Eclipse SDV Technical Alignment Sessions

13/12/2022 Meeting Agenda

- Guest Speaker Sebastian Baer, about openfasttrace (itsallcode/openfasttrace: Open source requirement tracing suite (github.com))
- Architecture presentation follow up, a CNFC style map - Daniel L.
- Working with other communities (SOAFEE, COVESA, etc..) - Daniel K.
- Review of Facilitators for the breakout groups:
    - https://gitlab.eclipse.org/eclipse-wg/sdv-wg/sdv-technical-alignment/sdv-technical-topics/vehicle-sw-orchestration-sdv-topic/-/wikis/home
    - https://gitlab.eclipse.org/eclipse-wg/sdv-wg/sdv-technical-alignment/sdv-technical-topics/observability-monitoring-sdv-topic/-/wikis/home
    - https://gitlab.eclipse.org/eclipse-wg/sdv-wg/sdv-technical-alignment/sdv-technical-topics/testing-validation-sdv-topic/-/wikis/home
- Migration to gitlab: GoogleDoc is deprecated.
    - https://gitlab.eclipse.org/eclipse-wg/sdv-wg/sdv-technical-alignment

29/11/2022 Meeting Agenda

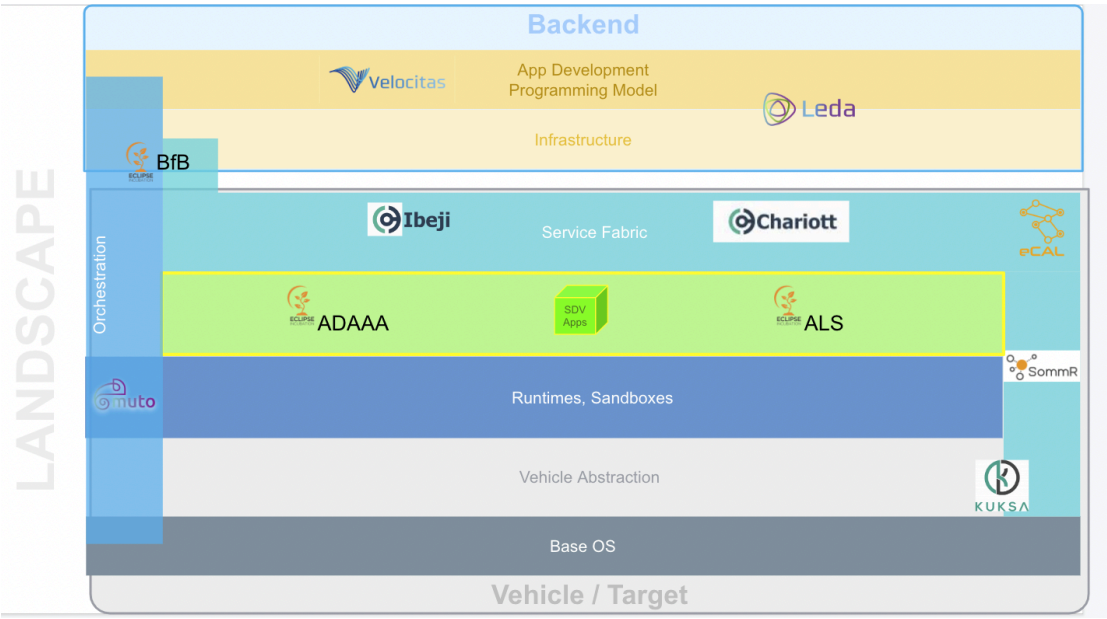
- Discussion of the platform/landscape picture with projects
- Finalization of the topics
- Presentation of the template

Meeting notes

- **Discussion of the platform/landscape picture with projects**

Kai presents the landscape with projects

Discussion about Ibeji, it should be closer to the vehicle layer. Interest in the Kanto project (IoT). Leda could possibly be moved as well.



Discussion of technical vs functional architecture

The architecture block set up is discussed: what is the definition of service fabric? Should it be moved below the sdv application?

Suggestion is not to create a picture that suggests a technical architecture representation. “Bubble style” representation might be helpful.

CNCF landscape https://landscape.cncf.io/

Rationale: SDV might have different distributions and it is WIP, could be easier to grasp on a landing page.

Drawback: containers and kubernetis drive the CNCF landscape, which are not to be taken from granted for SDV landscape.

Jeffrey brings up the Lf energy architecture example
https://www.lfenergy.org/projects/functional-architecture/

Duncan raises the point of safety critical applications. Should QM applications be target exclusively?

Action daniel.lueddecke@microsoft.com to propose a CNCF-like page for SDV.

- **Finalization of the topics**

Kai goes through the selected topics for the breakout groups. No additional topics are not raised.

- **Presentation of the template**

Filipe presents the template structure to be used to work on the topic discussion. The work will be organized in a wikipedia-like format. First step is to find a facilitator.

