IPv17

Test result

Test objectives

App server

UDTP/IP ~ TCP/IP

Clients

Mbps

To compare performances

UDTP

TCP

? ? ?

0.02 0.04 0.1 0.2 0.4 1 2 4 Sec
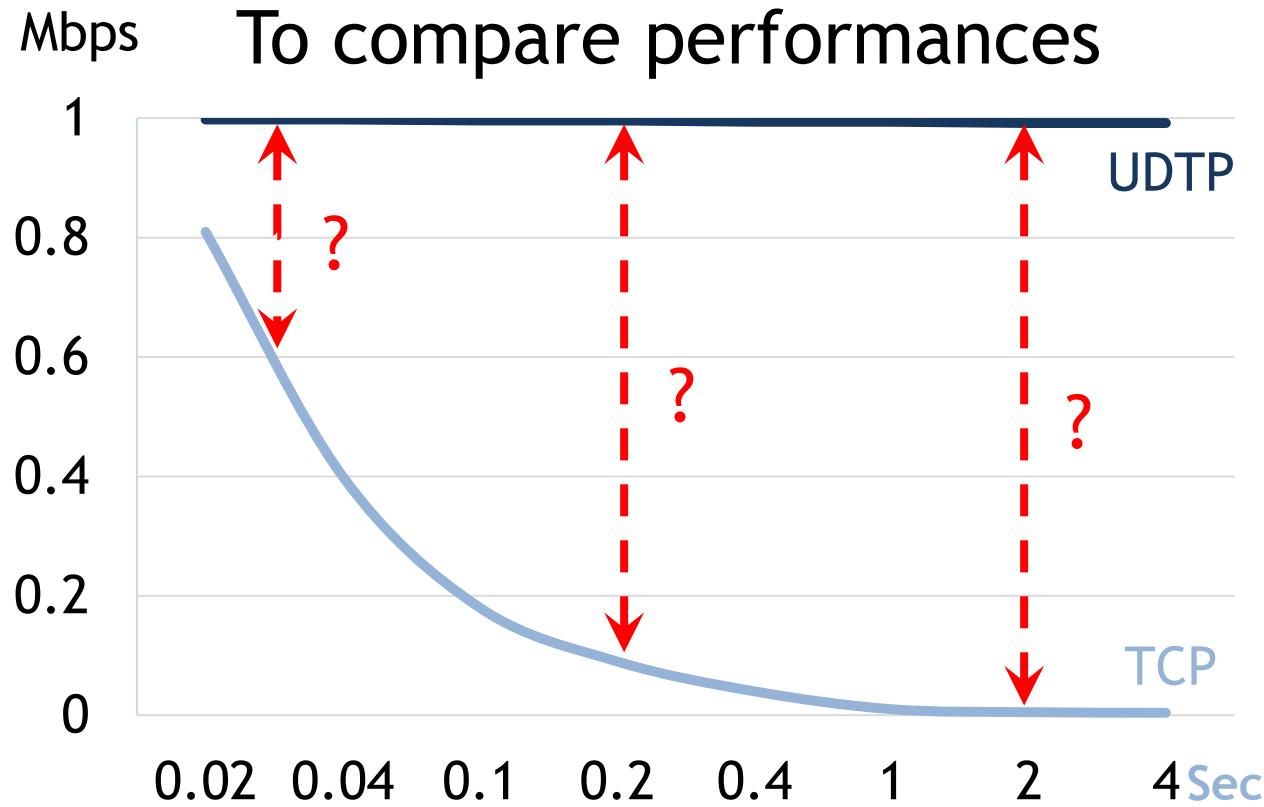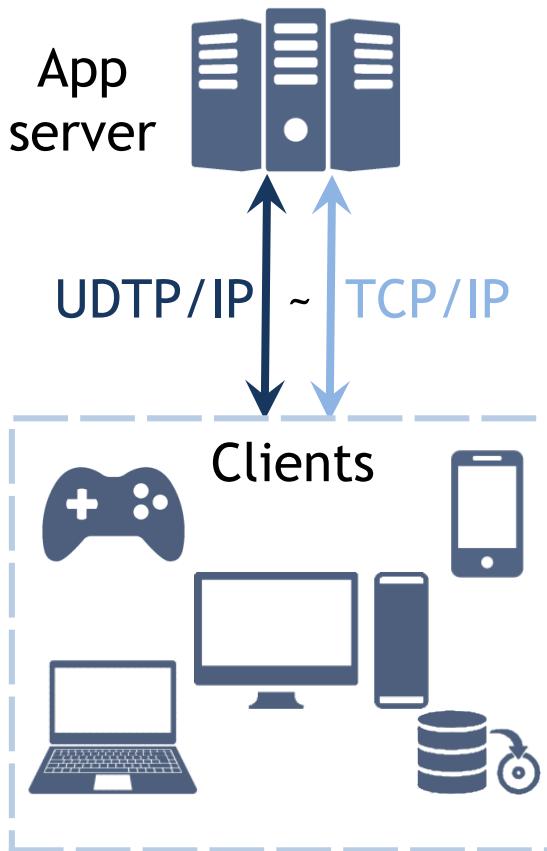
In-house testbed

