

# Network Debugging using Wireshark and Flow Separation

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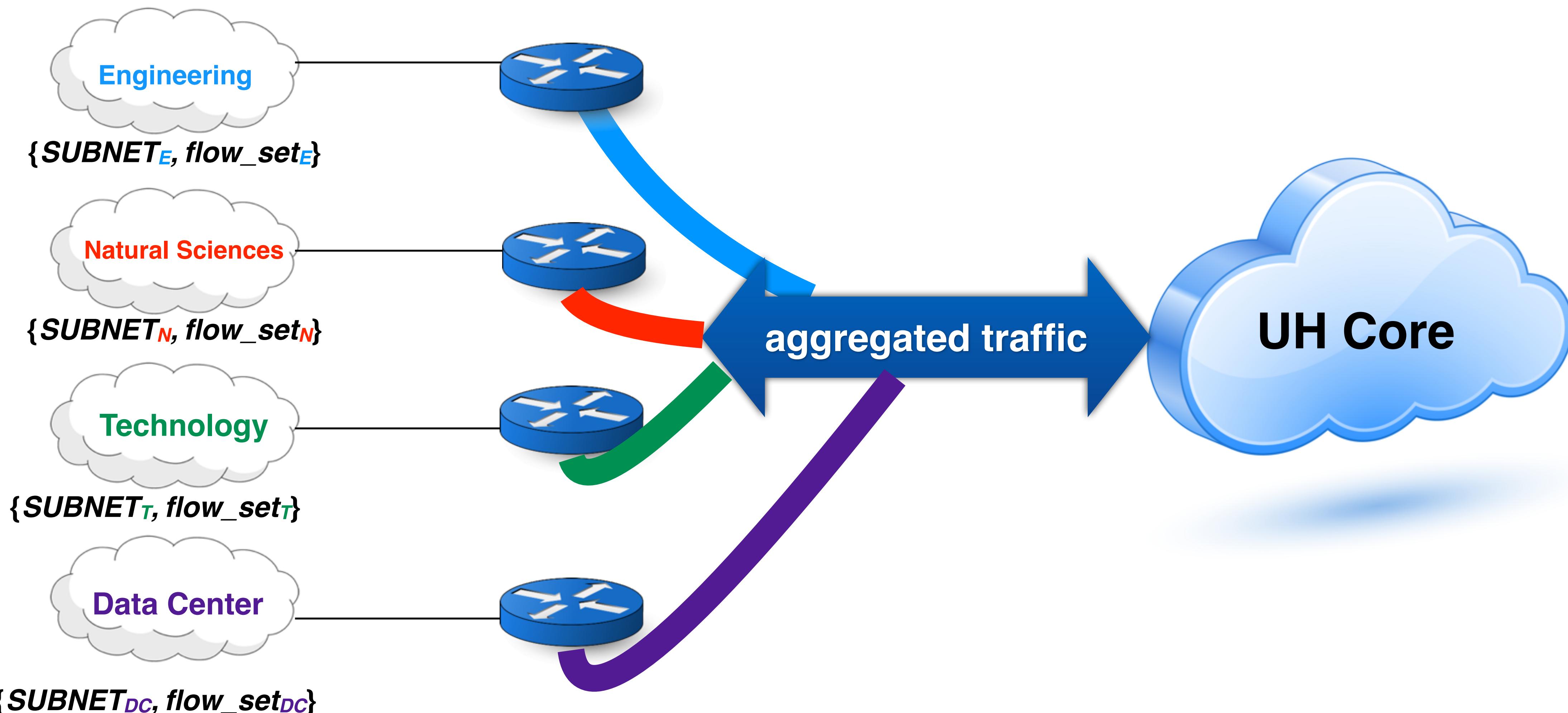
Barnstormer Softworks Inc.

