

# Performance And Measurement Tools

- **PERT Tools**
  - General purpose tools: ICSI Netalyzr
  - Measurement tools
    - Traceroute-like tools: Unix traceroute, tcp traceroute, LFT, mtr, tracepath, SmokeTrace, layer 2 traceroute...
    - Bandwidth measurement tools: pchar, iperf, bwctl, nuttcp, netperf, RUDE/CRUDE, ttcp, NDT, Thrlay, PsPing
      - Scripts
    - Active measurement tools: Ping, fping, OWAMP, SmokePing
      - Active measurement infrastructures - (HADES, RIPETTM, QoSMetrics)
    - Passive measurement tools
      - SNMP-based tools: MRTG, RRDTool, Cricket
      - Netflow-based tools
      - Packet tracing and analysis: tcpdump, Wireshark, libtrace, Netdude, jnettop, tcptrace, Network Monitor (Windows), TCP Analyzer (Windows SDK)
      - Host and Application Measurement Tools: NetLogger, Web100
- **NREN tools and statistics:**
  - GÉANT
  - SWITCH (CH)
  - PSNC (PL)
  - HEAnet (IE)
  - BREN (BG)
  - FCCN (PT)
  - IUCC (IL)
  - HUNGARnet (HU)
  - RENATER (FR)
- **Network emulation:**
  - netem
  - dummynet
  - NIST, hxbt
  - minimet