Use case of RDMA in Symantec storage software stack
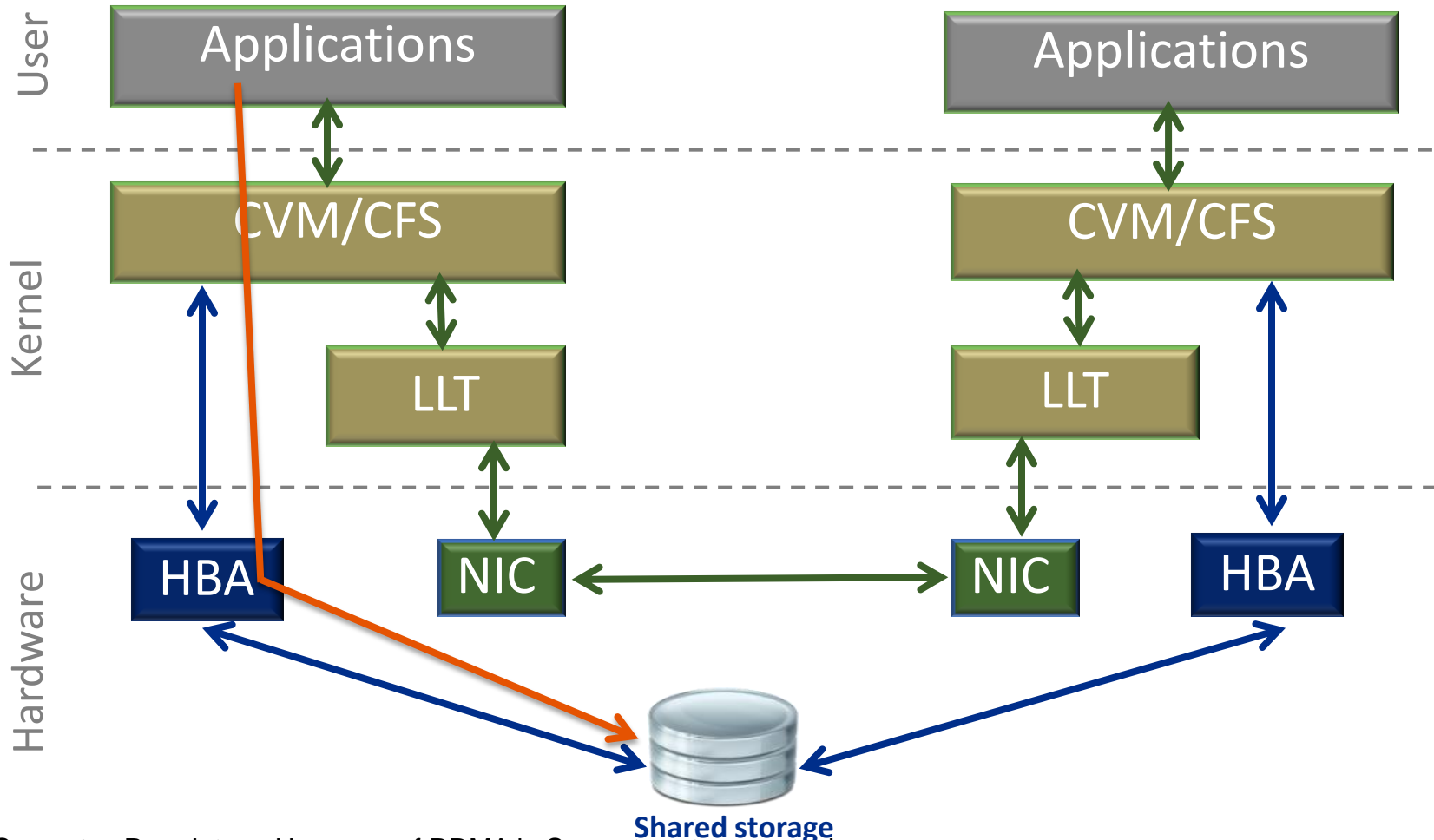
Om Prakash Agarwal