15/11/2022 Meeting Agenda

- Oniro introduction [Davide Ricci, ~25min]
    - High level Oniro presentation - slides available here - https://github.com/davidinux/pub/blob/main/conferences/eclipsecon2022/
    - Any question please feel free to reach out to Davide
- Proposal/thoughts for break-out group workshop series on above item [Filipe Prezado, ~15min]
    - Discussion on the topic structure in preparation for the breakout sessions
    - Topic template is accepted
        - Every topics needs a core list of participants that are expected to participate actively in the discussion
        - Every topic needs a facilitator who shall be impartial to the decision
        - All the participants should be informed about the topic discussion
        - The facilitator should define an objective, a deliverable and a delivery date for the topic
        - All meetings are open, and the notes are public
        - SDV wiki should be used for documentation https://docs.google.com/document/d/16bZ7WpuoxFHCdftrF2-vt7IZchKMKITQSOZFfOZbNok/edit#
    - Projects involvement to be improved

- Daniel presents the teaser of the Eclipse SDV ecosystem map
    - This will be made available on the SDV wiki page, where all members can comment offline before the online discussion during the next session
- SDV Program and Budget have been finalized, we can focus on tech topics and cool events! Please attend the all hands meeting next Monday

18/10/2022 Meeting Notes (Sara :))

Introduction of new team members to the round Fergus, Sara, Andy, Stefanie .

Friendly reminder of the EclipseCon participation next week.

- **Gathering concerns and discussion points**

Discussion on “meta level” about context and automation for plannable code deployment, with as little as possible human written code. OASIS TOSCA could be a good reference (https://github.com/osism/awesome-tosca). General topic area is not covered by SDV at the moment, but can be added to the “First Concern” list. Info session Daniel/Fergus.

- **Making the Tech alignment more useful**

Discussion goals and artifacts to generate during the tech alignment starting from the concerns gathered in Notes - SDV Initial Technical Alignment Meeting, define a number of use cases then starting with Architecture/Diagram for the implementation of use cases.

Proposal is breaking down to smaller groups for discussion.

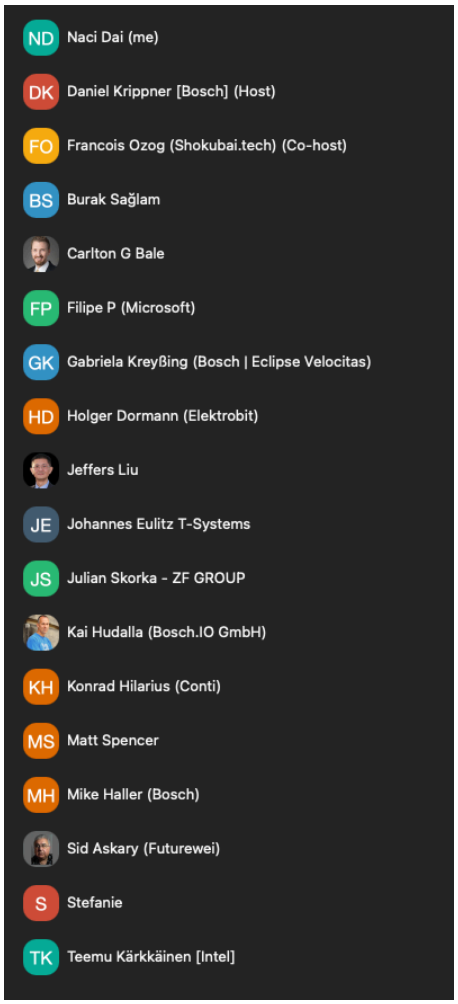
What does SDV mean? Discussion on a common definition that can be sold and therefore be a competitive advantage.

- Reducing integration costs
- Outlook and maintainability of SW stacks
- Could the deliverable be tooling?

- Reminder of mailing list and slack for agenda proposals
- Accessibility of documents ? Keep using google docs? Google Jamboard?

Oct 4, 2022 | SDV Initial Technical Alignment Meeting

Attendees:



Notes

- Couple of weeks ago it was proposed that Tech talk could have been discussed for the coming weeks (We can hold a poll for who to invite) or put priorities
    - Openfasttrace
    - Open telemetry from tracetest.io (Next Invite?)
    - Eclipse Oniro
    - SSI

- Join the Slack SDV #technical-alignment channel
    - Invite people with emails
    - Announce access in public channel
- Continue discussion on “What is SDV”
    - Francois Ozog presented his notes
    - Thin Edge/Hybrid Edge/Thick Edge

