In the NIC of time: Enabling high-performance edge applications with OpenStack, OVS, and SmartNICs

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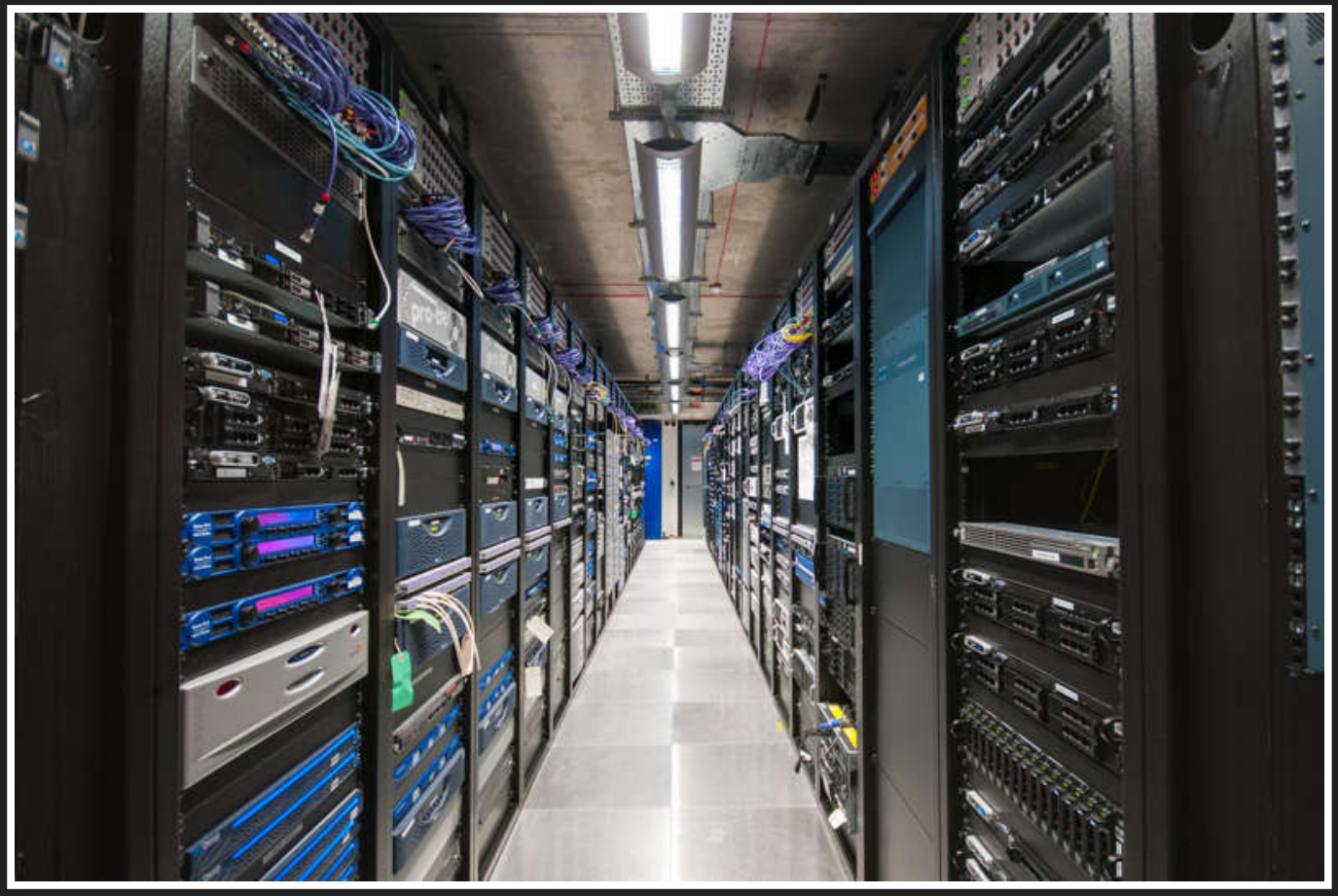
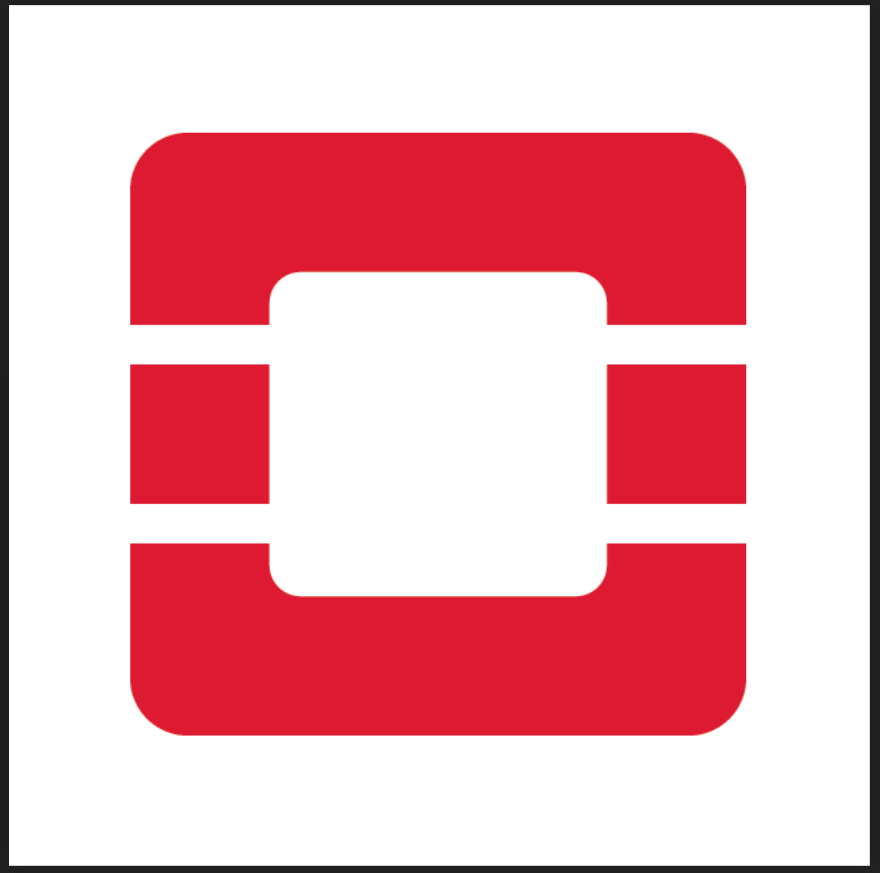
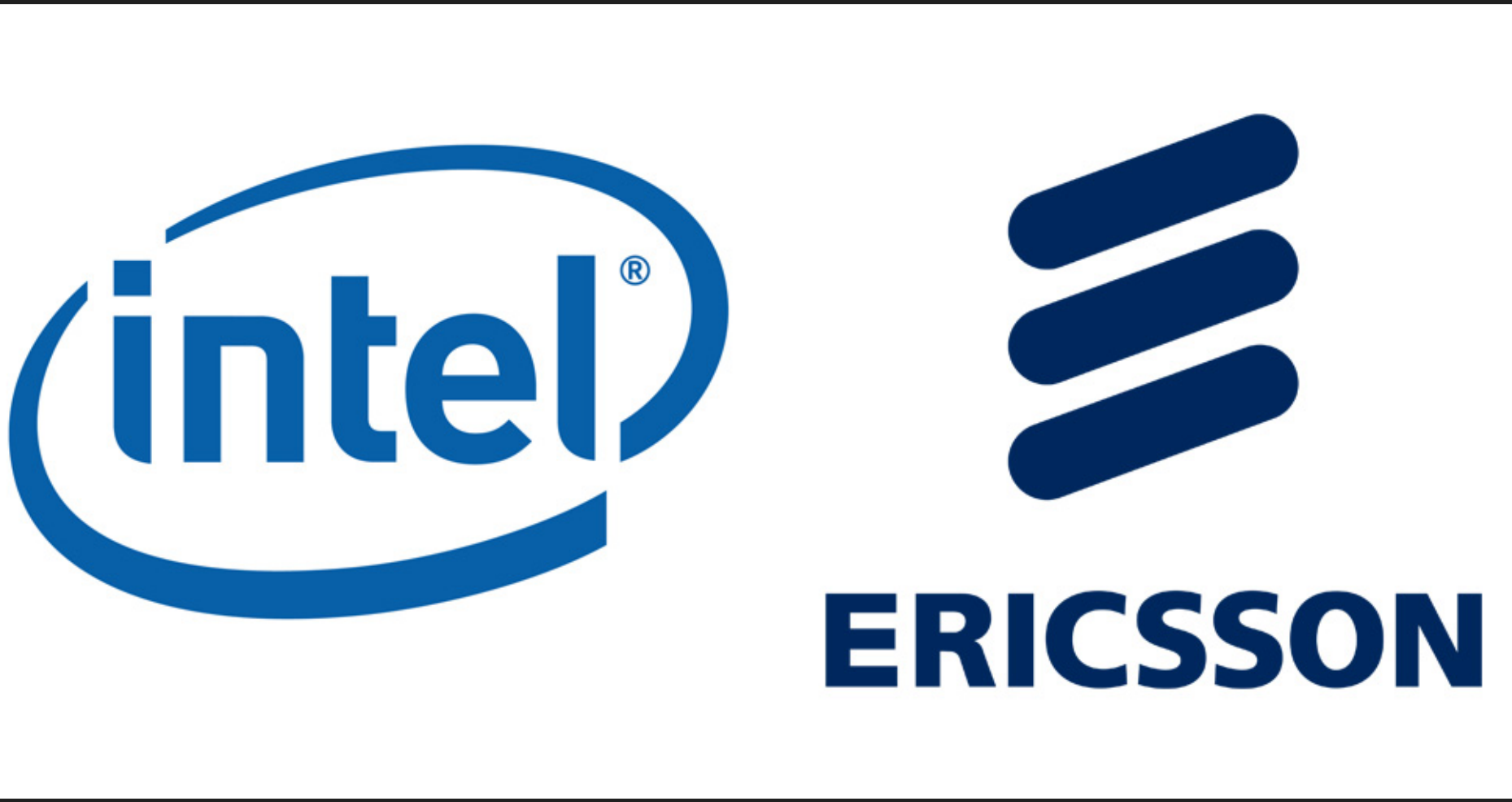


