

CVII Technology Stack meeting notes

Quick links: [[CVII home page](#)] [[Tech Stack components](#)]

2022-10-12

Agenda:

1. Project summary
2. Autumn AMM meeting planning + longer term topic planning
3. ISO ExVe update

• Kuksa.VAL	Sebastian (Bosch)	
• W3C VISS specification (v2)	Ulf, Ted as backup (both Geotab)	v2 standard process proceeding. Feedback here: https://github.com/w3c/automotive/issues/455 https://github.com/w3c/automotive/issues/459 or you can send endorsement to public-automotive@w3.org
• WAI VISS server implementation in Go	Ulf	Ulf has pushed the Vehicle to Cloud clients he outlined previously. See minutes below for links.
• VSS & Tools	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	PR for implicit branches merged
• VSSo	Daniel Alvarez (BMW), Felix (Bosch) Ted	
• VSC & Tools	VSC team members	
• CCS-components	Ulf	
• AOS	Artem (EPAM)	
• Android Automotive VSS Vehicle Properties Code Generator		
• Covesa GraphQL components	Alexander Domin (BMW)	
• Eclipse Kanto	(Thomas S)	
• vss-otaku	Steve (Renesas)	

Minutes:

- WAI VISS based Vehicle to Cloud arch
 - Ulf has pushed the code he had summarised previously that introduces clients to provide a connection between VISS in the vehicle and the cloud.
 - See branch <https://github.com/w3c/automotive-viss2/tree/ecuAdaptation> for the code. The readme for the vehicle shows the arch <https://github.com/w3c/automotive-viss2/tree/ecuAdaptation/client/client-1.0/VEC>
- Florian continued his standards update from last week:
 - ISO ExVe cont.
 - Florian looped feedback to the ExVe group. The coordinator and Philippe agree that ExVe should be aligned and not creating new data model. Recognition that the two groups move at different speeds.

- In answer to question whether standard can reference upstream the answer is yes. It would need to specify whether it is informative (info) or normative (must). So ExVe could reference a specific VSS version rather than duplicate.
- ExVe WG continues to discuss whether its scope is pure data or interfaces as well.
- Service Orientated Vehicle Diagnostics (SOVD)
 - Florian gave a quick intro to SOVD. This was unfortunately time limited. The group agreed we should ask Florian to expand on the topic after the AMM



Infosharing_CVII...October 2022.pdf

- Florian's presentation:

2022-10-05

Agenda:

1. Project summary
2. Autumn AMM meeting planning + longer term topic planning
3. ISO ExVe update

• Kuksa.VAL	Sebastian (Bosch)	
• W3C VISS specification (v2)	Ulf, Ted as backup (both Geotab)	
• WAI VISS server implementation in Go	Ulf	
• VSS & Tools	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	Processed PRs. Merged two-wheeler/motorbike profile.
• VSSo	Daniel Alvarez (BMW), Felix (Bosch) Ted	
• VSC & Tools	VSC team members	
• CCS-components	Ulf	
• AOS	Artem (EPAM)	
• Android Automotive VSS Vehicle Properties Code Generator		

• Covesa GraphQL components	Alexander Domin (BMW)	
• Eclipse Kanto	(Thomas S)	
• vss-otaku	Steve (Renesas)	

Minutes:

- Florian gave an update on ISO ExVe
 - Liason agreement concluded with Covesa
 - WG 6
 - REST (web) API for external access to car data
 - Discussion of ExVe thoughts around data models and the challenges of firstly avoiding competing models and secondly the slow speed of ISO updates. If ISO adopts VSS as the model or aspects of it for example there is still a challenge around the version it uses and a probably faster moving VSS version upstream.
 - Discussion of the use of VSS rule set outside of the VSS standard catalog, e.g. it would be useful for interoperability, example would be development cost sharing and familiarity, if non-VSS standard catalog data used the VSS rule set.

2022-09-28

Agenda:

1. Project summary
2. Autumn AMM meeting planning + longer term topic planning

• Kuksa.VAL	Sebastian (Bosch)	
• W3C VISS specification (v2)	Ulf, Ted as backup (both Geotab)	Finalised explainer. On track to publish for mid-Oct. Couple of minor PRs for the spec.
• WAI VISS server implementation in Go	Ulf	Waiting on public update for work on ECU deployment using WAI.
• VSS & Tools	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	Processed PRs. Merged two-wheeler/motorbike profile.
• VSSo	Daniel Alvarez (BMW), Felix (Bosch) Ted	Plan to do update based on VSS v3.
• VSC & Tools	VSC team members	
• CCS-components	Ulf	
• AOS	Artem (EPAM)	
• Android Automotive VSS Vehicle Properties Code Generator		
• Covesa GraphQL components	Alexander Domin (BMW)	

• Eclipse Kanto	(Thomas S)	
• vss-otaku	Steve (Renesas)	

Minutes:

- ISO ExVe
 - Florian kindly offered to give an update on the state of the data model discussion in ISO ExVe next week
- Discussion of [2022 Autumn AMM Detroit Planning \(CVII Tech Stack\)](#)
 - VISS client
 - Ted reports that where to do VISS client presentation discussed in W3C call. Paul will be discussing with conference team.
 - Ted is owning liasion with Issac and team.

2022-09-21

Agenda:

1. Project summary
2. Autumn AMM meeting planning + longer term topic planning

• Kuksa.VAL	Sebastian (Bosch)	
• W3C VISS specification (v2)	Ulf, Ted as backup (both Geotab)	
• WAI1 VISS server implementation in Go	Ulf	Working continuing on ECU deployment using WAI1. Public updates expected soon.
• VSS & Tools	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	There is a new PR to document more of the project management in markdown format
• VSSo	Daniel Alvarez (BMW), Felix (Bosch) Ted	Gen tooling for VSS v3, one passed, one failed. Following up to fix latter. Meetings have restarted.
• VSC & Tools	VSC team members	
• CCS-components	Ulf	
• AOS	Artem (EPAM)	
• Android Automotive VSS Vehicle Properties Code Generator		
• Covesa GraphQL components	Alexander Domin (BMW)	
• Eclipse Kanto	(Thomas S)	
• vss-otaku	Steve (Renesas)	

Minutes:

- Short readout on Autosar discussions
- Steve outlined the current plan for the AMM / future planning workshop ([2022 Autumn AMM Detroit Planning \(CVII Tech Stack\)](#))
 - Please add any topics you wish to discuss

2022-09-07

Agenda:

1. Project summary
2. Autumn AMM meeting planning + longer term topic planning
3. Rescheduling VISSv2 client deep dive

• Kuksa.VAL	Sebastian (Bosch)	
• W3C VISS specification (v2)	Ulf, Ted as backup (both Geotab)	
• WAI VISS server implementation in Go	Ulf	
• VSS & Tools	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	See vss and vss-tools github for updated PRs and issues. Marketing announced v3 release.
• VSSo	Daniel Alvarez (BMW), Felix (Bosch) Ted	Meetings restart in two weeks
• VSC & Tools	VSC team members	Consolidation work on tooling continues
• CCS-components	Ulf	
• AOS	Artem (EPAM).	No announcements. See source repository for code changes
• Android Automotive VSS Vehicle Properties Code Generator		Calls restarted weekly. Tues at 5pm CET. Shared status with Conjure. Discussion about VHAL conversion.
• Covesa GraphQL components	Alexander Domin (BMW)	
• Eclipse Kanto	(Thomas S)	
• vss-otaku	Steve (Renesas)	Continuing work on updating to Apache IoTDB v0.13.

Minutes:

- AMM / future planning ([2022 Autumn AMM Detroit Planning \(CVII Tech Stack\)](#))
 - Next steps
 - Discuss data storage proposals with Adnan to get clearer picture of what and when. Can we clarify before AMM or do we workshop it at AMM for example
 - Schedule needs some time (1hr at least?) to allow for the future planning discussion whilst we are together

- Go back to Issac to discuss where to schedule VISSv2 client outreach. If there is an AMM session it will feed into the schedule
- VISSv2 client from UMA
 - Deep Dive possible but summer slowdown may result in low attendance. What is best?
 - Ted: AMM session if remote allowed? 30 mins?
 - Paul/Steve: possible
 - Client has a focus on security so there is a connection to the security

2022-08-31

Agenda:

1. Project summary
2. Autumn AMM meeting planning + longer term topic planning

• Kuksa.VAL	Sebastian (Bosch)	
• W3C VISS specification (v2)	Ulf, Ted as backup (both Geotab)	Work continues on spec advancement. Explainer will be moved to github.
• WAI VISS server implementation in Go	Ulf	
• VSS & Tools	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	See vss and vss-tools github for updated PRs and issues. Marketing announced v3 release.
• VSSo	Daniel Alvarez (BMW), Felix (Bosch) Ted	Due to holidays expected to be quiet next week
• VSC & Tools	VSC team members	Consolidation work on tooling continues
• CCS-components	Ulf	
• AOS	Artem (EPAM).	No announcements. See source repository for code changes
• Android Automotive VSS Vehicle Properties Code Generator		Calls restarted weekly. Tues at 5pm CET. Shared status with Conjure. Discussion about VHAL conversion.
• Covesa GraphQL components	Alexander Domin (BMW)	
• Eclipse Kanto	(Thomas S)	
• vss-otaku	Steve (Renesas)	Continuing work on updating to Apache IoTDB v0.13.

Minutes:

- AMM / future planning
 - Planning page added [2022 Autumn AMM Detroit Planning \(CVII Tech Stack\)](#) and populated from in meeting discussion. Feel free to add ideas
- Discussion of Android EG / VHAL

2022-08-24

Agenda:

1. Project summary

2. Autumn AMM meeting planning + longer term topic planning
3. Brief report on production system using Kafka and MQTT between vehicle and cloud

<ul style="list-style-type: none"> Kuksa.VAL 	Sebastian (Bosch)	<ul style="list-style-type: none"> - kuksa.val databroker simple integration/API tests https://github.com/eclipse/kuksa.val/pull/330 - Ship VSS 3.0 and make it loaded by default in kuksa.val server container https://github.com/eclipse/kuksa.val/pull/331 - Load VSS3.0 as default in kuksa.val databroker container https://github.com/eclipse/kuksa.val/pull/332 - minor documentation fix for DBC feeder https://github.com/eclipse/kuksa.val.feeders/pull/16
<ul style="list-style-type: none"> W3C VISS specification (v2) 	Ulf, Ted as backup (both Geotab)	<p>Call for review for next step of standard process for v2 being prepared.</p> <p>BMW report source release for their implementation being prepared. See here https://www.w3.org/auto/wg/wiki/VISS_implementations</p>
<ul style="list-style-type: none"> WAI VISS server implementation in Go 	Ulf	New features coming in coming weeks related to in-vehicle client. Related to arch Ulf previously outlined in his vehicle to cloud proposal.
<ul style="list-style-type: none"> VSS & Tools 	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	<p>See vss and vss-tools github for updated PRs and issues.</p> <p>Discussion of the driver monitoring leaves in driver.vspec. Input requested from people in this field.</p>
<ul style="list-style-type: none"> VSSo 	Daniel Alvarez (BMW), Felix (Bosch) Ted	First public working draft of standard as 1st standardisation milestone. Ted will be testing the tooling.
<ul style="list-style-type: none"> VSC & Tools 	VSC team members	Discussion of MBition consolidation work on tooling.
<ul style="list-style-type: none"> CCS-components 	Ulf	
<ul style="list-style-type: none"> AOS 	Artem (EPAM)	No announcements. See source repository for code changes
<ul style="list-style-type: none"> Android Automotive VSS Vehicle Properties Code Generator 		Stefan reports that calls will restart in September.
<ul style="list-style-type: none"> Covesa GraphQL components 	Alexander Domin (BMW)	No announcements
<ul style="list-style-type: none"> Eclipse Kanto 	(Thomas S)	No announcements. See source repository for code changes
<ul style="list-style-type: none"> vss-otaku 	Steve (Renesas)	Continuing work on updating to Apache IoTDB v0.13.

Minutes:

- Project Summary
 - Android VHAL
 - Chris Tingley from Conjure says they intend to work on VSS to VHAL translation in the autumn. Introduced Chris to [Stefan Wysocki](#) the Android EG lead so they can collaborate.
- AMM
 - Need to plan Data Architecture / Infrastructure sessions
 - Ideation on future EG: cloud, in-vehicle
 - Data Storage / sync
 - vehicle to cloud link
 - CCS
- Return of Experience
 - Steve summarised use of MQTT (transport) and Kafka (ingest) outlined in webinar he attended

- [Bringing hyper-connectivity to hypercars with MQTT and Kafka - Mobex](#)

2022-08-17

Agenda:

1. Project Status and info sharing
2. AMM
3. Data Expert Group
4. AoB

Minutes:

- Project Status:
 - VSS v3 released
 - Kuksa.val
 - kuksa.val and kuksa.val.feeders repo completely Apache-2.0 now
 - Removed experimental HTTP interface <https://github.com/eclipse/kuksa.val/pull/316>
 - Updated all kuksa.databroker dependencies <https://github.com/eclipse/kuksa.val/pull/321/files> (due to critical security bug in nix dependency)
 - Update architecture pictures (mention GRPC in addition to VISS and add VSS Logo): <https://github.com/eclipse/kuksa.val/pull/324>
 - Fix some remaining GENIVI references to COVESA. Better late than never :) <https://github.com/eclipse/kuksa.val/pull/327>
 - VSS
 - Released Version 3.0 !!! https://github.com/COVESA/vehicle_signal_specification/releases/tag/v3.0
 - Decided way forward wrt complex datatypes/structs https://github.com/COVESA/vehicle_signal_specification/issues/326
 - Updated docs and logo https://github.com/COVESA/vehicle_signal_specification/pull/470
 - tools: Fixed regression in DDS and GraphQL exporters: fixed issue w.r.t. value attribute generation in DDS-IDL file, Extend exporter tests
- AMM
 - Paul: call for session topics.
 - Steve: To help plan whether we can have workshops who plans to travel? Seb hopes too, Ted yes, Ulf not clear yet, Steve yes.
- Data Expert Group
 - Approved in board meeting.
 - Now move to implementation.
 - Call for chair and co-chairs/project leads

2022-08-03

Agenda:

1. Project Status and info sharing
2. AoB

Minutes:

- With only four present with the summer slowdown and other absences had a general state of the nation discussion including the EV meeting directly prior to this one.
- Ted reported from the W3C call that BMW continue to work towards publishing the source to their VISS server

2022-07-27

Agenda:

1. Project Status and info sharing
2. AoB
 - a. Data EG

<ul style="list-style-type: none"> • Kuksa.VAL 	Sebastian (Bosch)	<ul style="list-style-type: none"> - Fix autocompletion in commandline client https://github.com/eclipse/kuksa.val/pull/298 - Subscriptions work in GRPC https://github.com/eclipse/kuksa.val/pull/299 (GRPC .proto still about to be changed/aligned with databroker) - Feeder replaced with submodule https://github.com/eclipse/kuksa.val/pull/300 - Go and Python client license changed to Apache-2.0 https://github.com/eclipse/kuksa.val/pull/305 https://github.com/eclipse/kuksa.val/pull/307
<ul style="list-style-type: none"> • W3C VISS specification (v2) 	Ulf, Ted as backup (both Geotab)	Explainer started for VISS (work in progress). The BMW implementation report for their VISS data server has been published. See here https://www.w3.org/auto/wg/wiki/VISS_implementations

<ul style="list-style-type: none"> • WAI VISS server implementation in Go 	Ulf	No announcements. See source repository for code changes
<ul style="list-style-type: none"> • VSS & Tools 	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	<p>Ongoing discussion about complex datatypes/structs https://github.com/COVESA/vehicle_signal_specification/issues/326 https://github.com/COVESA/vehicle_signal_specification/wiki/Complex-data-structures-in-VSS-based-systems</p> <p>Adding individual wheel speeds https://github.com/COVESA/vehicle_signal_specification/pull/464</p>
<ul style="list-style-type: none"> • VSSo 	Daniel W Ted	
<ul style="list-style-type: none"> • VSC & Tools 	VSC team members	Magnus has posted a PR for his 'vsclib' to support the creation of VSC tooling https://github.com/COVESA/vsc-tools/pull/30 . Discussion of it in the call and comparisons to earlier work by Gunnar and Mikhael.
<ul style="list-style-type: none"> • CCS-components 	Ulf	
<ul style="list-style-type: none"> • AOS 	Artem (EPAM)	No announcements. See source repository for code changes
<ul style="list-style-type: none"> • Android Automotive VSS Vehicle Properties Code Generator 		Paul meeting with Google to discuss VSS to VHAL conversion
<ul style="list-style-type: none"> • Covesa GraphQL components 	Alexander Domin (BMW)	No announcements
<ul style="list-style-type: none"> • Eclipse Kanto 	(Thomas S)	No announcements. See source repository for code changes
<ul style="list-style-type: none"> • vss-otaku 	Steve (Renesas)	Continuing work on updating to Apache IoTDB v0.13.

Minutes:

- Discussion of proposed Data Expert Group
- VSS
 - Discussion of complex data types in VSS
 - Nik: Is VSS v3 coming soon?
 - Seb: Should be soon after summer break

2022-07-20

Agenda:

1. Project Status and info sharing
2. AoB
 - a. Board discussions

<ul style="list-style-type: none"> • Kuksa.VAL 	Sebastian (Bosch)	No announcements. See source repository for code changes
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<ul style="list-style-type: none"> W3C VISS specification (v2) 	Ulf, Ted as backup (both Geotab)	Explainer started for VISS (work in progress). BMW have given green light to publish their VISS implementation report.
<ul style="list-style-type: none"> WAI VISS server implementation in Go 	Ulf	No announcements. See source repository for code changes
<ul style="list-style-type: none"> VSS & Tools 	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	Big discussion about adding complex data types to VSS for the first time: https://github.com/COVESA/vehicle_signal_specification/issues/326 . Needs more input. Please read and input.
<ul style="list-style-type: none"> VSSo 	Daniel W Ted	New chairs (Daniel A and Felix) in place. Daniel A will take over tooling. Plan to discuss with Ford data scientist. Github: https://github.com/w3c/vsso
<ul style="list-style-type: none"> VSC & Tools 	VSC team members	VSC-Core: waiting on code-drop and result of MBition staffing their dev team. Container deployment: Page created for discussion of non-differentiating parts of VSC deployment VSC Deployment - Containers
<ul style="list-style-type: none"> CCS-components 	Ulf	No announcements. See source repository for code changes
<ul style="list-style-type: none"> AOS 	Artem (EPAM)	No announcements. See source repository for code changes
<ul style="list-style-type: none"> Android Automotive VSS Vehicle Properties Code Generator 		Next step is for Covesa to articulate actionable points to take to Google.
<ul style="list-style-type: none"> Covesa GraphQL components 	Alexander Domin (BMW)	No announcements
<ul style="list-style-type: none"> Eclipse Kanto 	(Thomas S)	No announcements. See source repository for code changes
<ul style="list-style-type: none"> vss-otaku 	Steve (Renesas)	Updating to new Apache IoTDB v0.13 which adds more efficient APIs for large data input and MQTT broker.

Minutes:

- Ulf: Should we discuss the EG changes discussed in the recent board meeting?
 - Paul summarises the current situation

2022-07-06

Agenda:

- Project Status and info sharing
- AoB
 - Meeting next week

<ul style="list-style-type: none"> Kuksa.VAL 	Sebastian (Bosch)	<p>On-going work to upgrade GRPC binding and adding GRPC into Python and Go SDKs (alongside VISS, not to replace).</p> <p>On-going work to integrated Code drops from https://sdv.eclipse.org in kuksa.val ("databroker" https://github.com/eclipse/kuksa.val/tree/master/kuksa_databroker)</p>
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<ul style="list-style-type: none"> W3C VISS specification (v2) 	Ulf, Ted as backup (both Geotab)	Ted plans to create "explainer" document for v2 that is required as part of the standardisation process over summer.
<ul style="list-style-type: none"> WAI VISS server implementation in Go 	Ulf	Master branch now points at single process (threaded) version of WAI. web-client maintainers rebasing on that.
<ul style="list-style-type: none"> VSS & Tools 	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	<p>Remove obsolete files https://github.com/COVESA/vehicle_signal_specification/pull/463 (unused/outdated documentation)</p> <p>Binary tool bug fixes https://github.com/COVESA/vss-tools/pull/175</p> <p>Discussed how JSON output might be adapted to OpenAPI json schema subset https://github.com/COVESA/vehicle_signal_specification/issues/457</p> <p>Discussion of complex data types (coming from AWS https://github.com/COVESA/vehicle_signal_specification/issues/326). GeoTab engineer showed examples of serialisation to json that allowed simpler connection to OpenAPI.</p>
<ul style="list-style-type: none"> VSSo 	Daniel W Ted	
<ul style="list-style-type: none"> VSC & Tools 	VSC team members	See source repository for code changes. Epam/Renesas presented proposal for open definitions for container deployment - next discussion milestone is once VSC example developed enough to discuss controls.
<ul style="list-style-type: none"> CCS-components 	Ulf	
<ul style="list-style-type: none"> AOS 	Artem (EPAM)	No announcements. See source repository for code changes
<ul style="list-style-type: none"> Android Automotive VSS Vehicle Properties Code Generator 		Next step is for Covesa to articulate actionable points to take to Google.
<ul style="list-style-type: none"> Covesa GraphQL components 	Alexander Domin (BMW)	
<ul style="list-style-type: none"> Eclipse Kanto 	(Thomas S)	
<ul style="list-style-type: none"> vss-otaku 	Steve (Renesas)	

Minutes:

- Kuksa
 - Seb outlines background to the work in progress changes listed above
 - gRPC
 - Steve: You mentioned gRPC vs VISS. Where there use cases where you favoured one over the other that necessitated the new work on gRPC?
 - Seb: gRPC came about from feeders where gRPC more easily connected to lang like C++ then having to use websocket for VISS.
 - Steve: Ted reported last week that there were already multiple definitions for binary VSS data serialisation in protobuf. Is this adding another? Coordination needed?
 - Seb: Good point. Currently only single values are supported so there is no much (no data stream) to serialise.
 - kuksa dataserver:
 - gRPC get/set VSS data server. No WS
 - Currently parallel to kuksa VISS server.
 - Internal discussions ongoing in Bosch about respective uses for each and to what extent they may merge.