FTP client   Switch   WANem   FTP sever
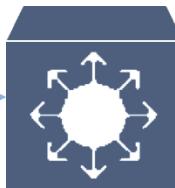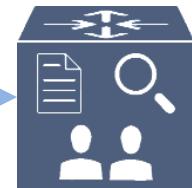
TCP/IP
UDTP/IP

*.log

Traffic analysis   Traffic analyzer   Post processing

Tests:

- 1000 files by 10KB
- 100 files by 1MB
- 10 files by 100MB
- 1 file of 10GB
- RTT (ms): 1, 25, 50, 75, 100, 150, 200, 250
- Packet loss (%): 0.001, 0.01, 0.1, 1

In-house test result

gFTP vs. UDTP

Specification

- UDTP: 0.2.2
- FTP: gFTP (NitroShare 0.3.0)
- openSUSE Leap 42.1
- Cisco 2950 switch
- Test file: 15.8MB
- Ping: 0.17ms (ping1, ping2 files)
- RTT (ms): 0
- Packet loss (%): 0

Data transfer rate

+6%

gFTP

UDTP

82.9Mb/s   88.2Mb/s
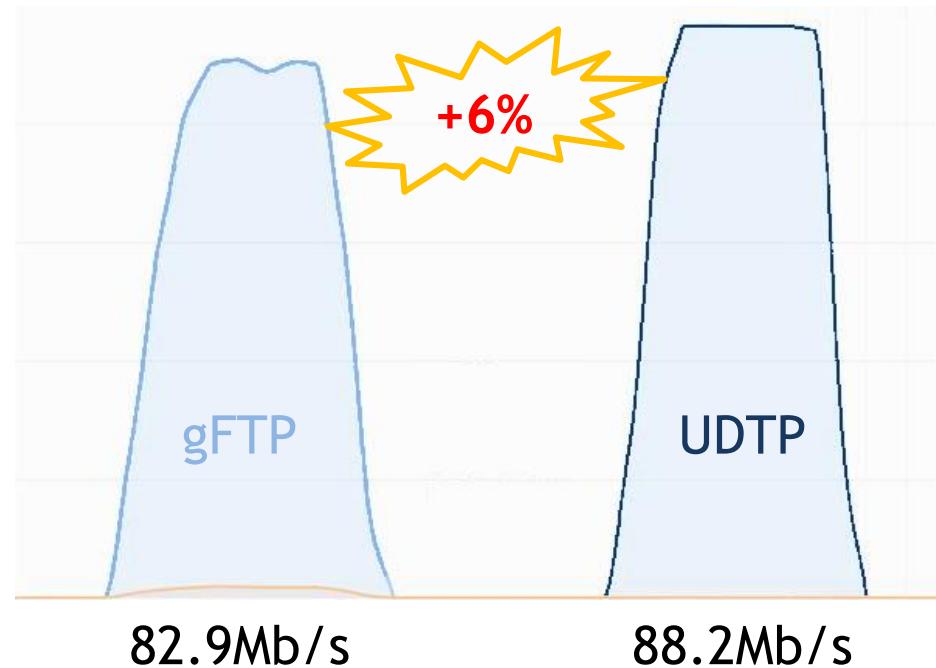
In-house test result