40% of all mobile traffic

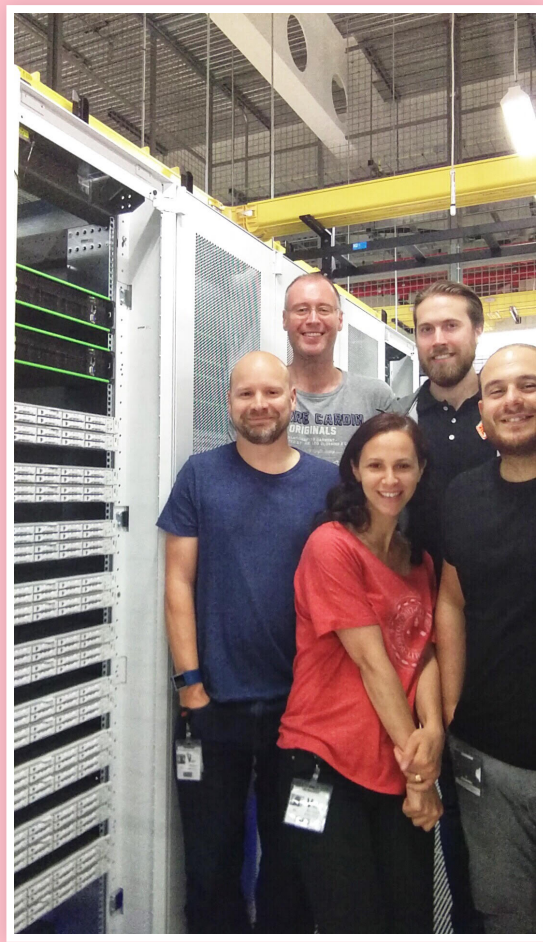
NFV



intel


intel
ERICSSON

To DELETE



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DPDK/SPDK

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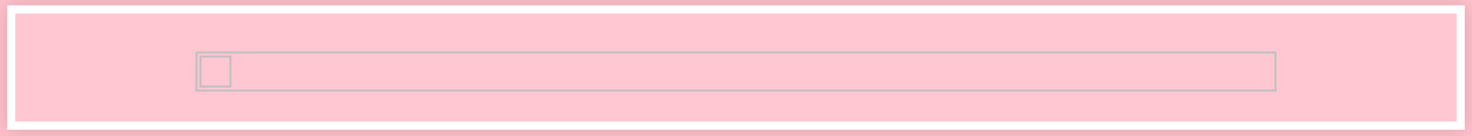