*Project is funded by*

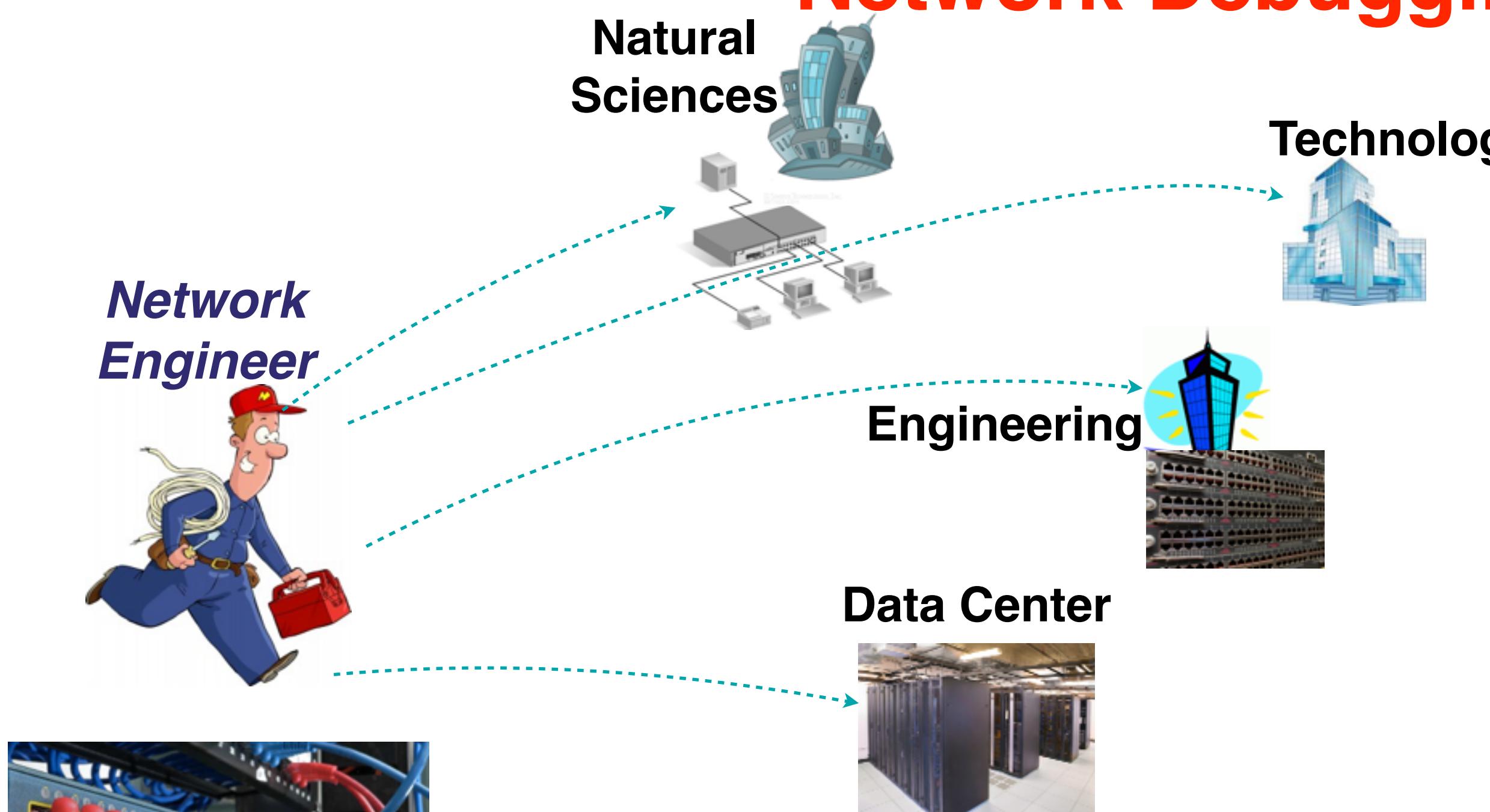


UNIVERSITY of  
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COLLEGE of TECHNOLOGY

