Enhancements to IOMMU and VFIO User APIs for guest SVA

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IOMMU UAPIs was partially merged to support basic guest Shared Virtual Address (SVA) functionalities such as cache invalidation, bind guest page tables, and page request service. These initial patches defined UAPI data structures without the transport mechanics and specifics for future extensions.

To bridge these gaps, new patchsets are being developed by Yi L Liu and Jacob Pan to address the following:
1. Define the roles between IOMMU and VFIO UAPI, allow IOMMU core to directly handle user pointers
2. Add sanity checking of UAPI data based on argsz, flags
3. Added a new UAPI for reporting domain nesting info
4. Document UAPI design and provide examples of interactions with VFIO

- In separate patchset, more to follow suit.

Currently, at its version 7 with many design choices reviewed and suggested by Alex Williamson, Eric Auger, and Christoph Hellwig, Yi and Jacob are trying to close on the patchset At LPC 2020.

I agree to abide by the anti-harassment policy

I agree

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