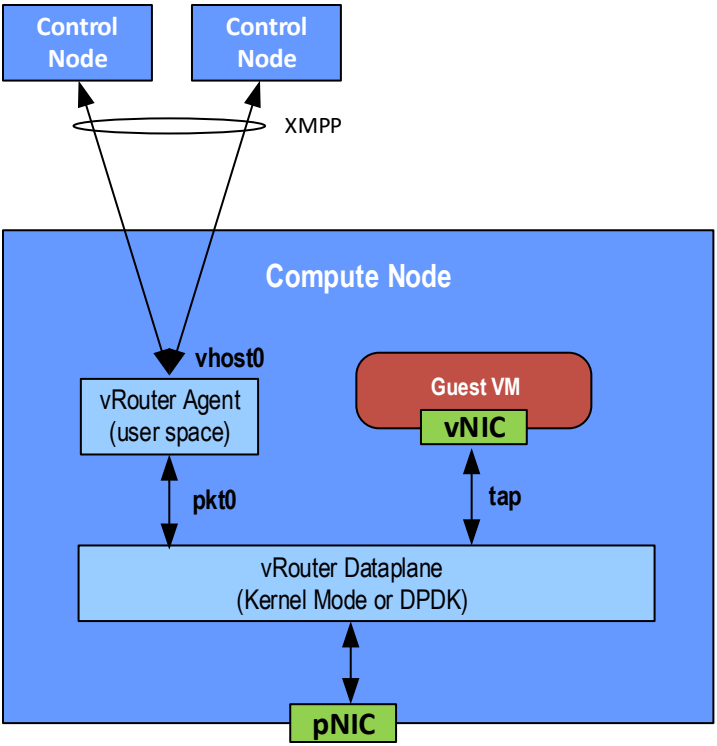
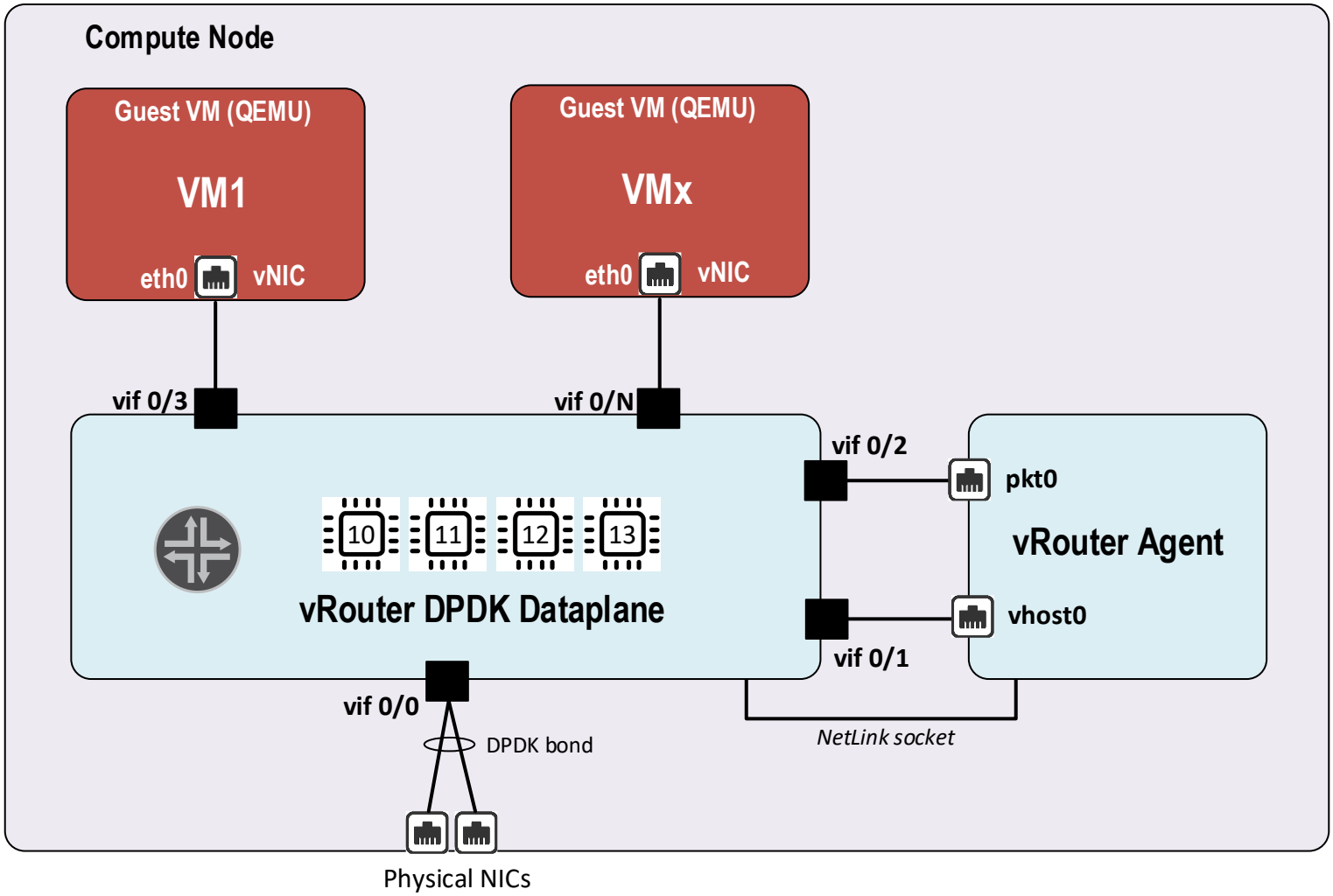
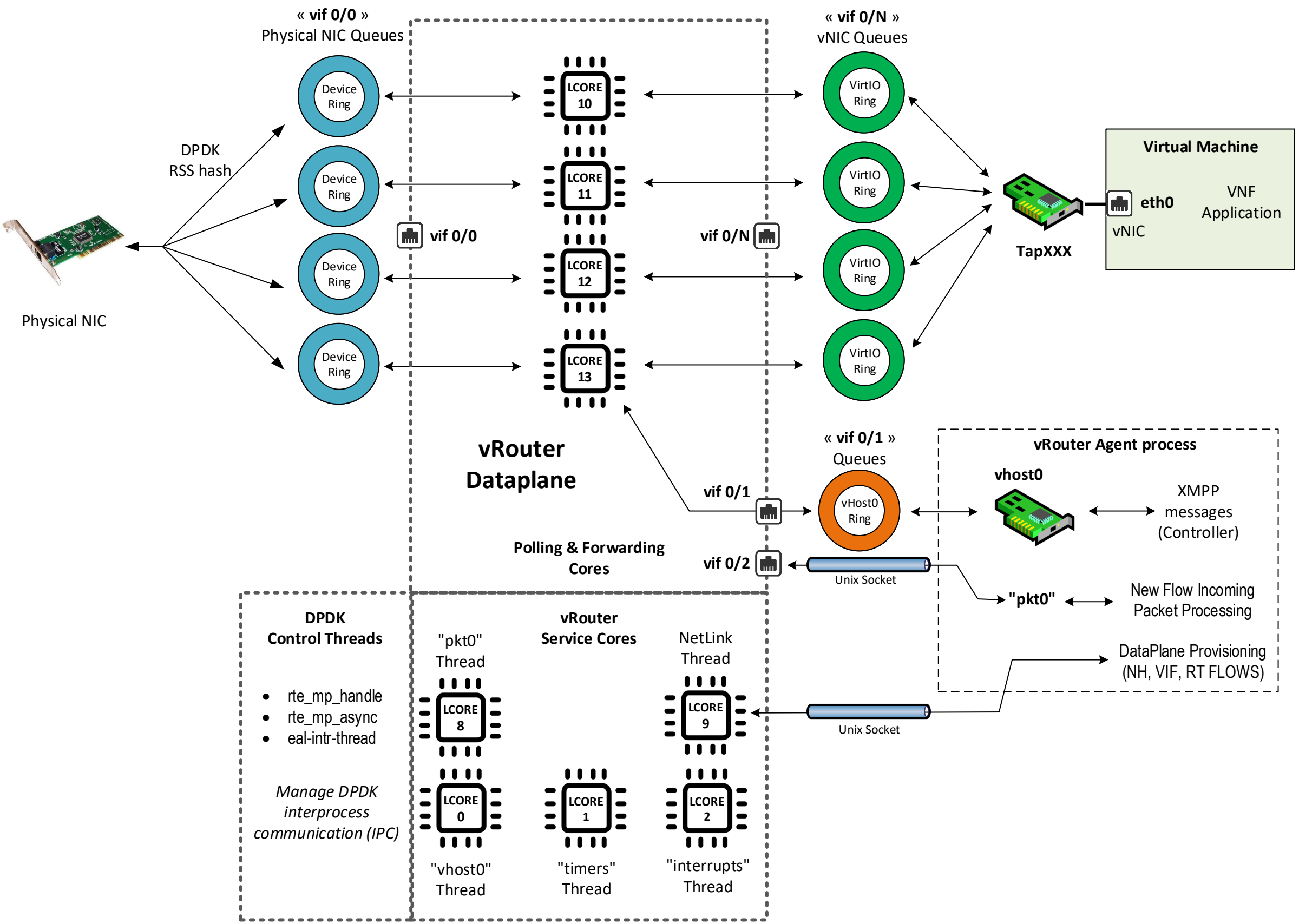


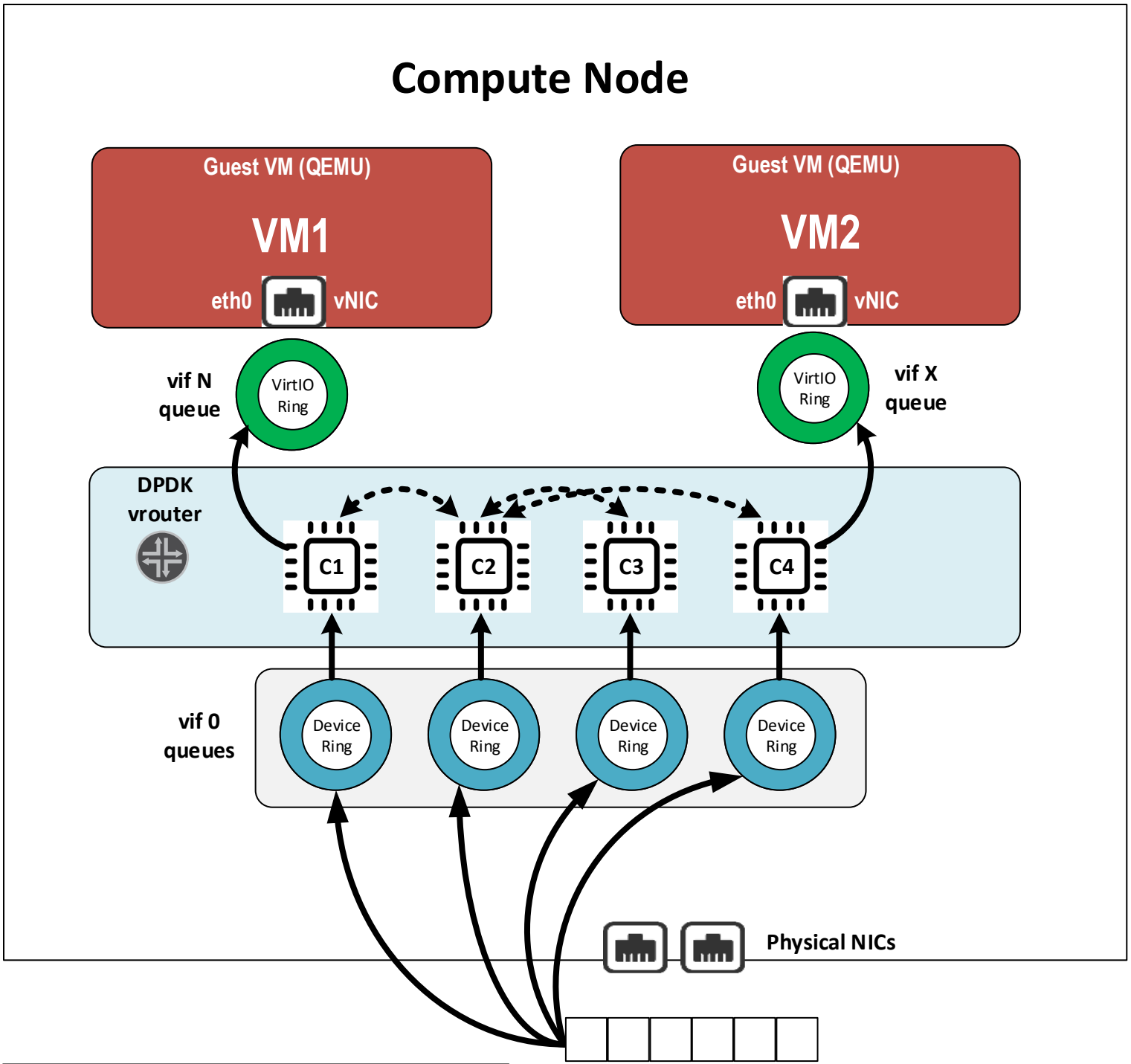
Title: vrouter overview	
version: 1.0	date: 25/03/2020



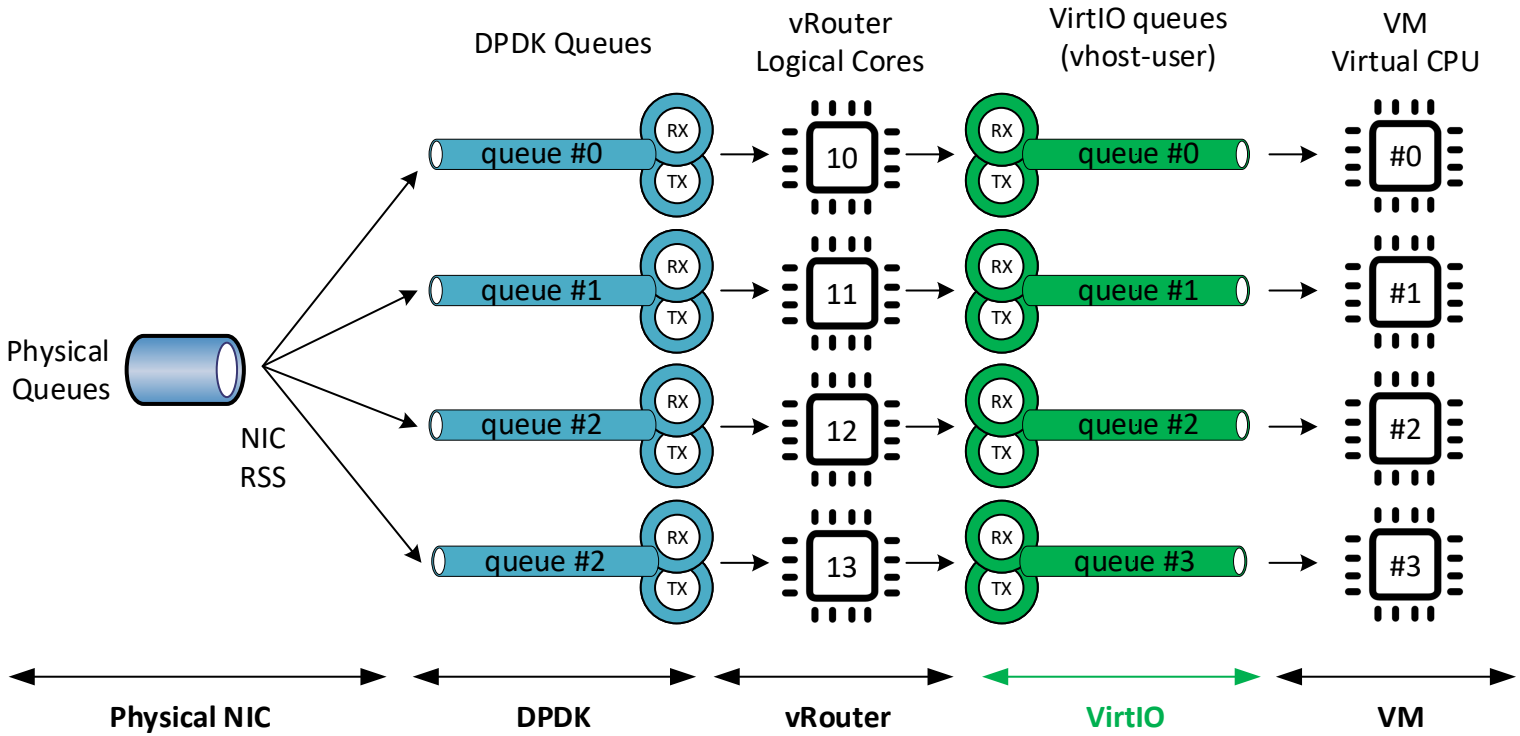
Title: vRouter interfaces overview	
version: 1.0	date: 27/03/2020



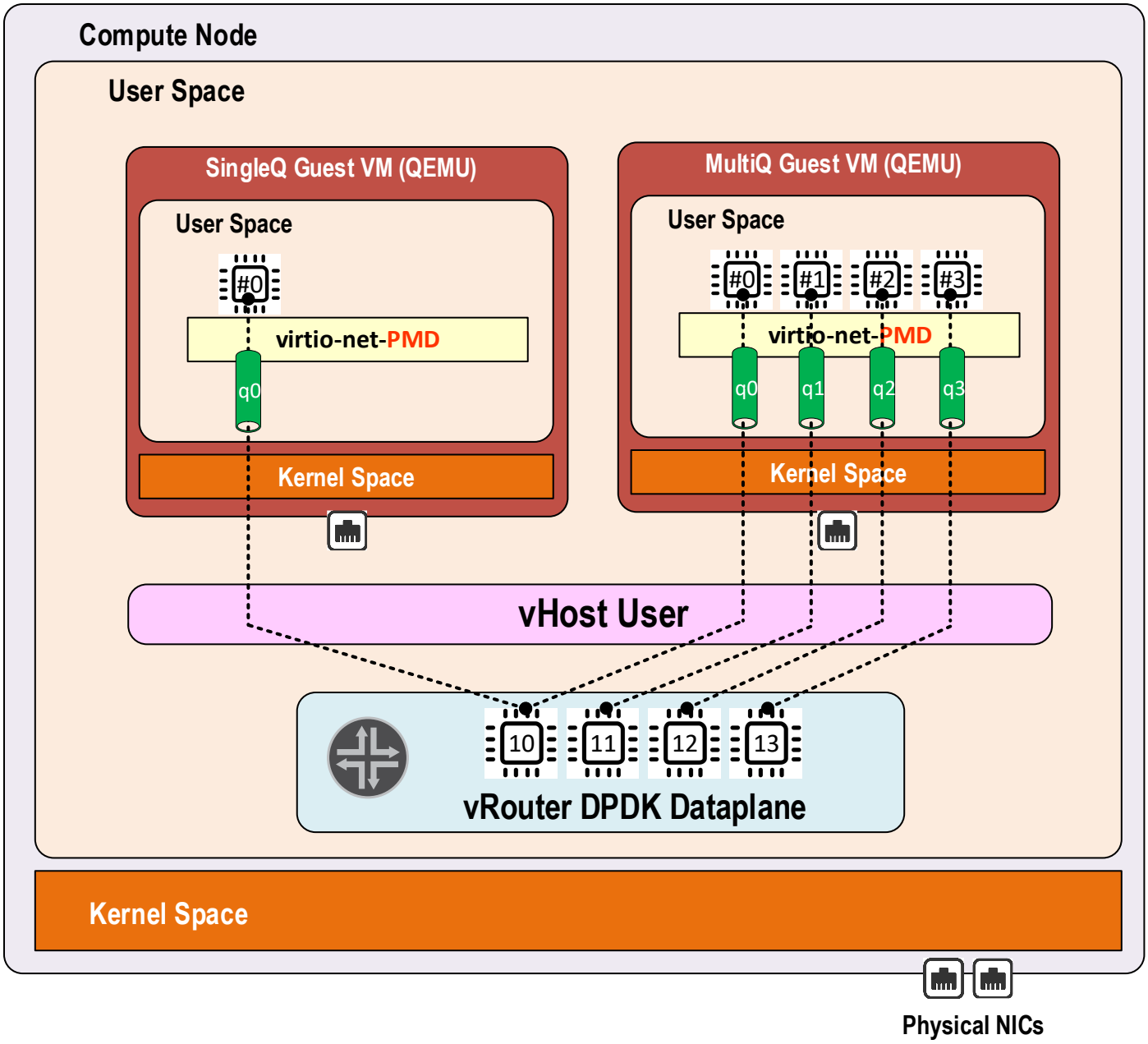
Title: vRouter Internal Architecture	
version: 1.0	date: 27/03/2020



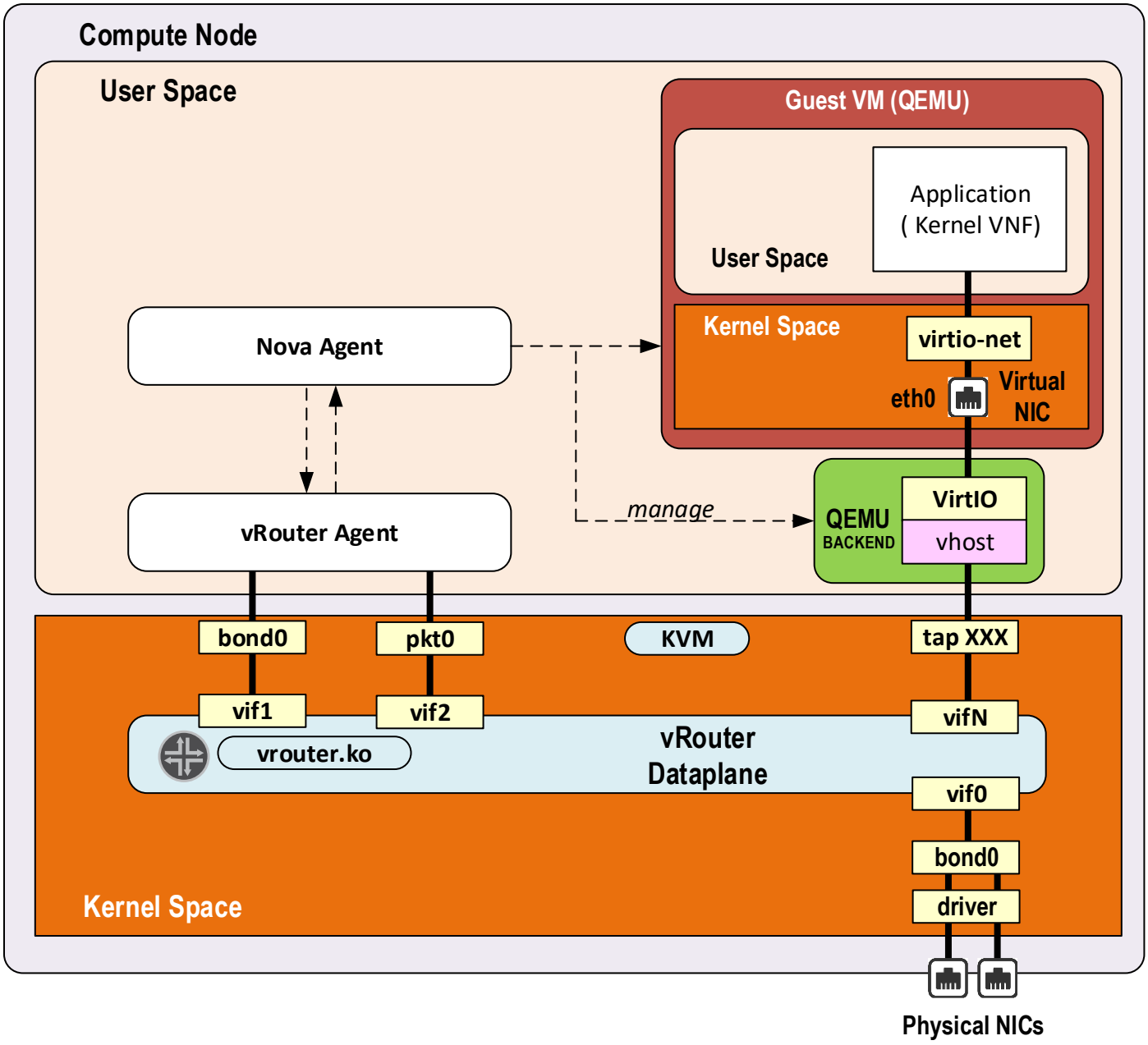
Title: DPDK Packet Processing Overview	
version: 1.0	date: 25/03/2020



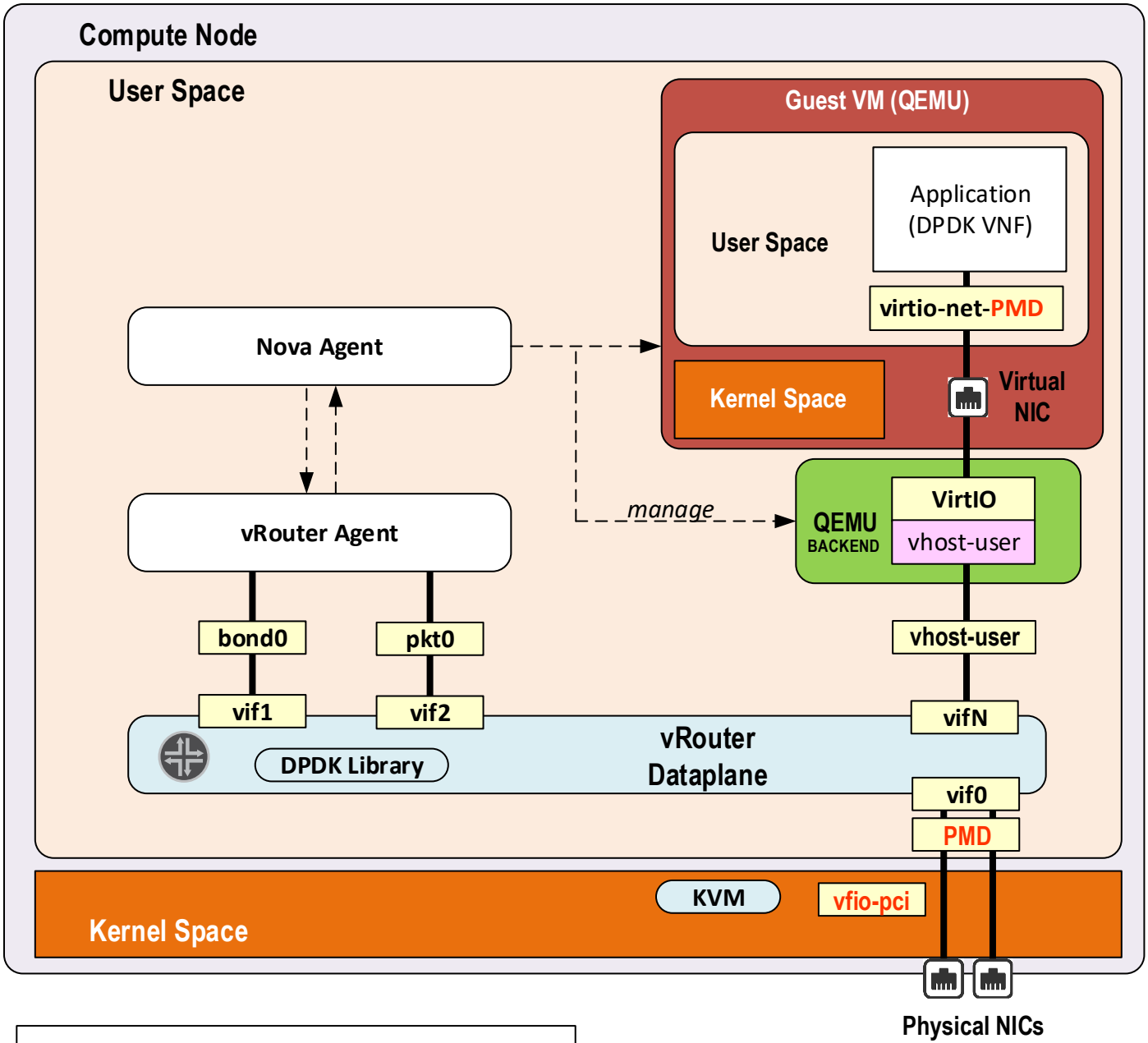
Title: DPDK End to End Packet Processing	
version: 1.0	date: 27/03/2020



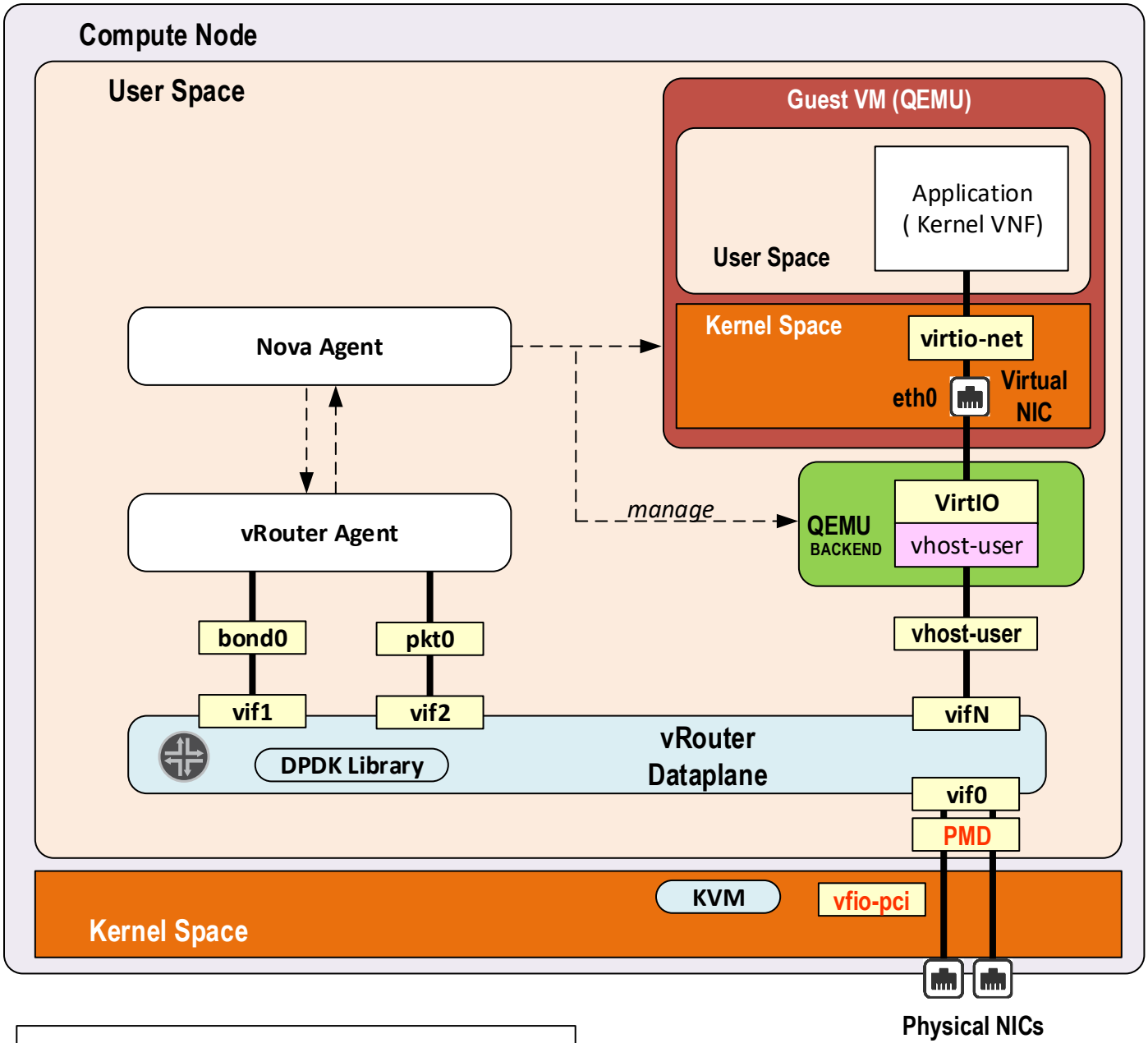
Title: SingleQ versus MultiQ VNF	
version: 1.0	date: 27/03/2020



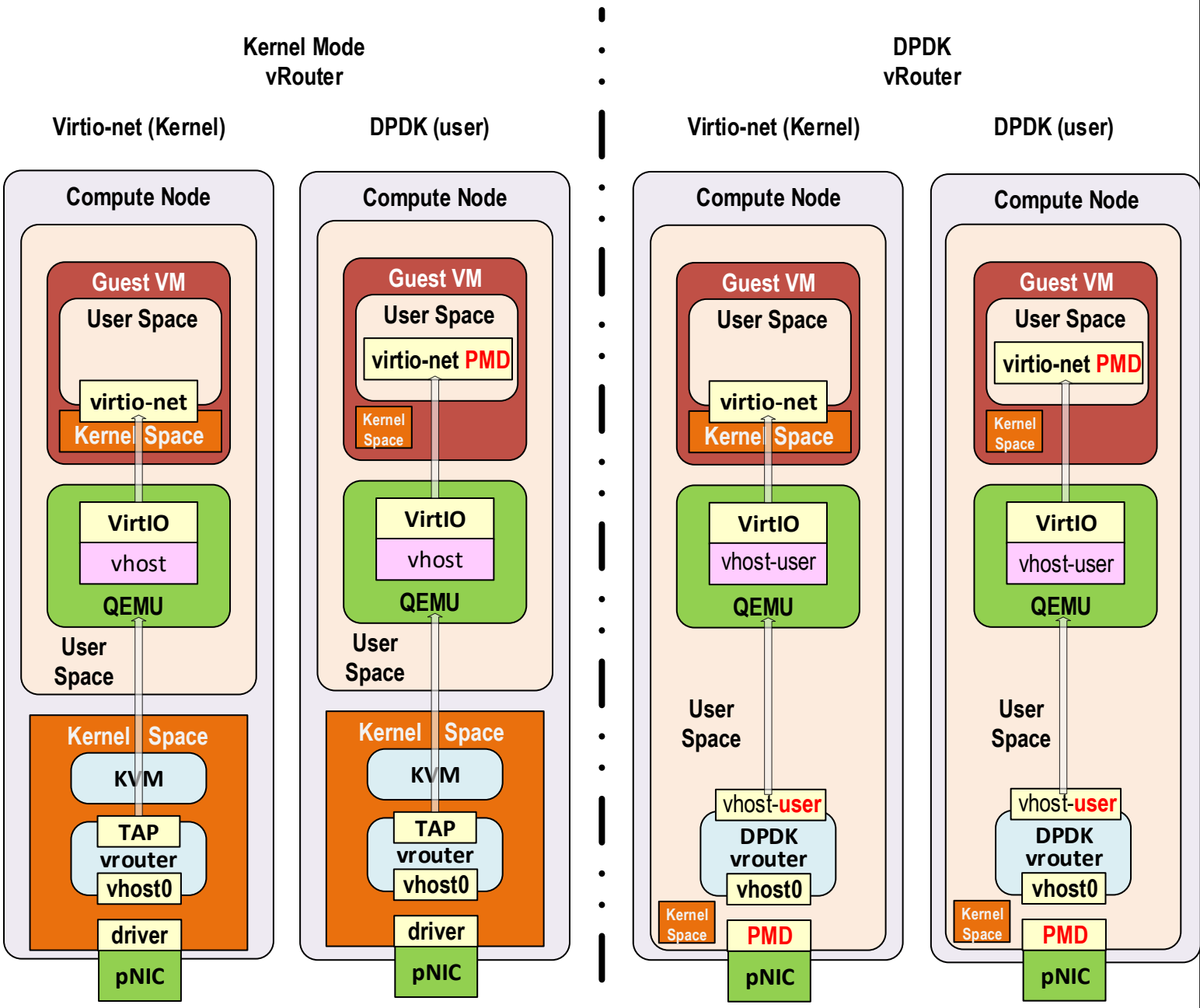
Title: Kernel vRouter details	
version: 1.0	date: 25/03/2020



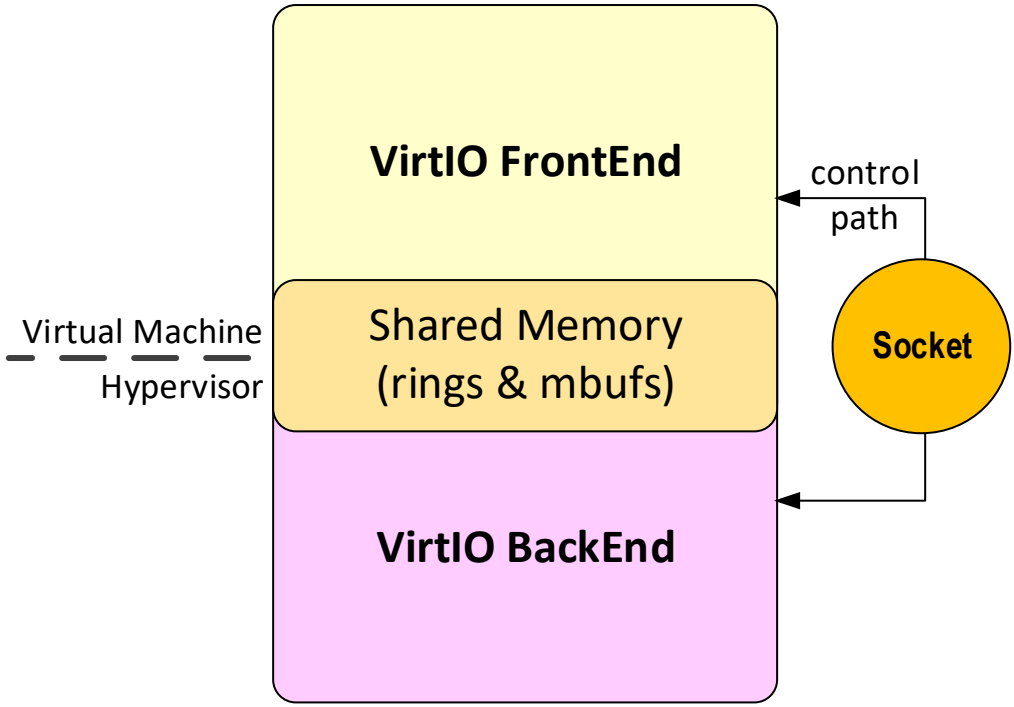
Title: DPDK vRouter details (DPDK App)	
version: 1.0	date: 25/03/2020



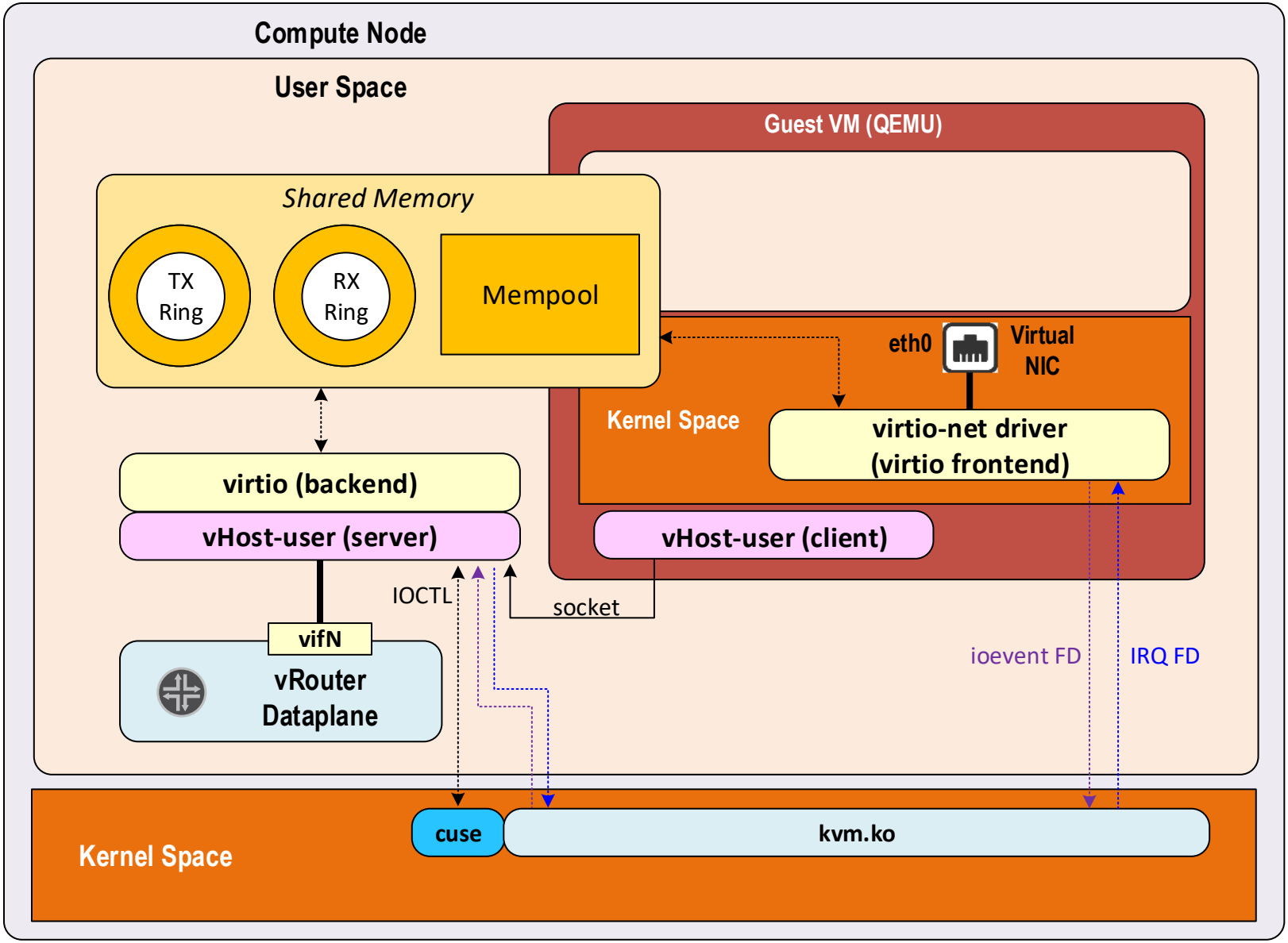
Title: DPDK vRouter details (Kernel App)	
version: 1.0	date: 25/03/2020



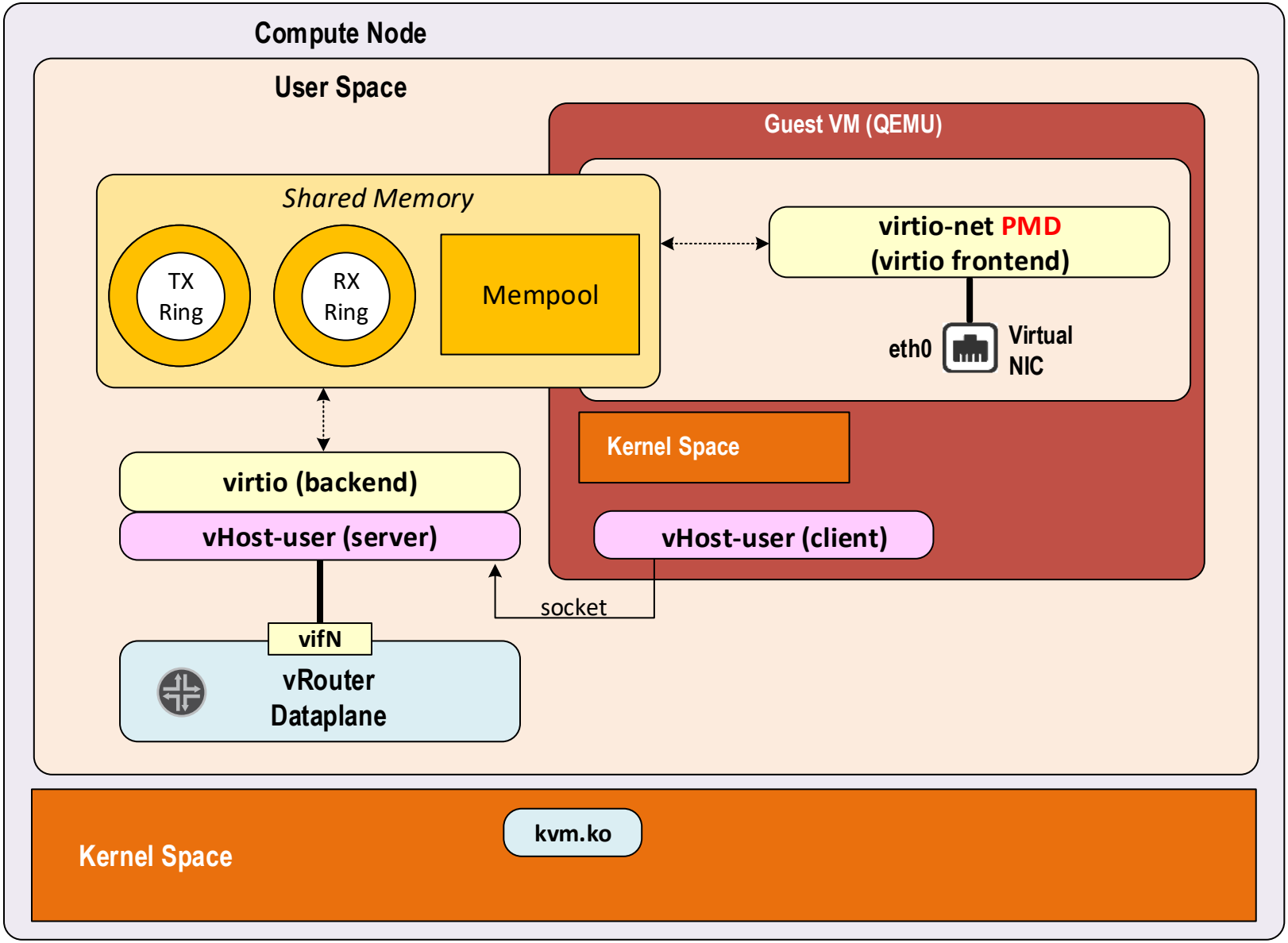
Title: Kernel vRouter All Cases	
version: 1.0	date: 25/03/2020



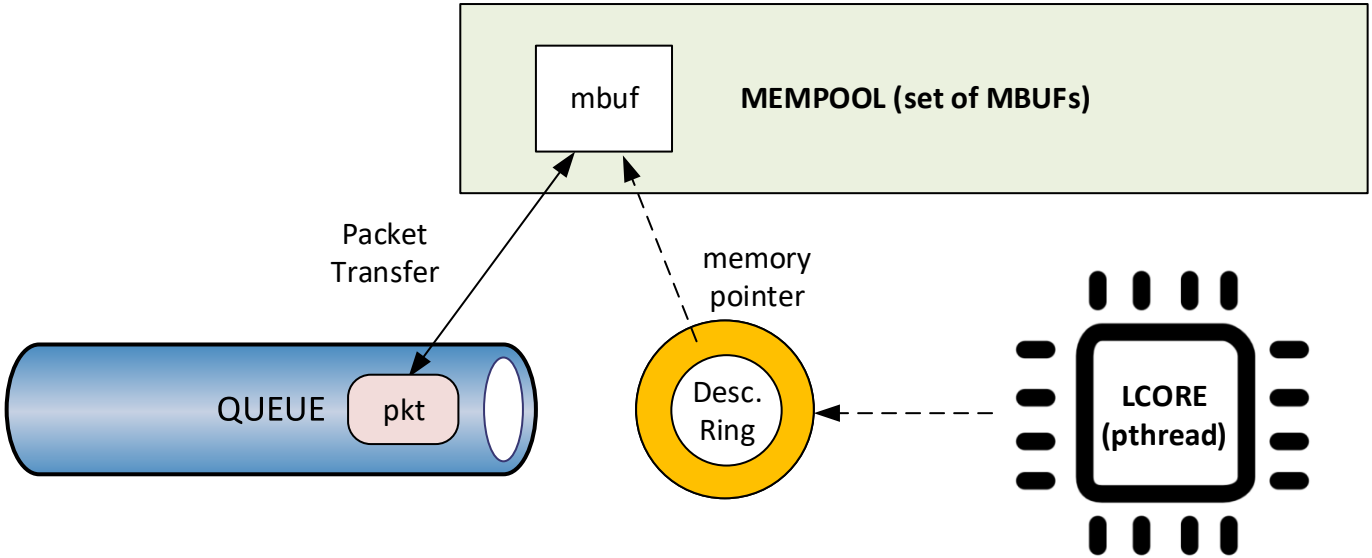
Title: VirtIO overview	
version: 1.0	date: 25/03/2020



VirtIO details (Kernel App)	
version: 1.0	date: 25/03/2020



VirtIO details (DPDK App)	
version: 1.0	date: 25/03/2020



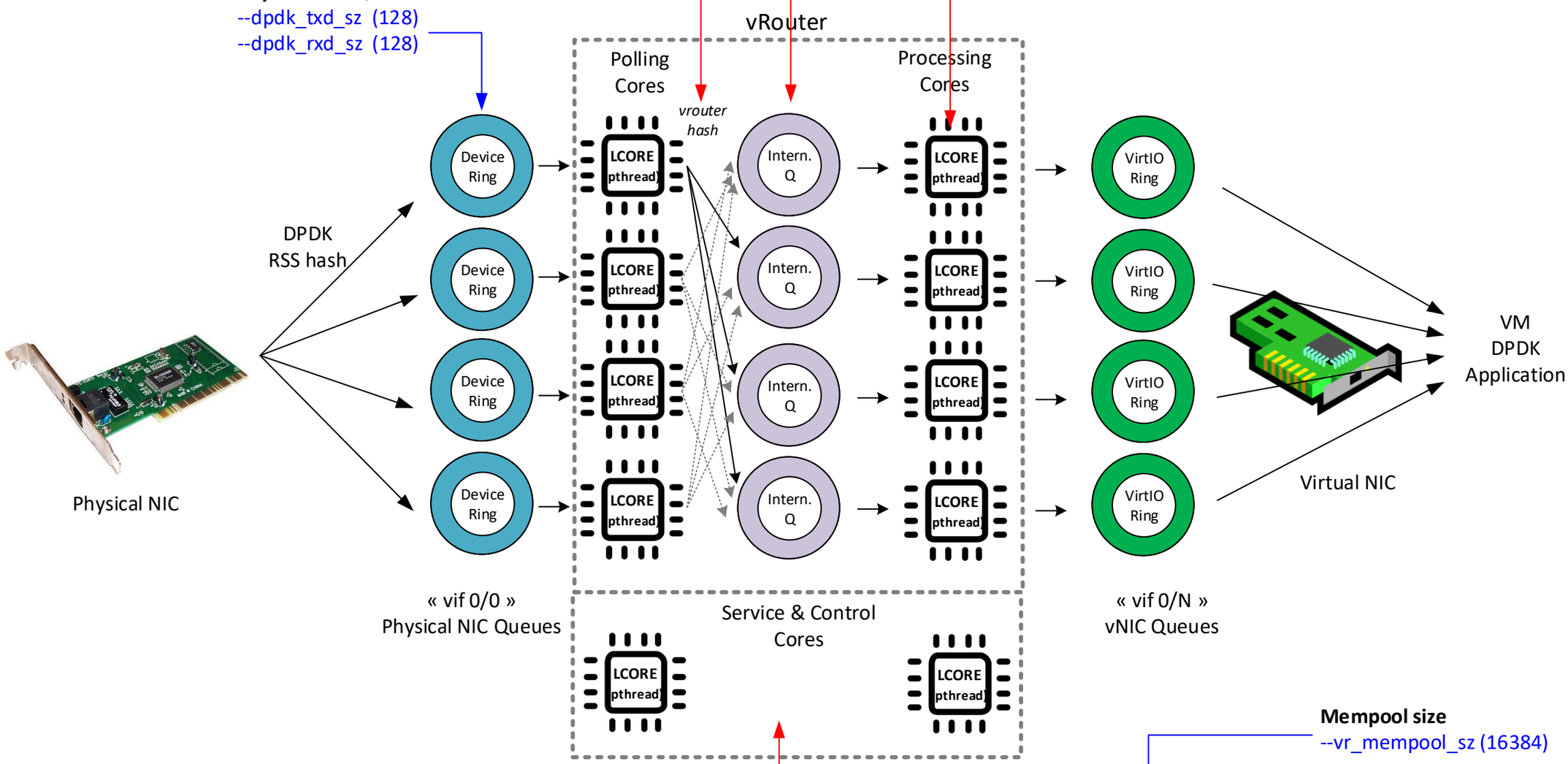
Title: DPDK High Level Components	
version: 1.0	date: 25/03/2020

vrouter Queues size:
--vr_dpdk_tx_ring_sz (1024)
--vr_dpdk_rx_ring_sz (1024)

Allow or not forwarding cores to be released:
--yield_option (1)

Allow or not core re-balancing (enable or not internal hasing):
TBD

Physical NIC Queues size:
--dpdk_txd_sz (128)
--dpdk_rxd_sz (128)

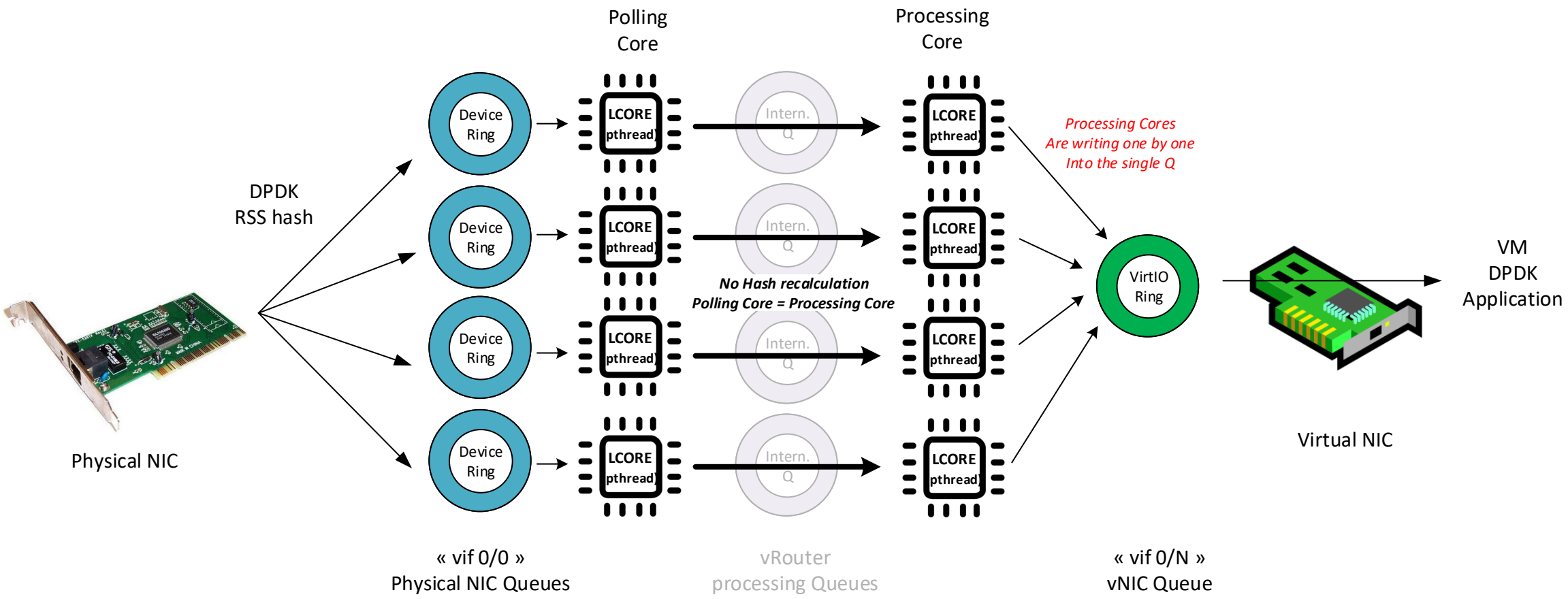


Service and Control cores pinning:
--service_core_mask
--dpdk_ctrl_thread_mask

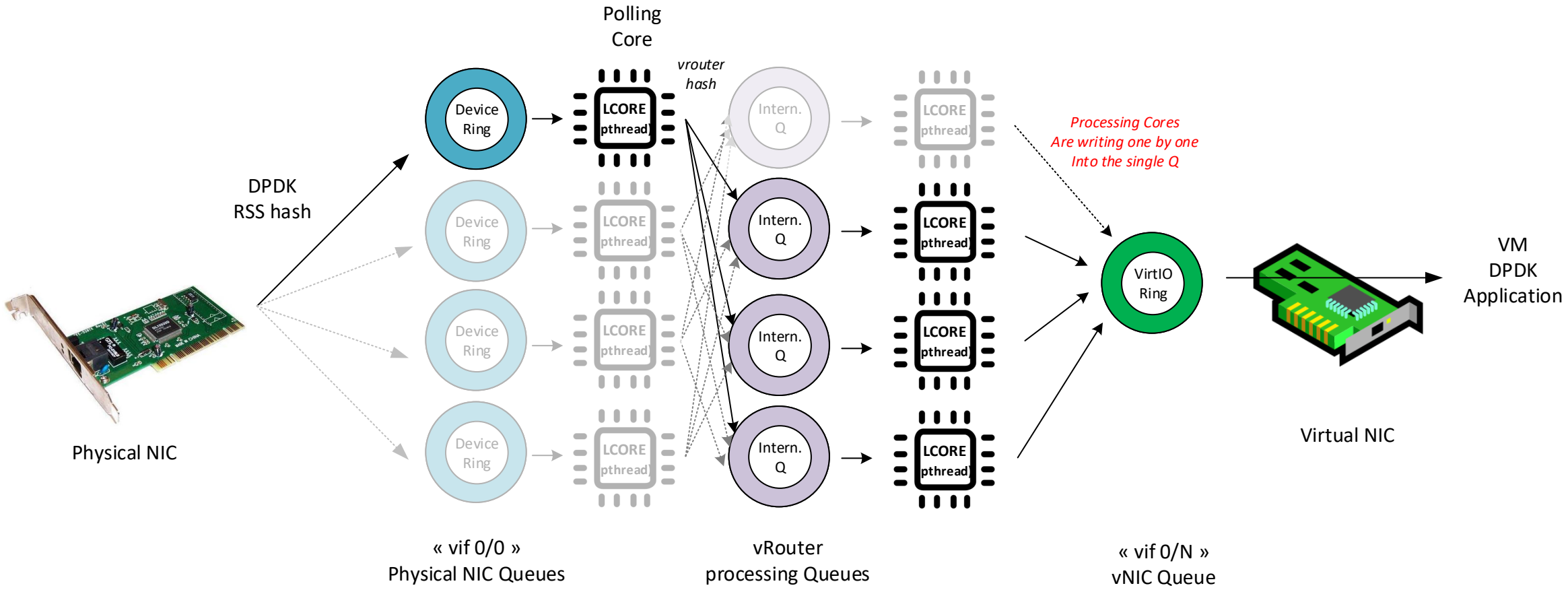
Mempool size
--vr_mempool_sz (16384)

MEMPOOL (DPDK rings memory)

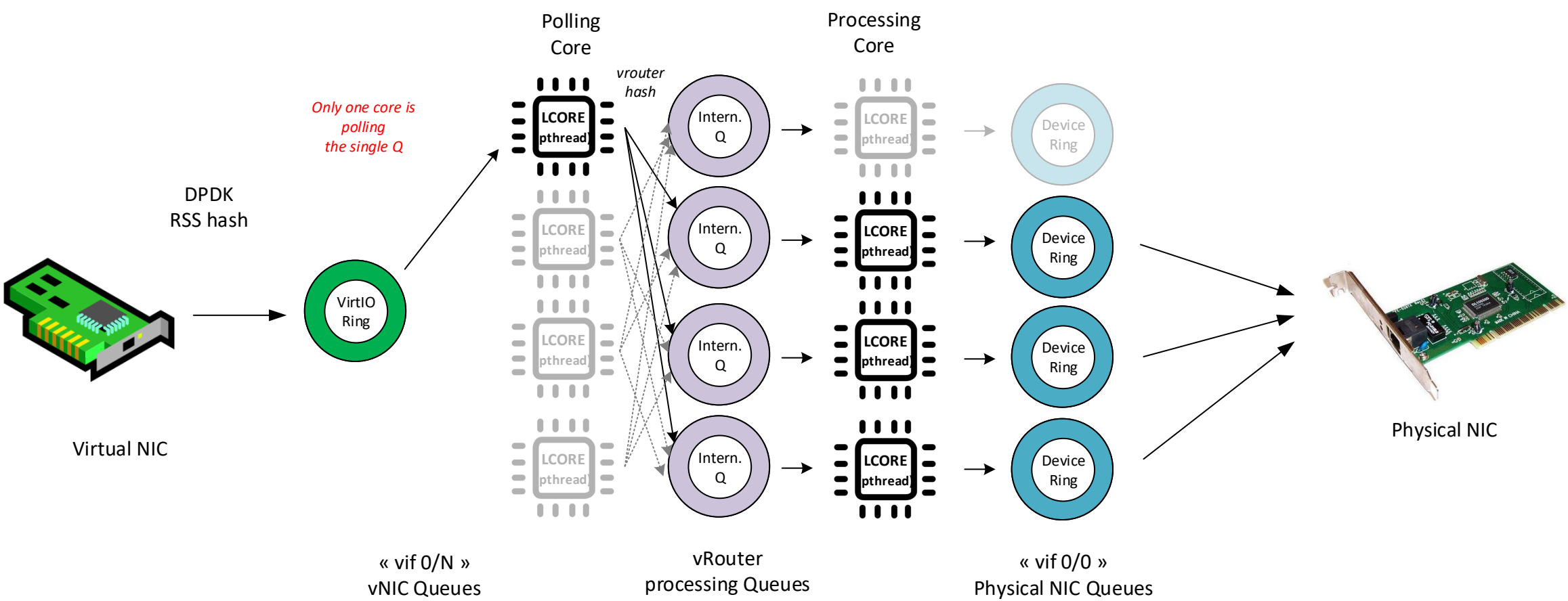
Title: vRouter Architecture	
version: 1.0	date: 25/03/2020



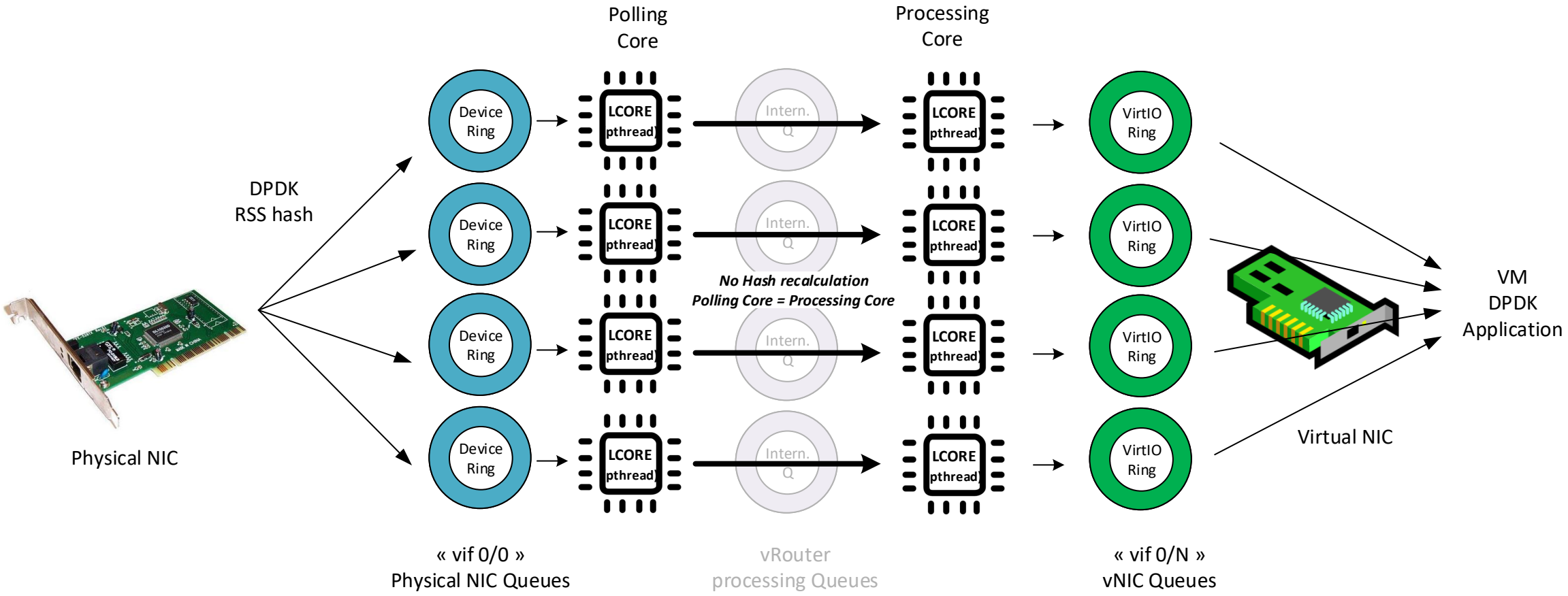
Title: UDP to SingleQ	
version: 1.0	date: 25/03/2020



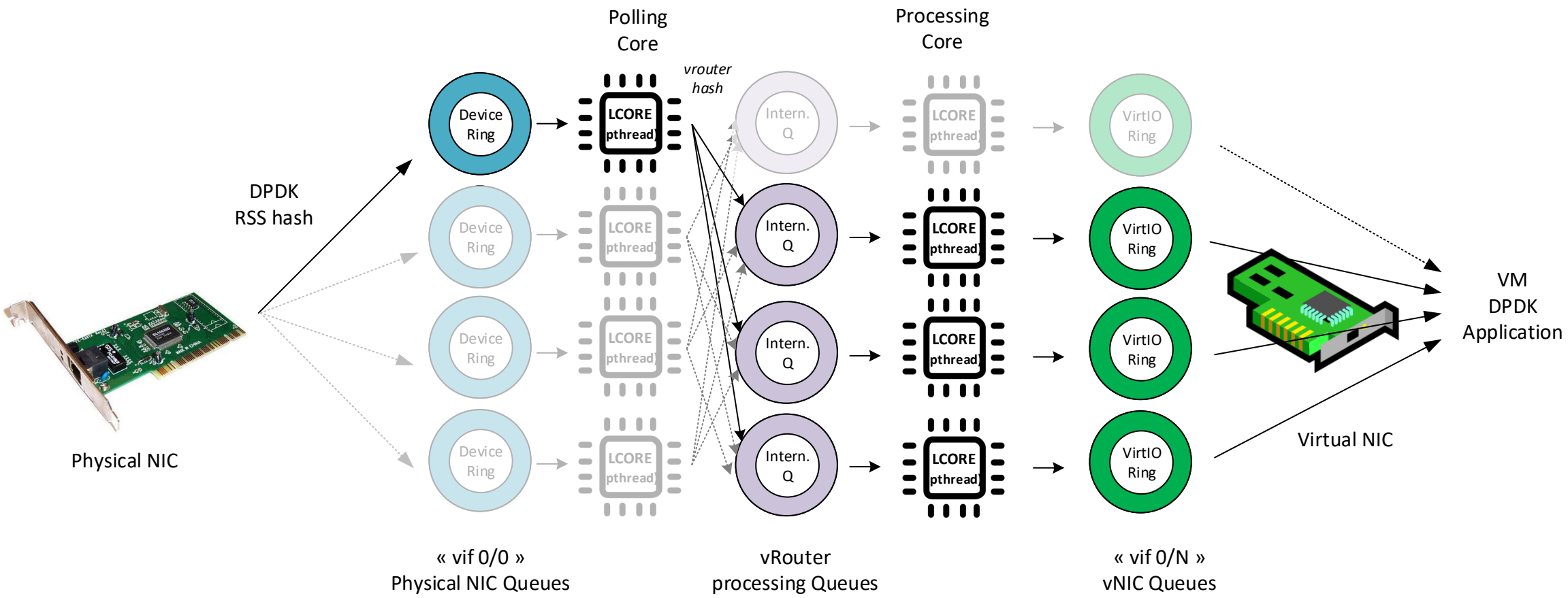
Title: GRE to SingleQ	
version: 1.0	date: 25/03/2020



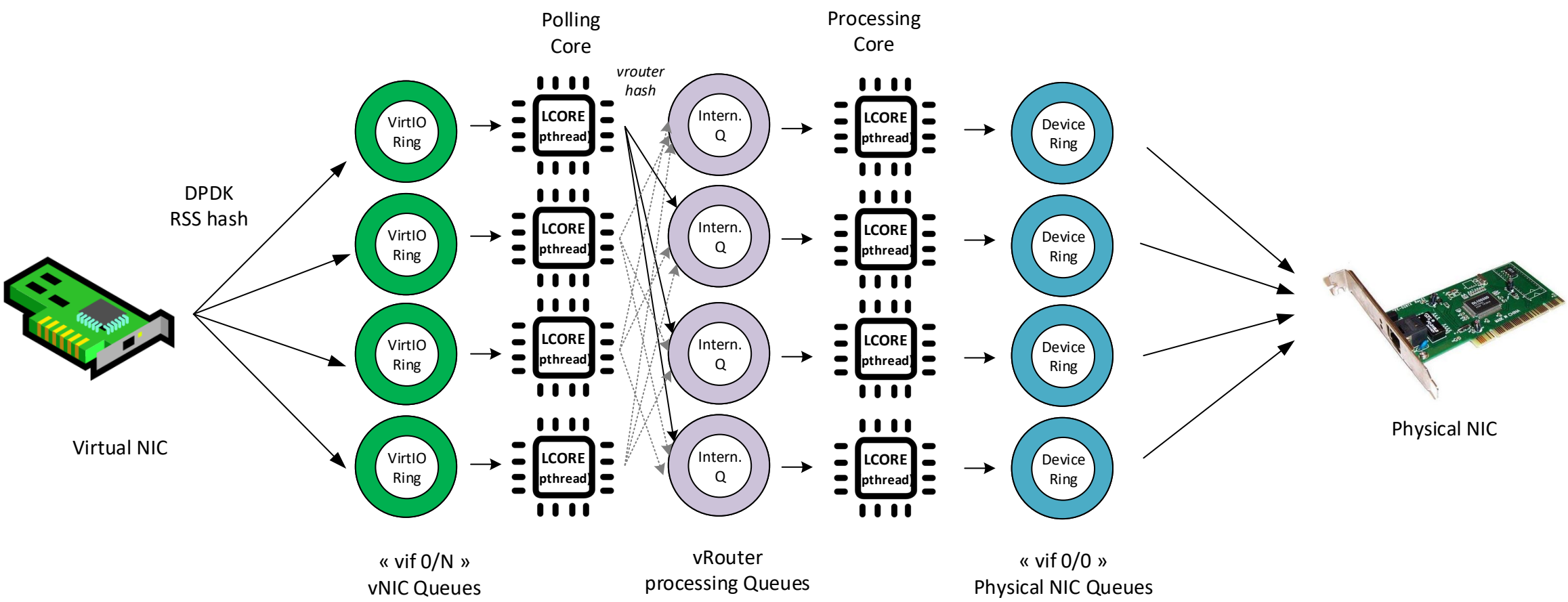
Title: SingleQ to Underlay	
version: 1.0	date: 25/03/2020



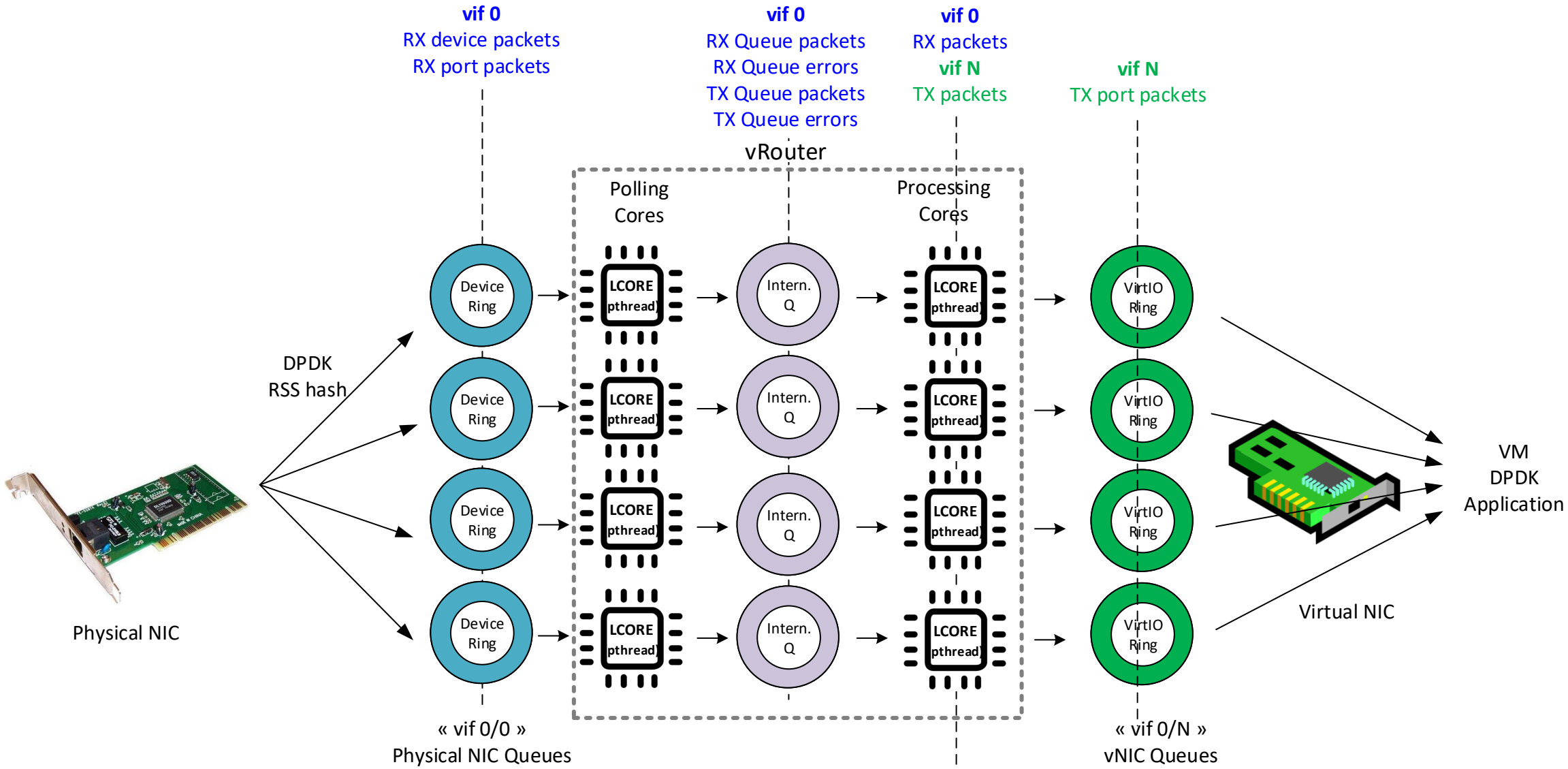
Title: UDP to MultiQ	
version: 1.0	date: 25/03/2020



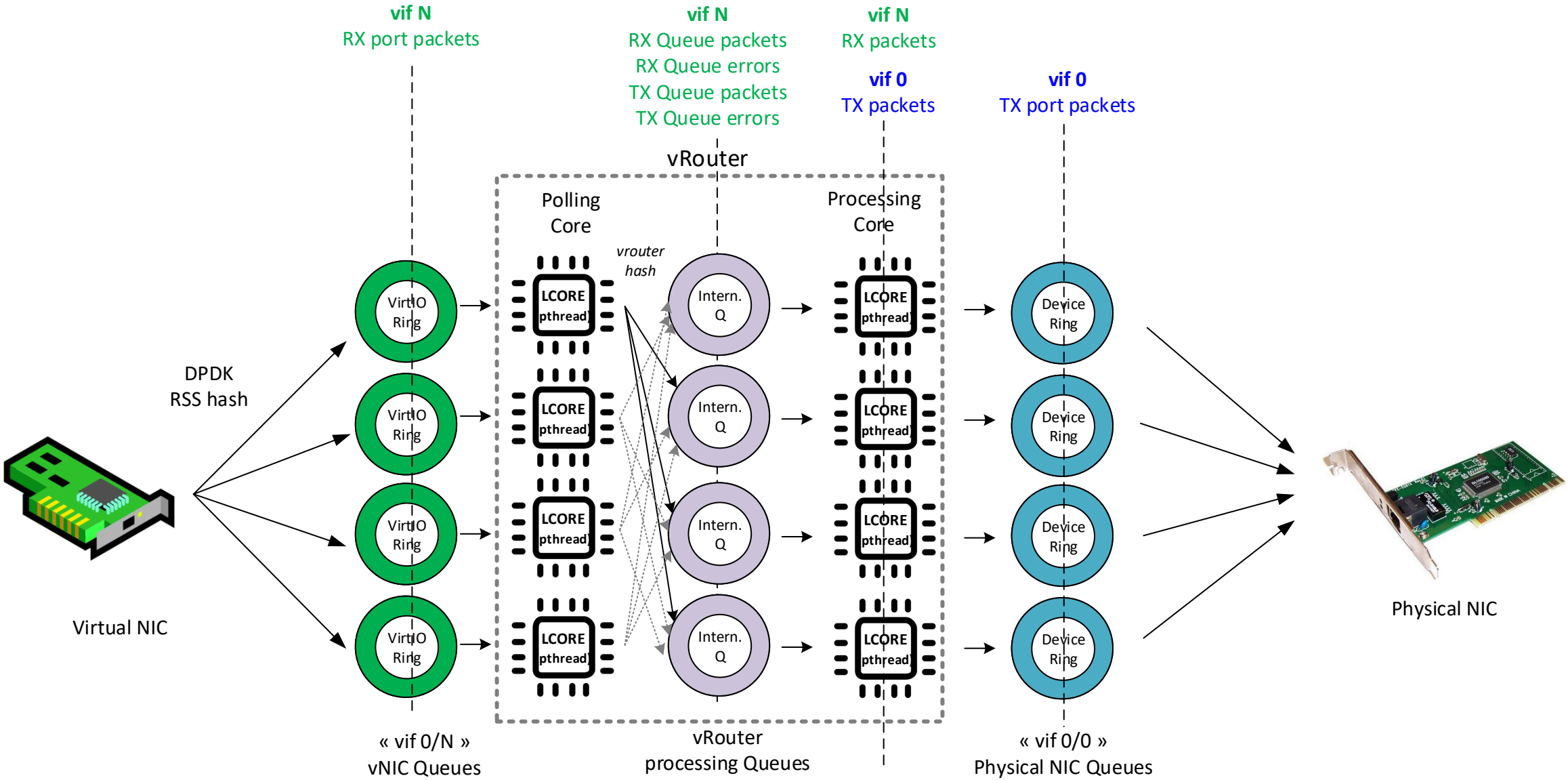
Title: GRE to MultiQ	
version: 1.0	date: 25/03/2020



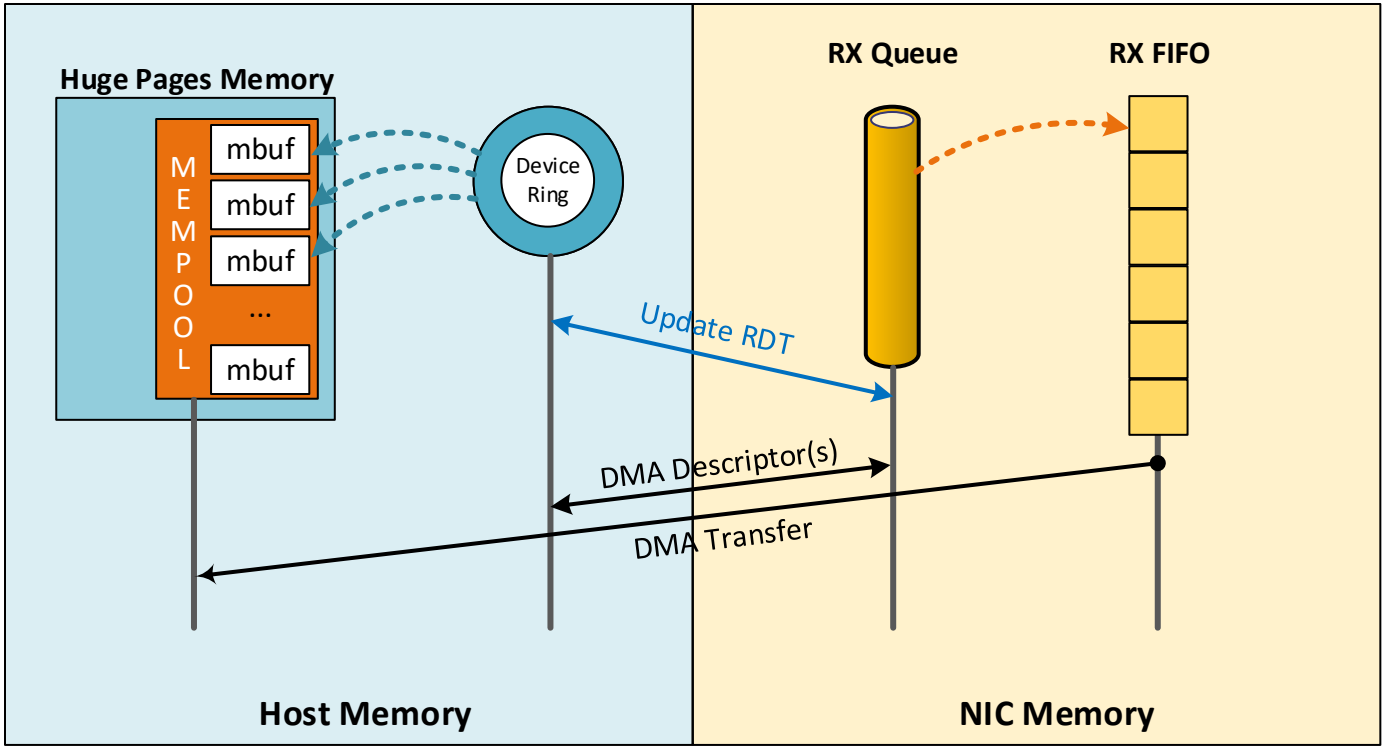
Title: MultiQ to Underlay	
version: 1.0	date: 25/03/2020



Title: vif counters (phys to virt)	
version: 1.0	date: 25/03/2020

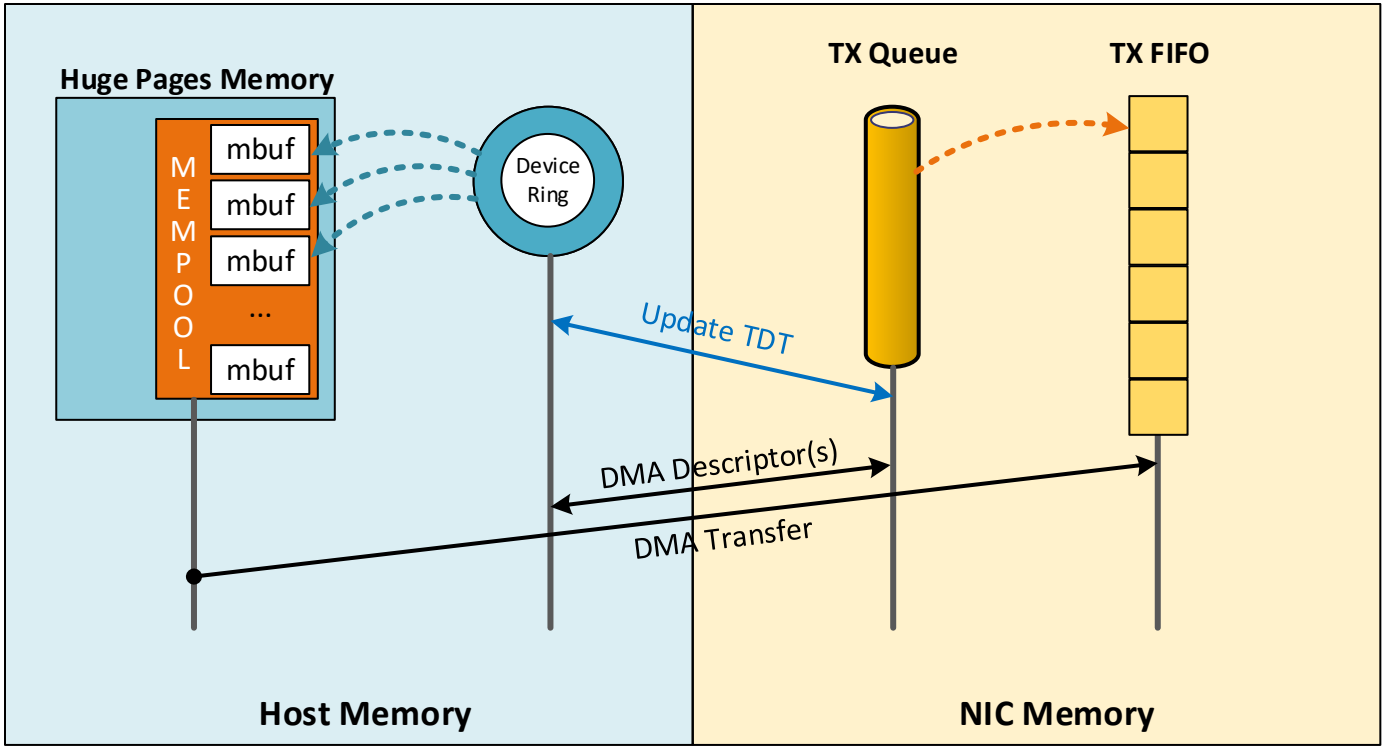


Title: vif counters (virt to phys)	
version: 1.0	date: 25/03/2020



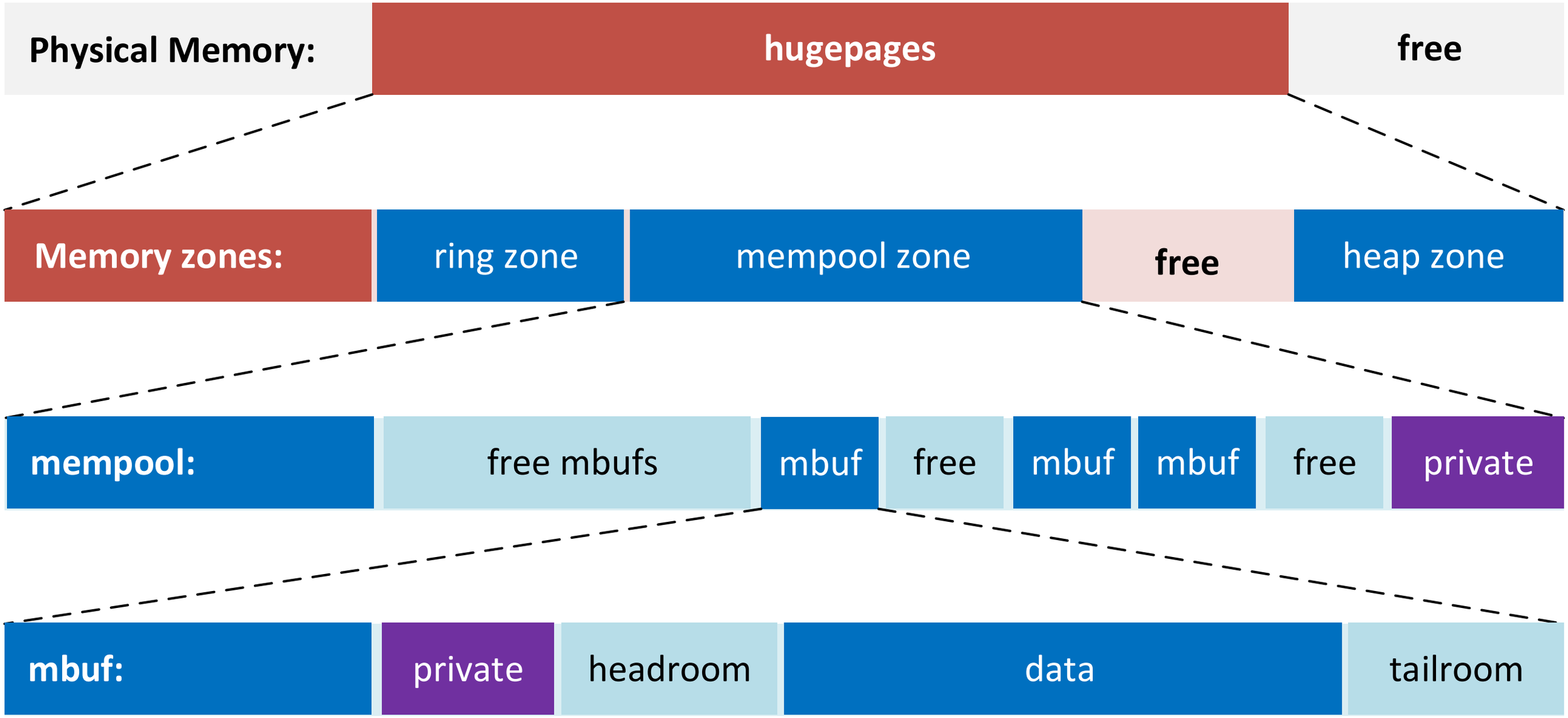
RDT: Receive Descriptor Tail

Title: pNIC incoming packet	
version: 1.0	date: 25/03/2020

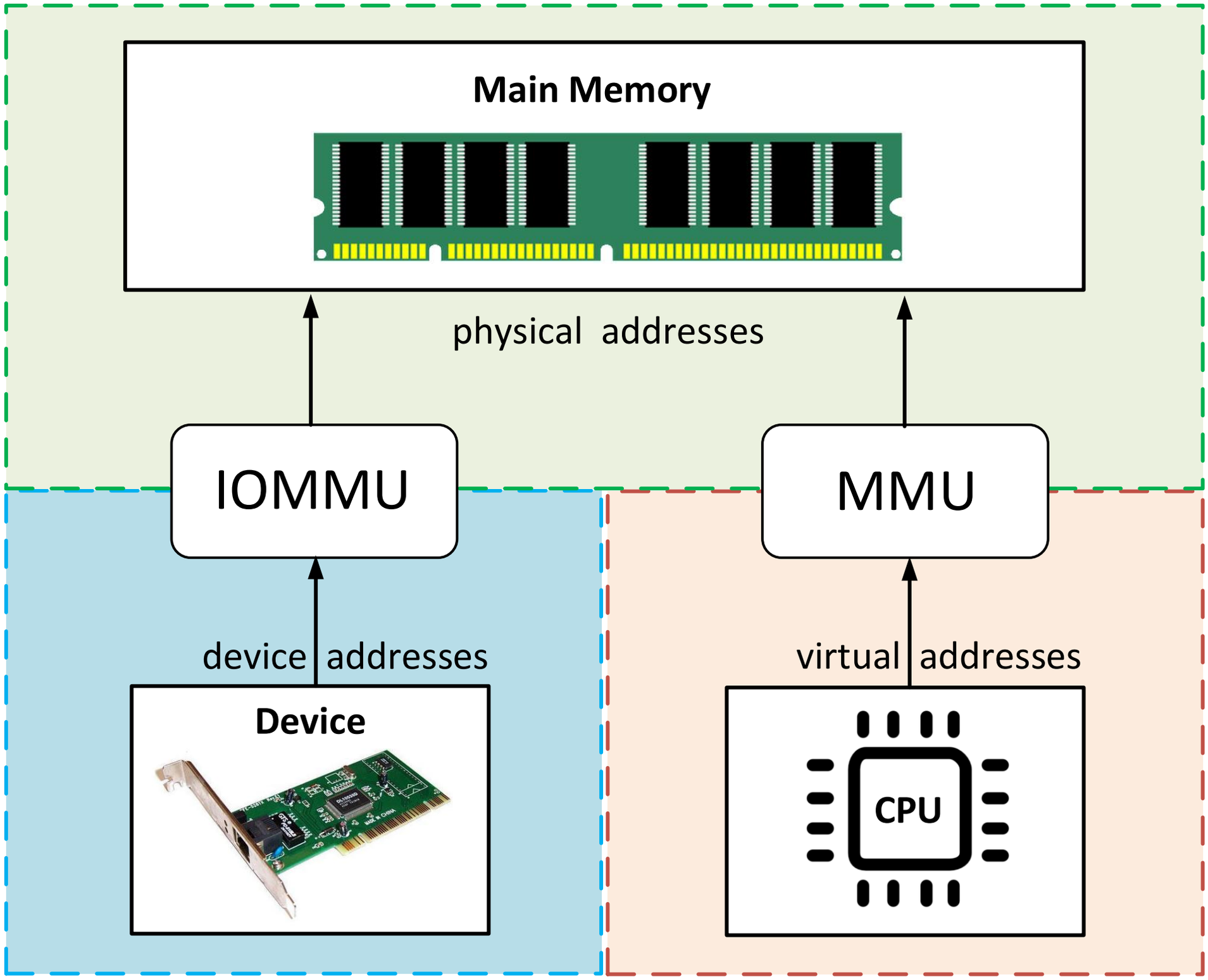


RDT: Transmit Descriptor Tail

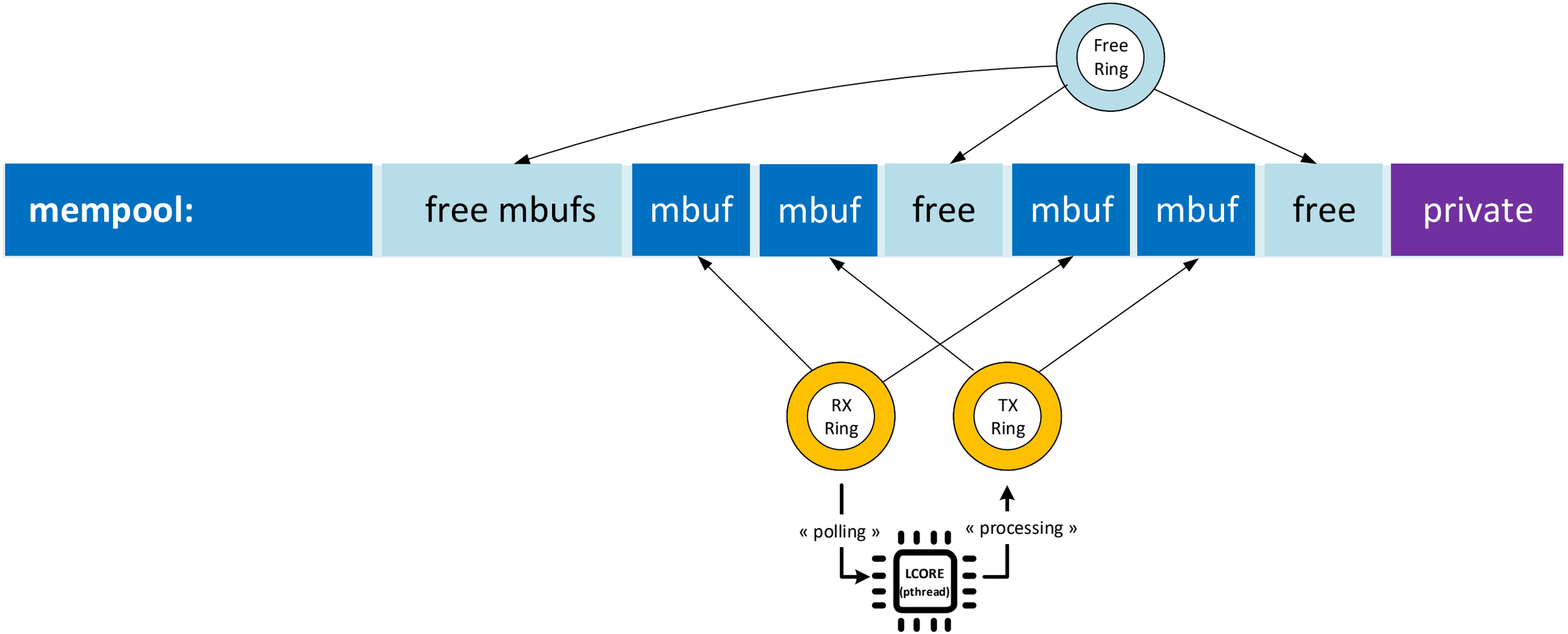
Title: pNIC outgoing packet	
version: 1.0	date: 25/03/2020



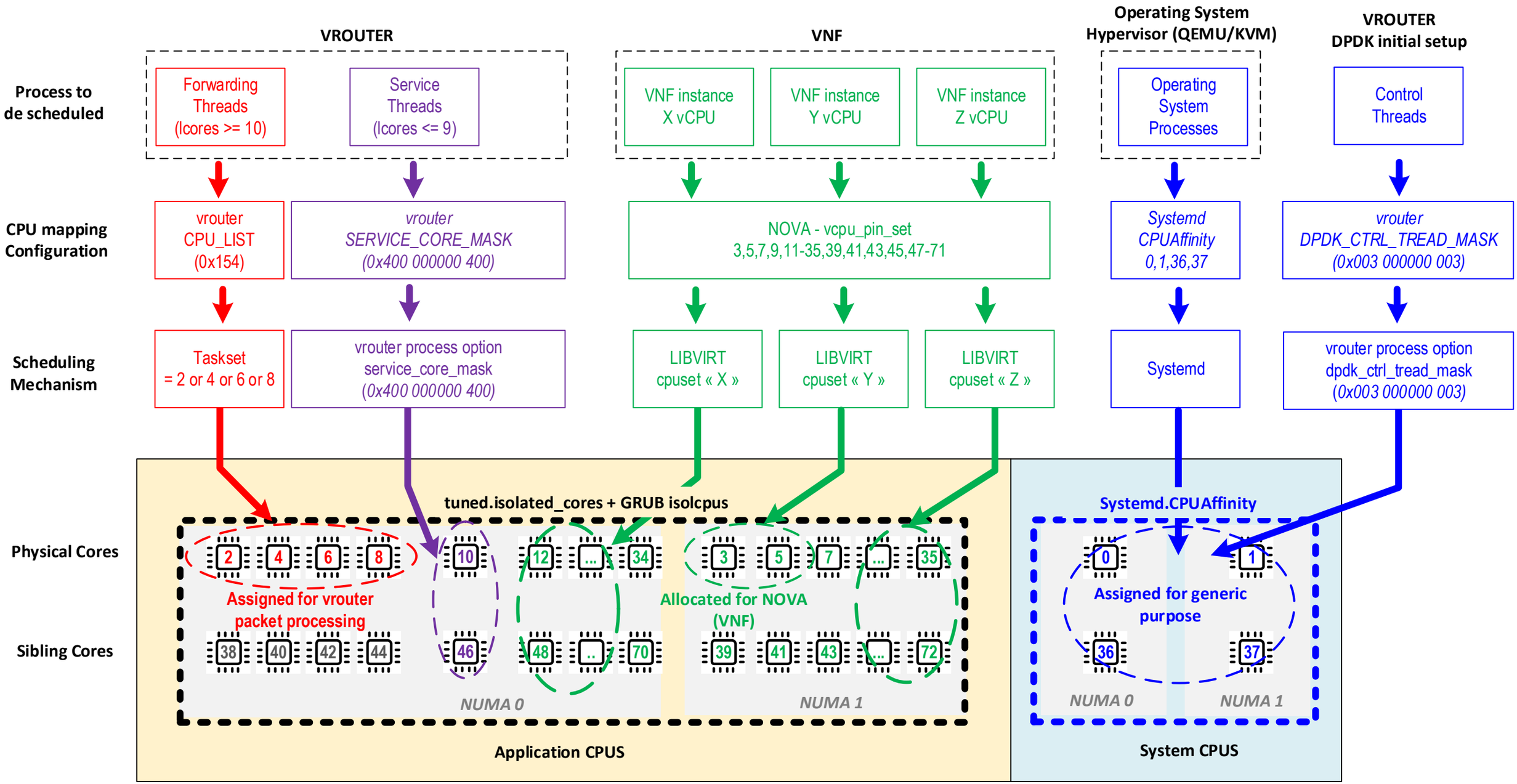
DPDK and Memory	
version: 1.0	date: 25/03/2020



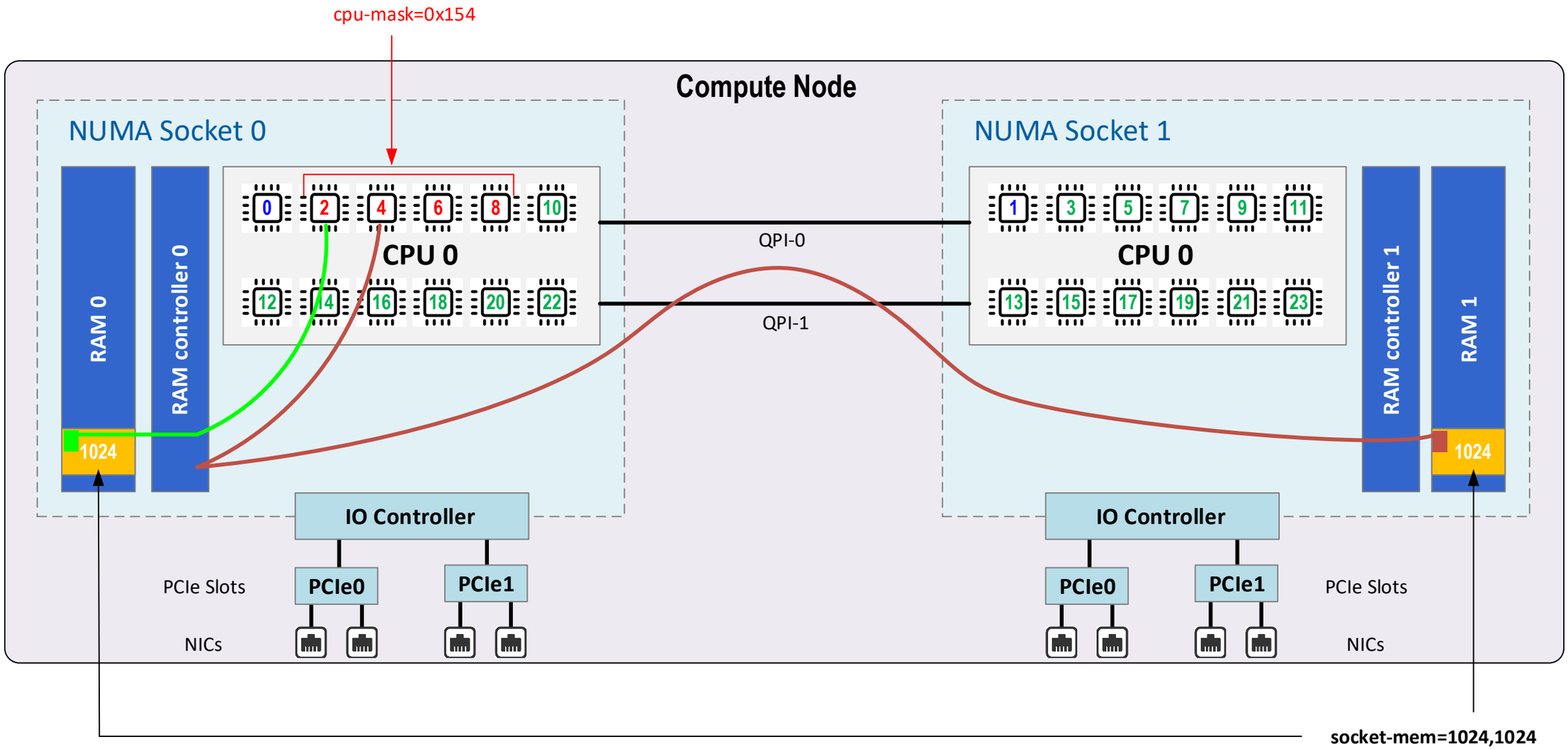
Memory Addressing	
version: 1.0	date: 27/03/2020



Packets Processing and Memory	
version: 1.0	date: 25/03/2020



Title: CPU Pinning	
version: 1.0	date: 25/03/2020



X vRouter DPDK PMD allocated CPUs

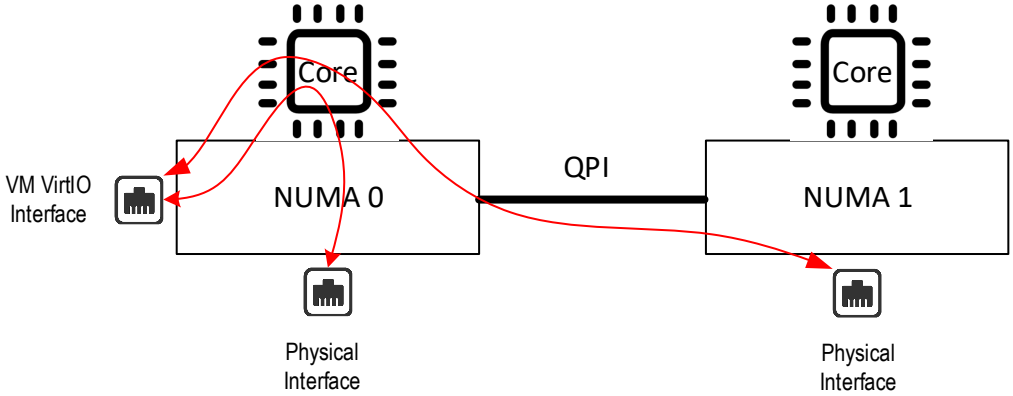
X VM allocated CPUs

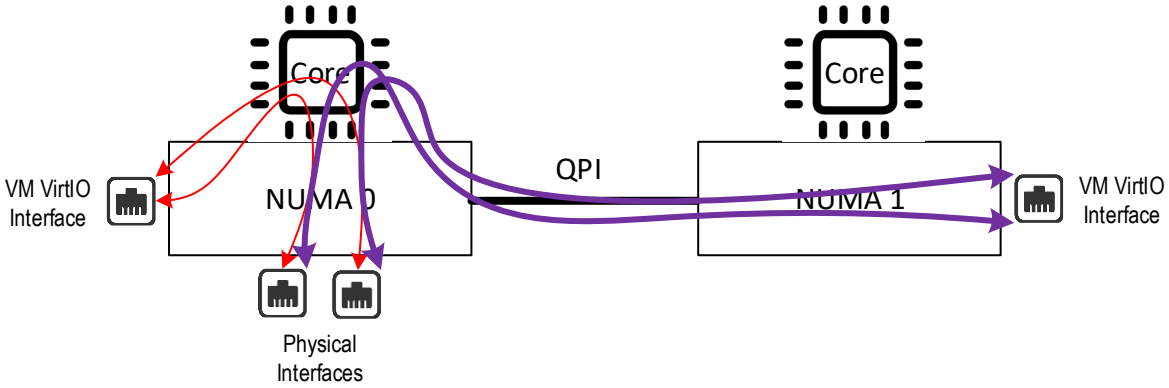
X Host OS allocated CPUs

vRouter memory access shortest path

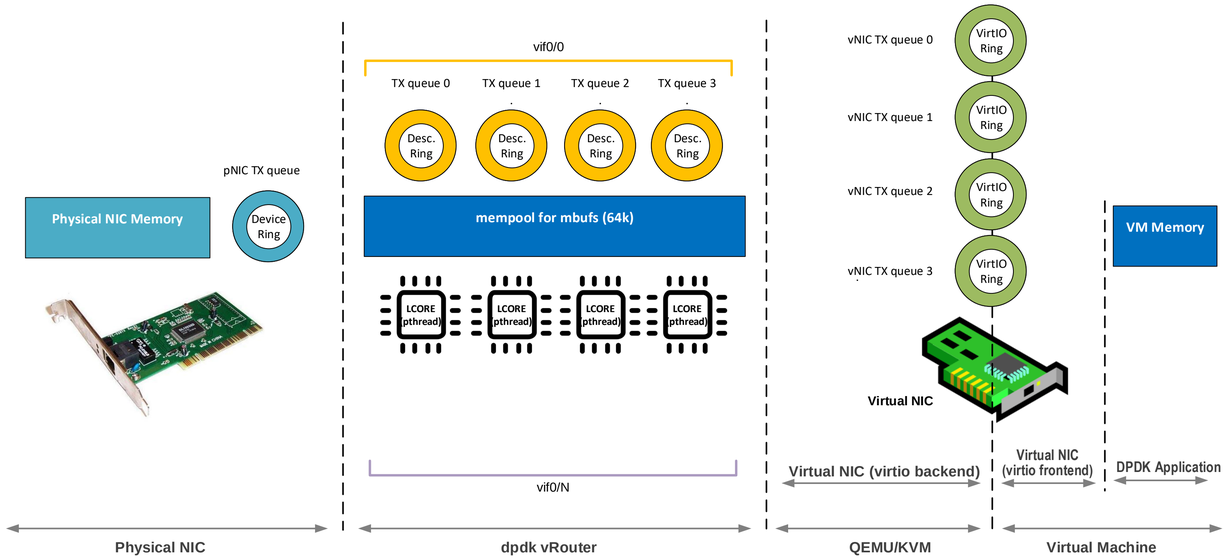
vRouter memory access longer path

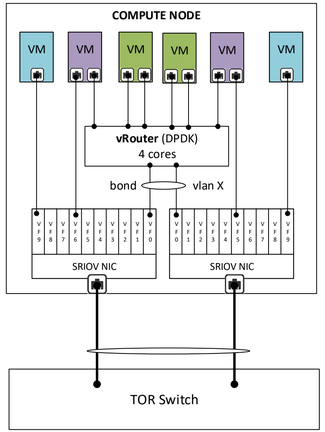
Title: vRouter Memory Access and NUMA	
version: 1.0	date: 27/03/2020

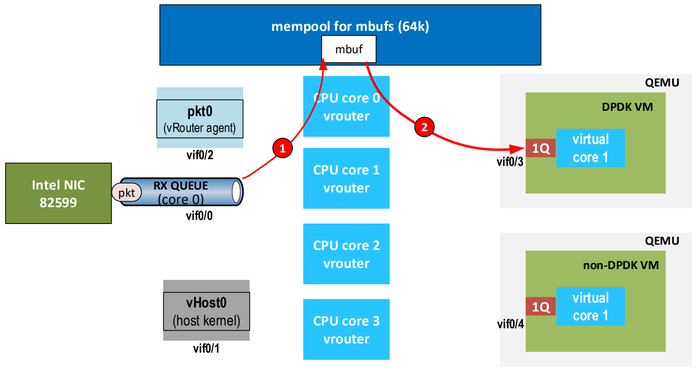




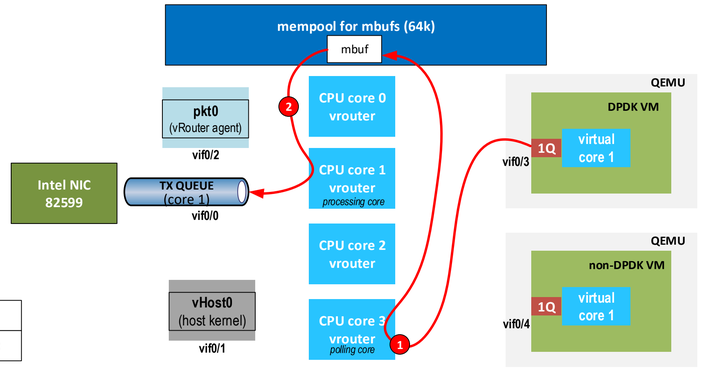
Title: NUMA concern	
version: 1.0	date: 25/03/2020

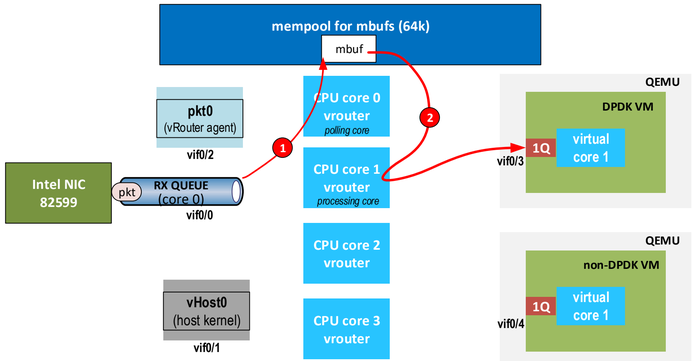


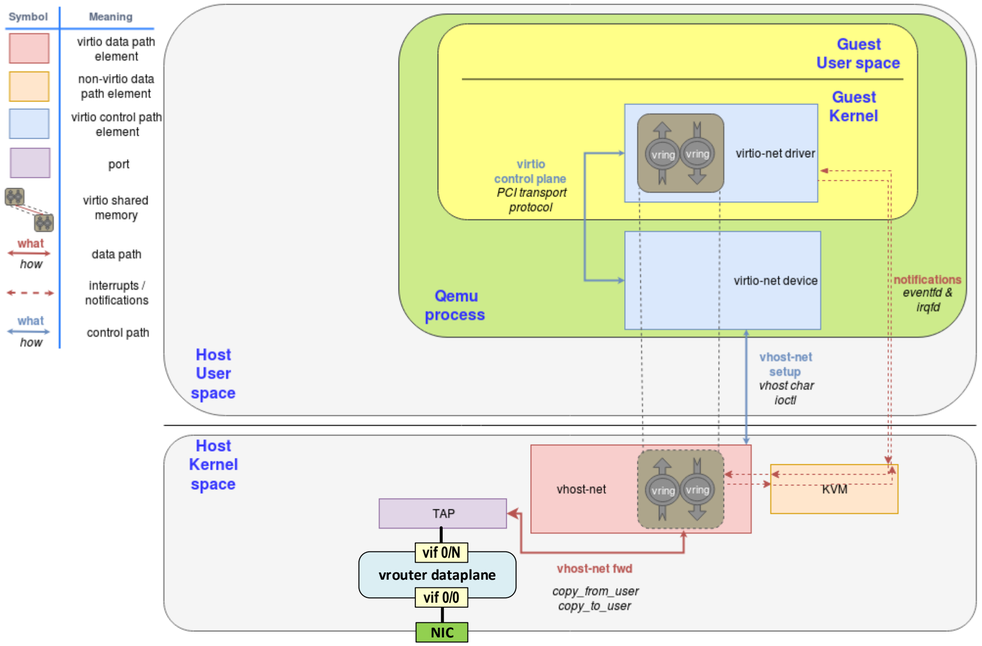


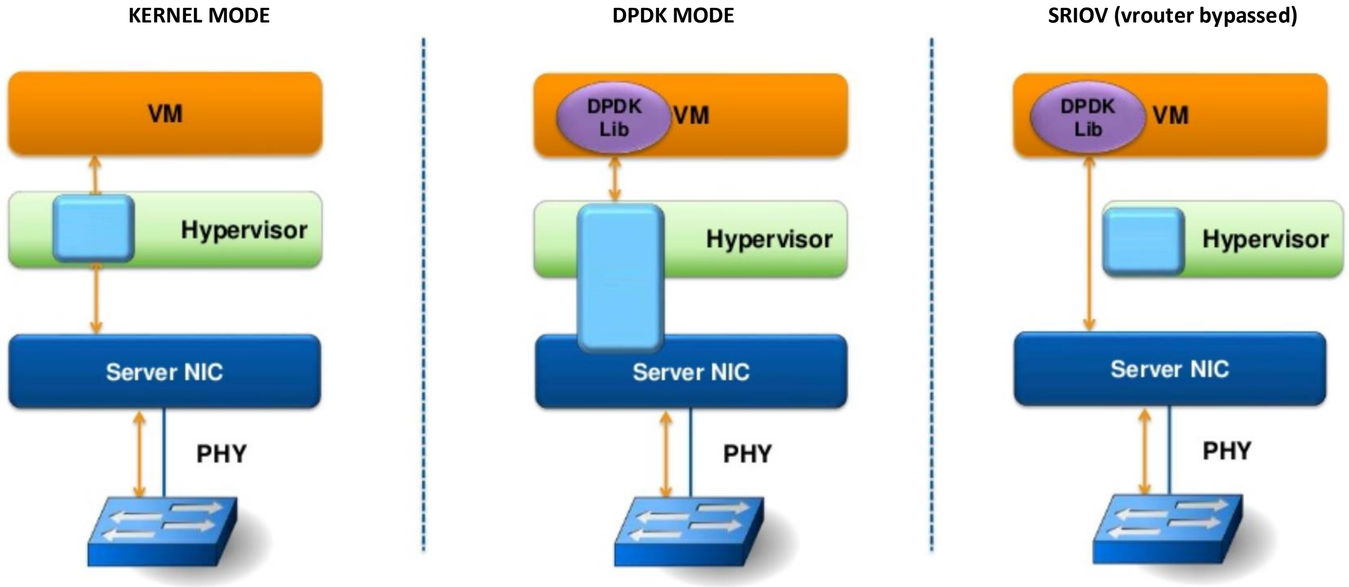


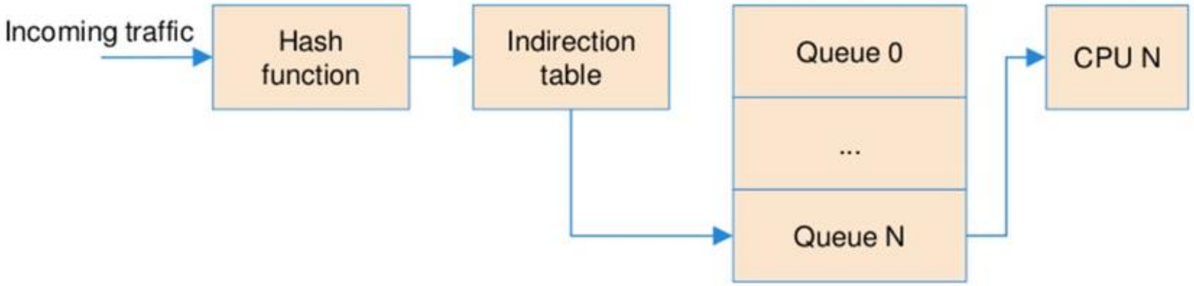
Title: Personal Stuff	
version: 1.0	date: 25/03/2020

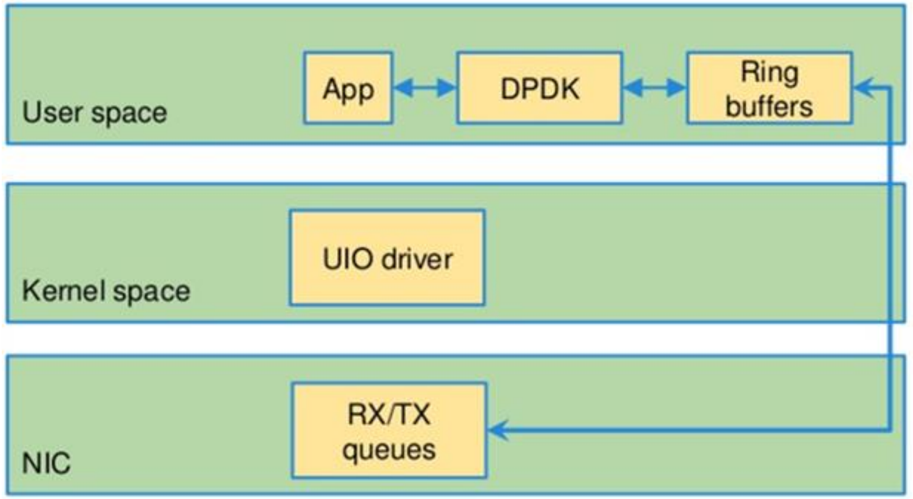












Title: Stuff (no source)	
version: 1.0	date: 25/03/2020