# Enterprise Network - Use Case at UH



# Network Debugging - The Problem



**Hours/days by many network engineers**

**No central visibility  
Port/interface difficult to identify/know**

**Individualized config at each department**



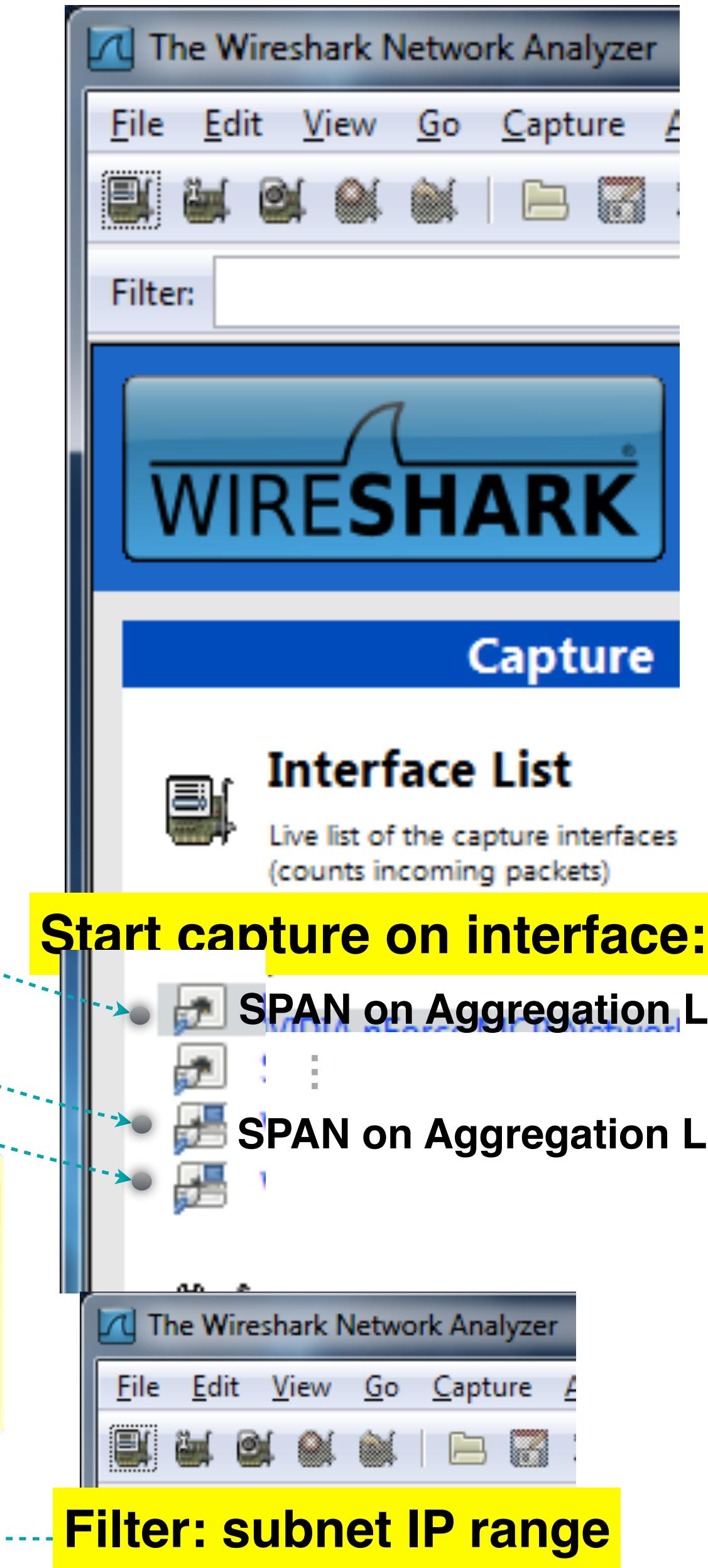
