Shared state, independent rendering PoC

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Summary

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

Approaches:

- Display Sharing
- GPU Sharing
- Surface Sharing
- API Remoting
- **Shared State, Independent Rendering**

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PoC/Demo Details

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

- Important customer cases related to domain interaction
- Using one of domain sharing approaches
- Using Linux and Android SW stacks

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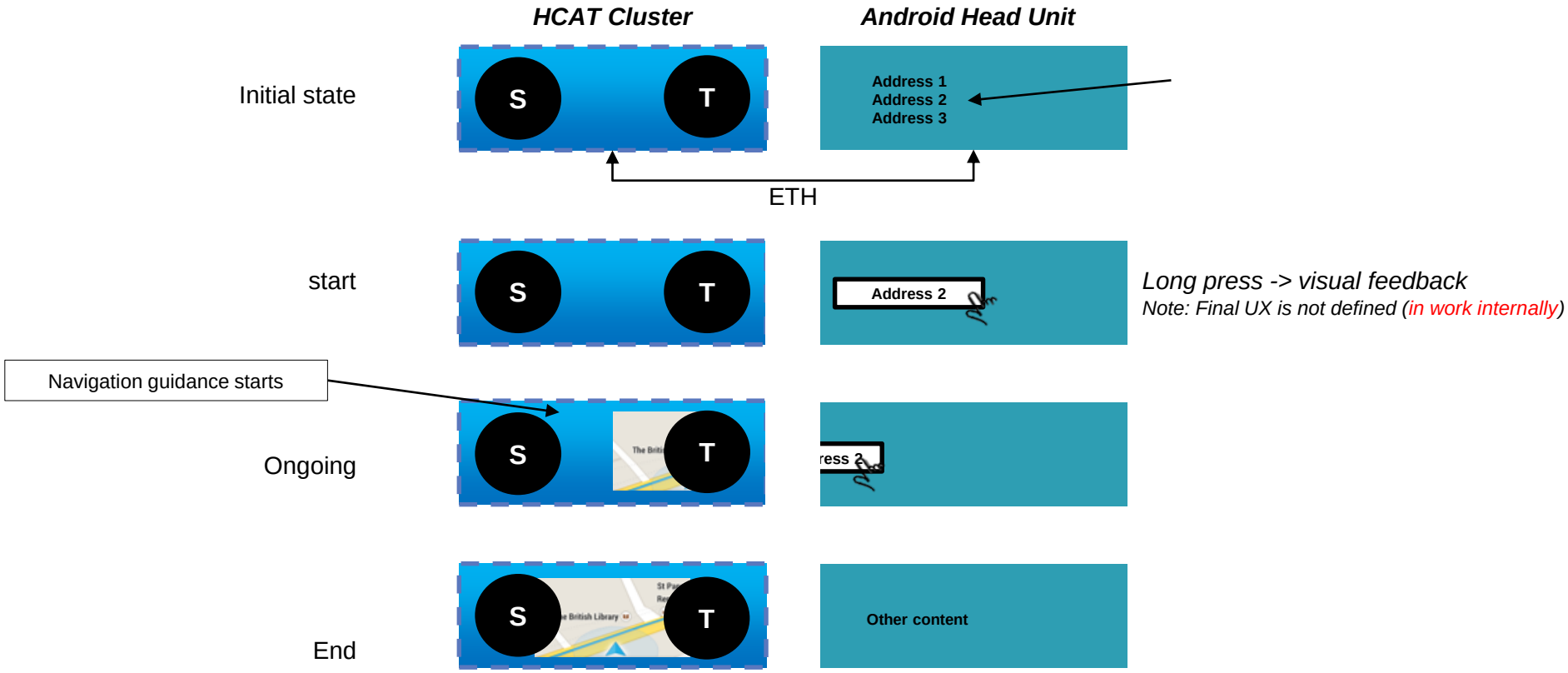
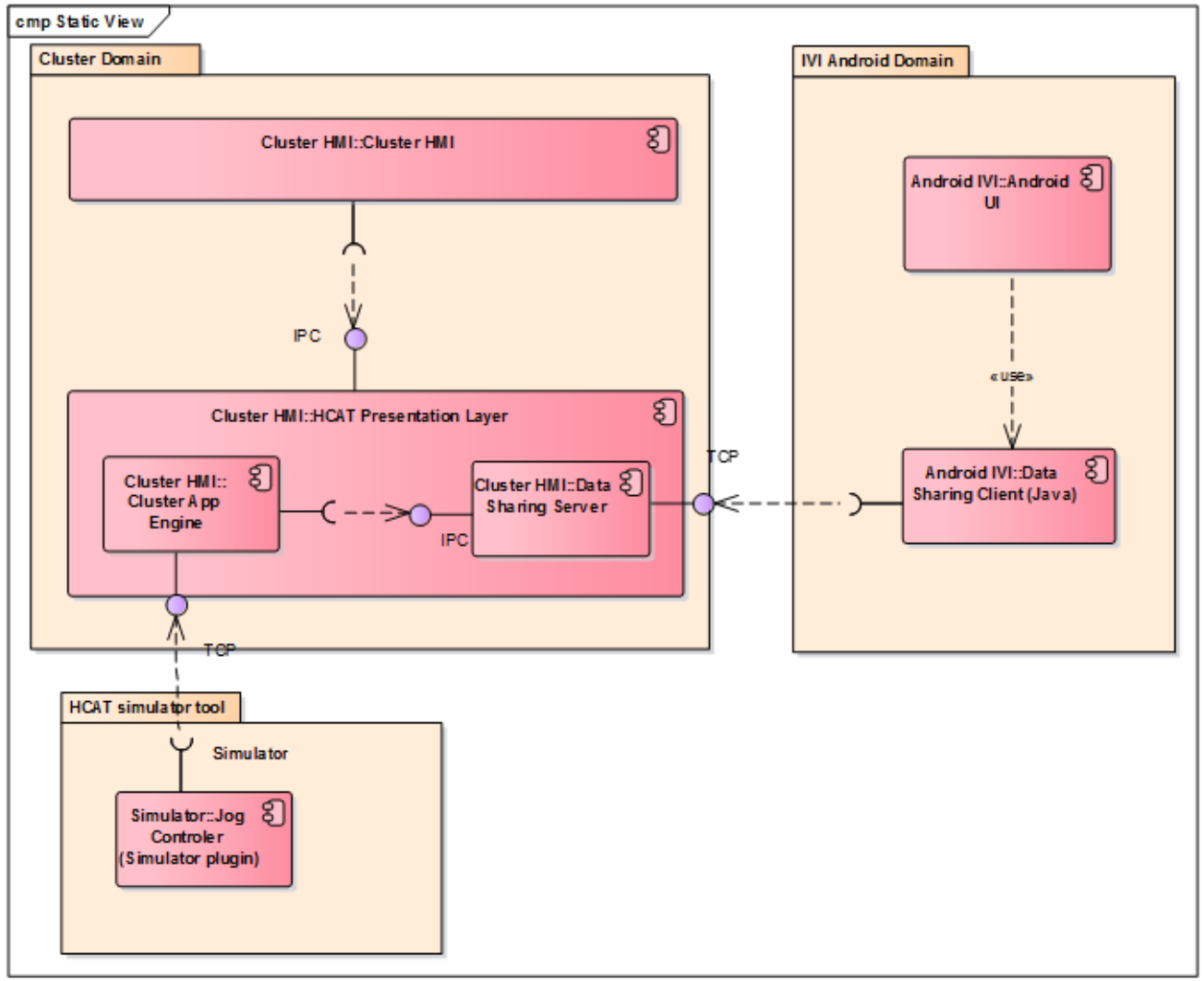
OEM scenario

Scope of the demo is to address one of customer use-cases: “**extended cluster**”



