4 ms      2 ms      3 ms     10.100.0.29
  2  3      2 ms      3 ms      7 ms     10.100.1.1
  3  4     171 ms     3 ms      4 ms     10.100.5.1
  4  5      3 ms      3 ms      2 ms     103.241.5.113
  5  6      8 ms      6 ms      8 ms     103.241.5.173
  6  7     21 ms     34 ms     17 ms    103.241.5.241
  7  8     27 ms     26 ms     24 ms    222.124.73.197
  8  9     26 ms     27 ms     23 ms    180.240.193.158
  9 10     22 ms     22 ms     29 ms    180.240.193.157
 10 11     25 ms     26 ms     30 ms    180.240.204.40
 11 12     29 ms     23 ms     27 ms    180.240.204.43
 12 13      *          *          *          Request timed out.
 13 14     243 ms    192 ms    222 ms    4.69.133.109
 14 15     213 ms    189 ms    190 ms    4.69.133.109
 15 16     195 ms    197 ms    188 ms    205.129.16.54
 16 17     198 ms    196 ms    278 ms    199.181.131.249
Trace complete.
C:\Users\Fifi>

```

Analisa :

Disini saya memasukkan website untuk IIX (Indonesia Internet Exchange) yaitu pandi.or.id dan Amerika yaitu Go.com . Dari hasil pencarian IP di website network.tool.com terdapat lookup failed yang artinya pada IP tersebut tidak diketahui milik siapa. Dilihat dari gambar bahwa time yang dibutuhkan hanya berkisar 10 ms-50 ms (puluhan) untuk IIX dan time-nya berkisar antara 150-400 ms untuk Amerika. Tracert/traceroute adalah perintah yang digunakan untuk melacak jalur yang dilalui packet data menuju ip/host tertentu di internet. Dari hasil tracert diatas menunjukkan bahwa koneksi yang digunakan cukup stabil untuk IIX terlihat yaitu 12 router dan 17 router untuk Amerika. Waktu dalam satuan ms (millisecond) sama seperti halnya router, semakin kecil waktu perpindahan data, maka akan semakin baik /cepat dalam mengakses situs yang

di traceroute tadi. Namun jika koneksi yang dijalankan ke server amerika (Go.com) membutuhkan lebih dari 13 router/titik maka jaringannya tidak optimal, kemungkinan besar terlalu banyak routing dari ISP ke lokasi indonesia. Semakin sedikit titik antara jaringan kita dengan server di amerika semakin bagus koneksinya. Tampak dari hasil tracert diatas latency besar terjadi pada ip 10.100.224.1 untuk IIX dan ip 4.69.133.109 untuk Amerika .