Symantec

Agenda

- About Symantec Storage Software Stack

- Need for the faster interconnects

- Write operation without and with RDMA

- Implementation details: Write operation with RDMA

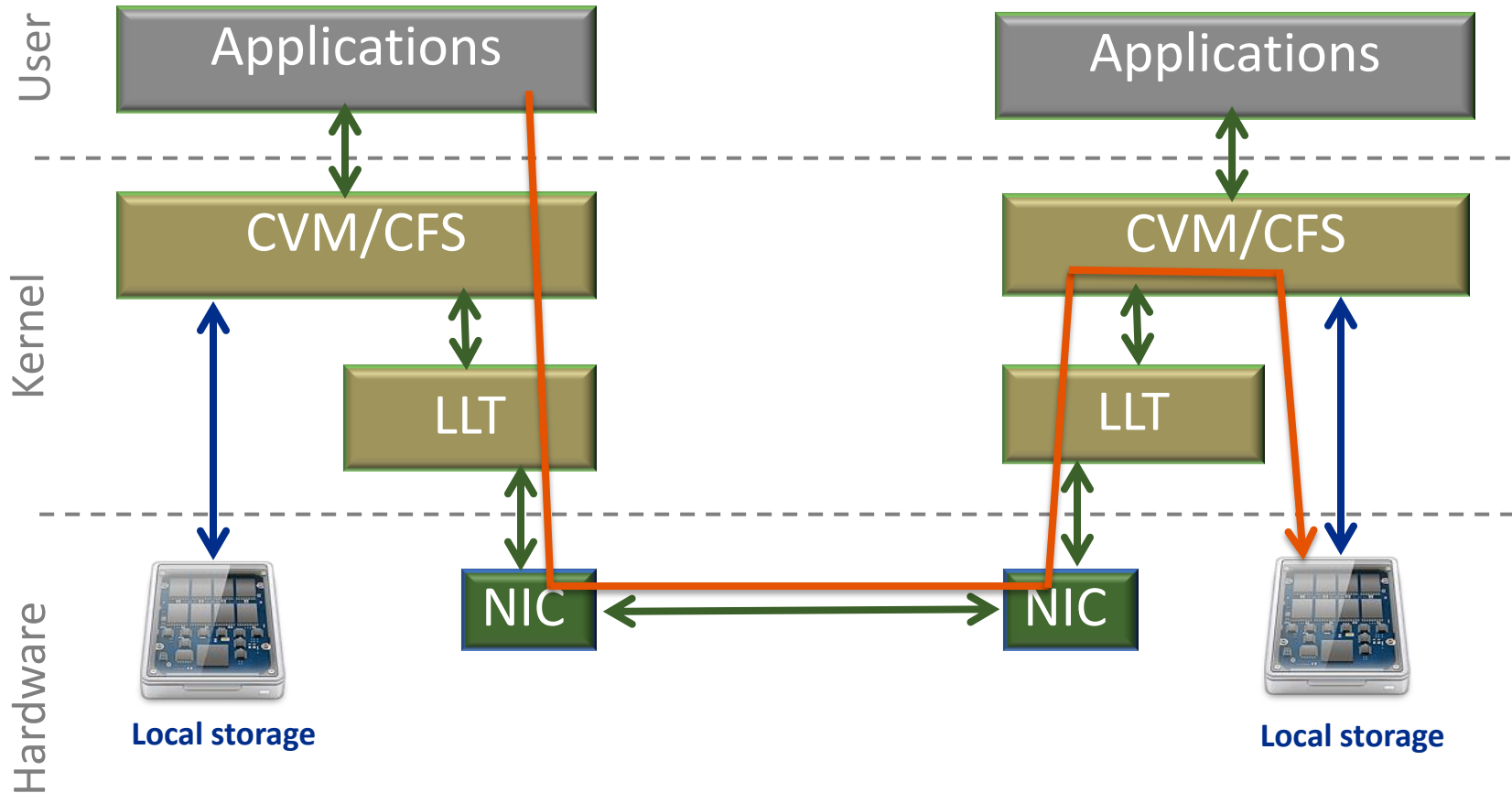- Perf comparison (without and with RDMA)