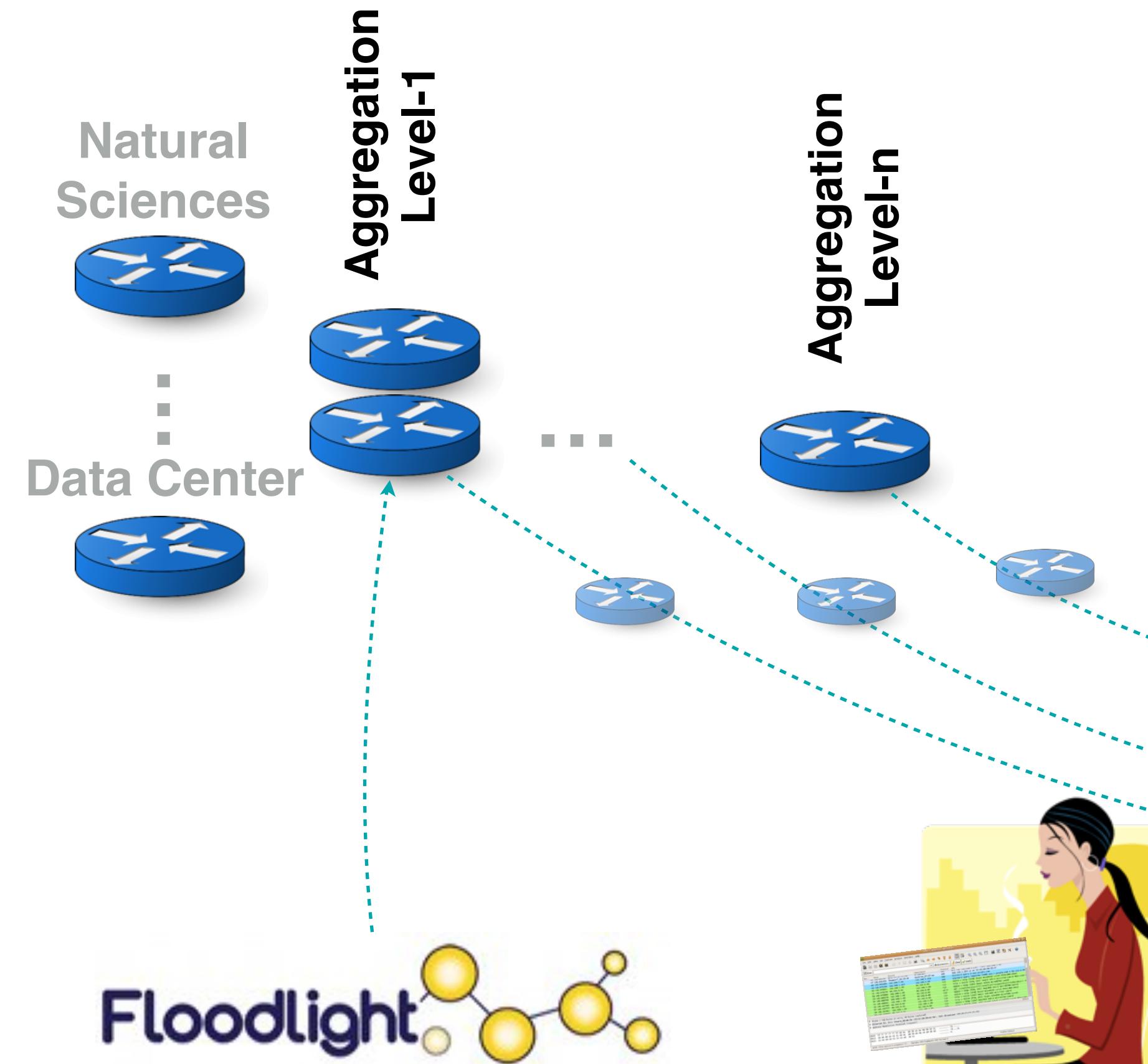
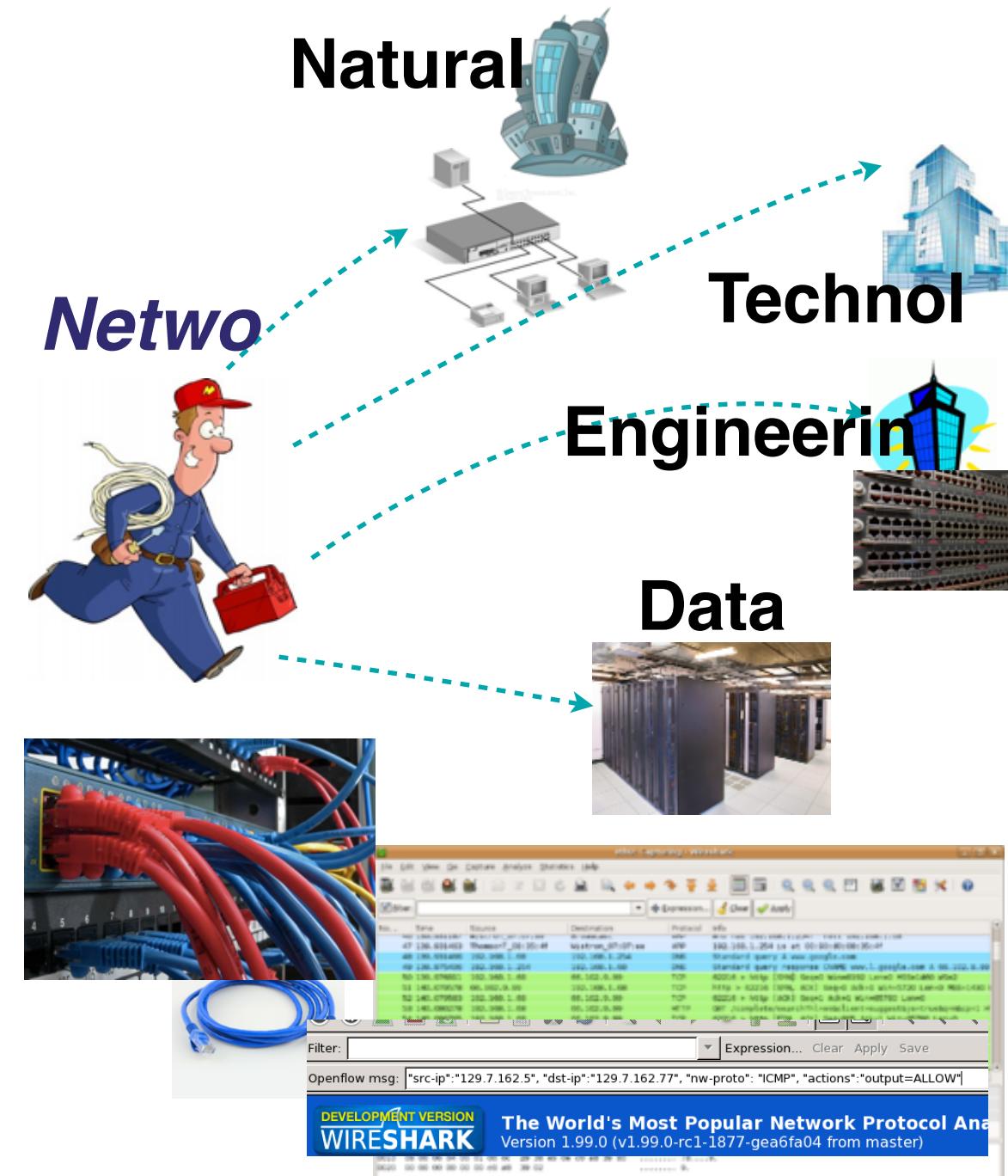
Wireshark Development Version 1.99.0 (v1.99.0-rc1-1877-gea6fa04 from master)

