Virtualized Networking Performance
Virtualized Router Benchmark
1 Gigabit bi-directional forwarding

Throughput vs. Packet Size

- Bare
- X
- V
TCP throughput over 10GB Ethernet

Gigabits / second

- Bare: 9.5 gigabits/second
- Bridge: 1.5 gigabits/second
- Route: 1.0 gigabits/second
- Nat: 1.0 gigabits/second
- 2 Tier: 0.5 gigabits/second
Multithread benchmark

- Baseline
- Packet Steering (RPS)
- Multi Queue NIC

Total Transactions/sec

- UP Guest
- SMP Guest
Multiple Queue
HW or SW

Flow classifier
Device queue
Device queue
Device queue
VNIC

Guest VM
Thread
Thread
Thread