- AoB
 - Steve will be travelling after the Covesa Board Meeting at the time of next weeks call. Do you want to have a call next week or skip?
 - Paul B will host the call.

2022-06-29

Agenda:

1. Project Status
2. Continue Vehicle Edge To Cloud Edge (VE2CE) project proposal (Slides [here](#)) discussion from last week

• Kuksa.VAL	Sebastian (Bosch)	
• W3C VISS specification (v2)	Ulf, Ted as backup (both Geotab)	
• WAll VISS server implementation in Go	Ulf	<p>Maintainers of new web client: https://github.com/nicslabdev/viss-web-client are stated they wish to do a Deep Dive on it. They have mentioned they are also working on a Management API. With summer break coming proposing Monday 5th September.</p> <p>Ulf: Talked to maintainers today about merging their WAll changes (security orientated). I am taking the opportunity to merge single process to master first, then they will merge. The 'long term token security' feature fills the remaining gap I see in WAll implementation of VISS v2 protocol, i.e it will then be 100% See vss protobuf comment in minutes</p>
• VSS & Tools	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	<p>No announcements. See source repository for code changes. See PR for documentation for VSS Layers.</p>
• VSSo	Daniel W Ted	<p>Felix (Bosch) and Daniel A (BMW) taking over from Daniel W soon. Minutes: https://www.w3.org/2022/06/27-auto-minutes</p>
• VSC & Tools	VSC team members	<p>See source repository for code changes. Magnus is working on thingsToVsc converters - code soon. Epam/Renesas ready to present proposal for container deployment - need to schedule when.</p>
• CCS-components	Ulf	
• AOS	Artem (EPAM)	<p>No announcements. See source repository for code changes</p>
• Android Automotive VSS Vehicle Properties Code Generator		<p>Next step is for Covesa to articulate actionable points to take to Google.</p>
• Covesa GraphQL components	Alexander Domin (BMW)	
• Eclipse Kanto	(Thomas S)	

<ul style="list-style-type: none"> • vss-otaku 	Steve (Renesas)	
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Minutes:

- Misc info sharing
 - Ted: there are 3 VSS protobuf serialisation versions - work ongoing to converge:
 1. WAI
 2. AWS Fleetwise
 3. vss-tool contrib
 - Ted: Eclipse sdv contributor reveal tomorrow. Expected that some will be building on CVII/VSS
 - <https://sdv.eclipse.org/sdv-contribution-day-june-2022/>
 - Steve: repeat of Ford EV project proposal kickoff planned for Asia friendly timeframe
- Vehicle Edge To Cloud Edge (VE2CE) project proposal
 - Nick: It would be good if the proposal addressed the relationship to existing standards e.g. ExVe, SOVD so its clear avoidance of fragmentation is preferred.
 - [Service Orientated Vehicle Diagnostics \(SOVD\)](#)
 - They are working with AUTOSAR Concept 704
- Ted: EU interest in VSS <https://ec.europa.eu/eusurvey/files/228a780b-d76e-4b63-bc3a-09a292d860ff/a9d67e78-cca0-4076-8d93-93a286654101>

2022-06-22

Agenda:

1. Project Status
2. Continue project proposal (Slides [here](#)) discussion from last week

<ul style="list-style-type: none"> • Kuksa.VAL 	Sebastian (Bosch)	
<ul style="list-style-type: none"> • W3C VISS specification (v2) 	Ulf, Ted as backup (both Geotab)	
<ul style="list-style-type: none"> • WAI VISS server implementation in Go 	Ulf	New web client: https://github.com/nicslabdev/viss-web-client . Discussion about doing a Deep Dive on it. They propose Monday 4th July - need to confirm.
<ul style="list-style-type: none"> • VSS & Tools 	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	No announcements. See source repository for code changes
<ul style="list-style-type: none"> • VSSo 	Daniel W Ted	
<ul style="list-style-type: none"> • VSC & Tools 	VSC team members	No announcements. See source repository for code changes. Work on container deployment proposal progressing.
<ul style="list-style-type: none"> • CCS-components 	Ulf	
<ul style="list-style-type: none"> • AOS 	Artem (EPAM)	No announcements. See source repository for code changes
<ul style="list-style-type: none"> • Android Automotive VSS Vehicle Properties Code Generator 		Next step is for Covesa to articulate actionable points to take to Google.

<ul style="list-style-type: none"> Covesa GraphQL components 	Alexander Domin (BMW)	
<ul style="list-style-type: none"> Eclipse Kanto 	(Thomas S)	
<ul style="list-style-type: none"> vss-otaku 	Steve (Renesas)	

Minutes:

- Coordination
 - Paul: Ford proposal meeting tomorrow.
 - Steve: Plan to repeat this in an asian friendly timeslot
 - Paul: Digital.auto proposal. VSS playground. Connection to academic work. Possibly 13th July.
- Vehicle Edge To Cloud Edge (VE2CE) project proposal
 - Ulf has updated proposal document.
 - Added backend client: to control what is sent from server, also allow writing to server from cloud.
 - See added slides for change log.
 - Discussion of Nick's point about how the proposed APIs relate to ongoing standards work, e.g. ExVe and ISO
 - Point made about ongoing work by Covesa to maintain outreach to such organisations.
 - Detail is multi-faceted: transport / messaging / data pipes (possibly proprietary), data models
 - ISO currently does not specify data model but plans to look at what is available including VSS
 - Florian: ISO API currently most closely fits CI-API
 - Ulf outlines how VDAPI can also be used as a App data API (see news slides in his proposal) as well as for data feeder
 - Steve: Are requirements for southbound interface to car network such as SOME/IP/CAN/LIN quite different from an end user app, or to lesser extent in-vehicle "function app"?
 - Next steps
 - Paul: need to figure out how to bring this to a bigger audience to grow interest.
 - Ulf: lets discuss next week

2022-06-15

Agenda:

- Project Status (brief)
- Vehicle Edge To Cloud Edge (VE2CE) project proposal

<ul style="list-style-type: none"> VSS & Tools 	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	<ul style="list-style-type: none"> VSS CI: Updated Makefile for graphql https://github.com/COVESA/vehicle_signal_specification/pull/456 VSS CI: VSS to DDS-IDL exporter inclusion in make file https://github.com/COVESA/vehicle_signal_specification/pull/455 VSS-Tools: VSSo switch to model VehicleComponents as instances (instead of subclasses) https://github.com/COVESA/vss-tools/pull/171 VSS-Tools: Adding first tests for checking instances https://github.com/COVESA/vss-tools/pull/167
<ul style="list-style-type: none"> VSC & Tools 	VSC team members	Generator to convert VSC to BMM model merged

Minutes:

- Brief project review
 - Paul: If anyone wants invite to the discussion of the EV Charging proposal from Ford please ask.
- Vehicle Edge To Cloud Edge (VE2CE) project proposal
 - Ulf presented proposal for CCS follow on. Slides [here](#)
 - Session recorded. Will be added once wiki page for proposal added.
 - Paul and Ulf will work on preparing next step.

2022-06-08

Agenda:

1. Project Status

• Kuksa.VAL	Sebastian (Bosch)	Work happening on breaking out feeders into own git repo to ease re-use and collab.
• W3C VISS specification (v2)	Ulf, Ted as backup (both Geotab)	BMW delivered their implementation report for W3C standardisation process. Post-summer slow down will advance standard to candidate status.
• WAI VISS server implementation in Go	Ulf	New web client: https://github.com/nicslabdev/viss-web-client This has been presented in W3C VISS call. Proposal is to repeat in a future deed-dive.
• VSS & Tools	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	<ul style="list-style-type: none"> • VSS & Tools: Fixed typo in battery.vspec https://github.com/COVESA/vehicle_signal_specification/pull/453 • Large wiper signal update https://github.com/COVESA/vehicle_signal_specification/pull/431 • Merged DDS-IDL generator: https://github.com/COVESA/vss-tools/pull/165 • Merged GraphQL generator https://github.com/COVESA/vss-tools/pull/166
• VSSo	Daniel W Ted	phd students sponsored by Volvo reported back on practical work on VSSo. See https://lists.w3.org/Archives/Public/public-automotive/2022Jun/0003.html
• VSC & Tools	VSC team members	No meeting this week due to EU holidays. AOS team continuing work on containerisation configuration proposal
• CCS-components	Ulf	No announcements. See source repository for code changes
• AOS	Artem (EPAM)	No announcements. See source repository for code changes
• Android Automotive VSS Vehicle Properties Code Generator		Ted: With Paul Boyes met Google Partner engagement team. Interested in VSS engagement.
• Covesa GraphQL components	Alexander Domin (BMW)	No announcements. See source repository for code changes
• Eclipse Kanto	(Thomas S)	No announcements. See source repository for code changes
• vss-otaku	Steve (Renesas)	No announcements. See source repository for code changes

Minutes:

- VISS web client
 - Ulf outlines features:
 - GUI compared to mix of simple CLI tooling in WAI. Easier to use
 - Supports both "short" and "long term" authentication. Long term support requires changes in WAI
 - Steve: Are the WAI changes being upstreamed and do you see any issues with review?
 - Ulf: Yes should be smooth integration
 - Discussion of possible deep-dive on it
- Vehicle Edge To Cloud Edge - VE2CE
 - Ulf wants to present a proposal next week for a follow on project to CCS.
 - No discussion of the details. Ulf prefers to leave it to the presentation.
 - He will provide a couple of lines for Steve to use in an announcement.

2022-06-01

Agenda:

1. Project Status

• Kuksa.VAL	Sebastian (Bosch)	No update
• W3C VISS specification (v2)	Ulf Ted as backup (both Geotab)	Ulf wrote implementation report on WAI. BMW have said they will do same on their implementation. Both needed in W3C standardisation process.
• WAI VISS server implementation in Go	Ulf	No update. Ulf is working on version nearer to production with OEM with demo in-vehicle. Hopes for changes to come back to OSS.
• VSS & Tools	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	<ul style="list-style-type: none"> - VSS logo suggestions & discussion - vss-tools: Merged updates to the "binary parser" go tooling https://github.com/COVESA/vss-tools/pull/163 - vss-tools: Initial discussion PR to generate DDS IDL files (usable by DDS stack tooling to generate publishers/subscribers) - VSS: Renamed RPM to speed in Electric Drivetrain for consistency https://github.com/COVESA/vehicle_signal_specification/pull/449 - VSS: Initial discussion on a PR suggesting creating a layer for 2-wheelers
• VSSo	Daniel W Ted	No update
• VSC & Tools	VSC team members	Discussion of containerisation and instrumentation aspects of VSC deployment.
• CCS-components	Ulf	No update
• AOS	Artem (EPAM)	No update. See github for code changes.
• Android Automotive VSS Vehicle Properties Code Generator		No update.
• Covesa GraphQL components	Alexander Domin (BMW)	No update
• Eclipse Kanto (proposed. worth tracking in CVII call?)	(Thomas S)	Connector between Kanto and Kuksa.val shown in Kanto Deep Dive is coming (public github)
• vss-otaku	Steve (Renesas)	No update

Minutes:

- Paul
 - Meeting upcoming to discuss proposal from Ford about collaboration on connecting EV Charging to VSS. Background is open smart use of charging data.
 - Next week he will be at Telematics Detroit. May not attend all meetings. Expect other members to be there also.
- Ted
 - Issac Agudo Ruiz (W3C VISS editor) has created VISS Client he will be open sourcing. He will present in W3C WG but it would be good to repeat in Covesa as well to get word out.
- Seb brings up question of ppl being spread out across multiple meetings

- Ulf we could do coordination bi-weekly
- Ted we could alternate: coordination one week, deep dive next week.

2022-05-25

Agenda:

1. Project Status
2. [CCS State Storage Deep Dive wrap up](#)

Project	Person reporting	Updates
<ul style="list-style-type: none"> • Kuksa.VAL 	Sebastian (Bosch)	New release v0.2.1 https://github.com/eclipse/kuksa.val/releases/tag/0.2.1
<ul style="list-style-type: none"> • W3C VISS specification (v2) 	Ulf Ted as backup (both Geotab)	No update
<ul style="list-style-type: none"> • WAI VISS server implementation in Go 	Ulf	No update
<ul style="list-style-type: none"> • VSS & Tools 	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	Improving charging and battery signals https://github.com/COVESA/vehicle_signal_specification/pull/442 Introducing signal for connectivity available https://github.com/COVESA/vehicle_signal_specification/pull/444 Improving documentation on data unit type usage https://github.com/COVESA/vehicle_signal_specification/pull/445 Clean up signals using percent https://github.com/COVESA/vehicle_signal_specification/pull/446
<ul style="list-style-type: none"> • VSSo 	Daniel W Ted	No meeting this week. New PRs to be discussed Monday.
<ul style="list-style-type: none"> • VSC & Tools 	VSC team members	Discussion of containerisation and instrumentation aspects of VSC deployment.
<ul style="list-style-type: none"> • CCS-components 	Ulf	No update
<ul style="list-style-type: none"> • AOS 	Artem (EPAM)	No update. See github for code changes.
<ul style="list-style-type: none"> • Android Automotive VSS Vehicle Properties Code Generator 		No update.
<ul style="list-style-type: none"> • Covesa GraphQL components 	Alexander Domin (BMW)	No update
<ul style="list-style-type: none"> • Eclipse Kanto (proposed. worth tracking in CVII call?)	(Thomas S)	No update
<ul style="list-style-type: none"> • vss-otaku 	Steve (Renesas)	No update

Minutes:

- [CCS State Storage Deep Dive wrap up](#)

- Was useful meeting to update ppl on State Storage component (what it is and its status) and discuss how it interacts with other components
- Discussion of the slides. Using 'feeders' vs VISS Client to update the VISS Server values. Architecture discussions.

2022-05-18

Agenda:

1. Project Status
2. [Next Deep Dive - CCS Component](#)

Project	Person reporting	Updates
<ul style="list-style-type: none"> • Kuksa.VAL 	Sebastian (Bosch)	No update
<ul style="list-style-type: none"> • W3C VISS specification (v2) 	Ulf Ted as backup (both Geotab)	No update
<ul style="list-style-type: none"> • WAI VISS server implementation in Go 	Ulf	No update
<ul style="list-style-type: none"> • VSS & Tools 	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	Presentation on Named Data Networking. Very forward looking. See slides and presentation from AMM.
<ul style="list-style-type: none"> • VSSo 	Daniel W Ted	Post workshop improvements
<ul style="list-style-type: none"> • VSC & Tools 	VSC team members	Code contribution from MBition coming closer. Waiting on final approvals. Discussion of 'VSC-core' (approx IDL+code generation deployment) and initial PoCs of tooling in github.
<ul style="list-style-type: none"> • CCS-components 	Ulf	No update
<ul style="list-style-type: none"> • AOS 	Artem (EPAM)	No update
<ul style="list-style-type: none"> • Android Automotive VSS Vehicle Properties Code Generator 		No update. Chris Simmond's meetup.
<ul style="list-style-type: none"> • Covesa GraphQL components 	Alexander Domin (BMW)	No update
<ul style="list-style-type: none"> • Eclipse Kanto <p>(proposed. worth tracking in CVII call?)</p>	(Thomas S)	No update
<ul style="list-style-type: none"> • vss-otaku 	Steve (Renesas)	No update

Apologies:

- Sebastian

Minutes:

- NDN
 - Ted: Tier 1 experimenting. Interesting for its connection to VSS.

- VSSo
 - Ted: Observers welcome to join calls at any time. Observers need to avoid involving in voting or concept introduction. Contributions can also be made through github. Same applies to VISS calls.
- Paul: describing CVII and CVII Tech Stack to various companies. If ppl have input on how best to describe it then please say.
 - Florian: OEM presentation from Graham at AMM. Seen those slides repeated elsewhere since then. May be helpful in terms of where VSS is applicable.
- [Next Deep Dive - CCS Component](#)
 - Monday 23rd at 4pm CET.
- Christian: Does it make sense to present/introduce digital.auto (<https://digitalauto.netlify.app/>) here?
 - Paul, Steve: Yes. Should discuss about what you wish to achieve.
 - Christian: Need to tie technical work to biz connection.
 - Paul: (running out of time) Can take that offline.

2022-05-11

Agenda:

1. Project Status
2. Next Deep Dive - CCS Component

Project	Person reporting	Updates
<ul style="list-style-type: none"> • Kuksa.VAL 	Sebastian (Bosch)	<p>Fixed a bug that kuksa.val throws an exception when subscriptionID is not a well-formed UUID on unsubscribe https://github.com/eclipse/kuksa.val/pull/267</p> <p>Code cleanup in GO client library https://github.com/eclipse/kuksa.val/pull/268</p> <p>Subscribe/Unsubscribe added to interactive command line client https://github.com/eclipse/kuksa.val/pull/269</p> <p>Fixed container bug, where CA.pem was missing https://github.com/eclipse/kuksa.val/pull/270</p> <p>Add link to secondary CI infrastructure in Readme, as Eclipse one has reliability problems https://github.com/eclipse/kuksa.val/pull/271</p>
<ul style="list-style-type: none"> • W3C VISS specification (v2) 	Ulf Ted as backup (both Geotab)	Merged PR. No open PRs, issues.
<ul style="list-style-type: none"> • WAI VISS server implementation in Go 	Ulf	Merged refactoring to single process. Two branches multi-process for the original multi-process arch and single-process for the new arch.
<ul style="list-style-type: none"> • VSS & Tools 	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	Discussion of possible future presentation on Named Data Networking in VSS call. VSS Layers PR in progress.
<ul style="list-style-type: none"> • VSSo 	Daniel W Ted	No update
<ul style="list-style-type: none"> • VSC & Tools 	VSC team members	Paul: I will be discussing with OEMs. Next weeks call will include deployment ideas.
<ul style="list-style-type: none"> • CCS-components 	Ulf	No update
<ul style="list-style-type: none"> • AOS 	Artem (EPAM).	No update
<ul style="list-style-type: none"> • Android Automotive VSS Vehicle Properties Code Generator 		Engaging OEMs in what they need in AOSP

<ul style="list-style-type: none"> Covesa GraphQL components 	Alexander Domin (BMW)	No update
<ul style="list-style-type: none"> Eclipse Kanto <p>(proposed. worth tracking in CVII call?)</p>	(Thomas S)	Added CANOPI to integration backlog. Integration to Apertis containers. Local digital twins.
<ul style="list-style-type: none"> vss-otaku 	Steve (Renesas)	No update

Minutes:

- CCS Components: State Storage Deep Dive Agenda
 - Timing
 - 15-20 min: Ulf Intro presentation on CSS Components: State Storage.
 - 40 min: reaction and building future plan
 - Technical API discussion
 - Design Issues in Ulf's presentation
 - Review current State Storage component API
 - Anything to fix or extend?
 - In VSS Terminology State Storage is 'simple'. Is this component left (fit) for that use case and something else is needed for 'more powerful' or do we reuse/extend?
 - Abstraction APIs
 - To Feeder, to Server
 - Requirements
 - Speed
 - Low vs medium vs high frequency
 - Native for high frequency?
 - Kuksa.val is also a target
 - Last value vs time series
 - VISS protocol has some TS query
 - 'History filtering'
 - Simple support for this in current WAI. Other process (e.g. comms) must tell WAI to start/stop recording. Then VISS client (e.g. cloud) must detect vehicle became disconnected and query for missing data.
 - Kuksa currently has no TS
 - Date
 - Monday 23rd May 4pm CET.

2022-05-04

Minutes:

- AMM feedback
 - Paul
 - Workshop
 - Input from Ricardo/NNG on interfacing VSS to ROS RTOS and its DDS messaging
 - Reached out waiting for reply to advance discussion
 - BMW (Adnan) input about links to big tech company
 - As above meeting needed to scope out
 - Next AMM
 - Need input on what ppl want to do to make workshops flow more organically
 - Sebastian
 - Workshops
 - Ppl came expecting 'readout' rather than workshop.
 - Positive was the good attendance and many newcomers, but the flipside of that was it was less 'workshopping'
 - Christian
 - Good discussions
 - Mixed expectations of new members/visitors vs call regulars
 - Good attendance in workshops despite them being scheduled at the end
 - It was cool
 - Florian
 - Good balance between panels, biz/tech track and workshops
 - Ted
 - Attended virtually
 - Enjoyed BMW presentation on VISS integration
- CVII Tech Stack Workshop talking points
 - SomelP work occurring in Autosar. No schedule but something to follow.
 - BMW Android/VISS presentation. Major: VISS + Android VHAL feeder, Minor: GraphQL backend.
 - See deep dive discussion below
 - ROS / ADAS DDS to VSS
 - See Paul comment above
 - VSS Feeders / Data Store
 - Seb update on kuksa.val CAN

- Loosely coupled, i.e. easily reusable
- CAN feeder in python. Nice for prototype but for production likely look C++, Rust
- CANOPI
- Next step: wider discussion about reusing this work in eco-system. More eyes on the code etc.
- VSS Feeder and Data Store abstraction
 - CCS Component status as starting point
 - Ulf's CCS component slides as possible starting point to deep dive
 - Need to discuss to what extent abstraction is possible or makes sense and for which use cases.
 - e.g. CCS Component current abstraction is simple single key/value API. Fine for low volume but would not scale.
 - In some cases might make sense to just use highest speed native API
- Steve suggests start planning Deep Dive to discuss VSS Feeders and Data Stores
 - 1st might be:
 - 20-30 min Ulf present CCS slides, followed by wider discussion about abstraction.
 - Ulf sent apologies today. Steve will discuss with him either next week or slack
- Deep dive next
 - Steve: What other things do you want to discuss in coming weeks?
 - Seb: Dig into what BMW needed/took from VISS protocol to understand their needs. Input may be useful towards VISS v3.
 - Ted has been having OSS roadmap discussion with BMW. Idea is to schedule meeting with Adnan about above when code available.
 - If meeting is in W3C slot then Ted will arrange 'visitor pass' for CVII members to attend.