Symantec Proprietary: Use case of RDMA in Symantec storage stack

About Symantec Storage Software Stack

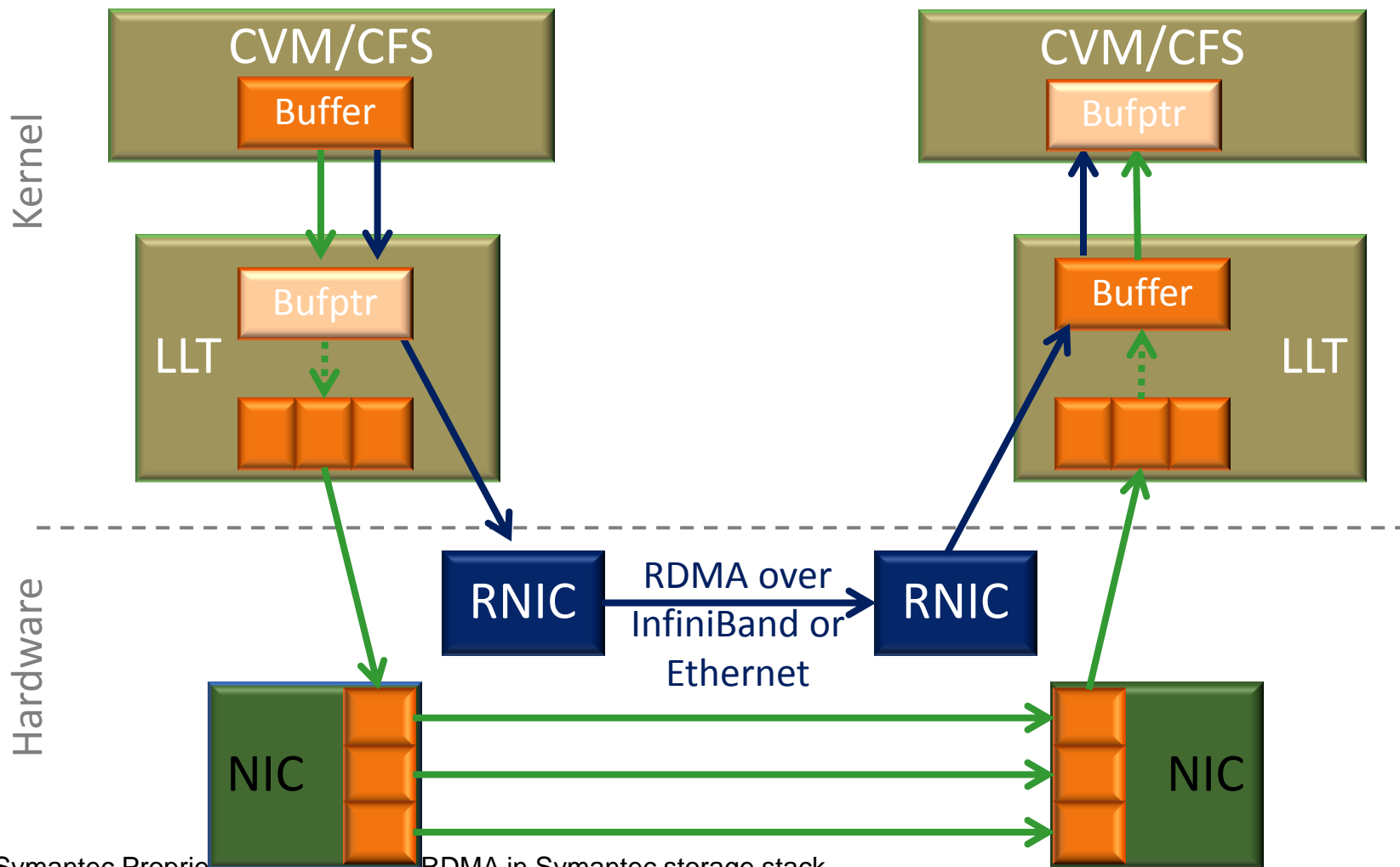Symantec