Shared state, independent rendering PoC

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Sergey Klevitskiy

Software Engineer, Harman

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

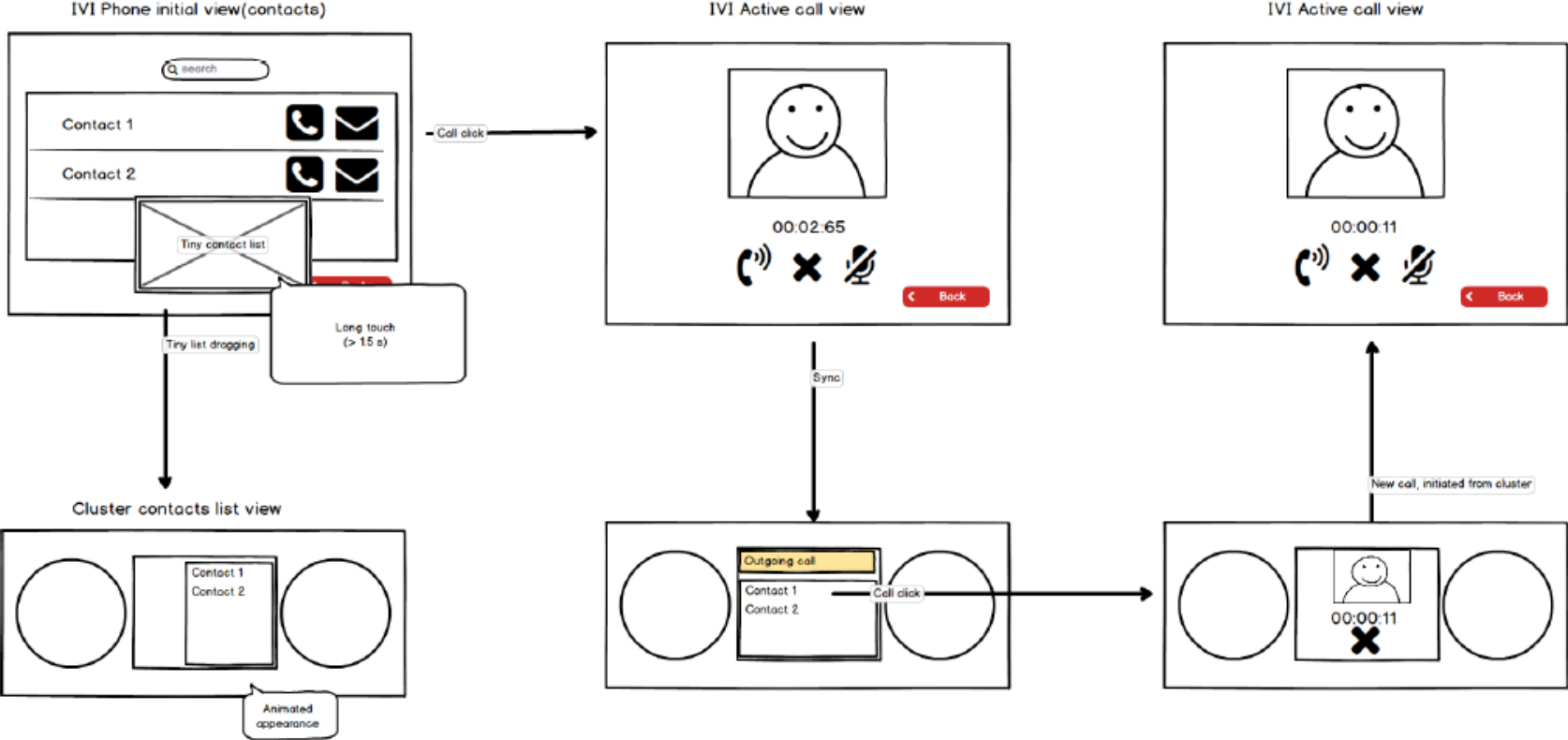- Operating System – agnostic approach

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PoC/Demo Details

Implemented prototype of the digital cockpit HMI that is addressing few essential customer use-cases and reusing HCAT framework main principles