2022-04-20

Agenda:

1. Project Status
2. AMM Sessions

Project	Person reporting	Updates
<ul style="list-style-type: none"> • Kuksa.VAL 	Sebastian (Bosch)	Refactor Subscription Manager and fixes race condition in Websocket interface: https://github.com/eclipse/kuksa.val/pull/264 https://github.com/eclipse/kuksa.val/pull/266 GO client library added for first time to access kuksa.val: https://github.com/eclipse/kuksa.val/pull/265
<ul style="list-style-type: none"> • W3C VISS specification (v2) 	Ulf Ted as backup (both Geotab)	See last update
<ul style="list-style-type: none"> • WAI1 VISS server implementation in Go 	Ulf	See last update
<ul style="list-style-type: none"> • VSS & Tools 	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	No update
<ul style="list-style-type: none"> • VSSo 	Daniel W Ted	See last update
<ul style="list-style-type: none"> • VSC & Tools 	VSC team members	No call this week due to national holidays
<ul style="list-style-type: none"> • CCS-components 	Ulf	No update
<ul style="list-style-type: none"> • AOS 	Artem (EPAM)	See update in minutes for last week
<ul style="list-style-type: none"> • Android Automotive VSS Vehicle Properties Code Generator 		Added wiki page to gather issues/opportunities for Minutes:

<ul style="list-style-type: none"> Covesa GraphQL components 	Alexander Domin (BMW)	No update
<ul style="list-style-type: none"> Eclipse Kanto <p>(proposed. worth tracking in CVII call?)</p>	(Thomas S)	Presentation from Kanto introduction posted in "2022-03-28" heading below.
<ul style="list-style-type: none"> vss-otaku 	Steve (Renesas)	No update

Minutes:

- AMM workshop Thursday afternoon: 2-3 hours (Updated working list from last week)
 - Discussion of what the group wants to work on and discuss in near-term
 - Currently the sessions are split into the two related topics VSS Data Storage, including feeders and VSS Data Servers
 - Topic brainstorming:
 - VSS Data Storage (including VSS Data Feeders) (Southbound)
 - Data Storage implementations:
 - DBs: redis, timeseries etc
 - Architecture: Single central vs distributed vs direct sensor connect (bypass store)
 - Feeders: CAN (kuksa.val have closed some gaps), some/ip,
 - Timeseries vs last/single value
 - Interfacing into data servers
 - VSS Data Servers (Northbound)
 - VISS v3? (Duplicate: Will be brought up in prior VISS session so likely handled there)
 - Are VISS backend abstractions possible: storage, feeders?
 - GraphQL - in-vehicle?
 - BMW VISSAndroid abstraction/interface/data server
 - VSS Data Servers to cloud
 - Data processing
 - Ted explains they see issues with OEM cloud data. Time slice not short enough for some forms of h/w maintenance wear tracking so have to do their own. Possible need for some in-vehicle processing. Also issues with in-vehicle caching with insufficient IO.
 - In-vehicle vs cloud
 - In-memory vs storage

2022-04-13

Agenda:

- Project Status
- AMM Sessions

Minutes:

- Project status roundup abbreviated to allow more AMM prep. Any
 - VISS
 - Ted: BMW hope to OSS the VISSAndroid adapter they will discuss at the VISS session at the AMM by June
 - Ulf is refactoring WAll so the architecture has a much lower number of standalone processes. Work should be complete in 2-3 weeks.
 - Kanto
 - Steve: Tom could you chase Tina for the Kanto presentation please.
 - Aos
 - Steve reports that the public documentation for Aos is now online <https://docs.aoscloud.io>
 - Work is starting on the previously reported goal of replacing the current VISS v1 server with an OSS replacement to adopt and extend. WAll and Kuksa.val in focus.
 - Work is also starting on some of the VSS related topics mentioned in Artem's presentation last year such as user service migration between cars.
- AMM workshop Thursday afternoon: 2-3 hours
 - Discussion of what the group wants to work on and discuss in near-term
 - Currently the sessions are split into the two related topics VSS Data Storage, including feeders and VSS Data Servers
 - Topic brainstorming:
 - VSS Data Storage (including VSS Data Feeders) (Southbound)
 - Data Storage implementations:
 - DBs: redis, timeseries etc
 - Architecture: Single central vs distributed vs direct sensor connect (bypass store)
 - Feeders: CAN (kuksa.val have closed some gaps), some/ip,
 - Timeseries vs last/single value
 - Interfacing into data servers
 - VSS Data Servers (Northbound)
 - VISS v3? (Duplicate: Will be brought up in prior VISS session so likely handled there)

- Are VISS backend abstractions possible: storage, feeders?
- GraphQL - in-vehicle?
 - BMW VISSAndroid abstraction/interface/data server
- VSS Data Servers to cloud
- Data processing
 - Ted explains they see issues with OEM cloud data. Time slice not short enough for some forms of h/w maintenance wear tracking so have to do their own. Possible need for some in-vehicle processing. Also issues with in-vehicle caching with insufficient IO.
 - In-vehicle vs cloud
 - In-memory vs storage

2022-04-06

Agenda:

1. Project Status
2. AMM Sessions

Project	Person reporting	Updates
• Kuksa.VAL	Sebastian (Bosch)	KUKSA released "CANOPi", which is version two of KUKSA's Open hardware in-vehicle prototyping platform. Pi Ecosystem compatible, 2x CAN FD, OBD, LTE/5G ready https://www.eclipse.org/kuksa/blog/2022/03/24/2022-03-24-canopi/
• W3C VISS specification (v2)	Ulf Ted as backup (both Geotab)	
• WAI VISS server implementation in Go	Ulf	
• VSS & Tools	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	iNAGO presented their VSS implementation. VSS: iNago presentation. https://drive.google.com/file/d/17Bu6AuFO4jAZ_7z1YO2sPch6Y5Q27ZBe/view?usp=sharing Had "Events" and "Method Calls" added to vanilla VSS Introduction:: Maintain intro slides and have regular introduction sessions
• VSSo	Daniel W Ted	New kickoff meeting post First Public Working Draft. New attendees. Reach out to new attendees.
• VSC & Tools	VSC team members	Magnus walked through his presentation in prep for AMM touching on most topics: catalog, definition language, tooling, VSS relationship to VSC.
• CCS-components	Ulf	
• AOS	Artem (EPAM).	
• Android Automotive VSS Vehicle Properties Code Generator		
• Covesa GraphQL components	Alexander Domin (BMW)	

<ul style="list-style-type: none"> • Eclipse Kanto <p>(proposed. worth tracking in CVII call?)</p>	(Thomas S)	<p>Need to connect with Thomas.</p> <ol style="list-style-type: none"> 1. Supporting C-Groups v2 2. Next Milestone release M2 3. Discussed collaboration with SDV re management of the many hardware variants. 4. Distributed Edge use cases without cloud discussed ETSI MEC (https://www.etsi.org/technologies/multi-access-edge-computing) <p>cgroups v2 support for containerization > working on M2 release - including system metrics, Azure IoT Hub connectivity, file-based backup-restore > exploring different publicly funded projects like SofDCar (https://sofdcar.de/) - digital twin concept and distributed edge computing use cases</p>
<ul style="list-style-type: none"> • vss-otaku 	Steve (Renesas)	

2022-03-31

Agenda:

1. Meeting arrangements for next week - Steve on holiday
2. Regular project recap
3. Develop the [deep dive](#) page: What (detail)? When (priority)?
4. AMM 5 min overview session - what to list?
5. AMM workshops - topics

Related projects walk-through (every week):

Project	Person reporting	Updates
<ul style="list-style-type: none"> • Kuksa.VAL 	Sebastian (Bosch)	<p>Fixes to CAN DBC mapping (Typo in ParkingBrake and added EngineLoad Mapping): https://github.com/eclipse/kuksa.val/pull/253</p> <p>Support for setting arrays (e.g. DTCList) https://github.com/eclipse/kuksa.val/pull/252</p>
<ul style="list-style-type: none"> • W3C VISS specification (v2) 	Ulf Ted as backup (both Geotab)	See last week. Reach out to BMW ongoing.
<ul style="list-style-type: none"> • WAI VISS server implementation in Go 	Ulf	See last week.
<ul style="list-style-type: none"> • VSS & Tools 	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	<p>Merged improved and extended model for seat signals: https://github.com/COVESA/vehicle_signal_specification/pull/421</p> <p>Added Ah (Ampere hours) as unit: https://github.com/COVESA/vss-tools/pull/151</p> <p>Refactored binary Exporter in vss tools: https://github.com/COVESA/vss-tools/pull/152</p>
<ul style="list-style-type: none"> • VSSo 	Daniel W Ted	Bi-weekly now scheduled for Monday 15:00 GMT starting 4th April
<ul style="list-style-type: none"> • VSC & Tools 	VSC team members	Tim Grieshammer from MBition (proposed lead) has begun to join calls. Discussing scope.
<ul style="list-style-type: none"> • CCS-components 	Ulf	No update
<ul style="list-style-type: none"> • AOS 	Artem (EPAM)	Work continues on the documentation release

<ul style="list-style-type: none"> Android Automotive VSS Vehicle Properties Code Generator 		Working towards wider industry discussion at AMM
<ul style="list-style-type: none"> Covesa GraphQL components 	Alexander Domin (BMW)	
<ul style="list-style-type: none"> Eclipse Kanto <p>(proposed. worth tracking in CVII call?)</p>	(Thomas S)	Presentation given by Bosch Monday.
<ul style="list-style-type: none"> vss-otaku 	Steve (Renesas)	First release of the Simulator to Apache IoTDB timeseries DB feeder made public. Includes README.md documentation.

- Minutes:
 - AMM overview
 - What
 - Achievements
 - GraphQL contributions?
 - WALL: Redis
 - Coordination:
 - Feeder/Storage: Redis, Apache IoTDB, Feeder news
 - Join: meetings and AMM session

2022-03-28 Eclipse Kanto Deep Dive

Agenda:

- Bosch introduce Eclipse Kanto. It's relation to CVII Tech Stack and VSS eco-system and suggestions for possible collaboration.
- Discussion

Presentation:

[20220315-Eclipse Kanto_covesa_pitch.pptx](#)

Minutes (summarised after the event):

- Konstantina Gramatova introduced Kanto.
- Live demo (see ppt for details)
 - Bosch IoT Suite (serverside) providing container image to Kanto.
 - Image contains Kuksa.val as VISS data server.
 - Kanto used to orchestrate running image.
 - GPS used to provide input to data feeder into kuksa.val which was read out to web.
- Recap of some known possible points for container orchestration collab around details missing in current OCI specs for auto needs.
- Kanto team interested in community collab. Team encouraged to feed in the gaps they see.

2022-03-23

Agenda:

- Regular project recap
- Meeting time for next two weeks before Europe switches to daylight saving
- Develop the [deep dive](#) page: What (detail)? When (priority)?
- AMM workshops

Related projects walk-through (every week):

Project	Person reporting	Updates
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<ul style="list-style-type: none"> Kuksa.VAL 	Sebastian (Bosch)	No update this week
<ul style="list-style-type: none"> W3C VISS specification (v2) 	Ulf Ted as backup (both Geotab)	Ted: open request around discussion of implementations. Hope for WAI and BMW Android VSS integration RoE at AMM. Waiting for detail on latter.
<ul style="list-style-type: none"> WAI VISS server implementation in Go 	Ulf	Redis support added: https://github.com/w3c/automotive-viss2/pull/28 WAI configurable whether you want to use SQLite or Redis for statestorage.
<ul style="list-style-type: none"> VSS & Tools 	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	Discussed AMM workshops, e.g. VSS Layers. Ulf refactoring vss2binary.
<ul style="list-style-type: none"> VSSo 	Daniel W Ted	Doodle going out to arrange the proposed bi-weekly VSSo call.
<ul style="list-style-type: none"> VSC & Tools 	VSC team members	Tim Grieshammer from MBition finding his feet as the lead
<ul style="list-style-type: none"> CCS-components 	Ulf	Ulf has pushed to css-components update to livesim component to make connection to updated state storage component to provide feeder for redis/sqlite, e.g. https://github.com/COVESA/ccs-components/commit/327e6757adfd54066800bd939bb4091583acc9d9
<ul style="list-style-type: none"> AOS 	Artem (EPAM)	No update this week
<ul style="list-style-type: none"> Android Automotive VSS Vehicle Properties Code Generator 		Direction discussions planned for AMM - see schedule
<ul style="list-style-type: none"> Covesa GraphQL components 	Alexander Domin (BMW)	No update
<ul style="list-style-type: none"> Eclipse Kanto <p>(proposed. worth tracking in CVII call?)</p>	(Thomas S)	Deep dive for next Monday 28th at 4pm CET
<ul style="list-style-type: none"> vss-otaku 	Steve (Renesas)	Data feeder now writing to Apache IoTDB timeseries DB, with latter acting as VSS Data Store.

- Minutes:

- eco-system

- Ted: Discussion planned with CCC (BMW representative) regarding coordination. They have traction around their digital key (keyless entry) and there are possible connections to VSC, VSS.

- Eclipse Kanto

- Thomas wants to go for next Monday 28th at the 'old CCS meeting' time for presentation.
 - Show of hands showed some ppl were available and Thomas wants to go ahead.
 - Rough plan for meeting is approximately 30 mins on Kanto from developers, followed by 30 mins on discussion. Focus is on the business of CVII Tech Stack and VSS eco-system, i.e. shared collaboration on non-differentiating technology.

- VSS Data Storage
 - Discussion of attaching timeseries DB to CCS statestorage to provide "last value" backend for VISS.
 - Obvious first step. Does not preclude other processes from directly accessing timeseries data.
 - Wider discussion of how timeseries can be helpful, e.g. query and data processing, can follow on.
- AMM
 - Discussion of CVII Tech Stack and issues around co-existing with parallel VSS track.
 - e.g. VSS has a VSS Layers discussion planned many will want to attend.
 - Deep dive
 - Ulf reminds we should not neglect CSS/Northbound to Cloud. Although we need participation from ppl in that area.
 - CVII Tech Stack workshop
 - Seb: I am less interested in architecture discussion.
 - Ulf, Seb and Steve all express interest in discussion on feeders, data storage and data servers.
 - Working idea is for that to be the focus for a workshop. Possibly in afternoon to allow VSS workshop attendance.
 - More detailed discussion points need to be developed ahead of time.

2022-03-16

Agenda:

1. Regular project recap
2. Meeting time for next two weeks before Europe switches to daylight saving
3. Develop the [deep dive](#) page: What (detail)? When (priority)?
4. AMM workshops

Related projects walk-through (every week):

Project	Person reporting	Updates
• Kuksa.VAL	Sebastian (Bosch)	No update this week
• W3C VISS specification (v2)	Ulf Ted as backup (both Geotab)	See last week summary - working towards v2
• WAI VISS server implementation in Go	Ulf	Improved and bug fixed curve logic functionality. Pushed to master.
• VSS & Tools	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	Discussion of documentation PR with regards to license. See github for closed issues
• VSSo	Daniel W Ted	Workshop was held this week: <ul style="list-style-type: none"> • Minutes: https://www.w3.org/2022/03/14-auto-minutes.html • Video: https://www.youtube.com/watch?v=p8_wYihOVMY Met goal of increasing participation. Ford, Volvo and Blackberry present in addition to usual suspects for example. Probably will form bi-weekly group.
• VSC & Tools	VSC team members	Magnus provided positive update on MBition involvement in project. Tom has a draft diagram for the potential wiper demo. Will add to the VSC page.
• CCS-components	Ulf	No update this week
• AOS	Artem (EPAM)	No update this week

<ul style="list-style-type: none"> Android Automotive VSS Vehicle Properties Code Generator 		No update this week
<ul style="list-style-type: none"> Covesa GraphQL components 	Alexander Domin (BMW)	No update this week
<ul style="list-style-type: none"> Eclipse Kanto <p>(proposed. worth tracking in CVII call?)</p>	(Thomas S)	No update this week
<ul style="list-style-type: none"> vss-otaku 	Steve (Renesas)	Progress made on feeder to VSS Data Store prototype. Concentrating on a few data points initially to keep it simple. Feeder is a websocket server. Successfully receives sim data and converts to VSS data model. Currently working on writing to Apache IoTDB DB.

- Apologies:
 - Sebastian

- Minutes:
 - Deep dive
 - VSS and VSC cohabitation
 - Tom would like to see the VSS and VSC cohabitation discussion get going before the AMM.
 - Ulf sees a topic connection to VISS.
 - Steve doesn't feel ownership for the topic in tech stack. Clearly it strongly connects to VSC and VSS.
 - Discussion about kick starting. Decision to bring it up in Monday's VSC call, then depending on that possibly take it onto Tuesdays VSS call.

2022-03-09

Agenda:

- Regular project recap
- Decide on timing for extra meetings.
 - Fill out the timing [doodle](#) if you have not already.
- Deep dive/AMM topic planning
 - Develop the [deep dive](#) page. What (detail)? When (priority)?
 - We need also to work on the topics for the AMM workshops.
 - Deep dive is an obvious input into that. Currently we have 1 hour scheduled. Is that enough?

Related projects walk-through (every week):

Project	Person reporting	Updates
<ul style="list-style-type: none"> Kuksa.VAL 	Sebastian (Bosch)	No change this week
<ul style="list-style-type: none"> W3C VISS specification (v2) 	Ulf Ted as backup (both Geotab)	Closing out remaining issues for v2. Discussion of extending filtering (range/compound) see https://github.com/w3c/automotive/issues/450 . Looking to keep v2 changes to minimum, before starting bigger changes/new features towards v3

<ul style="list-style-type: none"> • WAI VISS server implementation in Go 	Ulf	Ulf planning to add new Redis (CCS component) statestorage support. Timeline in 1-2 weeks.
<ul style="list-style-type: none"> • VSS & Tools 	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	<p>Spec changes: int16->float for pitch/roll/yaw for better precision https://github.com/COVESA/vehicle_signal_specification/pull/422</p> <p>Spec Changes: ADAS states also for EBD (Electronic brakeforce distribution) and EBA (Emergency Brake assist): https://github.com/COVESA/vehicle_signal_specification/pull/418/</p> <p>Decision to try to release VSS V3.0 before All Members Meeting (end of April)</p> <p>Discussion about what to do on AMM (to be collected in Wiki), and some roadmapping discussion, (layers, metadata, tools rewrite.. to be collected in Wiki) https://github.com/COVESA/vehicle_signal_specification/wiki/COVESA-AMM-Spring-22</p>
<ul style="list-style-type: none"> • VSSo 	Daniel W Ted	VSSo published as a First Public Working Draft at W3C https://www.w3.org/TR/vsso-core/
<ul style="list-style-type: none"> • VSC & Tools 	Gunnar	Discussion of AMM demo around window wiper ECU service continuing. Tom working on draft high level arch diagram.
<ul style="list-style-type: none"> • CCS-components 	Ulf	See Redis support last week.
<ul style="list-style-type: none"> • AOS 	Artem (EPAM)	No major update this week. Work continuing.
<ul style="list-style-type: none"> • Android Automotive VSS Vehicle Properties Code Generator 		No change
<ul style="list-style-type: none"> • Covesa GraphQL components 	Alexander Domin (BMW)	No update this week
<ul style="list-style-type: none"> • Eclipse Kanto <p>(proposed. worth tracking in CVII call?)</p>	(Thomas S)	<p>Maintainers can do from March 28th for presentation.</p> <p>Getting started guide (website) https://www.eclipse.org/kanto/docs/getting-started/ GitHub: https://github.com/eclipse-kanto</p>
<ul style="list-style-type: none"> • vss-otaku 	Steve (Renesas)	Currently working on feeder to VSS Data Store code.

- Minutes:
 - Project Summary
 - Kanto
 - Tom reports that Maintainers can do a presentation from March 28th.
 - Discussion of content. Focus of deep dives is the scope of CVII Tech Stack, e.g. shared collab areas and understanding big architecture picture of how components fit together. Suggestion that 50% of time be presentation, 50% discussion of raised collab points.
 - Deep dive scheduling
 - Doodle results
 - 5pm CET has good support but clashes with bi-weekly HV call. Paul would prefer to avoid rescheduling it.
 - 4pm CET (old CCS time) slightly worse in support terms. Sebastian may not be able to attend some but says group should go ahead. Ted thinks he can reschedule clashing meeting.
 - Conclusion:
 - Try 4pm CET.
 - Deep dive topics

- VSS / VSC integration
 - Seb: this overlaps with VSS and VSC groups and each has different participants. Needs coordination.
 - Steve: agree. I don't think "where" is important, i.e. not "owned" by Tech Stack, what is important is the topic.
 - Group participants are going to need to coordinate the topic. Upcoming AMM is going to be a good moment for everyone to be together.
 - Who is going to AMM?
 - Seb, Tom, Paul, Steve, Ulf, Florian (maybe), Nick (maybe), Erik, Philippe, Ted (would like to but obviously trans-atlantic)
 - General
 - Steve: please add your thoughts and topics to the deep dive page. Other the coming weeks we should refine and then prioritise to actually start the meetings.
- AMM
 - Steve: Is one hour enough?
 - Agreement that two hours would be better for workshop. Is that possible?
 - Paul will discuss with schedule planners.