Proprietary: Use case of RDMA in Symantec storage stack
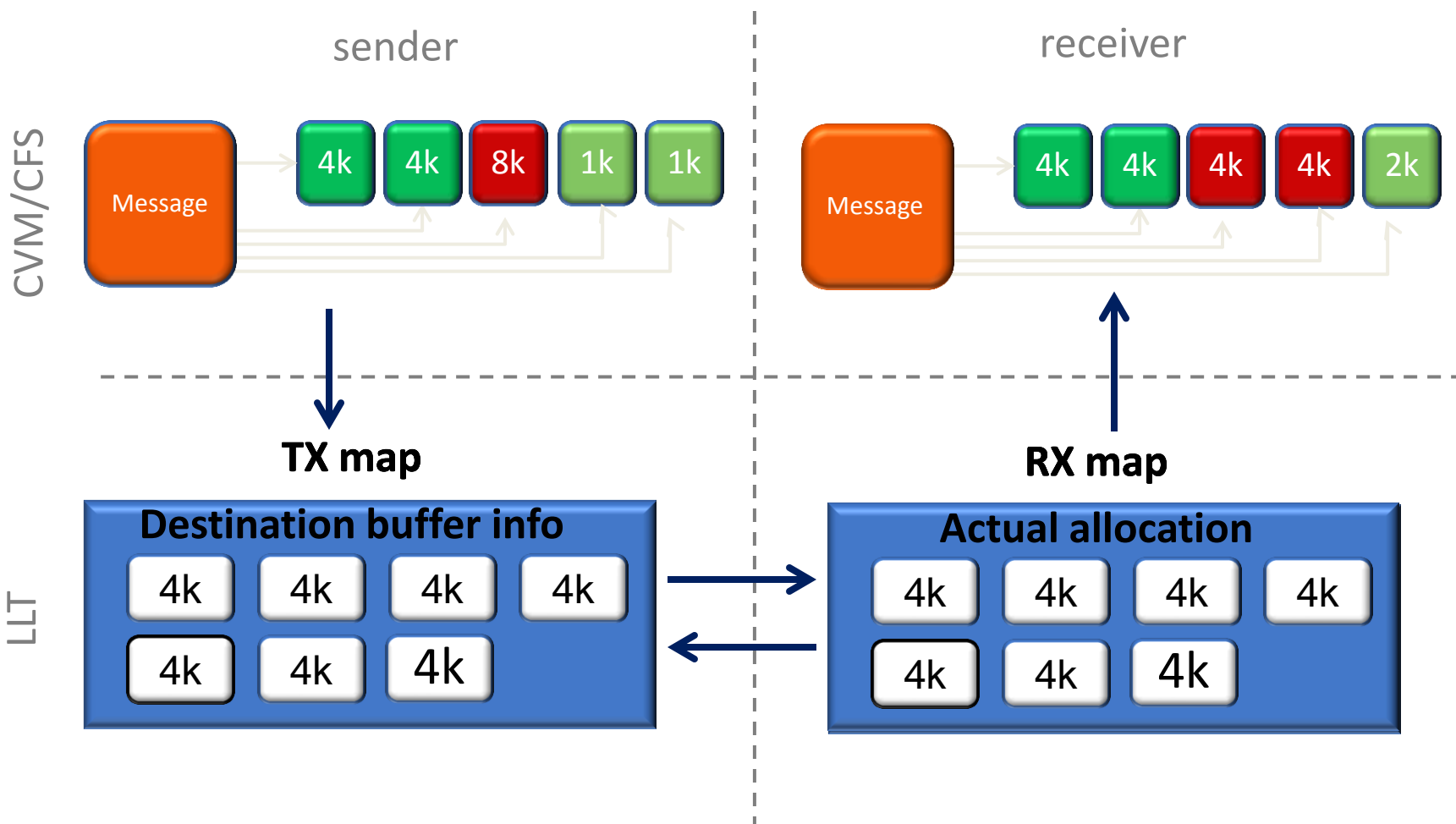
Need for the faster interconnects

