Previously, on Linux Features WG

Last meeting outcome:

- Top level goals:
  - the kernel should guarantee memory integrity along the different phases of the kernel thread life cycle.
- Derivate goals:
  - the kernel allocator mechanism should guarantee that when a new buffer is allocated the same is reserved for the driver/subsystem
  - Kernel needs to enforce variables scope/boundary

The need to additional top level requirements

Goals	Requirements	Features
kernel memory address space integrity	The kernel should guarantee memory integrity along the different phases of the kernel thread life cycle. The kernel must implement robust access controls to prevent global variable overflows from interfering with adjacent memory objects. The kernel should prevent spurious write access from devices that can access directly to the memory. The kernel should guarantee the coherence of the memory seen by any processor.	kernel memory allocators Debug: kmemcheck, KASan, (padding colouring) IOMMU synchronization primitives
Kernel provided userspace memory address space integrity	The kernel should guarantee a per process reserved memory that is exclusive, unless different dispositions. The kernel should sufficiently isolate kernel space from user space memory.	mm, TLB MMU