2022-02-03

Agenda:

- Regular project recap
- Continue the extra meeting discussions. Work on the "deep dive" topic list.k
 - Fill out the timing [doodle](#) if you have not already.
 - Add to the [deep dive](#) page.
- AMM topic planning
- Tech discussion with remaining time.

Related projects walk-through (every week):

Project	Person reporting	Updates
• Kuksa.VAL	Sebastian (Bosch)	Upgraded GRPC dependency to enable build on current Raspberry OS (and other platforms using similarly new GCC) https://github.com/eclipse/kuksa.val/issues/250
• W3C VISS specification (v2)	Ulf Ted as backup (both Geotab)	No update this week (Ulf and Ted absent)
• WAI VISS server implementation in Go	Ulf	<p>Ulf has pushed the Redis statestorage support mentioned last week, you can find it here: https://github.com/COVESA/ccs-components/tree/master/statestorage</p> <p>Publication for its use in WAI on the VISSv2 server github pending.</p> <p>Steve reports that Renesas have integrated WAI onto the R-Car S4 SoC using the AGL Linux distro, with a data feeder for a simulator writing VSS data to the statestorage DB. Planning to demo this PoC at the AMM.</p>
• VSS & Tools	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	<p>- spec: Doc/wording clarification, that sensors, actuators and attributes are all considered „signals“ https://github.com/COVESA/vehicle_signal_specification/pull/408</p> <p>- spec: Slight refactoring of GPS coordinates (separate vertical/horizontal accuracy) https://github.com/COVESA/vehicle_signal_specification/pull/417</p> <p>- spec: Max Line length recommendation https://github.com/COVESA/vehicle_signal_specification/pull/409</p> <p>- tools: vss2ttl (aka ontology) converter merged do official vss-tools repo https://github.com/COVESA/vss-tools/pull/141</p> <p>- tools. Unify codebase of 2json, 2csv and 2yaml converters https://github.com/COVESA/vss-tools/pull/146</p> <p>- tools: Fixed warning on badly escaped regexp strings https://github.com/COVESA/vss-tools/pull/147</p> <p>- FAQ being collected. Github wiki will be used to collect inputs. Not up yet, but now draft on Covesa wiki here: VSS FAQ - Draft Questions and Answers</p>
• VSSo	Daniel W Ted	<p>Ted update to ML:</p> <hr/> <p><i>We have decided to cut back this workshop to one day for three hours, specifically 14 March from 7-10PDT / 10-13EDT / 16-19CET.</i></p> <p><i>Those who want to propose items for the agenda may do so in Github although with more limited time we have less flexibility.</i></p> <p>https://github.com/w3c/vsso/issues/26</p>

<ul style="list-style-type: none"> • VSC & Tools 	Gunnar	<p>Discussion of AMM demo around Bosch washer ECU service. Outline will be delayed by about a week whilst VSC Lead relocates continents.</p> <p>Next task: architectural diagram and task split</p>
<ul style="list-style-type: none"> • CCS-components 	Ulf	See statestorage above
<ul style="list-style-type: none"> • AOS 	Artem (EPAM)	No update this week.
<ul style="list-style-type: none"> • Android Automotive VSS Vehicle Properties Code Generator 		Work continuing on Android 12 emulation environment
<ul style="list-style-type: none"> • Covesa GraphQL components 	Alexander Domin (BMW)	No update this week
<ul style="list-style-type: none"> • Eclipse Kanto <p>(proposed. worth tracking in CVII call?)</p>	(Thomas S)	<p>Kanto devs in Bosch wish to present VSS aspects of Kanto:</p> <ul style="list-style-type: none"> • 20 min overview + 10 min Q&A • See minutes
<ul style="list-style-type: none"> • vss-otaku 	Steve (Renesas)	Time limited this week. Work continues on data model conversion.

Apologies:

- Ulf

Minutes:

- Kanto
 - Thomas reports that project leads in Bosch working on Eclipse Kanto would like to present project
 - Source now available on Eclipse github
 - When?
 - Discussion about how to do 30+min session as this meeting has limited time
 - One approach is to do it as a "deep dive". Paul concerned about having people new to CVII having to sit through rest of the meeting.
 - AI: Thomas will get devs to add it as a topic to deep dive page and get feedback on when.
 - 5pm CET Monday is most liked time slot in Paul's deep dive doodle. Paul realises now that clashes with HV bi-weekly.
 - AI: Paul will consider timings.
 - What, why?
 - Assumption is that presentation is focused on CVII Tech Stack goals. Understanding architecture components and non-differentiating areas of collaboration.
 - From initial presentation discussion we can determine collab areas.
 - Some points that came up in first discussion:
 - Service definition
 - Container orchestration configuration
 - Extra meeting / deep dive
 - Doodle results show preference for "old CCS time" of Monday 5pm CET.
 - Please update the "deep dive" topics page with your thoughts and ideas. This page will be used as driving force for organisation of coming meetings.
 - AMM planning
 - Little time left to discuss. Please think about topic list.

2022-02-23

agenda:

- project recap
- extra meeting discussion
 - [CVII Tech Stack: "Deep-dive" topics](#)
- dev org
 - recording task list

- AMM prep
- AoB

Related projects walkthrough (every week):

Project	Person reporting	Updates
<ul style="list-style-type: none"> • Kuksa. VAL 	Sebastian (Bosch)	<p>Added a 150MB CAN trace with a lot more signals than before and mapped some of them to VSS, see https://github.com/eclipse/kuksa.val/tree/master/kuksa_feeders/dbc2val Or here https://github.com/eclipse/kuksa.val/blob/master/kuksa_feeders/dbc2val/mapping.yml</p> <p>Also upgraded Websocket dependency in Python package (security)</p>
<ul style="list-style-type: none"> • W3C VISS specification (v2) 	Ulf Ted as backup (both Geotab)	Ulf clarified comments about sensor r/w from last week. The current spec says sensors are read only, however discussions continue to change the normative language to allow r/w where it makes sense such an ECU setting the state in another ECU or data store. He expects that change to be made for v2 of the specification. Discussions to add an additional method API to allow updates will take more time and is expected for spec v3.
<ul style="list-style-type: none"> • WAI VISS server implementation in Go 	Ulf	See CCS
<ul style="list-style-type: none"> • VSS & Tools 	Daniel Wilms (BMW) (Erik J or Sebastian as backup)	<p>Merged fix to instantiation error #144 https://github.com/COVESA/vss-tools/pull/144</p> <p>Refactoring of charge plug signals https://github.com/COVESA/vehicle_signal_specification/pull/405</p> <p>Welcomed new participants from AWS. Questions came up about structured data types and informed about status of discussions.</p>
<ul style="list-style-type: none"> • VSSo 	Daniel W Ted	No update
<ul style="list-style-type: none"> • VSC & Tools 	Gunnar	<p>Discussions continue on possible Wiper ECU example</p> <p>Discussion also of cohabitation of VSS and VSC in-vehicle. Topic will take some time to talk through. Added this topic to the CVII Tech Stack Deep Dives list.</p>
<ul style="list-style-type: none"> • CCS-components 	Ulf	Ulf is implementing Redis DB as the data store for the CCS State Storage component . Currently SQLite is used. Code not yet pushed. Will then be used in WAI as VSS Data Store. See minutes for more details.
<ul style="list-style-type: none"> • AOS 	Artem (EPAM)	
<ul style="list-style-type: none"> • Android Automotive VSS Vehicle Properties Code Generator 		

<ul style="list-style-type: none"> Covesa Graph QL components 	Alexander Domin (BMW)	
<ul style="list-style-type: none"> Eclipse Kanto <p>(proposed. worth tracking in CVII call?)</p>	(Thomas S)	See discussion in minutes
<ul style="list-style-type: none"> vss-otaku 	Steve (Renesas)	Minor updates. Setting up environments. Hacking sim2vss code generator continues. Plan to hack some sim2iotdb feeder code to create prototypes for what Jinja templates in code generator need to produce.

Minutes:

- Project sync
 - CCS
 - Ulf summarises architecture. CCS State Storage as it is the component in WAI architecture that administrates the WAI VSS Data Store. Implementation allows a plugin approach to data backends. Once done will interface updated component into WAI.
 - Ulf happy to have seperate meeting to discuss details.
 - Sebastian mentions that dapr has a state-storage API to abstract DB backends [State management overview | Dapr Docs](#)
 - Work related to what steve is wanting to do with VSS Data Storage in vss-otaku.
 - Having three DBs should give good scope to discussions about VSS Data Stores and their interfacing.
 - Kanto
 - No updates since this project was first added. Should we keep it in the table?
 - Gunnar: We should list projects that have VSS functionality else we could list all dev tools.
 - Sebastian: No public source yet.
 - Proposal to remove it from table for now. We can add it back when needed. Any dissenters? None.
 - AWS
 - Gunnar reports that AWS mentioned they may have some VSS tooling to contribute
- Extra meeting / deep dive
 - Steve introduces [CVII Tech Stack: "Deep-dive" topics](#) page. Please add comments and topics.
 - Plenty of topics to get us started. Missing piece is when..
 - Open AI for Paul to post Doodle
- AMM (short of time)
 - Paul: We have CVII Tech Stack slots in the draft schedule. We need to decide if they are wanted and what the topics are.
 - AI: A wiki page will be created to work on the detailed Tech Stack talks

2022-02-16

agenda:

- project recap
- extra meeting discussion
- dev org
 - recording task list
- AoB

Related projects walkthrough (every week):

Project	Person reporting	Updates
<ul style="list-style-type: none"> Kuksa.VAL 	Sebastian (Bosch)	Skipped - no Bosch engineer this week
<ul style="list-style-type: none"> W3C VISS specification (v2) 	Ulf Ted as backup	Ulf: Volvo starting on "explainer" of v2 which is a needed deliverable for finalising the v2 spec. Discussions about enhancements for access between ECUs concluded cost/benefit of allowing sensor values to be set by VISS were too high.

<ul style="list-style-type: none"> • WAII VISS server implementation in Go 	Ulf	No change - WAII fully implements VISS v2 spec so no plan for large functional enhancements currently
<ul style="list-style-type: none"> • VSS & Tools 	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	Some signals in private branch of standard catalog have uncertain license and useage. Decision taken to delete for now. Work on re-formatting of standard catalog signals to fit tightened guidelines continues.
<ul style="list-style-type: none"> • VSSo 	Daniel W Ted	Published first working draft. Considering how best to handle workshop - something at AMM? MS willing to do DTDL talk about mapping. Ted will talk to Paul offline
<ul style="list-style-type: none"> • VSC & Tools 	Gunnar	Discussions about Wiper ECU test case continue.
<ul style="list-style-type: none"> • CCS-components 	Ulf	No change - expected as CCS meetings suspended as discussions about extra CVII Tech Stack meeting, in which CCS may be merged, continue.
<ul style="list-style-type: none"> • AOS 	Artem	No major change. Fuller documentation being worked on. Various smaller source update.
<ul style="list-style-type: none"> • Android Automotive VSS Vehicle Properties Code Generator 		Discussion about improvements to the packaging of the converter.
<ul style="list-style-type: none"> • Covesa GraphQL components 	Alexander Domin (BMW)	Skipped - Alex not present. Its noted there have been some fixes pushed to the components.
<ul style="list-style-type: none"> • Eclipse Kanto <p>(proposed. worth tracking in CVII call?)</p>	(Thomas S)	Skipped - no Bosch engineer this week
<ul style="list-style-type: none"> • vss-otaku 	Steve	Published data model for simulator in vspec. Working on code generator. Have identified common code in VHAL source than can migrate to shared "utils" area for use across multiple projects.

Minutes:

- Extra meeting discussion
 - Steve: I emailed a proposal to the list
 - After the extra meeting discussion last week I thought of one proposal on how to run them. In the Hypervisor group we would have what we called "deep dive" topics. A meeting dedicated to a single subject. We could do the same for the extra meeting. It would be on a set day and time to be agreed for continuity. However it will only go ahead if a topic has been agreed ahead of time, in the regular meeting. This avoids the trap of unproductive meetings and allows people to be selective about their interests.
 - Ulf: I like it.
 - Paul also supports the idea.
 - No other proposals made,
 - When?
 - AI: Paul will put up a doodle to identify some options of when ppl are available
 - Old CCS time should be one option: 4pm CET Monday
 - Time zones. More than one time slot may be needed. Doodle might gives us a couple of options from which we could select depending on topic participants.
 - Why?
 - Ulf: Integration of CCS scope including PoC for tech stack and CCS architecture diagrams.
 - Similar with Tech Stack work to date.
 - Anchoring discussions in shared architecture and terminology. Mapping prop
 - Naming
 - Weds: Tech Stack - eco-system/project coordination/sync

- 1st half: recap
 - 2nd half: design work
- New meeting: Tech Stack - detailed design
- Topics backlog:
 - AI: Steve add page to add topic descriptions
 - (Alex) GraphQL implementation with VSS data feeders and storage. AI: Steve ask Alex to expand
 - Gunnar: Can translation is common request.
 - Gunnar: Refer CVII component list, e.g. protobuf, grpc.
 - Steve: Interfacing VSS Data Storage to VSS Data Servers
- Dev org
 - JIRA tickets
 - List things people can pick-up
 - In-progress collaborative development, e.g. VHAL project showing what tasks are planned, which in turn defines when work is done.

2022-02-09

Related projects walkthrough (every week):

Project	Person reporting	Updates
• Kuksa.VAL	Sebastian (Bosch)	Skipped - no Bosch engineer this week
• W3C VISS specification (v2)	Ulf Ted as backup	Final stages towards v2 spec. Discussions about enhancements for access between ECUs. Ted: Looking for industry feedback on VISS protocol. Whats' good, what's missing. Etc.
• VISS server implementation in Go	Ulf	No change
• VSS & Tools	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	Adding FAQ documentation Update vss-tools submodule Updates to standard data catalog to follow new naming conventions, etc. (some things still pending) Weird fundamental bug/problem: keywords like "on" "off" interpreted as booleans (true /false). Studying formal YAML specification, as well as behavior of python libraries to sort this.
• VSSo	Daniel W Ted	Advancing onto formal standards draft Planning to hold couple day workshop. See https://lists.w3.org/Archives/Public/public-automotive/2022Feb/0001.html
• VSC & Tools	Gunnar	Good session preparing these ideas: <ol style="list-style-type: none"> 1. Introducing VSC-interface reference in AOS definition of service containers. (Still needs to be discussed with AOS leads) 2. More examples of useful services in a standard catalog. Bosch is proposing Wiper functions (concrete proposal not yet) 3. Plan to reach out to interface-tooling/methodology team at Bosch (OpenAPI more generic interface language)
• CCS-components	Ulf	No change
• AOS	Artem	No change
• Android Automotive VSS Vehicle Properties Code Generator		Stefan Wysocki at TietoEvry taking over
• Covesa GraphQL components	Alexander Domin (BMW)	GraphQL fixes. Android VHAL team can now check their issue. Small patch to improve build process.

Eclipse Kanto (proposed. worth tracking in CVII call?)	(Thomas S)	Skipped - no Bosch engineer this week
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Apologies:

- Sebastian S (Bosch)

Minutes:

- Project coordination
- Android VHAL
 - Ted: W3C talking to Google Cloud ppl. They want to learn more about VSS to AOSP VHAL properties converter. Who to loop in to explain to them?
 - Paul: Loop me in.
 - Gunnar: Stefan from TietoEvry leading the work.
- VSC
 - Heads up on discussions in VSC call.
 - Followed by illustration from Gunnar on specifying protocol and access control for VSC APIs and mapping the latter to existing systems, e.g. in GraphQL and VISS.
- Extra meeting
 - Continue discussion of whether to repurpose the CCS meeting into a wider CVII Tech Stack meeting dedicated to deep diving design discussions. Do we want to do it? If so when?
 - Ulf, Steve would like to see it continue. Alex is interested but is time constrained.
 - Two CVII Tech Stack meetings:
 - Weds: CVII Tech Stack: project coordination
 - This call. Coordination update as already done, followed by general discussion with time remaining.
 - TBD: CVII Tech Stack: detailed design
 - New call. Scope is deep dive on tech stack topics not specific to the VSS, VSC specific calls. Engineering focus. Will be small # of topics, known in advance.
 - AI: Create Doodle for timing
 - Deep dive topic list:
 - Alex: Discussion of connecting VSS Data Store to GraphQL
- Remaining 10 mins:
 - Southbound x2VSS conversion and code generators
 - Outline of two methods we currently have for conversion:
 - Android VHAL design pattern using JINJA template and yaml conversion description
 - vss-otaku is looking at a variant to the VHAL pattern that uses VSS vspec rule set to define the source data model. Outcomes will include pluses (vss-tools function set) and minuses (need to avoid polluting VSS standard catalog with source data types and units) of that approach.
 - We expect to need to expand the VSS Terminology set to include converters and generators. Please consider what they should be. A good set will ease coordination in and outside the group.
 - In-vehicle VSS Data Store
 - Steve outlined the direction of travel for VSS Data Store investigations in [vss-otaku](#)
 - Some universal themes to investigate collectively for Tech Stack such as connections between VSS Data Feeders, Data Stores and Data Servers.
 - Alex: I would really like to have a deep dive on the VSS Data Store and how it relates to what we are doing with GraphQL. To share our viewpoint and align.
 - Steve: Would love to. Your production/OEM perspective would be invaluable to guide later work connecting Data Stores to Data Servers.
 - Steve: This would also be a perfect topic for the proposed CVII Tech Stack Detailed Design meetings. Added it as a starting topic above.

2022-02-02

Related projects walkthrough (every week): SKIPPED

Apologies

- Ulf, Thomas,

Agenda / Minutes

- Project updates (skipped this week)
- **New person introductions**
 - **Andreas Warnke** (EB)
 - **Alan Freedman** (Autonomic/Ford)
 - **Dimitri** (Zync)

- Meeting structure
 - VSC - Vehicle Service Catalog - IDL language and catalog content
 - VSSo and VSS meeting - Vehicle Signal Specification - VSS model / catalog-content
 - + VSSo breakouts
 - CCS (not currently, restart or replace?)
 - W3C Automotive and Transportation WG
 - Primarily working on VISS but it is starting to be complete new topics come up
 - CVII Tech Stack (this meeting)
 - Reports/Updates on all projects
 - Technical architecture and software discussions, solving problems
 - + Breakout meetings when the need comes up
- Service definition (VSC) in comparison to AOS service definition format
 - Service API definition
 - Improve the description of data-services in the service definition format.
 - Related aspects: resources, device, permissions
 - CVII related sub-tasks that we ought to work on:
 - Better description of which protocols are used
 - ... and the exact interface if it is a RPC protocol (i.e. reference a "VSC interface")
 - ... and a common methodology for permissions definitions.

```
permissions:
vis:
  Attribute.Body.Vehicle.VIN : "r"
  Attribute.Body.Vehicle.VIN : "r"
```

- VSS data protocols
 - Methods, access control etc
- VSS Data Stores
 - VSS Data Server backend abstraction layer possible?
 - Comms between zone controllers
 - DB data (sync, replication, partial send) vs Data Server protocol (e.g VISS)

Wednesday 2022-01-26

Related projects walkthrough (every week):

Project	Person reporting	Updates
• Kuksa.VAL	Sebastian (Bosch) ✓	Sys arch documentation to clarify use of VISS for reading and writing data (ref previous week's discussion) https://github.com/eclipse/kuksa.val/blob/master/doc/system-architecture.md
• W3C VISS specification (v2)	Ulf ✓ Ted as backup	No discussion about spec (presentation MongoDB instead)
• VISS server implementation in Go	Ulf ✓	Nothing this week.
• VSS & Tools	Daniel Wilms (BMW) ✓ (Gunnar, Sebastian as backup)	Removing min/max in standard catalog because they appeared arbitrary. Added new signal for SAE autonomy level. Tools versioning , and how it relates to versioning of VSS standard catalog Recommendation for allowed_values names/strings. Used in standard catalog (whenever it is possible to define it from scratch, not constrained by system already).
• VSSo	Daniel W Ted	Switched to W3C reSpec tooling. New version including signal definitions derived from VSS catalog. First public working draft hopefully within a week or so. Discussed W3C workshop (virtual) in early March and/or in-person meeting in combination with COVESA AMM (Leipzig, end of April)
• VSC & Tools	Gunnar	Narrowing down tech solution to promote Franca IDL + YAML format as core description format. (Strategy to allow interchange with other technologies of course still in place) Increase catalog scope with more proposals to gather interest.

• CCS-components	Ulf	Nothing new
• AOS	<u>Artem</u>	
• Android Automotive VSS Vehicle Properties Code Generator		Maintenance may be taken over by Stefan at TietoEvery
Eclipse Kanto (proposed. worth tracking in CVII call?)	(Thomas S)	Possibly focus next wednesday?

