Summary

Goal: Holistic digital cockpit HMI with seamless user experience across IVI and Instrument Cluster displays

Advantages to Shared State, Independent Rendering:

- Low inter-domain data channel bandwidth usage
- Applicability to mid/low performant SoC
- Operating System – agnostic approach
PoC/Demo Details

Implemented prototype of the digital cockpit HMI that is addressing few essential customer use-cases and reusing HCAT framework main principles

- Important customer cases related to domain interaction
- Using one of domain sharing approaches
- Using QNX and Android SW stacks
Phone use case

- Phone app sharing and data sync
Map use case

- **Route select**
  - Cluster: 
  - Android Head Unit: 
    - Address 1
    - Address 2
    - Address 3
  - ETH

- **IVI navigation start**
  - Cluster: 
  - Android Head Unit: 
    - Address 3

- **Map move start**
  - Cluster: 
  - Android Head Unit: 
    - Address 3
  - Long press -> map preview appears.
  - Drag operation -> map on cluster follows the map moves on IVI

- **Drag and drop ongoing**
  - Cluster: 
  - Android Head Unit: 
    - Address 3
  - Drop in shaded area -> animated move of the map to the cluster

- **End. Navigation guidance starts**
  - Cluster: 
  - Android Head Unit: 
    - Address 3
  - Map appears in the cluster area.
  - Another app can be opened on IVI.
PoC architecture
Thank you!

Visit GENIVI at [http://www.genivi.org](http://www.genivi.org) or [http://projects.genivi.org](http://projects.genivi.org)

Contact us: [help@genivi.org](mailto:help@genivi.org)

This work is licensed under a Creative Commons Attribution-Share Alike 4.0 (CC BY-SA 4.0)

GENIVI is a registered trademark of the GENIVI Alliance in the USA and other countries.

Copyright © GENIVI Alliance 2018.