iperf3 vs. UDTP

Specification

- UDTP: 0.2.4
- iperf3: traffic
- openSUSE Leap 42.1
- Cisco 2950 switch
- Ping: 0.12ms
- RTT (ms): 0
- Packet loss (%): 0
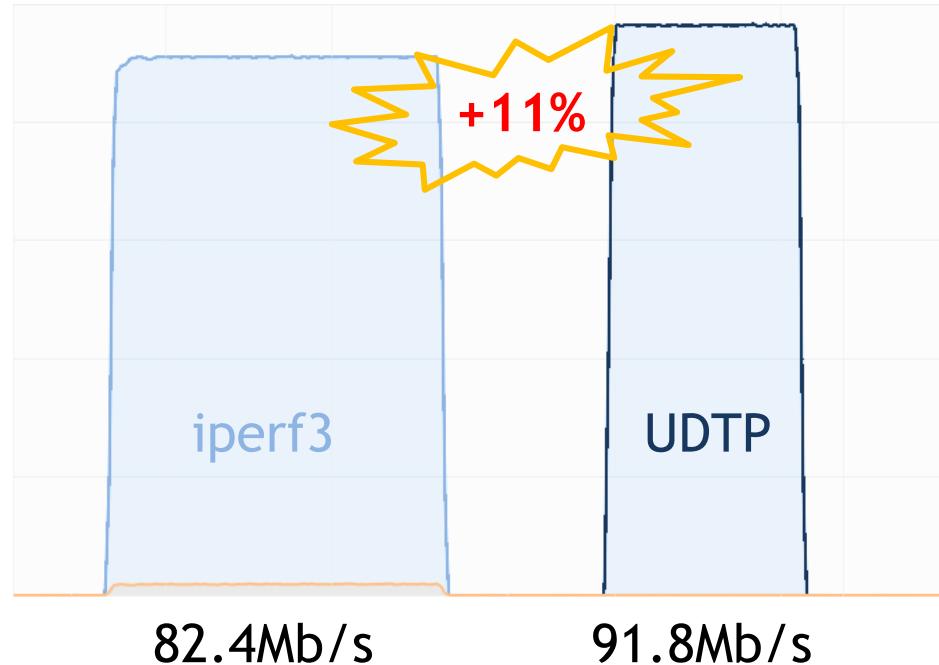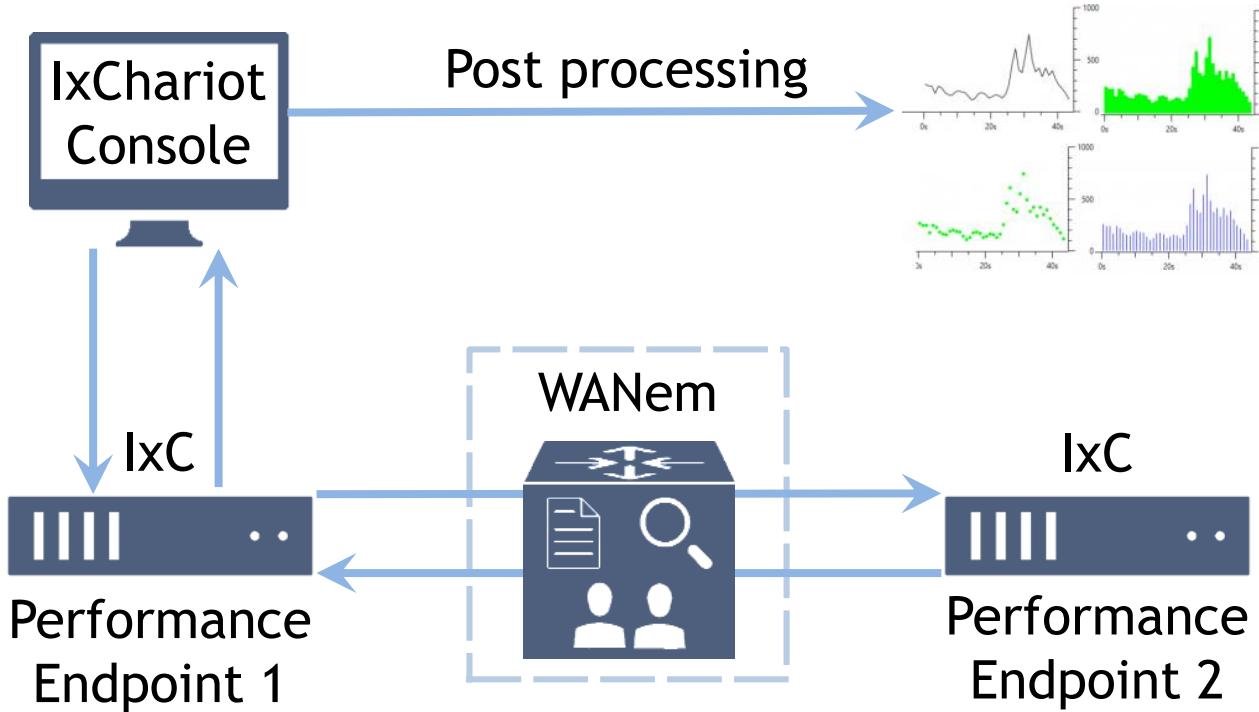
Data transfer rate

+11%

iperf3 — 82.4Mb/s

UDTP — 91.8Mb/s

External testbed

Tests:

- 1000 files by 10KB
- 100 files by 1MB
- 10 files by 100MB
- 1 file of 10GB
- RTT (ms): 1, 25, 50, 75, 100, 150, 200, 250, 500,1000
- Packet loss (%): 0.001, 0.01, 0.1, 1