Minutes

- Project update (above)
- AOS update, more comprehensive:
 - AOS code now [in GitHub](#).
 - Apache License
 - Framework to orchestrate containers
 - Several services in different repositories
 - Working on code coverage for CI tests
 - Follow the README documentation
 - Already used on some production projects
 - May lead to standards for orchestration, control, etc.
 - This covers all the software that runs on the embedded systems
 - meta-layers for Yocto
- **Thomas:** Can we get a demo? To understand the concept better?
- **Artem:** If you have a Renesas starter kit or similar. You can also try it in a VM on desktop. Yes to demo (in a week or two)
- **Artem:** We have our own CNF for plugins, firewall, = networking configuration for containers.
... not using docker.
...Using **crun** currently (previously **runc** but now crun).
- ...Working on introducing standard K8S APIs
- **Artem:** Data side, we wish to stay with CVII work and VSS specifically
- Artem: We have a YAML based description format. Also monitoring any OCI standards that may apply
- **Gunnar:** As noted we should set up a time to discuss overlap of the services description format in AOS and VSC.
Gunnar/Artem: Agreed joint desire to consider service description ability using a common language, as VSC project intends to achieve.
- For information: Data Privacy Initiative
 - COVESA is discussing a Data Privacy oriented project (led by member companies in the legal space)
 - Overview of current rules and regulations, legal risks, counteractions.
 - Create an environment of collaboration to discuss these aspects, in general terms.
 - This topic requires a combination of business management, legal, technical, ...
 - Please reach out to your colleagues (including management, legal) to evaluate interest
 - Likely webinar/Q&A discussion in Feb/March + focus in AMM
- Meeting CCS tech architecture.
 1. Meeting 1? – 30 min overview. 30 min any other topics
 2. Meeting 2? – Technical work? Is it implementation focus? Architecture focus?
 Agendas are important
One slot is shorter?
Thomas: Workshop planning - 1h not enough. (4h, less frequently)?
- Ted: Possibly fewer calls instead?

Relevant links:

- [CVII Tech Stack](#)
- [Towards CVII pluggable components](#)
- [CVII Tech Stack Terminology](#)

Wednesday 2022-01-19

Related projects walkthrough (every week):

Project	Person reporting	Updates
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<ul style="list-style-type: none"> Kuksa.VAL 	Sebastian (Bosch) ✓	Upgrade CI infra to GH actions
<ul style="list-style-type: none"> W3C VISS specification (v2) 	Ulf ✓ Ted as backup	Feature freeze agreed. Polishing ongoing. W3C process steps.
<ul style="list-style-type: none"> VISS server implementation in Go 	Ulf ✓	Protobuf used to encode messages (used as efficient binary/compression of the messages, compared to JSON format) over Websocket/MQTT. Might also be on HTTP. Compared to JSON as a "compression ratio".
<ul style="list-style-type: none"> VSS & Tools 	Daniel Wilms (BMW) ✓ (Gunnar, Sebastian as backup)	enum allowed_values rename. (another enum concept is still possible/pending) Signal list - quality improvements. Documentation updates
<ul style="list-style-type: none"> VSSo 	Daniel W Ted	As discussed, document is complete, going through a release process.
<ul style="list-style-type: none"> VSC & Tools 	Gunnar	Biweekly to weekly meetings Exact time TBD, planning process
<ul style="list-style-type: none"> CCS-components 	Ulf ✓	ovds-client (VISS client) updated to also support protobuf feature.
<ul style="list-style-type: none"> AOS 	Artem ✗	next week full update
<ul style="list-style-type: none"> Android Automotive VSS Vehicle Properties Code Generator 		Request for new main developer/maintainer.
Eclipse Kanto (proposed. worth tracking in CVII call?)	(Thomas S)	Thomas will be an ambassador for this project. Exact VSS connection not known yet.

Minutes

- CVII Tech Stack
- Towards CVII pluggable components
- CVII Tech Stack Terminology

Wednesday 2021-12-22

Project	Person reporting	Updates
<ul style="list-style-type: none"> Kuksa.VAL 	Sebastian (Bosch) ✗	
<ul style="list-style-type: none"> W3C VISS specification (v2) 	Ulf ✗ Ted as backup	<ul style="list-style-type: none"> All open questions have been resolved (for the moment)
<ul style="list-style-type: none"> VISS server implementation in Go 	Ulf ✗	
<ul style="list-style-type: none"> VSS & Tools 	Daniel Wilms (BMW) ✓ (Gunnar, Sebastian as backup)	Meeting series postponed until January

• VSSo	Daniel W Ted	(See previous week)
• VSC & Tools	Gunnar	Meeting series postponed until January
• CCS-components	Ulf	--
• AOS	Artem ✓	<i>Publishing has started on GitHub, and is still ongoing</i>
• Android Automotive VSS Vehicle Properties Code Generator		<ul style="list-style-type: none"> "Simple compile check" in CI system (stubbed out dependencies). See GitHub actions, currently on this branch here for example. Updated to generate all type=conversion functions on the fly. Track Manu's vss-tools fork / PR for status.
Eclipse Kanto (proposed. worth tracking in CVII call?)		<i>not discussed today</i>

Apologies

[Ulf Bjorkengren](#)

Agenda/Minutes:

- Project updates, see above.
- BMW / GraphQL – end 2 end demo
 - <https://github.com/COVESA/graphql-vss-data-server> is the latest repo (see also related ones).
 - Still to come: Code generator from GraphQL schema itself. Classes (stubs) that are implemented by the developers to make the binding connections.
 - The demonstration and part of the discussion was **recorded** for future use (**link pending**)
- **Reminder to review [Towards CVII pluggable components](#), and [CVII Tech Stack Terminology](#) to give feedback**
- Also the CVII Tech Stack components area (presented last week)

Wednesday 2021-12-15

- <https://github.com/slavr/vss-otaku>
- <https://drive.google.com/file/d/1kVXB7bdTarzQdiwtZyNqCK-vHihJeW0w/view?usp=sharing>

Wednesday 2021-12-08

Project	Person reporting	Updates
• Kuksa.VAL	Sebastian (Bosch)	Released last month's recent changes into a tagged version. See changelog. https://github.com/eclipse/kuksa.val/releases/tag/0.2.0
• W3C VISS specification	Ulf ✓ Ted as backup ✓	<ul style="list-style-type: none"> ▪ Discuss optional features ▪ Decision around the API to query feature-capability of the VISS server. <p>Very few open questions at the moment, so it seems like the specification is starting to be considered "complete", thus starting planning for formal proposal</p>
• VISS server implementation in Go	Ulf ✓	Protobuf trials are coming for the payloads (next year)

• VSS & Tools	Daniel Wilms (BMW) ✓ (Gunnar, Sebastian as backup)	Enum functionality discussion <ul style="list-style-type: none"> Does the current function suffice? Discussion about extended feature/capability of assigning fixed values, etc.
• VSSo	Daniel W ✓ Ted	Documentation up to date. https://w3c.github.io/vsso/ Publishing plans in January. Workshops being planned, February.
• VSC & Tools	Gunnar	meeting delayed
• CCS-components	Ulf	--
• AOS	Artem	no news today, awaiting open-source release
Eclipse Kanto (tbd)		IoT/edge cloud connector piece (to be determined the association to data-model/services-model)

Apologies

Agenda/Minutes:

- Sebastian: GitHub Packages are recommended, for container images for example.
- Stephen: Common implementations? E.g. AOS has VISS server, KUKSA.val has VISS server, etc. Upgrades to latest protocol version - shared implementation?
- Alexander: Additional code is coming from BMW (ref: last week's walkthrough). The implementation of the actual GraphQL server is coming next.
- Further discussion on how to organize joint development projects:
- Provide feedback to component names in: **CVII Tech Stack Terminology** - temporarily stored on GENIVI Wiki:
 - <https://at.projects.genivi.org/wiki/pages/viewpage.action?spaceKey=MIG&title=CVII+Tech+Stack+Terminology>
- Also read (again) [Towards CVII pluggable components](#) and consider if these are obstacles to collaboration, and which ones we can overcome.

Wednesday 2021-12-01

Project	Person reporting	Updates
• Kuksa.VAL	Sebastian (Bosch)	--
• VISS server implementation in Go	Ulf ✗	--
• VSS & Tools	Daniel Wilms (BMW) ✓ (Gunnar, Sebastian as backup)	<ul style="list-style-type: none"> v 2.2 tagged (1 week ago) Review update proposals in VSS standard catalog on several points (open for review another week) Redefining enum was further discussed
• VSSo	Daniel W ✓ Ted	Draft spec proposal for reading
• VSC & Tools	Gunnar	referring to last week's updates
• W3C VISS specification	Ted ✓ Ulf	VSSo was discussed on the WG meeting Simpler authentication flow, change was accepted.

• CCS-components	Ulf	–
• AOS	<u>Artem</u>	Still working on logistics of publishing open source

Apologies

- Ulf

Agenda/Minutes:

- Project updates
- Demonstration of end-2-end SOME/IP signal source / GraphQL VSS server (Alexander Domin, BMW)
 - Walkthrough of existing repos, reasons and intentions behind.
 - Live demo
 - Create GraphQL schema with tool
 - Only a single Query / entry point that is matched against the whole Vehicle Tree. GraphQL schemas can define multiple, but this is how it is done here.
 - Subscription queries are supported
 - Query can include all values of any (sub)type in the tree, or only some, it is very flexible.
 - RECORDING ATTACHED

Wednesday 2021-11-17

Project	Person reporting	Updates
• ioTEA/Vehicle Edge	Mike Haller (Bosch) Thomas Spreckley	Further development of these components (from Bosch side) has been halted in favor of building a new infrastructure based on DAPR framework Rules engine in iot-event-analytics still of interest - either reuse or write similar functionality into DAPR CES demo
• Kuksa.VAL	Sebastian (Bosch)	Plans are unchanged (not more, not less). Small feature sprints. Still being maintained.
• VISS server implementation in Go	Ulf	Nothing this week. Will be updated soon due to latest changes in VISS spec.
• VSS & Tools	Daniel Wilms (BMW) Gunnar (Sebastian as backup)	<ul style="list-style-type: none"> • Preparation of 2.2 release • (VSS catalog) Remove empty branches • (VSS and vss-tools, documentation etc.) Change links from genivi to covesa • (Makefile) Specifying PYTHONPATH for contrib builds • Bugfix handling of non-core attributes. Fix strict checking #118 • Bugfix config.yaml not found for contrib tools Adding config.yaml to setup.py #119 • upcoming: "comment" field - meaning is being proposed
• VSSo	Daniel W Ted	
• VSC & Tools	Gunnar	Nothing this week (biweekly sync meeting) - see last week's minutes Bosch interface tools - see minutes below
• W3C VISS specification	Ted Ulf	Additional updates on access control: <ul style="list-style-type: none"> - Optional usage of vehicle-identifier in security tokens. (Optional when not required such as inside-vehicle access) - only one vehicle is relevant, the one that is "connected") ... but mandatory when required - e.g. access from cloud to (many) vehicles. - One new flow in access-control model. Low-complexity flow (PR coming)

<ul style="list-style-type: none"> CCS-components 	Ulf	Updated images in README explaining the usage of different component parts
<ul style="list-style-type: none"> AOS 	<u>Artem</u>	<i>Awaiting open-source code publication</i>

Apologies

- Ted – conflicting meeting


Agenda/Minutes:

- Project updates according to above table
- Ted and Gunnar will be presenting **W3C, COVESA, CVII and VSS** on a **Workshop on Future Automotive Research Datasets**, organized by **SR I international**
- Thomas: Bosch preparing a presentation of interface-related tooling (OpenAPI) to VSC meeting for alignment of IDL needs and definition. The example will be modeling comfort services.
- First code repositories created for GraphQL (and more) related tools from BMW.
- The code is ready to go, but unfortunately the responsible has become ill, so we're waiting for the first code push still.
- Planned content:
 - [test-someip-service](#)
 - Example interface for showing the mapping from GraphQL-server to SOME/IP signal source
 - [test_franca2vss_mapping_layer](#) - Proposing a VSS layer format to define where each VSS signal can be fetched, from a service interface described by Franca IDL. (similar to the ideas in the [ongoing VSS-to-Android mapping files](#))
 - [vss2graphql_schema](#) - Tool (generator) creating GraphQL schema definition from a VSS catalog. (Possible inclusion into **vss-tools** later on)
- DAPR - looking at connection points
- (Renesas) - Started development of internal-simulator2VSS mapping job, and [Apache IoTDB](#) implementation.
 - Who's behind this, who created, maintain... ? Renesas?
 - Stephen: It was created at a Chinese university before being contributed to the Apache Foundation.
 - A natural? choice for an embedded time-serie
 - s DB (if you need that).
 - Strong connections to other Apache tools.
- AVRO serialization [status on this branch](#)
- Proposed: (shared) C++/and-or other language library - client library / convenience API for data serialization.
- Reminder: Gunnar update CCS-component picture with proposed changes.

Wednesday 2021-11-10

Meeting minutes pending.

Wednesday 2021-11-03

Project	Person reporting	Updates
<ul style="list-style-type: none"> ioTEA/Vehicle Edge 	Mike Haller (Bosch) Thomas Spreckley	
<ul style="list-style-type: none"> Kuksa.VAL 	Sebastian (Bosch)	
<ul style="list-style-type: none"> VISS server implementation in Go 	Ulf 	
<ul style="list-style-type: none"> VSS & Tools 	Daniel Wilms (BMW) Gunnar (Sebastian as backup)	
<ul style="list-style-type: none"> VSSo 	Daniel W Ted	

• VSC & Tools	Gunnar	Agreement to include a full-featured error-handling mechanism directly in IDL.
• W3C VISS specification	Ted Ulf	
• CCS-components	Ulf	
• AOS	<u>Artem</u>	

Next week's agenda

Agenda/Minutes:

Minutes

- Alexander: BMW publishing code around GraphQL server, mapping VSS to GraphQL, and resolving requests by translating how to get the data from underlying platform (.e.g. through Franca defined interfaces, etc.)
Also, a demo

Wednesday 2021-11-03

Project	Person reporting	Updates
• ioTEA /Vehicle Edge	Mike Haller (Bosch) Thomas Spreckley	Devs are AWOL. 😞
• Kuksa. VAL	Sebastian (Bosch)	Devs are AWOL. 😞
• VISS server implementation in Go	Ulf	<i>No code changes this week</i>
• VSS & Tools	Daniel Wilms (BMW) Gunnar (Sebastian as backup)	Discussing upcoming PRs (improvements and additions to VSS catalog) but not merged.
• VSSo	Daniel W Ted	FYI, (again) More in-depth workshop planned (mid-January)
• VSC & Tools	Gunnar	No VSC meeting this week, and no change (see last week's info)
• W3C VISS specification	Ted Ulf	Discussions around consequences of MQTT addition. Also how to identify the vehicle in different usage environments (currently spec uses the "VIN" name, but the actual VIN is considered privacy sensitive, so it should be clarified if pseudo-VIN or other identification is to be used).

<ul style="list-style-type: none"> CCS-components 	Ulf	Diagrams in README updated a few times.
<ul style="list-style-type: none"> AOS 	Artem	Approved to publish open-source licensed code! Coming soon... Control-plane APIs still being developed (for deployment more than vehicle data access specifically). Proposals on what to choose? (Kubernetes APIs are gRPC-only...)

Next week's agenda









Agenda/Minutes:





- **Stephen/Renasas:** plans and thoughts about component development.
- **Manu/Bittium:** demonstrate progress on VSS code generator (Android properties)
- Continued: [Towards CVII pluggable components](#)
- AOB

Minutes

- Discussion: SOAFEE looking somewhat similar to AOS.
- Reminder: Cool to discuss any overlap of projects, such as deployment-strategies, access-control but looking to be focused on core of CVII Tech Stack = all technologies dealing with VSS and VSC.
- Stephen presented slide deck as planned, according to agenda. Discussion, Q&A
- Manu demonstrated code generator, according to agenda. Discussion, Q&A

Wednesday 2021-10-27

Project	Person reporting	Updates
<ul style="list-style-type: none"> ioTEA/Vehicle Edge 	Mike Haller (Bosch)  Thomas Spreckley 	<ul style="list-style-type: none"> ▪ Repo moved to GitHub/COVESA (iot-event-analytics, vehicle-edge)
<ul style="list-style-type: none"> Kuksa.VAL 	Sebastian (Bosch) 	VSS release 2.1 file included in download. Fix on feeder (SocketCAN). All data sent as strings (JSON format already, VISS)
<ul style="list-style-type: none"> VISS server implementation in Go 	Ulf 	--
<ul style="list-style-type: none"> VSS & Tools 	Daniel Wilms (BMW)  Gunnar (Sebastian as backup)	Repo moved to GitHub/COVESA <ul style="list-style-type: none"> • Finally merged the support for adding own units (and changing implementation of existing units). • Agreed IgnitionOnState signal which created new discussions about related signals.
<ul style="list-style-type: none"> VSSo 	Daniel W  Ted 	<ul style="list-style-type: none"> • Intention to bring to first public working draft status soon. • Microsoft meetings resumed at smaller scale. More in-depth workshop planned (mid-January) for planning activities with MS and others.
<ul style="list-style-type: none"> VSC & Tools 	Gunnar 	Repo moved to GitHub/COVESA <ul style="list-style-type: none"> • First discussion with Bosch on how interface handling (and tools) are done for interface handling. • Proposal for Standard Error codes

<ul style="list-style-type: none"> W3C VISS specification 	Ted  Ulf 	<ul style="list-style-type: none"> Ashish made presentation of his research into policy control of data access including: access control, sticky-policies, proxy-re-encryption, prioritization of (computing) resources, etc. Access Control - new proposal (Bosch) considered. BMW input also further discussed (attribute-based access control, and some other details sorted out) INAGO (autonomous vehicles). Project arrow - implemented VSS+VISS, presentation coming.
<ul style="list-style-type: none"> CCS-components (new name) 	Ulf 	Repo moved to GitHub/COVESA
<ul style="list-style-type: none"> AOS 	Artem 	--

Apologies



- Thomas Spreckley

Agenda/Minutes

1. (Permanent agenda item)

Report recent progress on each of the relevant* projects.









2) Other discussions

- Catch-up with TietoEvry (Piotr Krawczyk , Adam Konopa )
 - Piotr: Plan to set up and test [FARACON toolchain](#), update to latest AUTOSAR and then look into other conversion opportunities.
- AVRO based binary VSS value encoding: See [serialization](#) branch for latest updates
- Progress on Android code generation. ([Work in progress PR](#)) Generated code compiles. Still todo: set up test environment to run it in Android system.

2. Deep dive discussion on the current state of the tech stack work

Reviewed and discussed [Towards CVII pluggable components](#) page further.

Wednesday 2021-10-20

Project	Person reporting	Updates
<ul style="list-style-type: none"> ioTEA/Vehicle Edge 	Mike Haller (Bosch)  Thomas Spreckley 	
<ul style="list-style-type: none"> Kuksa.VAL 	Sebastian (Bosch) 	
<ul style="list-style-type: none"> VISS server implementation in Go 	Ulf 	Minor fixes
<ul style="list-style-type: none"> VSS & Tools 	Daniel Wilms (BMW)  Gunnar (Sebastian as backup) 	This week: VSS-layers discussion. Refer to minutes below.
<ul style="list-style-type: none"> VSSo 	Daniel W  Ted 	

• VSC & Tools	Gunnar	See presentation from last week's AMM https://at.projects.genivi.org/wiki/display/WIK4/Slide+Decks+and+Videos
• W3C VISS specification	Ted Ulf	Discussions on how to modify specification to better support in-vehicle web apps. (Access control) Questions around Service discovery, versioning of VSS (how to know what "interface version" (VSS) you are speaking to)
• CCS-client repository	Ulf	
• AOS	<u>Artem</u>	Completing review towards open source code publication.

Apologies

Agenda/Minutes

- (Permanent agenda item)
Report recent progress on each of the relevant* projects.
- Deep dive discussion on the current state of the tech stack work

Wednesday 2021-10-13

Project	Person reporting	Updates
• ioTEA/Vehicle Edge	Mike Haller (Bosch) Thomas Spreckley	
• Kuksa.VAL	Sebastian (Bosch)	
• VISS server implementation in Go	Ulf	Minor fixes
• VSS & Tools	Daniel Wilms (BMW) Gunnar (Sebastian as backup)	This week: VSS-layers discussion. Refer to minutes below.
• VSSo	Daniel W Ted	
• VSC & Tools	Gunnar	See presentation from last week's AMM https://at.projects.genivi.org/wiki/display/WIK4/Slide+Decks+and+Videos
• W3C VISS specification	Ted Ulf	Discussions on how to modify specification to better support in-vehicle web apps. (Access control) Questions around Service discovery, versioning of VSS (how to know what "interface version" (VSS) you are speaking to)
• CCS-client repository	Ulf	
• AOS	<u>Artem</u>	Completing review towards open source code publication.

Apologies

Minutes

- Report out from VSS layers discussion
- Relatively long discussion on VSS versioning (see note on VISS above)
- Still preparing/approval process for a set of VSS related tool implementations from OEM.
- Artem: VSS, VISS, implementation optimizing for edge-computing (different/comprehensive access control mechanism). Transports. CNI.

Wednesday 2021-09-29

Project	Person reporting	Updates
• Kuksa.VAL	Sebastian (Bosch)	--
• VISS server implementation in Go	Ulf	--
• VSS & Tools	Daniel Wilms (BMW) Gunnar (Sebastian as backup)	
• VSSo	Daniel W Ted	Formal publication plans continue. Transition to W3C working group. VSSo DTDL translation (still) exists.
• VSC & Tools	Gunnar	
• W3C VISS specification	Ted Ulf	Access control PRs moving forward, and some specification text changes. (more details see last week's minutes on COVESA Wiki)
• CCS-components	Ulf	Updated picture (PR sent)
• AOS	Artem	Publishing started. Hopefully links to source within a week.