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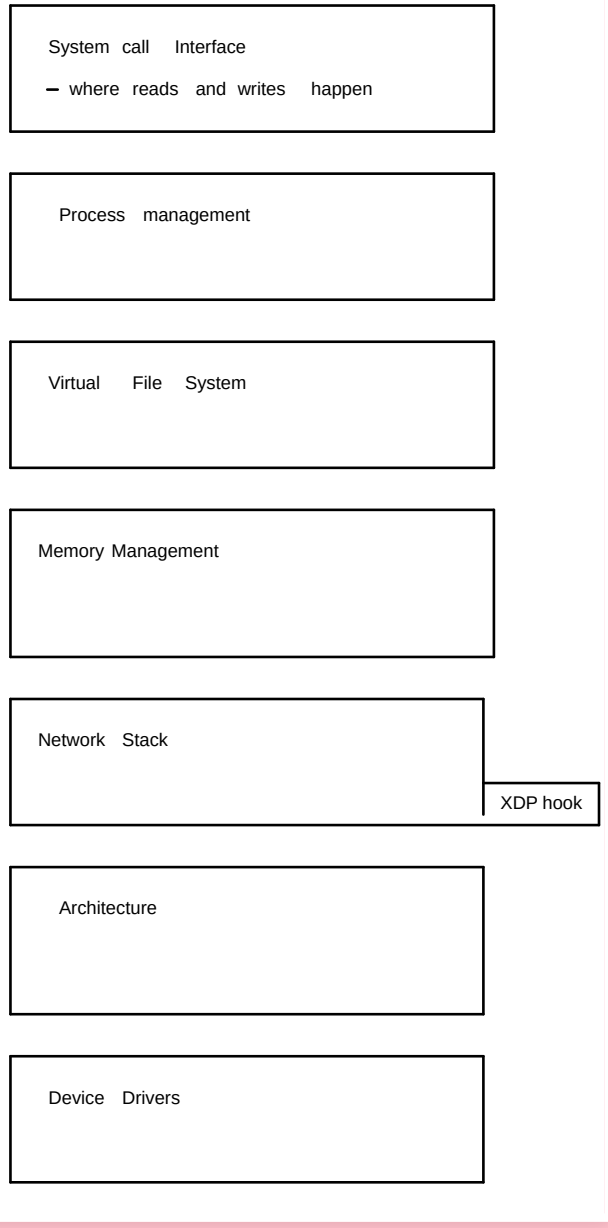
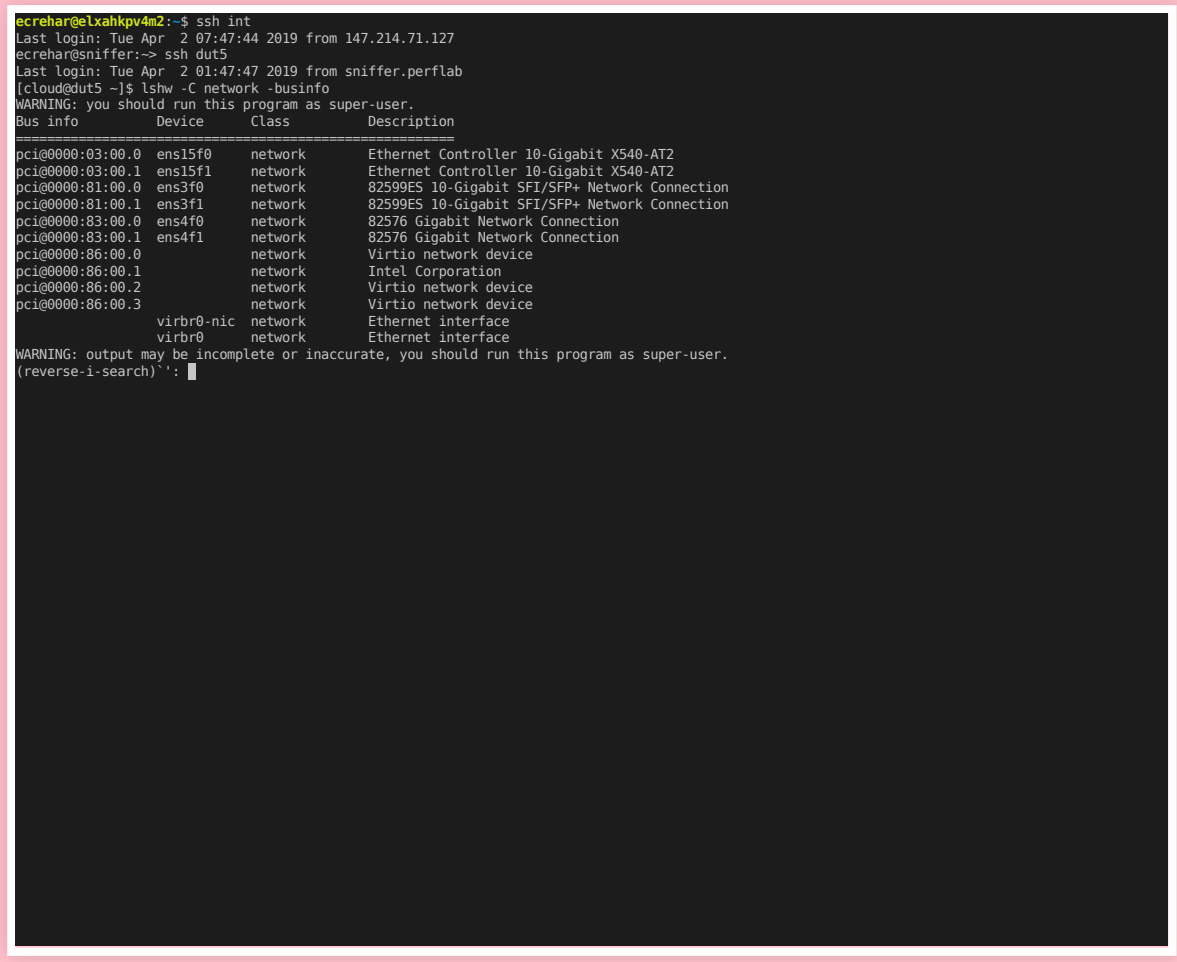