Openflow msg: "src-ip": "129.7.162.5", "dst-ip": "129.7.162.77", "nw-proto": "ICMP", "actions": "output=ALLOW"

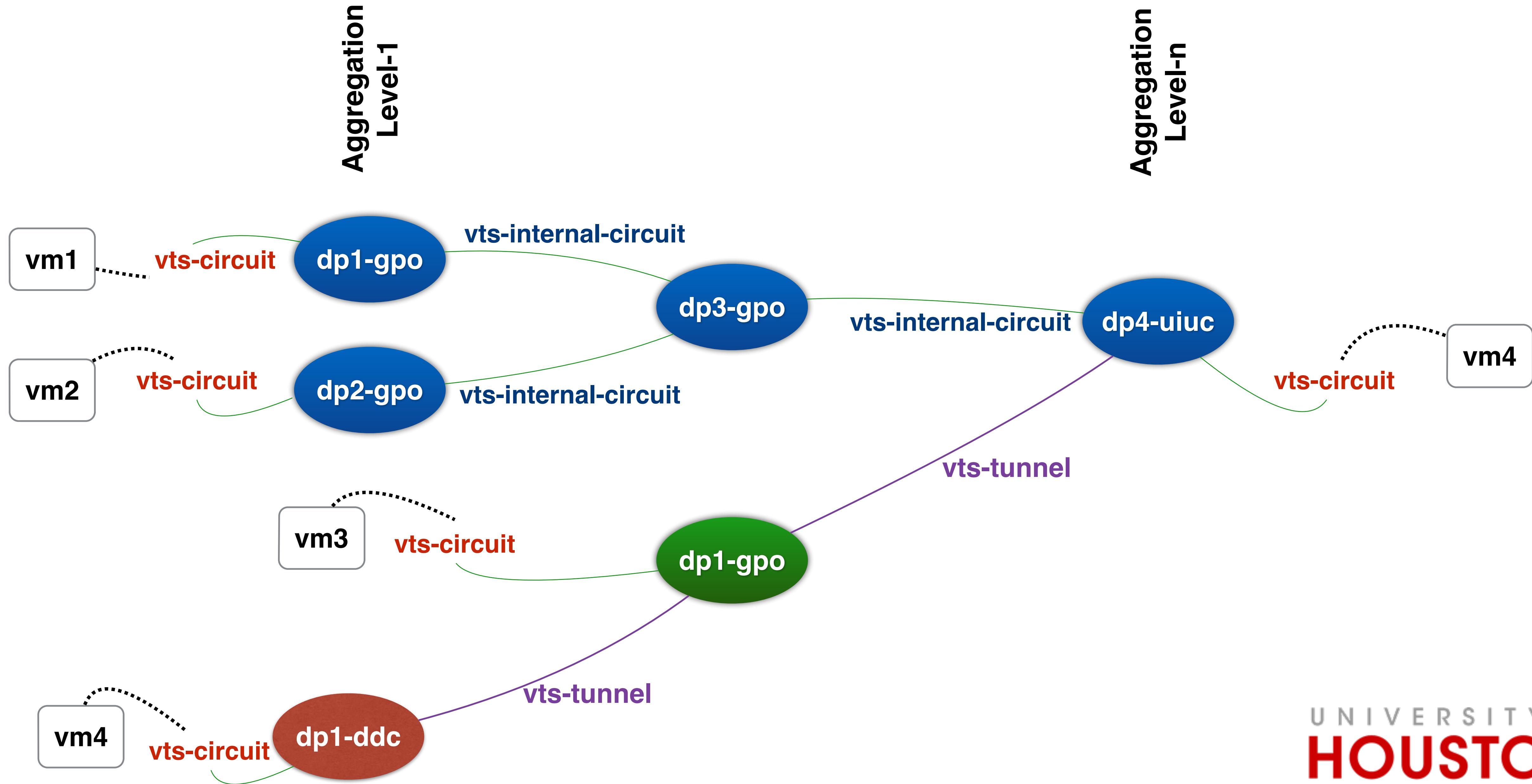
DEVELOPMENT VERSION  
**WIRESHARK**

The World's Most Popular Network Protocol Analyzer

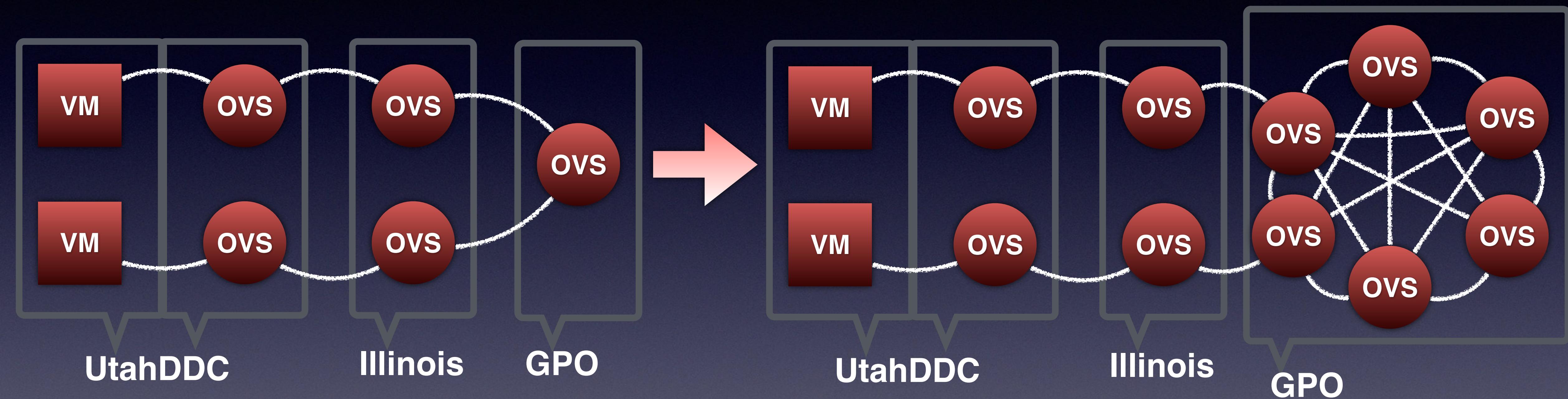
# Network Debugging - Our Solution



# Aggregation Topology on GENI



# LIVE TOPOLOGY SWAP



VTS & geni-lib: scale, automate, orchestrate SDN experiments