- DAPR - evaluation, discussion, plans for VSS integration
- Initial code drops from BMW. Full signal-source (SOME/IP) to GraphQL data server, serving VSS data.
Note: All parts of the end-to-end are not here yet, but these initial 3:
 - https://github.com/COVESA/vss2graphql_schema
 - https://github.com/COVESA/test_franca2vss_mapping_layer
 - <https://github.com/COVESA/test-someip-service>
- VSS serialization reusable C++ library? *(not discussed today in particular - but note that serialization/messaging format remains a need for connecting to the frameworks such as DAPR and other transparent "transports" that do not define a format yet.)*













Wednesday 2021-10-13

From now on, refer to [COVESA Wiki](#)

Wednesday 2021-10-06

No regular meeting due to [ongoing AMM](#)

Wednesday 2021-09-29




Project	Person reporting	Updates
<ul style="list-style-type: none"> ioTEA/Vehicle Edge 	Mike Haller (Bosch)  Thomas Spreckley 	Automated package/docker container image deployment. Gunnar prefers to delay upgrade of account types (GitHub, Docker Hub etc) until after next week.
<ul style="list-style-type: none"> Kuksa.VAL 	Sebastian (Bosch) 	
<ul style="list-style-type: none"> VISS server implementation in Go 	Ulf 	Access control and curve logging planned demo for AMM so those features have been tested and some fixes recently.
<ul style="list-style-type: none"> VSS & Tools 	Daniel Wilms (BMW)  Gunnar  (Sebastian as backup)	Implementation proposal for unit file. Close to ready but some details (e.g. where to store config) are pending. VSS-Layer discussion planned 2 weeks from now
<ul style="list-style-type: none"> VSSo 	Daniel W  Ted	(Preparing presentation for AMM)
<ul style="list-style-type: none"> VSC & Tools 	Gunnar 	Parser/generator working with updated service-description file (which includes some changes to the IDL language).
<ul style="list-style-type: none"> W3C VISS specification 	Ted  Ulf 	Discussion/finalizing updates on access control: - bandwidth savings and server-caching of tokens - alternative (simplified) access-control model proposal
<ul style="list-style-type: none"> CCS-client repository 	Ulf 	
<ul style="list-style-type: none"> AOS 	Artem 	

Apologies

Minutes

- AASIG code gen, some progress. Working on adding type-conversion into generated code. Code still in Manu's fork. PR not sent yet.
- Stephen: Started looking into time-series databases. Plan to connect VSS data server (using Go-implementation VISS?) to the database APIs. InfluxDB, IoTDB, ...

Wednesday 2021-09-22

Project	Person reporting	Updates
<ul style="list-style-type: none"> ioTEA/Vehicle Edge 	Mike Haller (Bosch)  Thomas Spreckley 	CI/CD integration mostly finished. Extended reports (JUnit) Unit testing working. SDK bug fix, was not reading config files. Vehicle Edge - phase 2, seat-adjuster demo. (Discussions on VSC started, driven from this). Focus on internal stakeholders but open-sourcing pending.
<ul style="list-style-type: none"> Kuksa.VAL 	Sebastian (Bosch) 	Pending PR allowing Kuksa.VAL to load several VSS files at start up (supporting layer idea)

<ul style="list-style-type: none"> VISS server implementation in Go 	Ulf ✓	Minor bug fixes
<ul style="list-style-type: none"> VSS & Tools 	Daniel Wilms (BMW) ✗ Gunnar ✓ (Sebastian as backup)	Accessory setting for ignition switch was missing, proposed to be added in a PR Dynamic unit list: implementation needs rework, new proposal next week
<ul style="list-style-type: none"> VSSo 	Daniel W ✗ Ted	
<ul style="list-style-type: none"> VSC & Tools 	Gunnar ✓	No VSC meeting this week (biweekly)
<ul style="list-style-type: none"> W3C VISS specification 	Ted ✓ Ulf	Major discussion on caching of access-tokens, mandatory or optional, behavior of server and client if token is used but not found in cache, etc. Multi-set values (actuators) in a single call still open.
<ul style="list-style-type: none"> CCS-client repository 	Ulf ✓	Minor fixes.
<ul style="list-style-type: none"> AOS 	Artem ✓	Discussions about how to design edge-computing, with one Tier1 and one IAS provider, with relationship to CVII topics.

Apologies








- Florian (DENSO)

Minutes

- VSS-tools, A bit of *additional* progress in Android Automotive Vehicle Properties (VHAL code-generation) (Follow along in code_generation branch in vss-tools (and Manu's fork))
- Discuss possible automatic unit/scaling
- Time-series database implementation, see [CVII Tech Stack](#)
 - Discussion with Stephen/Renesas about this point.
- Stephen: There is a dataset that exists from previous demos. (Values and timestamps) that could be used as data (after aligning it to VSS standards)
- Stephen (sharing screen): Many values look like Snapshots (according to [this definition](#)), i.e. several signals measured the same time.
 - Gunnar: Yeah, the snapshot format suggests to only store the timestamp once, if it is measured at the same time.
 - Gunnar: Note "same time"/simultaneous might include a short time interval since the meaning of simultaneous is a bit sketchy in a discrete system.
- Tom: You can also reduce size of time stamps by transferring a delta-time compared to some reference.
- Gunnar: Good point, worthy of adding a note to [Data serialization / value formats](#) page.
- Reminder: [Register for AMM](#) if you haven't.

Wednesday 2021-09-15

Project	Person reporting	Updates
<ul style="list-style-type: none"> ioTEA/Vehicle Edge 	Mike Haller (Bosch) ✓	Preparing to publish docker images (using GitHub package releases) Gunnar to support with Docker Hub or GitHub package support for GENIVI organization. Idea brewing: Educational (University) involvement - build curriculum / community of students?
<ul style="list-style-type: none"> Kuksa.VAL 	Sebastian (Bosch) ✓	
<ul style="list-style-type: none"> VISS server implementation in Go 	Ulf ✓	

<ul style="list-style-type: none"> • VSS & Tools 	Daniel Wilms (BMW)  Gunnar  (Sebastian as backup)	First presentation of a set of new VSS signals proposed by ExcelFore and eSync Alliance in the areas of SOTA-metrics, Battery Mgmt, ... Proposal for defining allowable units in a config file is almost done. Just a rename remaining. v2.2 release is being prepared. No breaking changes, but additions and fixes to the catalog. Also some new contrib tools and such of course included there. vspec2yaml finally merged.
<ul style="list-style-type: none"> • VSSo 	Daniel W  Ted	
<ul style="list-style-type: none"> • VSC & Tools 	Gunnar 	Bosch joined this week's meeting. Discussion about current state and opportunities.
<ul style="list-style-type: none"> • W3C VISS specification 	Ted  Ulf	Continued improvement issues. Lots of discussion on multi-set values (actuators) in a single call
<ul style="list-style-type: none"> • CCS-client repository 	Ulf 	-
<ul style="list-style-type: none"> • AOS 	Artem 	-

Apologies

- Ted, Piotr, Artem

Minutes

- Discussion about how to integrated (tagged) version of VSS into IOTea out of the box. Generated files are automatically inserted into Hugo documentation and can be downloaded from there, but otherwise using the git tag.
- (Bosch) Idea brewing: Educational (University) involvement - build curriculum / community of students?
- Android Automotive Vehicle Properties (VHAL code-generation) is now making progress (Follow along in code_generation branch in vss-tools (and Manu's fork))

Wednesday 2021-09-08

Wiki was down so these minutes were taken offline, and later added:

1. Standard project updates

Kuksa

- Unit tests for gRPC code
- Investigating switching from Jenkins to GitHub actions
- IoT-event-analytics / vehicle-edge
- Working on npm packaging (npmjs organization account now exists)
- Quality checks/
- Suitcase demonstrator including hardware, includes gRPC to communicate with Vehicle
- API. RPi ARM 64 bit.

VSSo

- Refine first version
- A bit more structure to the process
- Discussions continued with Microsoft, conversion to DTDL

VSS

- Continued discussions on units and datatypes

AOS

- Additional discussions with various stakeholders in industry. Want to get the code and the container (definition) specification into the open. Registration framework.

- Some inputs drive toward constrained environments. Small efficient implementations
- required for data-servers The full Go-lang VISS server might not fit, k3s and others
- might also not "fit".
- Higher modularity is preferred

VSC

- PR + examples added to master branch in the VSC repository.
- vss-tools (Android)
- A document provided to outline plan, and basic file structure
- Looking for strengthening the implementation team












VISS

- Improvements being done from feedback (pull requests) based on the first public working draft

2. Other minutes

- Mike Haller (Bosch) introduces himself. New product owner for IoT EA.
- Artem EPAM might have developers free in 2-3 weeks
- AMM update, reminder to register

Wednesday 2021-09-01

Project	Person reporting	Updates
<ul style="list-style-type: none"> • ioTEA/Vehicle Edge 	Thomas Spreckley (Bosch) 	Integration test pull-request, renamed test APIs. More friendly integration in CI pipeline npmjs.org now has a package for ioTEA , with information PyPi will get a package as well Prepare release process, 0.6.0 release is imminent
<ul style="list-style-type: none"> • Kuksa.VAL 	Sebastian (Bosch) 	
<ul style="list-style-type: none"> • VISS server implementation in Go 	Ulf 	
<ul style="list-style-type: none"> • VSS & Tools 	Daniel Wilms (BMW)  Gunnar  (Sebastian as backup)	Discussing some new topics related to possibly new strategy for instantiation of branches ...
<ul style="list-style-type: none"> • VSSo 	Daniel W  Ted 	
<ul style="list-style-type: none"> • VSC & Tools 	Gunnar 	Magnus F taking some open issues. Inclusions of nested namespaces still to be merged/decided.
<ul style="list-style-type: none"> • W3C VISS specification 	Ted  Ulf	
<ul style="list-style-type: none"> • CCS-client repository 	Ulf 	-
<ul style="list-style-type: none"> • AOS 	Artem 	-

Minutes

- Sebastian and Daniel W, Ulf, sent apologies
- Thomas working on AMM presentation
- eSync Alliance, upcoming
- OPIN, upcoming
- A bit of progress on AVRO encoding.

- (Repeated info), ongoing work on Android VSS-to-Android properties
 - The goal is to create something like this: [aasig-vhal-demo/tree/main/src repository](#) this should already compile in AOSP (HAL implementation), but that example has a fixed set of signals. Instead it shall be possible to code-generation from an arbitrary list of VSS signals
 - Here is a planning/background page named [VSS to AOSP translation - WBS](#)
 - The code generator implementation will be a kind of combination of VSS-tools (to read VSS) and vsc-tools (that shows how to use Jinja2 templates for generation). The tools will need to consume also a "VSS layer" (deployment model) that describes how VSS signals are mapped to their respective Android counterparts.
Example of such mapping is on [VSS to AOSP translation - WBS](#)

Wednesday 2021-08-25

Project	Person reporting	Updates
• ioTEA /Vehicle Edge	Thomas Spreckley	Node.js and python for containerized integration tests. DAPR integration demo Bugfix Seat adjuster demo. Developed, not pushed public though.
• Kuksa. VAL	Sebastian	Merged first gRPC, no docs yet and don't ask... :) First logging feature impl. Useful for debug/development.
• VISS server implementation in Go	Ulf	Working on TLS implementation
• VSS & Tools	Daniel Wilms Gunnar (Sebastian as backup)	For values that are defined in model (default, or min/max limits), shall "0" be valid if the signal datatype is float, or shall we require it to be "0.0"? Discussion on Structured datatypes support? Major discussion opened, it is a fairly major change if included. And of course discuss syntax in that case. Extensible (new) datatypes and units, no progress yet. vss-tools: "vspec2yaml" proposal. vspec is already yaml, but this expands all instances and flattens into a single output file, and includes uuid values. Not yet accepted, maybe rename tool since vspec is basically yaml already.
• VSSo	Daniel W Ted	Rudimentary automated mapping VSSo<->DTD
• VSC & Tools	Gunnar	Fix needed to use python 3.8 (currently works only on 3.9) GitHub actions now run unit tests README updates to document gen() function changes
• W3C VISS specification	Ted Ulf	Feedback on first public working draft: <ul style="list-style-type: none"> • Minor bug - all messages to provide timestamp uniformly • Bandwidth usage due to access token sent with every request. Discussing if the token could be used like a session, for example by sending only the signature as a reference to a token that had already been authenticated. Traditional session-cookie possibly going out of style in the future?
• CCS-client repository	Ulf	-
• AOS	Artem	-

Minutes/Agenda

- New participant: Francisco Uribe. Quick roll-call/introduction.

- Project updates, see table.
- (VSS input)
 - Alexander: Is OBD branch really required? Is it useful to model the data according to the channel where it is distributed. (For example vehicle speed could be fetched on OBD, but also in other contexts)
 - Gunnar: Understood and it is a known issue, but this is not only about the channel of distribution but also of the signal definition. Sometimes an existing defacto list of data already exists, and occasionally it might be useful to reproduce it without changing it so that people recognize the signals they are used to. We are aware there are certain cases where this would lead to the same signal value being in more than one place, so it's a continuous discussion. If the majority thinks the OBD branch should not be there, then it can be changed. For every case, bring the discussion to the specific VSS call on Tuesdays.
- Update/plans on upcoming open source code for tools, from BMW:
- Alexander D (BMW): We have for a while explored how to distribute VSS data in our platforms. MQTT looked at before but we saw benefits with GraphQL. Flexible queries! GraphQL "invented" shortly after VISS v1? Good community. Implementations exist. Possibility to tie signal sources in the system (SOME/IP services, REST services, CAN? ... etc.) to a single signal schema. The schema is hierarchical, following VSS model (but possibly including more signals?) Created python tools that generate the GraphQL schema from VSS. There are some local extensions we have made (coming in second wave of tool release).
 - Mapping using a VSS-layer type (deployment model) which explains how to fetch the values from the system via an interface that is described using Franca IDL.
 - With this as input the tools generate code (e.g. resolvers for the GraphQL server)
 - Plan: Define a "ugly" Franca IDL interface and show examples of VSS-signal mappings on it. The purpose is to include some "misuse" of Franca, or put another way, challenges in mapping VSS to "difficult" existing services.
 - First (partial) release of code fairly soon.
- Gunnar: First tests on serialization using AVRO. See [branch](#). Will investigate python and C++ implementations first.
- Work started on VSSAndroid property C++ binding code. Just investigating VSS-generators and VSC/Jinja2 generation methods so far.
- AMM planning CVII topics

Wednesday 2021-08-18

Project	Person reporting	Updates
• ioTEA /Vehicle Edge	Thomas Spreckley ✗	
• Kuksa.VAL	Sebastian ✓	gRPC, Visual Studio dev containers for easier development
• VISS server implementation in Go	Ulf ✓	No updates.
• VSS & Tools	Daniel Wilms ✗ Gunnar ✓ (Sebastian as backup)	<ul style="list-style-type: none"> • Dropped travis file because GitHub actions cover all now • Seat signals were sensors, now actuators • VSS meeting group continues discussion of extensible datatypes and units (each separately). At the moment it's basically a fixed list. <ul style="list-style-type: none"> - Which datatypes and units are predefined as part of the standard VSS model? - Are these also used in the current standard catalog? Are there "standard" types that are not used at all? - Shall the model allow extension with new datatypes? ... and/or with new units? - If it shall, what is the method of extension? Shall the datatypes and units be defined in the program source code or read in from a configuration file. <p>Progress is being made on these questions but all (many) stakeholders need to have time to weigh in.</p> <ul style="list-style-type: none"> • Early hints on upcoming issues: Supporting struct data types (or not, as now), and possibly revisiting the definition of the enum type.
• VSSo	Daniel W ✗ Ted ✗	

<ul style="list-style-type: none"> VSC & Tools 	Gunnar ✓	<ul style="list-style-type: none"> vsc-tools: Generator function now uses type introspection on nodes, so there is no need to specify the node type in the template any longer. (Issue #16) vsc-tools: Unit test framework in place (pytest) with a first test example (#13) VSC/RPC meeting this week discussed way forward, and outreach to companies for one-on-one input regarding preferences gRPC, OpenAPI, and other standards are important to get into the mix, as well as Franca usage or migration path as described before. A new Franca input parser may need to be programmed from scratch, but this should be straight forward.
<ul style="list-style-type: none"> W3C VISS specification 	Ted ✗ Ulf	
<ul style="list-style-type: none"> CCS-client repository 	Ulf ✓	
<ul style="list-style-type: none"> AOS 	Artem ✓	<p>Trying to find common ground around authorization etc. Need a proposal for community to react.</p> <p>Service representation spec. also of interest (VSC (and VSS) related discussion).</p>

Minutes/Agenda

- Several vacation/apologies this week from Bosch, BMW, ...
- Project updates above, for those that are available
- Catch up with Artem regarding AOS issues
 - See above
 - Also working on modularity - identifying components for reuse.
- VSC and tools
 - synergy opportunities with gRPC support in KUKSA.VAL?
 - Let's discuss "decisions" taken during this development how to find consistency with the VSC-related work (which intends to integrate gRPC and other technologies as needed).
- Awareness: [CVII-TS: Binary encoding for VSS-based data transfer](#)
 - synergy opportunities with gRPC impl. also here?
 - Artem: We have seen some problems with binary encodings, so JSON mostly for now, which is adequate for a lot of the needs at the moment. We see potential need (for binary efficient encoding) however.
 - Sebastian: For gRPC we replace some of the JSON protocol parts of course, but data encoding is often still using strings for simplicity at the moment.
 - Gunnar: OK, I conclude this is still important and interesting to together define one or two canonical binary encodings for VSS.
- Updates/discussion on other priority-list projects:
 - [VISS v2 server Planning / Work Breakdown page](#)
 - Needs a proper "need"/request for resource allocation. Discussion on if current development frameworks (using python, NodeJS and other) are acceptable in in-vehicle embedded space or if this need actually *does* exist already.
- Android AAASIG update
 - Plan to start implementing [VSS to AOSP translation - WBS](#) using a combination of [VSS-tools](#) examples for reading VSS and [VSC-tools](#) examples for code generation using jinja2. Bittium is leading.

Wednesday 2021-08-11

- No meeting this week.

Wednesday 2021-08-04

- Kuksa; Sebastian reports that students are working on the gRPC binding, no new feature in the pipe for the time being
- Eclipse: Philippe indicates that the contact is established with the Eclipse Foundation, a new call is scheduled at the end of the month
- AMM: Philippe indicates that the upcoming AMM will be virtual due to the delta variant
- Kubernetes: Stephen Lawrence reports that there is an on-going experiment for running kubernetes on R-Car, please look at [https://elinux.org/R-Car/k8s\(J\)](https://elinux.org/R-Car/k8s(J)), this is in Japanese but can be translated using the usual tools
- there will be NO CALL NEXT WEEK due to Summer low activity period, meeting schedule is the following
 - 11 August -- No meeting
 - 18 August -- meeting as usual (and back to weekly schedule).

Wednesday 2021-07-21

Project	Person reporting	Updates
• ioTEA/Vehicle Edge	Thomas Spreckley	(Bootable image): Working on encoding the documentation of licenses and other needs for binary image release. Planned docker support in Apertis for (next) binary release based on Apertis
• Kuksa.VAL	Sebastian	New release https://github.com/eclipse/kuksa.val/releases/tag/0.1.11 <ul style="list-style-type: none"> extra transformations (mapping/math) in DBC feeder last release before switching to more VissV2 like responses for get Work on GRPC on-going
• VISS server implementation in Go	Ulf	
• VSS & Tools	Sebastian Daniel W W Gunnar (Sebastian as backup)	vss-tools: (python-fu...) Optimization of reverse-lookup of types among available types vss-tools: bugfix: include dirs now searched in given order instead of undefined behavior tools: bugfix: include dirs now searched in given order instead of undefined behavior VSSo tools update merged Made progress on discussion on "custom" Data-types (leaning towards not supporting, and showing how to get to a solution in other ways). Similar discussion on Units, pushed to later.
• VSSo	Daniel W Ted	VSSo tools update merged, see above.
• VSC & Tools	Gunnar	
• W3C VISS specification	Ted	(Finalizing details to push first public working draft). Vacation pause in meetings.
• CCS-client repository	Ulf	
• AOS	Artem	

Minutes/Agenda

- Project updates, see above
- AMM, discuss candidates for sessions / presentations
- Follow-up and further planning on [3 prioritized development topics](#)
- Vacation/attendance planning for upcoming weeks

Wednesday 2021-07-14

Project	Person reporting	Updates	Comments
• ioTEA/Vehicle Edge	Thomas Spreckley	- Hoping to make Vehicle Edge repo more capable / updated - Raspberry pi image (as noted last week) is done, and (so far) used internally	
• Kuksa.VAL	Sebastian	VSS v2 support?	

• VISS server implementation in Go	Ulf		
• VSS & Tools	Gunnar Sebastian Daniel W	Fundamental discussions on flexibility / growth of data types and units. vss-tools, some bugfix (standard catalog did not make use of this feature)	
• VSSo	Ted	(Breakout call with Microsoft). Design choices still discussed, comparison to DTDL, trying out automated conversions and evaluating the result.	
• VSC & Tools	Gunnar	No news. Still establishing individual outreach and necessary questions to establish the "choice" of the established IDL.	
• W3C VISS specification	Ted	First public working draft is almost ready to go.	
• CCS-client repository	Ulf		
• AOS	Artem	Still working on documentation and internal agreements for possibility to open-source.	

Minutes:

- Project updates according to above.
- Thomas: How/where to host the "ready-to-go" RaspberryPi images mentioned previously? Let's discuss how to make it more visible.
- Gunnar: Reiterating that out-of-the box experience is good, but we also need to "break apart" frameworks into reusable components, to promote and help a collaborative tech-stack development.
- Thomas: Daniel K has some ideas for APIs for cloud-to-device.
- Went through the currently three highlighted development projects at the top of [CVII Tech Stack](#)
 - VISS server (C++)
 - Artem / AOS likely to plan resources
 - VSC-based proof of concept
 - Bosch interest - Thomas to set up initial chat with Daniel Krippner.
 - Binary serialization specification
 - Call for volunteers
- Overall, these three seemed to still be high on interest/priority list.