PoC architecture



RELEVANCE

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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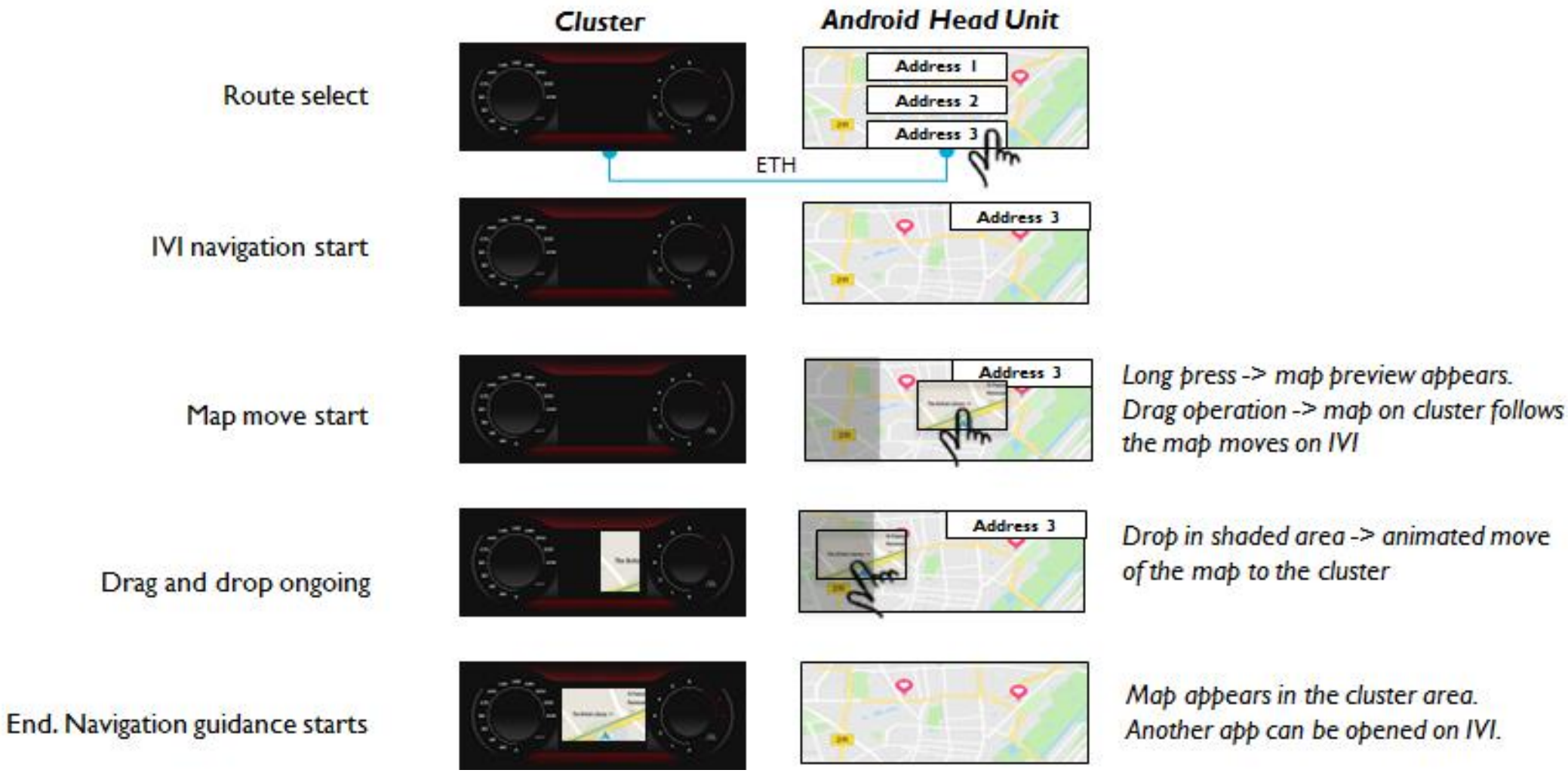
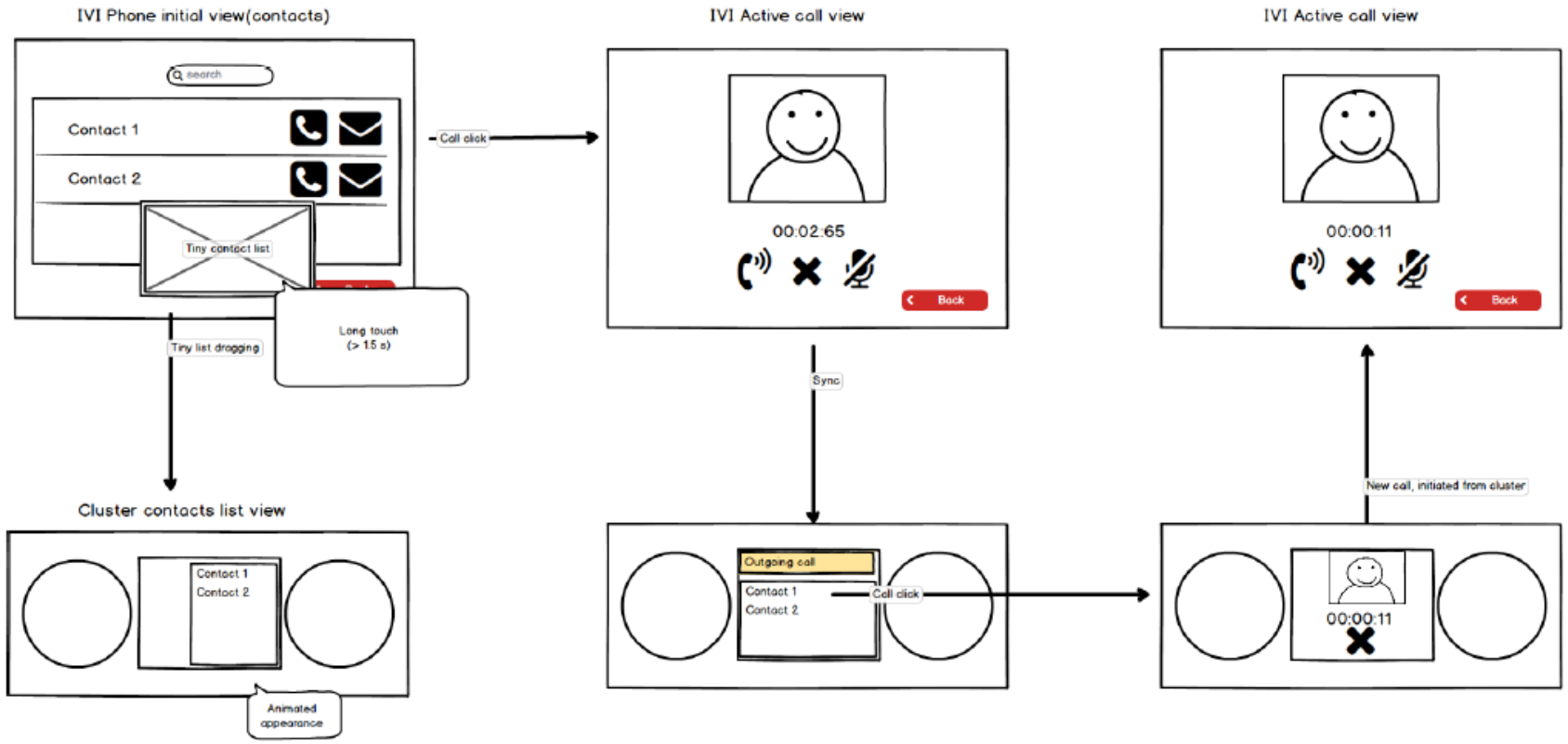
DEMO MAP USE CASE



DEMO PHONE USE CASE

- Phone app sharing and data sync



PoC Technical Info

Rich Text Format

Thank you!

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Contact us: help@genivi.org