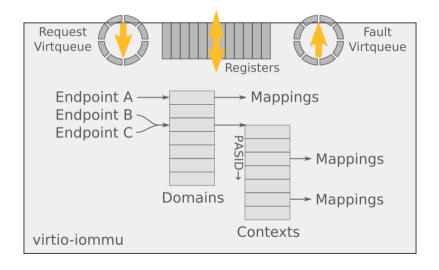
arm

virtio-iommu A paravirtualized IOMMU

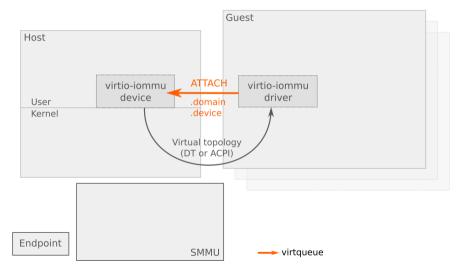
Jean-Philippe Brucker < jean-philippe.brucker@arm.com>

The virtio-iommu



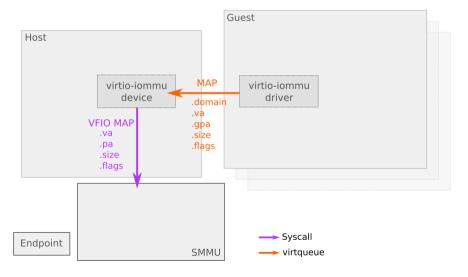


virtio-iommu - initialization





virtio-iommu - mapping



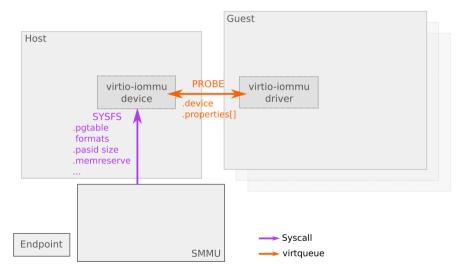


virtio-iommu - vSVM

- Query plOMMU capabilities with a PROBE request,
- Bind page directory to PASID with a ADD_TABLE request,
- Receive IO Page Faults on the fault queue,
- Complete faults on the requests queue,
- Update mappings with INVALIDATE request.

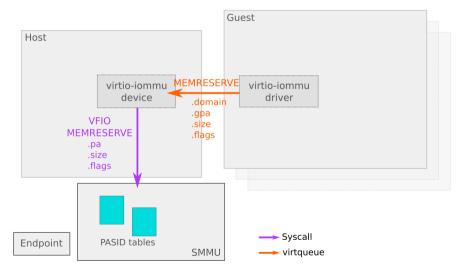


virtio-iommu - probe



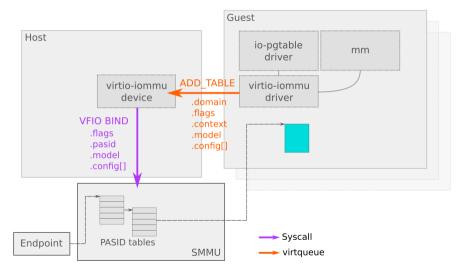


virtio-iommu - Page Table Handover - memreserve



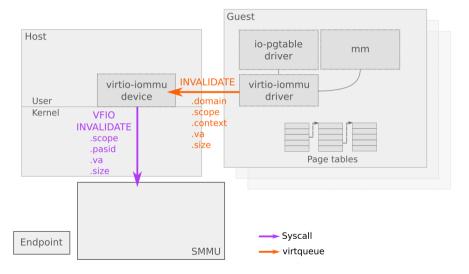


virtio-iommu - Page Table Handover - bind page directory





virtio-iommu - Page Table Handover - unmapping







Questions

The Arm trademarks featured in this presentation are registered trademarks or trademarks of Arm Limited (or its subsidiaries) in the US and/or elsewhere. All rights reserved. All other marks featured may be trademarks of their respective owners.

www.arm.com/company/policies/trademarks