Multi-OS Integration Project

Project Overview

OEMs are finding challenges to integrating operating systems like Android™ Automotive, Linux, AUTOSAR, QNX, Integrity™ and various other in-vehicle operating systems, some of which may be deployed primarily in a regional context such as China.

Through a Multi-OS Integration project, OEMs, their suppliers and the broader cockpit software ecosystem can discuss requirements, identify gaps and provide an aligned, community voice for discussion with providers and integrators of the numerous operating systems in the centralized cockpit. Resulting solutions and integration approaches should make building, enhancing, deploying, securing and managing central cockpit software more efficient and less costly.

Areas of Focus

The following list of topics were adopted in the original project charter. Additional topics are likely to be added as the project proceeds:

- Cluster and IVI integration (includes safety, graphics sharing, communication protocols)
- Standard interfaces/partition quality measures (e.g., ASIL levels)
- Boundaries between OS’s
- Partition lifecycle management (separate long-term & short-term software production)
- Hypervisor - OS standardization (virtual device and platform specification)
- Software platform portability on multiple OSes and Hypervisors
- Region-specific OS’s - Simplify integration
- Configuration management – end of line, SOTA over OS boundaries.

The following areas were added during a project kick-off at the GENIVI AMM in Munich in May 2019:

- Debugging in a Multi-OS context (Logging, Tracing, Profiling)
- Security and Safety (and the interplay between the two)
- Analyze existing domains and determine how many OSes (and combinations) are really needed with a desire to limit complexity.

Participants

- List to be provided after initial project call

Point of Contact

- Philippe Robin (GENIVI PMO)
- Gunnar Andersson (GENIVI Technical Lead)

Next Meeting

⭐ Wednesday, 5 June , 1300 CET

Dial-in information:
https://zoom.us/j/272598799
Meeting ID: 272 598 799
Find your local number: https://zoom.us/u/aCAyOAcT6

Agenda (preliminary)

- Sort topics into existing, active GENIVI projects
- Prioritize remaining topics
- Establish cadence for project calls in future
- Call for leadership

Meeting Minutes

DRAFT Project Charter