Wednesday 2021-07-07

Project	Person reporting	Updates	Comments
• ioTEA /Vehicle Edge	Thomas Spreckley	Still working on "ready-to-go" Raspberry images (with Ubuntu and Apertis)	
• Kuksa.VAL	Sebastian	GRPC interface: Work ongoing Eclipse SAAM slides and talk, also pitching vss available at: https://www.eclipse.org/kuksa/blog/2021/06/24/2021-06-24-eclipsesaam-scr-anti-tampering/ for all SAAM talks check https://events.eclipse.org/2021/saam-mobility/	
• VISS server implementation in Go	Ulf		
• VSS & Tools	Gunnar Sebastian Daniel W	Discussion around units (kph, m, kg,...) and datatypes (int16, string, float,... : How to "add" new ones, should this really be encouraged, or rather discouraged. Discussion ongoing Fixed a small datatype bug in Wheel specification Small bugfixes in tooling	
• VSSo	Daniel W	No updates. Meeting with MS upcoming (how to map to MS ecosystem)	

• VSC & Tools	Gunnar ✓	Has been discussed during CVII workshop July 1st CVII Workshop July 1, 2021	
• W3C VISS specification	Ulf ✗		
• CCS-client repository	Ulf ✗		
• AOS	Artem ✗	Has been presented during CVII workshop July 1st CVII Workshop July 1, 2021	

Minutes:

- Project updates above.
- Mentioned Backlog heading on main page, and the placeholder page for [User Identification \(CVII\)](#)

Wednesday 2021-06-30

Project	Person reporting	Updates	Comments
• ioTEA/Vehicle Edge	Thomas Spreckley ✓	Bugfixes in VSCode extension, and a NodeJS spawning fix. RPi4 image. A full Apertis image will be created. Added required dependencies for ioTEA /VehicleEdge.	
• Kuksa.VAL	Sebastian ✗		
• VISS server implementation in Go	✗ awaiting Ulf's return		
• VSS & Tools	Gunnar ✓ Daniel W ✓	PRs for documentation improvement, some merged Progressing tickets and major discussions (still open tickets)	
• VSSo	Daniel W ✓	Break-out discussion, with Microsoft, still working with some postponement (vacations etc.) VSS2TTL small tweaks.	
• VSC & Tools	Gunnar ✓	<i>Preparation for the workshop discussion tomorrow.</i>	
• W3C VISS specification	✗ awaiting Ulf's return		
• CCS-client repository	✗ awaiting Ulf's return		
• AOS	Artem ✓	Some licensing discussions. Updating to VISS v2.	

Minutes:

- Introduction (for Marc mostly) on various topics, organization etc.
- Artem: There are fundamental topics I would like to have workshop on. How to identify services. Authorization....
- Blackberry+AWS [IVY project](#) was mentioned. Bosch working on setting up a first discussion / onboarding.

Wednesday 2021-06-23

Fixed Agenda:

Project updates (<= 2-4 min each)

Project	Person reporting	Updates	Comments
• ioTEA/Vehicle Edge	Thomas Spreckley ✓	Improved unit-tests (especially on protocol gateway) Vehicle Edge repo improvements, hardware support (RPi4)	
• Kuksa.VAL	Sebastian ✓	Perfect.	
• VISS server implementation in Go	✗		
• VSS & Tools	Gunnar ✓ Daniel W ✓	GitHub actions VSS catalog now not using list-format, better consistency UUID no longer using an input file. Improved package dependency handling	
• VSSo	Daniel W ✓	Short meeting Plan deep-dive this week on format of TTL file (Turtle - Terse RDF Triple Language), and checking if conversion tools work, etc.	
• VSC & Tools	Gunnar ✓		
• W3C VISS specification	✗		
• CCS-client repository	✗	Future: possibly split up parts into repos, prepare for proper "microservices" usage.	
• AOS	Artem ✓ Stephen	Ongoing discussion about existing code becoming open-source, and identify new collaboration areas.	

Project planning, other topics

Participants

- Christian K
- Philippe R
- Dirk
- Stephen
- Thomas
- Piotr
- Ted
- Gunnar

Minutes

Subprojects / tracks updates

- Development projects, in table above

Bosch Framework

- [IoT-event-analytics and Vehicle-Edge projects](#) – Thomas will help out to fill this in
- [deployment.md documentation file](#) is useful new input

General

- Is the (old but actively developed) [JOYNR project](#) of interest in CVII context?
- Eclipse Foundation project [Tractus-X](#) – worth starting an alignment discussion

AUTOSAR

- CVII was presented / discussed with AUTOSAR steering committee today. (Good Q&A and discussions but further details not shared here)
- We want to discuss the ability to use AUTOSAR based systems as signal sources
- Connecting AUTOSAR and "non-AUTOSAR worlds"
- Can there be a gateway doing (any) necessary translation (if needed), and/or mapping between protocols

Wednesday 2021-06-16

Fixed Agenda:

Project updates (<= 2-4 min each)

Project	Person reporting	Updates	Comments
• ioTEA/Vehicle Edge	Thomas Spreckley ✓	Technology transport abstraction (protocol gateway) C++ support Integration test framework + test suites Rust experiments starting (not visible yet)	
• Kuksa.VAL	Sebastian ✓	Paper describing working with Kuksa (gather data from exhaust system and analyze the values)	
• VISS server implementation in Go	Ulf ✓	Support for Curve Logging. Implementation better verified now (connected and compared to Geotab Go-device implementation)	
• VSS & Tools	Gunnar ✓ Daniel W ✓	Travis broken... 😞 Discussion on attributes (constants), how often and if they can change (for example between driving cycles)	
• VSSo	Daniel W ✓	vss2vsso ready to merge.	
• VSC & Tools	Gunnar ✓	PR open tweaks some concepts, nested namespaces, clarifies properties. Properties = VSS signals. Similar setup. Discussion on whether it can be done only "in VSS" instead. NOTE: Planning in parallel a " <i>fundamental</i> " discussion on the creation of the common services/interface language likely on July 1 workshop.	
• W3C VISS specification	Ulf ✓	VISS version 2, process started to send it out as First Public Working Draft (first working group approves to go to this state). Discussion on if some features should be optional. Candidates for optionality are in the areas of filtering and access control.	
• CCS-client repository	Ulf ✓	Some smaller fixes after testing in new environment. Planning to have a tool to transform from Geotab collected data into VSS. The first step was implemented (to interpolate curve logging formatted data).	
• AOS	Artem ✓	<i>Awaiting big-picture plan first (see below)</i>	

Project planning, other topics

Participants

Minutes

- Quick updates done
- AOS:
- Artem: We are working on publishing the appropriate open-source parts. Protocols, authentication, ...
- Authorization service. Defining access rights.
- Gunnar: Definition of access control rights, permissions, etc. are worthwhile to make standard. Different environment have different needs (e.g. VISS spec, Android Automotive permissions model, etc.) but there are opportunities to design this together.
- AUTOSAR connection
- Piotr: TietoEvry has talked with AR community to propose some concepts. VehicleGateway (Cloud-to-vehicle connection), conceptual phase started. Piotr tracking but not part of main design team. Adam can tell us more.
- [Fill out survey](#) (and ask colleagues who are not as connected to CVII already)
- [July 1 Workshop planning](#)
- Ted: Best Practices for automotive applications, is progressing well (recent discussions on accessibility aspects).

Wednesday 2021-06-09

Project planning, other topics

- Student development project (security) – brainstorm implementation topics
- CVII Workshop planning
- AOS presentation by Artem

Participants

- 16 participants
- Florian, Jeff, Johan, Ulf, Stephen, Gunnar, Philippe, Ted, Daniel W, Artem, Christian K, Dirk, Christian H, Ravi
- Apologies: Ilyaz

Minutes

- Development project updates were skipped (missed). Postponed until next week.
- Round-table due to new mix of participants
- Discussed student dev project ideas, link above
- Discussed CVII workshop plan, link above
- Artem presented AOS overview
- Discussions around future plans (overlay architectures from AOS, Bosch-IoTea/Vehicle Edge, CCS and other. Identify work areas).

Wednesday 2021-06-02

Fixed Agenda:

Project updates (<= 5 min each)

Project	Person reporting	Updates	Comments
• ioTEA/Vehicle Edge	Lars-Erich?, Jochen? ✗	Waiting for the right people next week.	
• Kuksa.VAL	Sebastian ✓	<ul style="list-style-type: none"> • Bugfix on test / validation of VSS • DBC feeder improvements • Old experiment on permissions removed (newer approach to JWT based access remains) • stress test (new student developer) 	
• VISS server implementation in Go	Ulf ✗	Curve Logging implemented (Ulf can explain more later)	
• VSS & Tools	Gunnar Daniel W ✓	VSS: default should be only for attributes, fixed in tools and removed from non-attributes in VSS itself Documentation generation fixes vss-tools new graphql schema generator vss to vssso converter still under review (PR)	
• VSSo	Daniel W ✓	vss to vssso converter still under review (PR)	
• VSC & Tools	Gunnar ✓	A VSC generation tool/framework exists. Templates still todo. Reconsidering the language definition (maybe use standard Franca IDL?)	
• W3C VISS specification	Ulf ✗		
• CCS-client repository	Ulf ✗		
AOS?			

Updates on liaisons, alignment track, etc.

Project planning, other topics

- Starting conversations with/about AOS today
- CVII Workshop date set for 1 July (1600 CEST, 3h duration)

Minutes

- Introductions (Artem's first meeting)
- Brief discussion on AOS (principles, not the technology). Embedded parts are planned to be open-source. Process ongoing (outlook - a few months).
- Artem to give AOS architecture/tech overview next week
- Artem mentioned Android HAL using a VISS-protocol external server was implemented and shown by EPAM a few years ago.
 - Gunnar: So this was before AASIG was started... It is good input, although current work has considered GraphQL as the protocol for the internal VSS-data server.
 - => Artem to provide a link to the published code.
- New table-based tracking of wanted/expected/missing tech stack components was added to the [CVII Tech Stack](#) overview page ⚠ Feedback /changes welcome!
 - This could drive priority discussions also
- Sub-topics moved to separate pages for deeper analysis, e.g. [protobuf](#) (already existed), [mqtt](#) (new), etc.
- Eclipse: short discussion on the liaison with Eclipse, to be followed up with the Bosch team

Wednesday 2021-05-25

Project updates (<= 5 min each)

Project	Person reporting	Updates	Comments
• ioTEA/Vehicle Edge	Lars-Erich?, Jochen?		
• Kuksa.VAL	Sebastian	VISS server - PR 190 - now apply default values if given in input catalog.	
• VISS server implementation in Go	Ulf	Full implementation of Curve Logging (see Tech Brief page) included now.	
• VSS & Tools	Gunnar Daniel ✓	vss-tools: Array size support (caused warnings before) Bug in instantiation code fixed.	
• VSSo	Daniel ✓		
• VSC & Tools	Gunnar		
• W3C VISS specification	Ulf		
• CCS-client repository	Ulf		
AOS?			

Updates on liaisons, alignment track, etc.

- Main topic right now is liaison with ISO group W6 for Extended Vehicle to discuss (potentially) introduction of data model definition in ExVe work.
- Plan for a small-scale meeting with some engineers involved in the activity.
- A deeper technical alignment work is required for SENSORiS. It could be done by a volunteer or a small working group meeting (doing the work, not talking about what *could* be done).

Project planning, other topics

- Upcoming - overlay architectures and plans from VehicleEdge, CCS, AOS, plus the VSS-tools, VSC-tools and various [plans discussed in this meeting](#). The purpose is to combine these into a view of the full tech stack.
- Gunnar reached out to EPAM for participation

Minutes

- Many vacations in Germany this week affects today's attendance.
- Gunnar: Some things might need to be repeated next week, but let's run a dress-rehearsal of the fixed agenda today. Starting with updates.

- Sebastian: Note the upcoming [Eclipse Conference](#). There will be a presentation on KUKSA.VAL, but also other interesting things.
- Gunnar: (Tip from Stephen). Note also this [Embedded virtual conference](#) starting June 3rd (several strong embedded Linux talks in the agenda).
- AOS, first look for related code:
 - [aos-sdk](#)
 - [Yocto meta layer](#)

Wednesday 2021-05-19

- Sebastian suggests every meeting should start with a project-update from each component development project, including IOT-event-analytics, and others.
 - Start this next week.
- Gunnar notes that we should have clearer indication of who is attending/not every week. Better structure and discipline for attendance, (and for agenda of course). Time-boxing can be used if people only want to be on part of the meeting.
- Not much progress on VS* to AUTOSAR tooling this week. Piotr had to leave meeting.
- Basic **VSC** generation framework now on GENIVI github [vsc-tools](#)
- More **VSS**-to-bindings tools might come out open-source licensed, from another OEM's development
- A look at [aoscloud.io](#) - Renesas and EPAM. Some open-source components. Renesas has used VSS and VISSv1 in previous demos. We are hopeful for setting up collaborative work on overlapping areas.
- Collecting up some more related SW project (some older, some newer):
 - <https://github.com/aShinjiroUrata/vehicle-information-service-spec>
 - <https://github.com/aos-sdk/>

Wednesday 2021-04-21

Agenda

- Development related to integrating with AUTOSAR
- "Plan B" on VSC tooling development - discuss options
- Bosch I-O-Tea and Vehicle Edge evaluation

Notes

- Integrations to AUTOSAR
 - Tieto platform running, ready to use for investigations
 - Gunnar: For "Any"2Autosar tooling, first step is usually a definition of the mapping (spread-sheet showing language features that map to each other, where is it simple, where are challenges, etc.)
- VSS2ara would be basically solving the "autosar side" of the system, similar to how Franca AUTOSAR XML converter was used with AUTOSAR.
- Alternative is to first focus on the "non-AUTOSAR" side of systems, e.g. generate a SOME/IP binding directly, or DDS, or other. (VSS/VSC to SOME/IP binding directly).
- ASAM service oriented diagnostics seems interesting.
- "Plan B"
 - The VSC-related tooling is taking even longer time to go through company legal reviews and final approvals for releasing it with an open source license, although there is a clear desire to get it done.
 - A discussion started on how to develop a first set of tools in parallel with waiting for the other.

Wednesday 2021-04-14

Notes

- Tieto: AUTOSAR analysis ongoing. Need tooling soon.
- VSC tooling seems held up by something. End of this week consider if we should launch plan B. Talk to Magnus about it.
- VSC:
 - Piotr: Has ASN.1 been considered as a definition language? (it could be an alternative to protobuf?)
 - ... the compilers are often able to generate a compact binary format
 - ... likely less availability of open-source tools. There should be some however.
 - Gunnar: For VSS I think it's "overkill" since VSS has very simple datatypes but for VSC and arbitrarily complex data definitions, maybe
 - Gunnar: FYI: [OpenAPI](#) and [AsyncAPI](#) have however come up as potential reuse or inspiration for VSC definition. Franca IDL is still a strong basis however. OpenAPI is only REST-focused and AsyncAPI seems to describe primarily a pub/sub direction.
- VSS
 - Stephen: I was recently reading about GraphQL Federation that allows separation of concerns and for domain teams to create parts of the data graph that are then federated into a whole. The separation of concerns resonated with in-vehicle engineering where you have for example services with very different safety and security requirements. Could this help us?
 - Background reading:
 - [video: Apollo GraphQL Federation introduction](#)
 - Netflix uses it to scale their APIs and have some good blogs and a video on its use that have some nice practical illustrations:
 - [blog: How Netflix Scales its API with GraphQL Federation \(Part 1\)](#)

- [blog: How Netflix Scales its API with GraphQL Federation \(Part 2\)](#)
- [blog: Beyond REST](#)
- [video: How Netflix Scales Its API with GraphQL Federation](#)
- [blog: Open Sourcing the Netflix Domain Graph Service Framework: GraphQL for Spring Boot](#) (added after meeting)

Cloud

- Iyyaz: Regarding demo (AMM). Docker-based stack and Terraform is being developed.

Wednesday 2021-04-07

Notes

- Reviewing and amending [IoT-event-analytics and Vehicle-Edge projects](#) page. UML diagram overview. Dennis supporting.
- Tieto setting up internal meetings to figure out what to do next with the plans on AUTOSAR interoperability.

... planning to build on VSC tooling

... Gunnar: Plan translation mapping and templates can start early

- Iyyaz has prepared some notes . E.g. what is "the edge" by definition?

Wednesday 2021-03-31

Notes

- Review of wiki page [IoT-event-analytics and Vehicle-Edge projects](#)
- content of the wiki page is considered very useful by the participants

Wednesday 2021-03-24

- pipeline and configmanager come from IoT-event-analytics repository = Northbound
- kuksa val, hal interface+adapter, vss2iotea part of vehicle-edge = Southbound
- Dirk: There should be some useful UML diagrams.
- Christian to find the presentations/pictures that are useful here and attach to [CVII Tech Stack](#) page.
- Tieto still working on setting up AUTOSAR environment and planning.
- Discussed the need to coordinate development plans (e.g. bindings to DDS, SOME/IP, and-or code generators) to avoid overlap.
- Gunnar create a home page for Vehicle-Edge stack analysis and information.

Wednesday 2021-03-17

Notes

- Update on protobuf tool ([merged](#))
- Bosch code released for [IoT-event-analytics](#) framework, and the [vehicle-edge](#) project to bring together all parts of the stack.
- Discussion on AUTOSAR tooling
 - TietoEVERY to continue to seek out relevant people, bring into a design discussion meeting.
- Franca / FARACON vs VSC development
- VSC code generation framework coming soon. Discussing what to expect.
- Planning the CVII related sessions at GENIVI AMM, May 4-7.

Wednesday 2021-03-10

Agenda

- Updates on topics below
- [Protobuf](#) continued.
- Bosch

Notes

- Bosch: Code related to the demo on the CVII workshop will be on an open repository within 1-2 weeks.
- Discussion about organization of the different parts of CVII. **TODO** link for "org.chart" and [Common Vehicle Interface Initiative - Activity Matrix](#).
- confirming Signal2Service not a likely input to our work (no demonstrator, no plans at the moment)
- ZOOM 😊 KEEPS KICKING ME OUT...
- Waiting....
- Can someone take over leadership?

Wednesday 2021-03-03

- Adam K / Piotr: AUTOSAR - Signal2Service is not really implemented yet.
 - Some VSS to AUTOSAR tooling seems to make sense therefore
 - Tieto want to start working on this. First steps is getting runtime platform setup working. Then the design of VSSAUTOSAR can start (and be discussed).
- Quick look at [CVII Tech Stack technologies - Protobuf](#) again.
- Need for full software architecture focus in this project.
 - Separation of safety-critical technologies and info/entertainment/other. What is being targeted exactly?
 - Where in a typical architecture are we working?
 - VSS itself is orthogonal to safety/other question. However, the chosen technologies and implementations may need to be classified from safety perspective.
 - Clarify where different proposals belong. E.g. "MQTT is unlikely in safety domain, right?"
 - Agreement on which technology to use where.
- Images to show architecture.
- Big software release announcement next week...
- Virtualization important aspect to consider.
 - Gunnar informed about [Automotive Virtual Platform Specification](#) work ongoing in GENIVI.
 - Let's discuss in the future if there are particular aspects to consider in this area.

Wednesday 2021-02-24

- AUTOSAR - Tieto/EVRY still interested but other priorities came up so the time plan not clear at this point.
- Signal2Service - [check if spec released and if applicable](#)
- Look at [defining the representation of data in AUTOSAR-XML](#) (to prepare VSS to ARXML conversion)
 - FARACON tool would be one approach. Create a Franca IDL file with some observable data ("Attributes" in FIDL) and run the conversion, study the result. There is a comprehensive mapping between Franca ARXML that should be correct.
- MQTT
 - VISS over MQTT (Uif) has been described in W3C Automotive working group.
 - It is embedding VISS in MQTT with a small control protocol defined (over MQTT).
 - Access control strategy is identical to standard VISS.
 - Topic needs to be "protected" somehow or anyone could listen/inject to traffic.
 - Give some time to let this idea mature before it becomes part of any official specifications. New ideas and improvements may come up.
 - A more direct VSS-to-MQTT topic mapping is a different and complementary alternative
 - Sebastian: Publishing to MQTT is easy. For writing more work required (because access control details not done yet).
 - **Steps: Define the payload message format**
 - **Steps: Describe the access control strategy (clients have access to a subset of topics)**
 - **Steps: Deciding implementation language and reuse libraries**
- Protobuf – think about how to represent messages - [this page](#)

Wednesday 2021-02-17

Workshop preparation

Shortlist of working items:

- General efficient message format (JSON and Binary). For use in many contexts, e.g. MQTT, and SOME/IP and other.
 - For JSON, consider VISS spec
 - VISS spec also has a "compressed" format (unique to VISS)
 - Discussion about having a more "standard" format for binary/efficient encoding. MsgPack is somewhere in between (like compressed /binary JSON) whereas describing a schema in Protobuf or AVRO or similar will generate an efficient encoding from the schema.
- Define mapping to AUTOSAR technologies, ARA:COM (AUTOSAR XML) and/or SOME/IP or DDS specifically. In other words how is a signal definition converted to a 'Service'? Or should it simply be observable properties (Fields in SOME/IP).
- The AUTOSAR spec Signal2Service seems still unclear to many. Perhaps further investigation required.
- Can we define the actual purpose of the specification? If so, there is opportunity for any one here to propose potential solutions or to 'unstuck' this activity somehow.