System call Interface
– where reads and writes happen
Process management
Virtual File System
Memory Management
Network Stack
XDP hook
Architecture
Device Drivers

To DELETE

PCI bifurcation

To DELETE


ecrehar@elxahkpv4m2:~$ ssh int
Last login: Tue Apr 2 07:47:44 2019 from 147.214.71.127
ecrehar@sniffer:~> ssh dut5
Last login: Tue Apr 2 01:47:47 2019 from sniffer.perflab
[cloud@dut5 ~]$ lshw -C network -businfo
WARNING: you should run this program as super-user.
Bus info Device Class Description
pci@0000:03:00.0 ens15f0 network Ethernet Controller 10-Gigabit X540-AT2
pci@0000:03:00.1 ens15f1 network Ethernet Controller 10-Gigabit X540-AT2
pci@0000:81:00.0 ens3f0 network 82599ES 10-Gigabit SFI/SFP+ Network Connection
pci@0000:81:00.1 ens3f1 network 82599ES 10-Gigabit SFI/SFP+ Network Connection
pci@0000:83:00.0 ens4f0 network 82576 Gigabit Network Connection
pci@0000:83:00.1 ens4f1 network 82576 Gigabit Network Connection
pci@0000:86:00.0 network Virtio network device
pci@0000:86:00.1 network Intel Corporation
pci@0000:86:00.2 network Virtio network device
pci@0000:86:00.3 network Virtio network device
virbr0-nic network Ethernet interface
virbr0 network Ethernet interface
WARNING: output may be incomplete or inaccurate, you should run this program as super-user.
(reverse-i-search)``: