

Implementing Scalable IOV for ice ethernet driver

Jake Keller

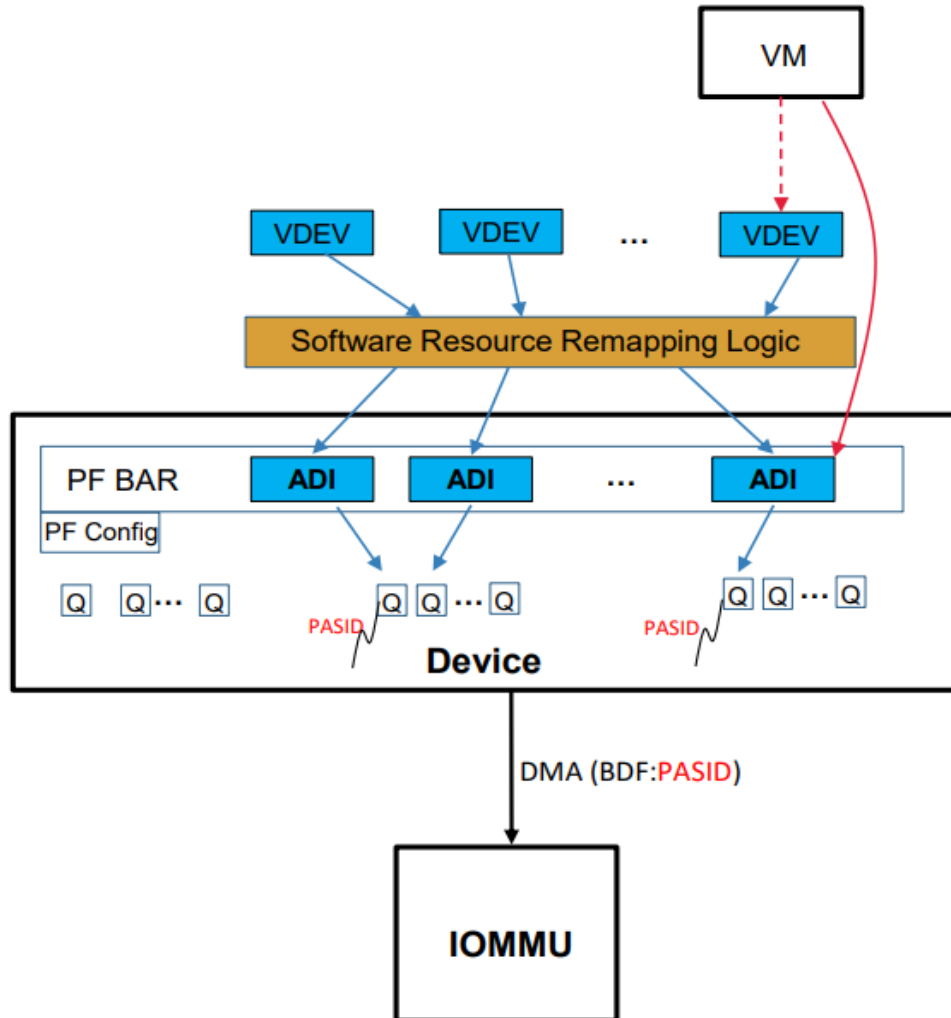
Harshitha Ramamurthy

Intel Corporation

Agenda:

- Introduction
 - Quick Scalable IOV overview
 - ice driver refactor
- Upcoming changes
 - IOMMU_FD and VFIO API change
 - Devlink subfunctions
 - Introduction of new port type
- Open to feedback and discussion

Overview of Intel Scalable IOV



■ Device: Assignable Device Interfaces (ADI)

- ✓ Queues, queue pairs, contexts
- ✓ Meet isolation criteria to be 'assignable'
- ✓ Tagged with unique PASID

■ Platform: PASID-granular DMA isolation

- ✓ Through Intel® VT-d extensions

■ Software: Compose ADIs into Virtual Device (VDEV)

- ✓ Software managed resource remapping between VDEV and ADI
- ✓ Slow-path emulation & fast-path pass-through

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