Shared Nothing Architecture

Symantec Proprietary: Use case of RDMA in Symantec storage stack

Write operation without and with RDMA

Symantec Proprietary. Use case of RDMA in Symantec storage stack

Write operation with RDMA

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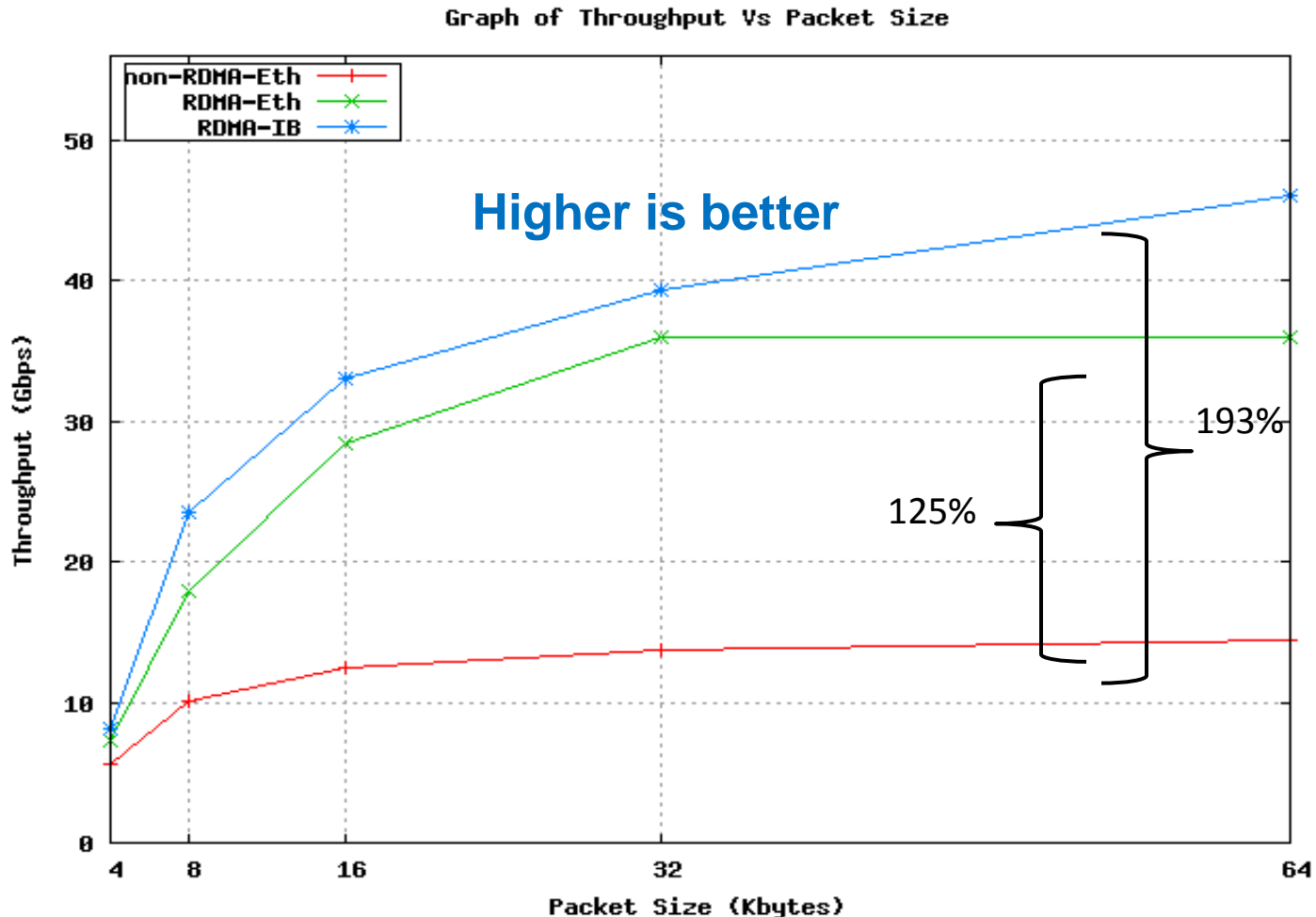
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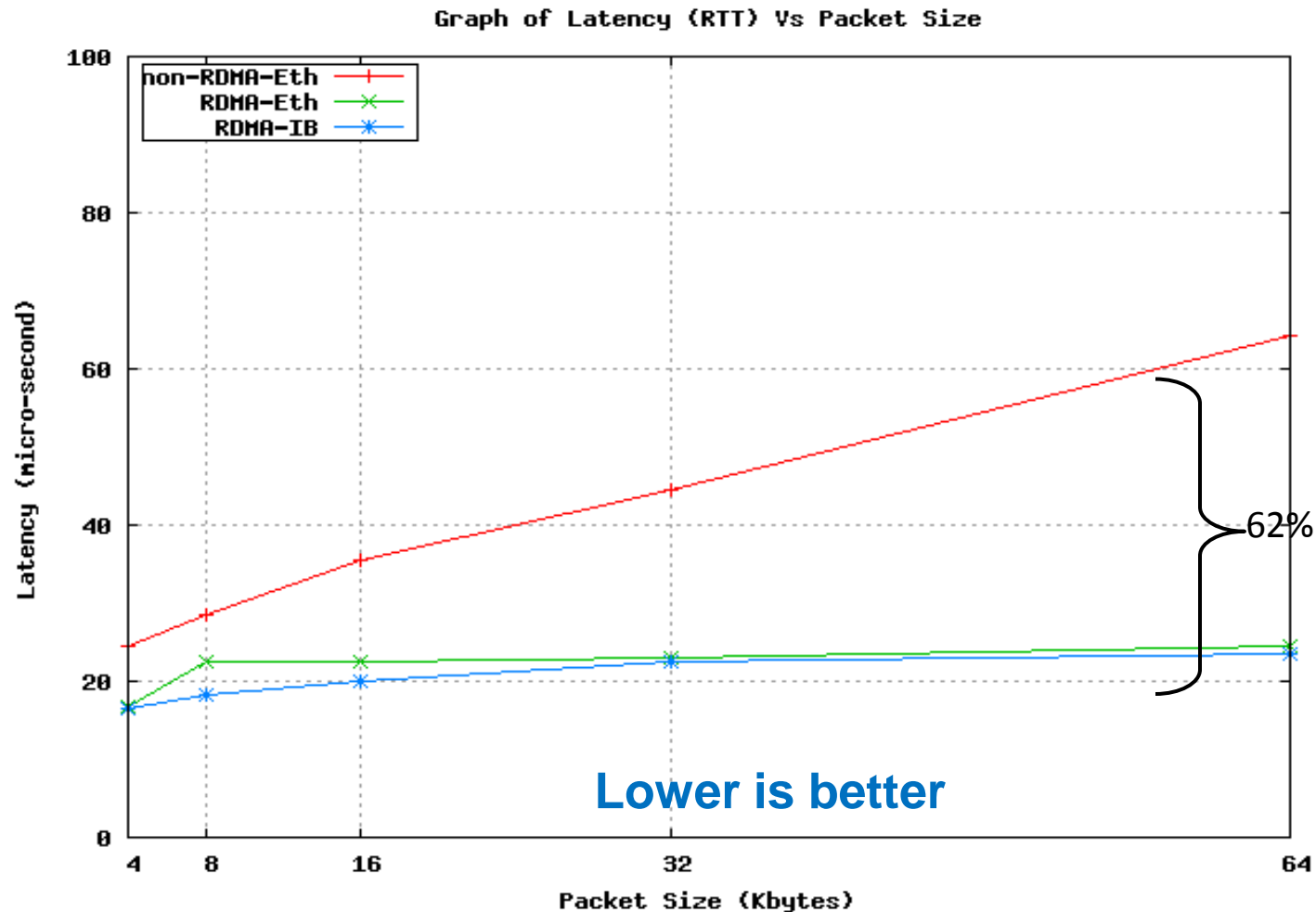
1) Throughput
2) Latency

Setup configuration

➢ Two node Linux (RHEL6.3) cluster

➢ ConnectX3 VPI NIC card from Mellanox

  ✓ IB -56 Gbps

  ✓ RoCE-40 Gbps

  ✓ Eth-40 Gbps

➢ 3.3GHz Processor

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LLT perf comparison : Throughput

Graph of Throughput Vs Packet Size

Higher is better

193%

125%

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LLT perf comparison : Latency

Graph of Latency (RTT) Vs Packet Size

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Thank You