

Lab 8

Lab 1 (Routing Trace)

- traceroute (Linux)
- tracert (Win)

```
D:\Documents and Settings\tony>tracert ptt.cc

Tracing route to ptt.cc [140.112.172.11]
over a maximum of 30 hops:

  0  0 ms  0 ms  0 ms  140.112.172.11
  1  2 ms  1 ms  2 ms  88-router.cs.nctu.edu.tw [140.113.88.254]
  2  <1 ms <1 ms <1 ms 140.113.0.198
  3  <1 ms <1 ms <1 ms 140.113.0.166
  4  <1 ms <1 ms <1 ms 140.113.0.74
  5  2 ms  2 ms  2 ms  bb-NTU.NCTU.edu.tw [140.113.255.112]
  6  2 ms  3 ms  2 ms  140.112.0.69
  7  4 ms  3 ms  3 ms  140.112.0.201
  8  3 ms  2 ms  2 ms  140.112.0.213
  9  2 ms  2 ms  2 ms  ip-140-112-172-11.ntu.edu.tw [140.112.172.11]

Trace complete.
```

- Visual Route (Win/Linux)
<http://www.visualroute.com/>

Lab 2 (LAN Monitoring)

- Wireshark (Win/Linux)
<http://www.wireshark.org/>
- Switch vs. Hub
 - Collision domain
- Monitor traffic under:
 - Streaming (YouTube)
 - FTP
 - Online Game
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Old Lab 3 (TANet Traffic)

- **TANet架構 (教育部電子計算機中心)**
http://www.edu.tw/MOECC/content.aspx?site_content_sn=1735
- **TANet網路維運中心**
http://192.83.166.66/index.php?option=com_wrapper&view=wrapper&Itemid=29
- **TWAREN (TWANR網路維運中心)**
http://noc.twaren.net/noc_2008/index.php

New Lab 3 (NCTU Net Topology)

- Tools
 - traceroué
 - tracert
 - Visual route
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- Method
 - Trace paths to gateways (140.113.X.254)
- Requirement
 - At least 20 nodes in topology