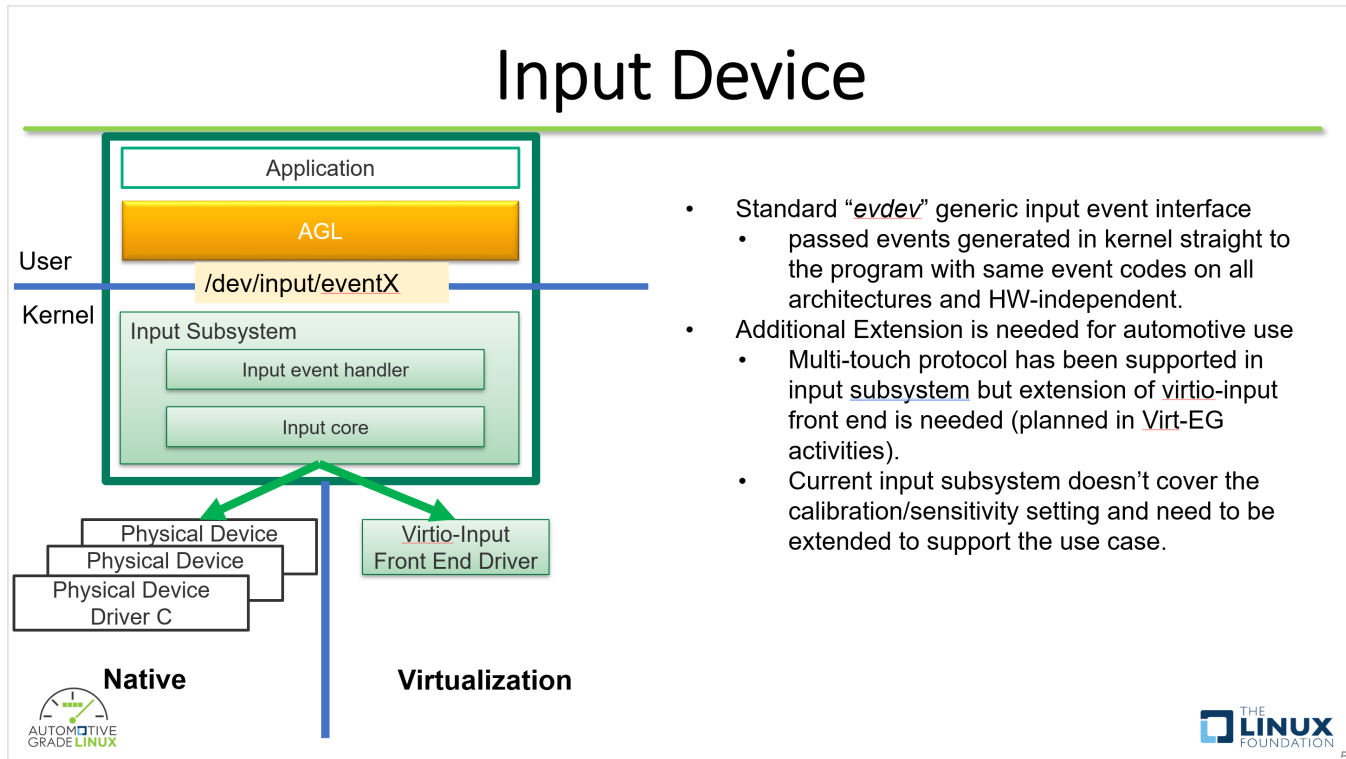


Input Device Abstraction



- Standard “**evdev**” generic input event interface
 - passed events generated in kernel straight to the program with same event codes on all architectures and HW-independent.
- Additional Extension is needed for automotive use
 - Multi-touch protocol has been supported in input subsystem but extension of virtio-input front end is needed (planned in Virt-EG activities).
 - Current input subsystem doesn’t cover the calibration/sensitivity setting and need to be extended to support the use case.

- Preliminary Research with IVI PR: https://gerrit.automotivelinux.org/gerrit/gitweb?p=staging/toyota.git;a=blob;f=hal_api/input_hal.h;h=bfc9d5923f1c17da17b0684913df3ae3339de27c;hb=96bd8be3dbf0c36c211f7d4feb61a1eba7f30ee7
 - API list:
 - InitInput
 - DelInitInput
 - InitTouch
 - StartTouch
 - SelfTestTouch
 - LockTouch
 - SuspendTouch
 - **SetSensitivityLevelTouch** (not possible w/ evdev subsystem and virtio-input linux driver)
 - **GetSensitivityLevelTouch** (not possible w/ evdev subsystem and virtio-input linux driver)
 - NotifyRadioScanFreqTouch
 - GetPanelSpecResolutionInput
 - Pending Questions: Mitsuo Date-san from IVI EG will kindly answer the question in the next Virt-EG on 15 Sep 2021
 - Are there any touchscreen HW already on the market supporting features of Input HAL (e.g. setting touch sensitivity)?
 - Needed to figure out details when adapting virtio-input Linux driver and evdev subsystem the to Input HAL requirements
 - Are there any other important features, besides setting sensitivity, that the HAL will be supporting in the future?
 - Anticipate changes in the HAL that will influence evdev subsystem and virtio input