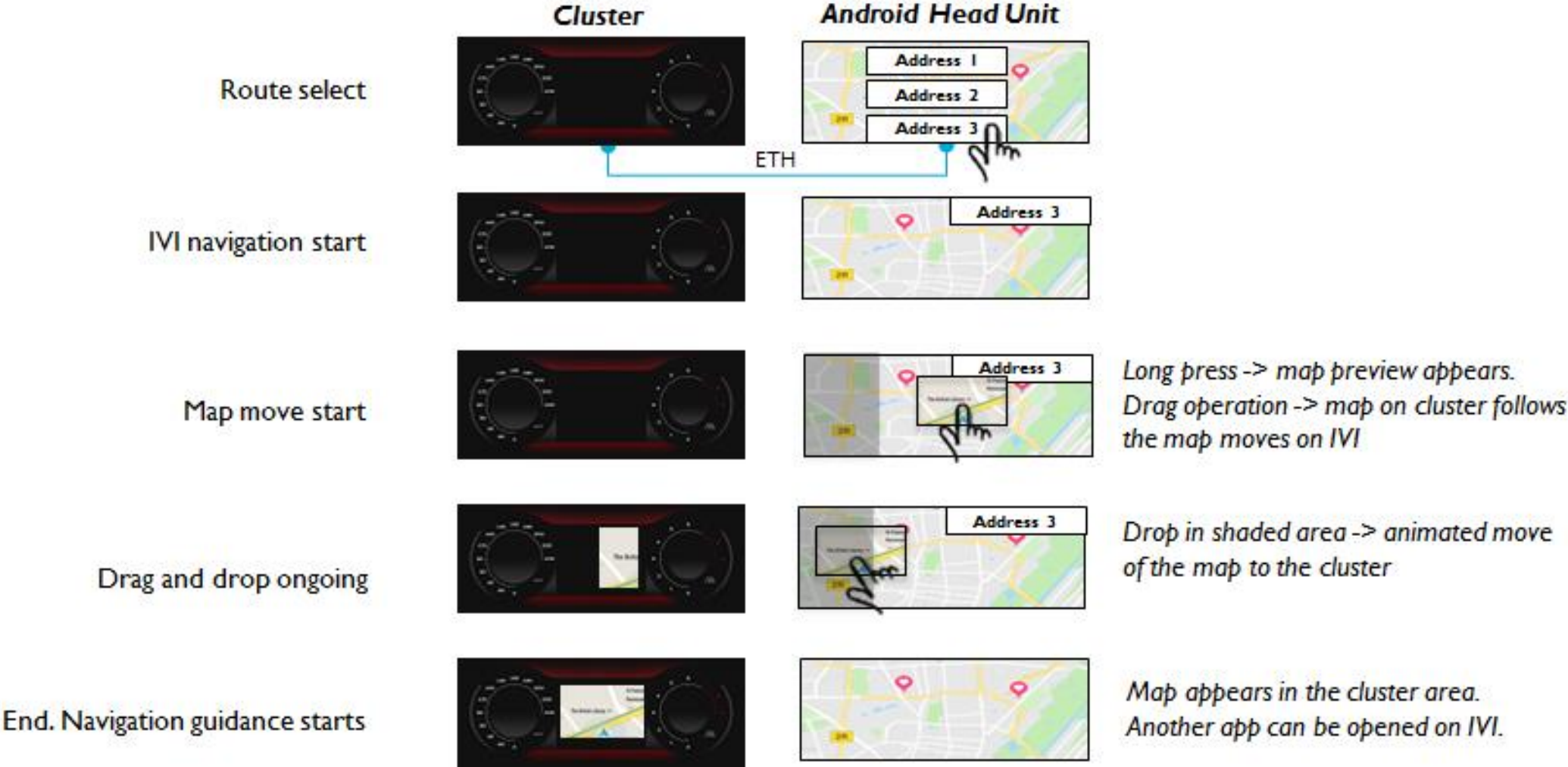
- Important customer cases related to domain interaction
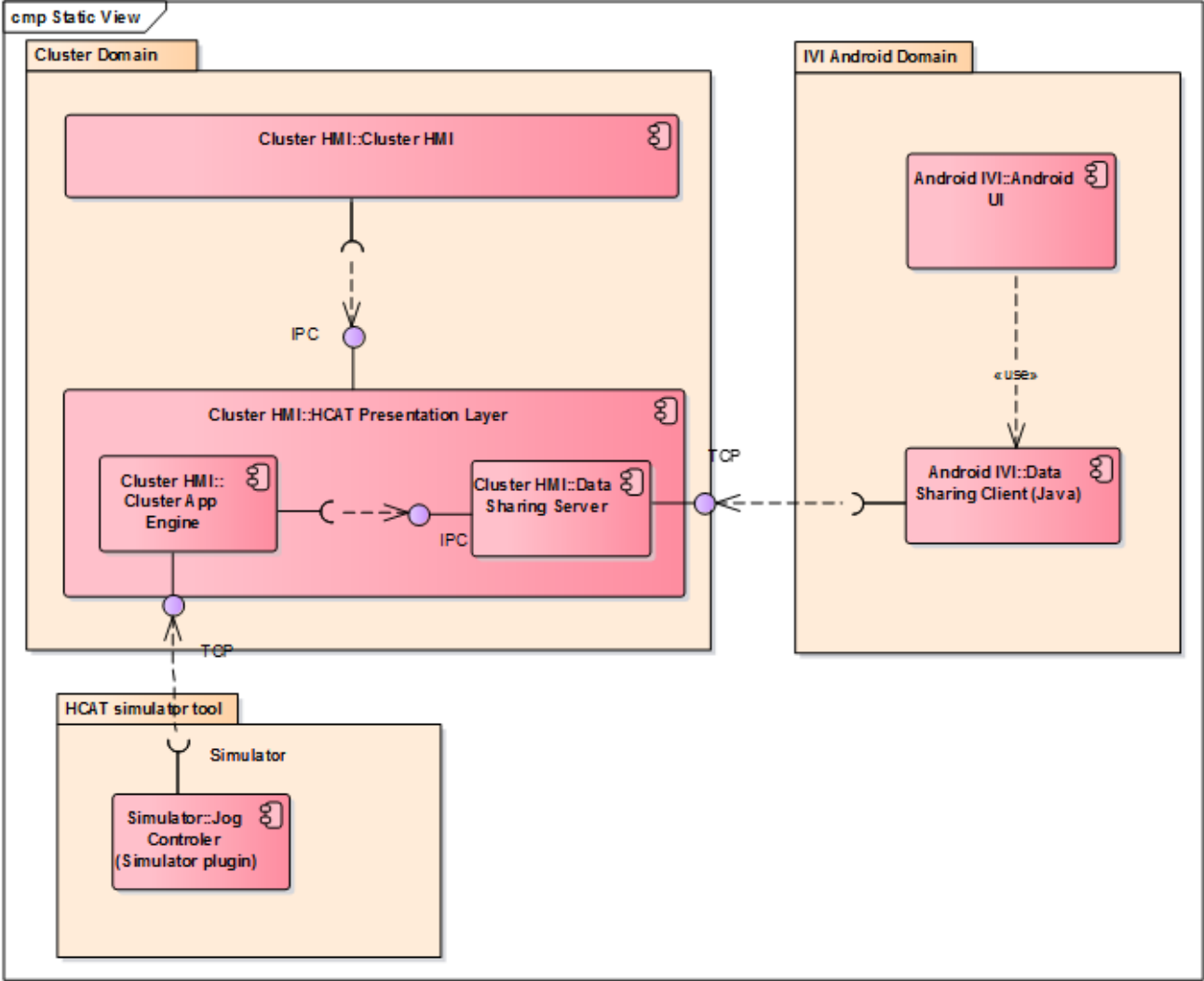- Using one of domain sharing approaches
- Using QNX and Android SW stacks

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Phone use case

- Phone app sharing and data sync

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Map use case

Cluster | **Android Head Unit**

Route select — Address 1, Address 2, Address 3 — ETH

IVI navigation start — Address 3

Map move start — Address 3 — *Long press -> map preview appears. Drag operation -> map on cluster follows the map moves on IVI*

Drag and drop ongoing — Address 3 — *Drop in shaded area -> animated move of the map to the cluster*

End. Navigation guidance starts — *Map appears in the cluster area. Another app can be opened on IVI.*

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PoC architecture

Thank you!

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