



connect

San Francisco 2015

SFO15-408: ODP-DPDK platform performance

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Date

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Event

SFO15

Agenda

- The testcase
- The test environment
- Status at previous Connect
- Current status
- Other achievements
- Future plans

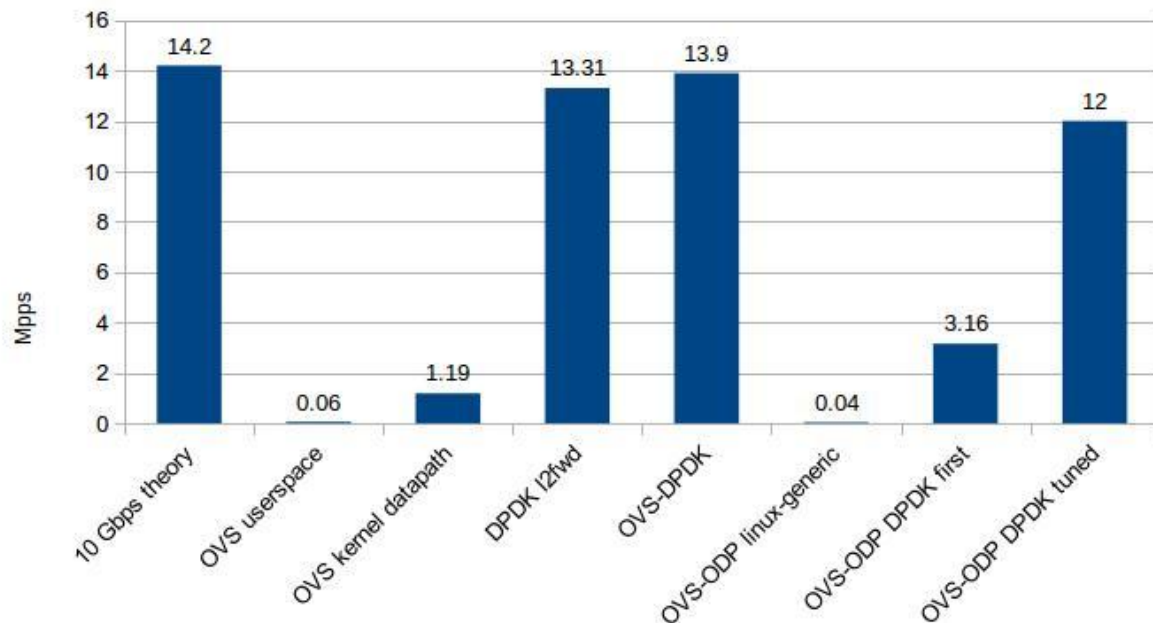
The testcase

- The generator (netmap-pktgen) sends 64 bytes UDP packets near line rate
- Ports and addresses are constant
- OVS forwards them to another port
- There is a sink on the other side to count the received packets (netmap-pktgen again)

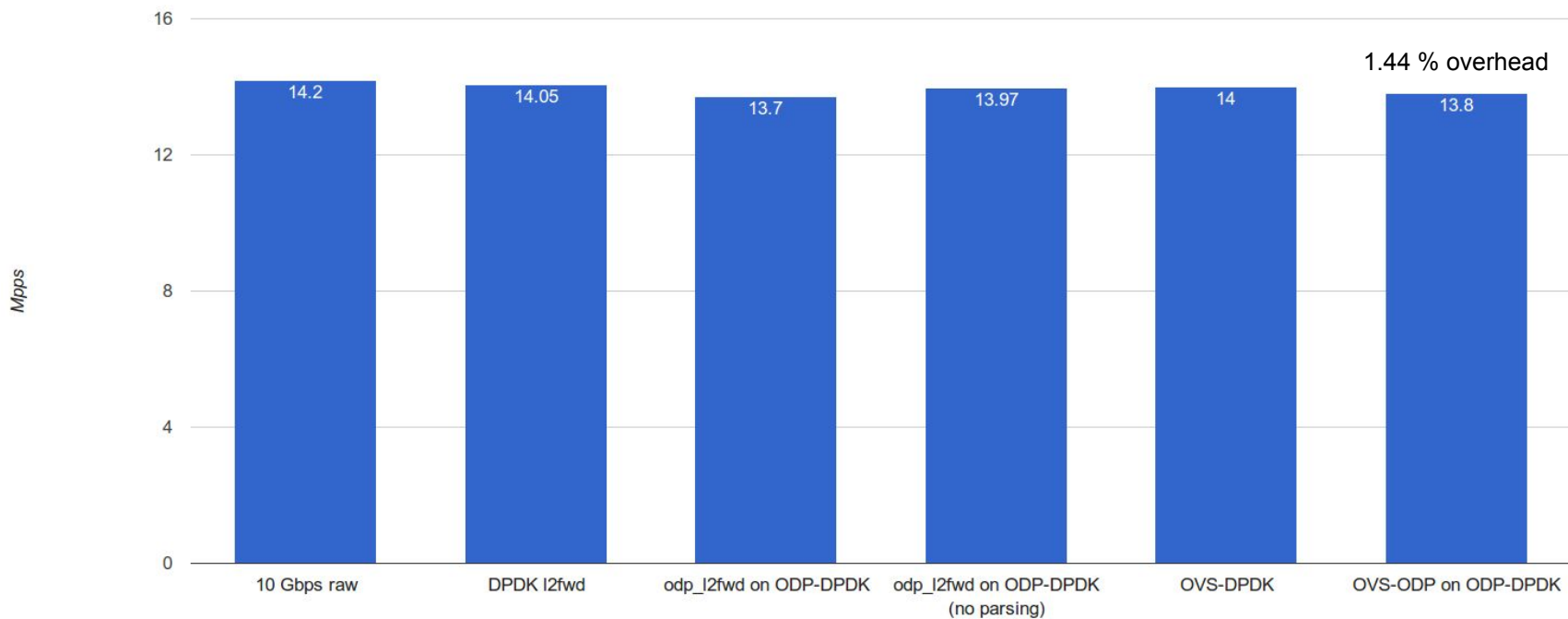
The test environment

- Intel 82599ES 2-port 10 Gbps NIC
- Intel i5-4570 @ 3.20GHz
- ODP-DPDK platform developed originally by Venkatesh Vivekanandan
- OVS base: v2.4.0+ (forked 31st Aug)
- ODP API: v1.3 (+ RSS hash support)
- DPDK API: v2.1

Status at previous Connect



Current status



Other achievements

- Unit tests are running (except classification)
- ODP API support: 0.6 -> 1.3
- DPDK base: 1.7.1 -> 2.1
- OVS base: 2.3.1 -> 2.4.90
- ODP-DPDK: 268 commits, 4191 insertions (+), 2754 deletions(-)
- ODP-OVS: 46 commits, 256 insertions(+), 211 deletions(-)



Future plans

- More thorough tests (RFC 2544-like)
- Run these tests in LAVA
- Utilize as much as possible from OPNFV's VSPERF project
- Optimize further OVS-ODP and ODP platforms to achieve a near line rate performance

Questions?



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