    - Notes - SDV Initial Technical Alignment Meeting
        - People are invited to add their comments/content in this document
    - For Prioritization of components, find aspects that are innovation points for automotive that will add value
        - Suggesting a master controller project to standardize key aspects (Standardized differentiation)
        - SOAFEE for “thicker” edge is critical
    - Linaro?
    - Daniel Krippner notes the importance of orchestration of workloads at the edge/cloud etc.
        - Defining the alignment/semantics of workloads
    - Vehicle and Context (Around the Car Automotive.OS/Edge/V2X)
        - Themes for SDV
        - Platoons/Parking/Roads/City/Charging/Fueling
        - Interacting with key technologie such as DDS
    - Vehicle Diagnostics
        - Observations/Maintenance
        - Rendering/Visualization is important
        - SDV containers may not have access to this information (i.e. tapping into comm/CAN to get data)
        - Address its Impact on architecture to tap into components and data early
        - SOAFEE / Autosar collaboration
    - Vehicle and Its Tenants
        - OEMs and third parties such as insurance do not have standard ways to observe and capture data.
        - Contracts and data standards
        - Access to data and ownership of data (Confidential Computing?)
        - Microsoft demonstration of trusted sensors maybe an interesting technology to study for cars/sdv
    - Vehicle Validation and Hybrid Simulation
        - Simulation/CI-CD
        - System Level Unit-testing vs. Simulation must be clarified
        - Simulation accuracy and details, car physics, compute accuracy etc.
- Daniel invited volunteers to create work-group and raise their hands at the technical-alignment group.

Action items

- [ ] Announce access to SDV (#technical-alignment) in public places (i.e. Web/mail lists)
- [ ] Use slack to offer/invite techtalks and keep this in a joint document (@daniel)
- [ ] Attendees are invited to contribute/provide feedback to the Key Concerns “Defining SDV” document (Page 4) https://docs.google.com/document/d/1rdP7M2m_pk0eYZvTtbgd7QUxterQoYrgEvmCT6hOTrg/edit#heading=h.7w23bpr5dd7w
- [ ] Francois to post his slides and presentation

06/09/2022 Meeting Minutes

The meeting opened with 2 topics for community awareness and feedback:

- The next Eclipse SDV Technical Alignment Meeting will be moved from Tuesday to Monday, the 19th of September.
- A proposal was made to occasionally invite people and organizations to introduce topics to the ESDV Community
    - can be anything raging from specific projects and/or topics related to SDV,
    - not directly related to SDV.
    - OpenFastTrace was given as an example.
    - Duration can be something short (15mins) with a recurring schedule of once a month
    - Community welcomed and agreed with proposal.
    - **A document will be created to capture list of topics and volunteers/presenters**

The meeting then went on with the topics on the agenda:

- Why have a technical alignment group
- What could the group address
- To support the discussion and capture feedback, a document was created and shared with the team. Doc is available Notes - SDV Initial Technical Alignment Meeting - Google Docs

- The community discussed some concrete examples on the why and what:
- The ecosystem is not a specific take or leave it - anyone can contribute their view and technical choices and implementation
    - eg: CNCF CRI – you can bring your own proposal and components for a container image format and discuss its value and how can be leveraged by the community
- **a proposal was made to create a breakout group, coordinated via Slack, to discuss if and what does it mean for the Eclipse SDV projects to be Automotive Grade**
- **a proposal was made to create a breakout group, coordinated via Slack, to discuss and define hardware platforms and tooling to endorse so that all project contributions can benefit from. Eg: soafee integration**
- The community discussed the need to consider / assess existing frameworks, how Eclipse SDV approach differentiates from others, what is in and out of scope for Eclipse SDV. Eg: of existing frameworks and components like automotive grade linux, autosar adpative
    - It was highlighted to the community that a similar workstream is ingoing in SOAFEE and we could have a jointly collaboration and contribution across both.

- The community continued the discussion highlighting topics like higher safety requirements, safety and non-safety applications, simulation in a digital world, interfaces and data standardization needs, observability, open source in auto industry, autosar and OTA, standardized package formats and used the CNCF landscape example to suggest a workstream in ESDV to create our landscape.
- A point was made on the attractiveness of Eclipse SDV ecosystem and code 1st approach to create a healthy ecosystem to support and drive innovation and symbiose across the multiple projects.
- There was also a point on the need to have more OEMs joining and collaborating the ESDV community to help capture the customer demand into requirements for the landscape definition and project contributions.
- The discussion on the above topic went on with points made that in past the linux community also had the same feedback – eg: SAP cannot run on Linux. The open source community then worked together to capture the requirements and contribute project submissions to support and run SAP on linux.
- A point was made that we should see more members joining ESDV and with the upcoming events like the EclipseCon and Bosch Connected World SDV hackathons this will create momentum where we can demonstrate to OEMS and automotive players the value and innovation ESDV projects can bring to the table.
- **The community agreed with the creation of a slack work stream to start collaboration and creation of the ESDV landscape and supporting artifacts but always with 2 things in mind: the power of the code 1st approach to support the creation of artifacts and supporting the definition of standards and avoid one and only solution.**
- **a proposal was made to create a breakout group, coordinated via Slack, to discuss the scope and alignment points of the SDV Ecosystem**