Wednesday 2021-02-10

MQTT (and general design) discussion

- SSL/TLS setup between MQTT server and MQTT client could have bi-directional authentication (checking also client certificate)
- Authentication method for the initial CONNECT can be any one that client+server both support.
- One approach is to allow any client to get any MQTT topic, but the data itself is encrypted and then only those who can decrypt have access to the data in practice.
- Another (VISS and other) consider applying filters on the signals (MQTT:topics) that you can actually request. E.g. Vehicle/Cabin /Temperature. E.g. Mosquitto plugins can be used for this.
- VSS Layer (<link) a possibility to define permissions groups (for any of the technology choices or approaches above).
- Bosch proposes the use of the SSI approach: https://en.wikipedia.org/wiki/Self-sovereign_identity
 - ... but SSL/TLS is also required in some environments e.g. across internet

Open areas for getting started on implementation

- Mapping VSS to popular cloud/infrastructure technologies Apache Kafka/Spark/NiFi etc.
- What about VSSo?
- Which existing technologies do VSSo fit into?
 - VSSo maps well to GraphQL (or SPARQL of course). Web-of-things is there an obvious implementation/framework to use in implementing?
 - For GraphQL there is Apollo, Neo4j, maybe others.
 - Protege / Webprotege development/analysis of ontology/data?

Action: Collect more information from more companies about preferred technologies/implementations.

Wednesday 2021-02-03

US friendly time 17:00 CET

Agenda

- project scoping
- upcoming CVII workshop

Participants

- Christian H, Christian K, Dirk, Sebastian (Bosch)
- Niclas (Volvo Cars)
- Kevin (High Mobility), Ulf (Geotab), Iyyaz (Cobrasphere) (GENIVI CCS project participants)
- Piotr, Michal, Dariuz, Adam, Stefan, (TietoEVRY)
- Ted (W3C), Gunnar, Stephen, Philippe (GENIVI)

Notes

project scoping

- review of [CVII Tech Stack](#), updated on line
- Dirk shows latest status of Bosch VAPP project implementation, slide deck can be shared once the code is published in the open

upcoming CVII workshop

- please have a look at [Common Vehicle Interface Initiative \(CVII\) Working Session Details](#)

Wednesday 2021-01-27

US friendly time 17:00 CET

Agenda

- project scoping
- AOB

Participants

- Sebastian, Christian K, Dirk, Gerald (Bosch)
- Niclas (Volvo Cars)
- Kevin (High Mobility), Ulf (Geotab), Iyyaz (Cobrasphere) (GENIVI CCS project participants)
- Rex (Saferide)
- Piotr, Michal, Dariuz, Adam, Stefan, (TietoEVRY)
- Ted (W3C), Gunnar, Stephen, Philippe (GENIVI)

Notes

Project scoping

- discussion starts with MQT, discussion is based on the content of [CVII Tech Stack](#)
- Sebastian: this is a preferred techno, but what should be the reference implementation for the mapping of VSS to MQTT ?
- discussion on code vs specs
- Christian K: code does not lie
- Ted: but it can have bugs (as can specs)
- Ted: a server in cloud could return VSS JSON or VSSo RDF (or other formats) through content negotiation from the same end points based on client preferences
- Christian K: I am convinced there will other standards than CVII in the air, Sensoris for instance, we have already vehicles in development that use Sensoris and I would like to give an opportunity to sync with CVII in the future
- TODO Christian K to contact Sensoris and make the liaison happen with them
- discussion on the interface to AUTOSAR
- Sebastian: we do not need to dig deeply into Adaptive Autosar, our interface point is rather someip for instance
- Dirk: I would assume both data & service mapping with Autosar
- Rex: signal-to-service mapping
- Ted: back to SENSORIS, a mapping may be sufficient for this activity and translators can be created by those who need them. likely would be welcome in GENIVI repo if created, HERE previously showed me some mappings they maintain
- Christian K: TSN, ARA::COM are deeply embedded when we go so deep, we will lose the opportunity to do any abstraction

- TODO all to define what are the high level objectives of constructing an AUTOSAR connection
- Christian K: AUTOSAR is so much in the safety world that it will be difficult to build cool things with them
- Sebastian: we want the data from below, i.e. from the safety world, do we want to write safety critical applications on top of VSC ?
- Gunnar: IMHO VSC can describe a safety critical application but will not implement it
- Dirk: what is the targeted runtime environment ? is the vehicle computer or a deeply embedded ECU ?
- short discussion between Christian K, Dirk and Gunnar
- Gunnar: IMHO the model could apply to any system whatever it safe or not
- Christian: we will take this offline
- Michal: VSS to MQTT , what is the preferred language to implement the translation ?
- Dariuz: I have some experience with MQTT and I am interesting in this translator but not familiar with C++ for instance
- SebastianLet's all use RUST :)
- Gunnar: we could start with python first and see where it goes, but if Tieto says we use Rust, please do it, you know the industry better
- Michal and Dariuz: volunteer for the translator
- Adam: we can bring some feedback on AUTOSAR for the next call

Quick links: [[CVII home page](#)] [[Tech Stack components](#)]

2022-05-18

Agenda:

1. Project Status
2. [Next Deep Dive - CCS Component](#)

Project	Person reporting	Updates
• Kuksa.VAL	Sebastian (Bosch)	No update
• W3C VISS specification (v2)	Ulf Ted as backup (both Geotab)	No update
• WAI VISS server implementation in Go	Ulf	No update
• VSS & Tools	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	Presentation on Named Data Networking. Very forward looking. See slides and presentation from AMM.
• VSSo	Daniel W Ted	Post workshop improvements
• VSC & Tools	VSC team members	Code contribution from MBiton coming closer. Waiting on final approvals. Discussion of 'VSC-core' (approx IDL+code generation deployment) and initial PoCs of tooling in github.
• CCS-components	Ulf	No update
• AOS	Artem (EPAM)	No update
• Android Automotive VSS Vehicle Properties Code Generator		No update. Chris Simmond's meetup.
• Covesa GraphQL components	Alexander Domin (BMW)	No update

<ul style="list-style-type: none"> • Eclipse Kanto <p>(proposed. worth tracking in CVII call?)</p>	(Thomas S)	No update
<ul style="list-style-type: none"> • vss-otaku 	Steve (Renesas)	No update

Apologies:

- Sebastian

Minutes:

- NDN
 - Ted: Tier 1 experimenting. Interesting for its connection to VSS.
- VSSo
 - Ted: Observers welcome to join calls at any time. Observers need to avoid involving in voting or concept introduction. Contributions can also be made through github. Same applies to VISS calls.
- Paul: describing CVII and CVII Tech Stack to various companies. If ppl have input on how best to describe it then please say.
 - Florian: OEM presentation from Graham at AMM. Seen those slides repeated elsewhere since then. May be helpful in terms of where VSS is applicable.
- [Next Deep Dive - CCS Component](#)
 - Monday 23rd at 4pm CET.
- Christian: Does it make sense to present/introduce digital.auto (<https://digitalauto.netlify.app/>) here?
 - Paul, Steve: Yes. Should discuss about what you wish to achieve.
 - Christian: Need to tie technical work to biz connection.
 - Paul: (running out of time) Can take that offline.

2022-05-11

Agenda:

1. Project Status
2. Next Deep Dive - CCS Component

Project	Person reporting	Updates
<ul style="list-style-type: none"> • Kuksa.VAL 	Sebastian (Bosch)	<p>Fixed a bug that kuksa.val throws an exception when subscriptionID is not a well-formed UUID on unsubscribe https://github.com/eclipse/kuksa.val/pull/267</p> <p>Code cleanup in GO client library https://github.com/eclipse/kuksa.val/pull/268</p> <p>Subscribe/Unsubscribe added to interactive command line client https://github.com/eclipse/kuksa.val/pull/269</p> <p>Fixed container bug, where CA.pem was missing https://github.com/eclipse/kuksa.val/pull/270</p> <p>Add link to secondary CI infrastructure in Readme, as Eclipse one has reliability problems https://github.com/eclipse/kuksa.val/pull/271</p>
<ul style="list-style-type: none"> • W3C VISS specification (v2) 	Ulf Ted as backup (both Geotab)	Merged PR. No open PRs, issues.
<ul style="list-style-type: none"> • WAI VISS server implementation in Go 	Ulf	Merged refactoring to single process. Two branches multi-process for the original multi-process arch and single-process for the new arch.
<ul style="list-style-type: none"> • VSS & Tools 	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	Discussion of possible future presentation on Named Data Networking in VSS call. VSS Layers PR in progress.

• VSSo	Daniel W Ted	No update
• VSC & Tools	VSC team members	Paul: I will be discussing with OEMs. Next weeks call will include deployment ideas.
• CCS-components	Ulf	No update
• AOS	Artem (EPAM)	No update
• Android Automotive VSS Vehicle Properties Code Generator		Engaging OEMs in what they need in AOSP
• Covesa GraphQL components	Alexander Domin (BMW)	No update
• Eclipse Kanto (proposed. worth tracking in CVII call?)	(Thomas S)	Added CANOPI to integration backlog. Integration to Apertis containers. Local digital twins.
• vss-otaku	Steve (Renesas)	No update

Minutes:

- CCS Components: State Storage Deep Dive Agenda
 - Timing
 - 15-20 min: Ulf Intro presentation on CSS Components: State Storage.
 - 40 min: reaction and building future plan
 - Technical API discussion
 - Design Issues in Ulf's presentation
 - Review current State Storage component API
 - Anything to fix or extend?
 - In VSS Terminology State Storage is 'simple'. Is this component left (fit) for that use case and something else is needed for 'more powerful' or do we reuse/extend?
 - Abstraction APIs
 - To Feeder, to Server
 - Requirements
 - Speed
 - Low vs medium vs high frequency
 - Native for high frequency?
 - Kuksa.val is also a target
 - Last value vs time series
 - VISS protocol has some TS query
 - 'History filtering'
 - Simple support for this in current WAI. Other process (e.g. comms) must tell WAI to start/stop recordering. Then VISS client (e.g. cloud) must detect vehicle became disconnected and query for missing data.
 - Kuksa currently has no TS
 - Date
 - Monday 23rd May 4pm CET.

2022-05-04

Minutes:

- AMM feedback
 - Paul
 - Workshop
 - Input from Ricardo/NNG on interfacing VSS to ROS RTOS and its DDS messaging
 - Reached out waiting for reply to advance discussion
 - BMW (Adnan) input about links to big tech company
 - As above meeting needed to scope out
 - Next AMM
 - Need input on what ppl want to do to make workshops flow more organically
 - Sebastian

- Workshops
 - Ppl came expecting 'readout' rather than workshop.
 - Positive was the good attendance and many newcomers, but the flipside of that was it was less 'workshopping'
 - Christian
 - Good discussions
 - Mixed expectations of new members/visitors vs call regulars
 - Good attendance in workshops despite them being scheduled at the end
 - It was cool
 - Florian
 - Good balance between panels, biz/tech track and workshops
 - Ted
 - Attended virtually
 - Enjoyed BMW presentation on VISS integration
- CVII Tech Stack Workshop talking points
 - SomeIP work occurring in Autosar. No schedule but something to follow.
 - BMW Android/VISS presentation. Major: VISS + Android VHAL feeder, Minor: GraphQL backend.
 - See deep dive discussion below
 - ROS / ADAS DDS to VSS
 - See Paul comment above
 - VSS Feeders / Data Store
 - Seb update on kuksa.val CAN
 - Loosely coupled, i.e. easily reusable
 - CAN feeder in python. Nice for prototype but for production likely look C++, Rust
 - CANOPI
 - Next step: wider discussion about reusing this work in eco-system. More eyes on the code etc.
 - VSS Feeder and Data Store abstraction
 - CCS Component status as starting point
 - Ulf's CCS component slides as possible starting point to deep dive
 - Need to discuss to what extent abstraction is possible or makes sense and for which use cases.
 - e.g. CCS Component current abstraction is simple single key/value API. Fine for low volume but would not scale.
 - In some cases might make sense to just use highest speed native API
 - Steve suggests start planning Deep Dive to discuss VSS Feeders and Data Stores
 - 1st might be:
 - 20-30 min Ulf present CCS slides, followed by wider discussion about abstraction.
 - Ulf sent apologies today. Steve will discuss with him either next week or slack
 - Deep dive next
 - Steve: What other things do you want to discuss in coming weeks?
 - Seb: Dig into what BMW needed/took from VISS protocol to understand their needs. Input may be useful towards VISS v3.
 - Ted has been having OSS roadmap discussion with BMW. Idea is to schedule meeting with Adnan about above when code available.
 - If meeting is in W3C slot then Ted will arrange 'visitor pass' for CVII members to attend.

2022-04-20

Agenda:

1. Project Status
2. AMM Sessions

Project	Person reporting	Updates
<ul style="list-style-type: none"> • Kuksa.VAL 	Sebastian (Bosch)	Refactor Subscription Manager and fixes race condition in Websocket interface: https://github.com/eclipse/kuksa.val/pull/264 https://github.com/eclipse/kuksa.val/pull/266 GO client library added for first time to access kuksa.val: https://github.com/eclipse/kuksa.val/pull/265
<ul style="list-style-type: none"> • W3C VISS specification (v2) 	Ulf Ted as backup (both Geotab)	See last update
<ul style="list-style-type: none"> • WAI VISS server implementation in Go 	Ulf	See last update
<ul style="list-style-type: none"> • VSS & Tools 	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	No update

• VSSo	Daniel W Ted	See last update
• VSC & Tools	VSC team members	No call this week due to national holidays
• CCS-components	Ulf	No update
• AOS	Artem (EPAM)	See update in minutes for last week
• Android Automotive VSS Vehicle Properties Code Generator		Added wiki page to gather issues/opportunities for Minutes:
• Covesa GraphQL components	Alexander Domin (BMW)	No update
• Eclipse Kanto (proposed. worth tracking in CVII call?)	(Thomas S)	Presentation from Kanto introduction posted in "2022-03-28" heading below.
• vss-otaku	Steve (Renesas)	No update

Minutes:

- AMM workshop Thursday afternoon: 2-3 hours (Updated working list from last week)
 - Discussion of what the group wants to work on and discuss in near-term
 - Currently the sessions are split into the two related topics VSS Data Storage, including feeders and VSS Data Servers
 - Topic brainstorming:
 - VSS Data Storage (including VSS Data Feeders) (Southbound)
 - Data Storage implementations:
 - DBs: redis, timeseries etc
 - Architecture: Single central vs distributed vs direct sensor connect (bypass store)
 - Feeders: CAN (kuxsa.val have closed some gaps), some/ip,
 - Timeseries vs last/single value
 - Interfacing into data servers
 - VSS Data Servers (Northbound)
 - VISS v3? (Duplicate: Will be brought up in prior VISS session so likely handled there)
 - Are VISS backend abstractions possible: storage, feeders?
 - GraphQL - in-vehicle?
 - BMW VISSAndroid abstraction/interface/data server
 - VSS Data Servers to cloud
 - Data processing
 - Ted explains they see issues with OEM cloud data. Time slice not short enough for some forms of h/w maintenance wear tracking so have to do their own. Possible need for some in-vehicle processing. Also issues with in-vehicle caching with insufficient IO.
 - In-vehicle vs cloud
 - In-memory vs storage

2022-04-13

Agenda:

1. Project Status
2. AMM Sessions

Minutes:

- Project status roundup abbreviated to allow more AMM prep. Any
 - VISS
 - Ted: BMW hope to OSS the VISSAndroid adapter they will discuss at the VISS session at the AMM by June
 - Ulf is refactoring WAIL so the architecture has a much lower number of standalone processes. Work should be complete in 2-3 weeks.

- Kanto
 - Steve: Tom could you chase Tina for the Kanto presentation please.
- Aos
 - Steve reports that the public documentation for Aos is now online <https://docs.aoscloud.io>
 - Work is starting on the previously reported goal of replacing the current VISS v1 server with an OSS replacement to adopt and extend. WAI and Kuksa.val in focus.
 - Work is also starting on some of the VSS related topics mentioned in Artem's presentation last year such as user service migration between cars.
- AMM workshop Thursday afternoon: 2-3 hours
 - Discussion of what the group wants to work on and discuss in near-term
 - Currently the sessions are split into the two related topics VSS Data Storage, including feeders and VSS Data Servers
 - Topic brainstorming:
 - VSS Data Storage (including VSS Data Feeders) (Southbound)
 - Data Storage implementations:
 - DBs: redis, timeseries etc
 - Architecture: Single central vs distributed vs direct sensor connect (bypass store)
 - Feeders: CAN (kuksa.val have closed some gaps), some/ip,
 - Timeseries vs last/single value
 - Interfacing into data servers
 - VSS Data Servers (Northbound)
 - VISS v3? (Duplicate: Will be brought up in prior VISS session so likely handled there)
 - Are VISS backend abstractions possible: storage, feeders?
 - GraphQL - in-vehicle?
 - BMW VISSAndroid abstraction/interface/data server
 - VSS Data Servers to cloud
 - Data processing
 - Ted explains they see issues with OEM cloud data. Time slice not short enough for some forms of h/w maintenance wear tracking so have to do their own. Possible need for some in-vehicle processing. Also issues with in-vehicle caching with insufficient IO.
 - In-vehicle vs cloud
 - In-memory vs storage

2022-04-06

Agenda:

1. Project Status
2. AMM Sessions

Project	Person reporting	Updates
• Kuksa.VAL	Sebastian (Bosch)	KUKSA released "CANOPi", which is version two of KUKSA's Open hardware in-vehicle prototyping platform. Pi Ecosystem compatible, 2x CAN FD, OBD, LTE/5G ready https://www.eclipse.org/kuksa/blog/2022/03/24/2022-03-24-canopi/
• W3C VISS specification (v2)	Ulf Ted as backup (both Geotab)	
• WAI VISS server implementation in Go	Ulf	
• VSS & Tools	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	iNAGO presented their VSS implementation. VSS: iNago presentation. https://drive.google.com/file/d/17Bu6AuFO4jAZ_7z1YO2sPch6Y5Q27ZBe/view?usp=sharing Had "Events" and "Method Calls" added to vanilla VSS Introduction:: Maintain intro slides and have regular introduction sessions
• VSSo	Daniel W Ted	New kickoff meeting post First Public Working Draft. New attendees. Reach out to new attendees.
• VSC & Tools	VSC team members	Magnus walked through his presentation in prep for AMM touching on most topics: catalog, definition language, tooling, VSS relationship to VSC.

<ul style="list-style-type: none"> CCS-components 	Ulf	
<ul style="list-style-type: none"> AOS 	Artem (EPAM)	
<ul style="list-style-type: none"> Android Automotive VSS Vehicle Properties Code Generator 		
<ul style="list-style-type: none"> Covesa GraphQL components 	Alexander Domin (BMW)	
<ul style="list-style-type: none"> Eclipse Kanto <p>(proposed. worth tracking in CVII call?)</p>	(Thomas S)	<p>Need to connect with Thomas.</p> <ol style="list-style-type: none"> Supporting C-Groups v2 Next Milestone release M2 Discussed collaboration with SDV re management of the many hardware variants. Distributed Edge use cases without cloud discussed ETSI MEC (https://www.etsi.org/technologies/multi-access-edge-computing) <p>cgroups v2 support for containerization > working on M2 release - including system metrics, Azure IoT Hub connectivity, file-based backup-restore > exploring different publicly funded projects like SofDCar (https://sofdcar.de/) - digital twin concept and distributed edge computing use cases</p>
<ul style="list-style-type: none"> vss-otaku 	Steve (Renesas)	

2022-03-31

Agenda:

- Meeting arrangements for next week - Steve on holiday
- Regular project recap
- Develop the [deep dive](#) page: What (detail)? When (priority)?
- AMM 5 min overview session - what to list?
- AMM workshops - topics

Related projects walk-through (every week):

Project	Person reporting	Updates
<ul style="list-style-type: none"> Kuksa.VAL 	Sebastian (Bosch)	<p>Fixes to CAN DBC mapping (Typo in ParkingBrake and added EngineLoad Mapping): https://github.com/eclipse/kuksa.val/pull/253</p> <p>Support for setting arrays (e.g. DTCList) https://github.com/eclipse/kuksa.val/pull/252</p>
<ul style="list-style-type: none"> W3C VISS specification (v2) 	Ulf Ted as backup (both Geotab)	See last week. Reach out to BMW ongoing.
<ul style="list-style-type: none"> WAI VISS server implementation in Go 	Ulf	See last week.

<ul style="list-style-type: none"> • VSS & Tools 	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	Merged improved and extended model for seat signals: https://github.com/COVESA/vehicle_signal_specification/pull/421 Added Ah (Ampere hours) as unit: https://github.com/COVESA/vss-tools/pull/151 Refactored binary Exporter in vss tools: https://github.com/COVESA/vss-tools/pull/152
<ul style="list-style-type: none"> • VSSo 	Daniel W Ted	Bi-weekly now scheduled for Monday 15:00 GMT starting 4th April
<ul style="list-style-type: none"> • VSC & Tools 	VSC team members	Tim Grieshammer from MBition (proposed lead) has begun to join calls. Discussing scope.
<ul style="list-style-type: none"> • CCS-components 	Ulf	No update
<ul style="list-style-type: none"> • AOS 	Artem (EPAM)	Work continues on the documentation release
<ul style="list-style-type: none"> • Android Automotive VSS Vehicle Properties Code Generator 		Working towards wider industry discussion at AMM
<ul style="list-style-type: none"> • Covesa GraphQL components 	Alexander Domin (BMW)	
<ul style="list-style-type: none"> • Eclipse Kanto (proposed. worth tracking in CVII call?)	(Thomas S)	Presentation given by Bosch Monday.
<ul style="list-style-type: none"> • vss-otaku 	Steve (Renesas)	First release of the Simulator to Apache IoTDB timeseries DB feeder made public. Includes README.md documentation.

- Minutes:
 - AMM overview
 - What
 - Achievements
 - GraphQL contributions?
 - WAI: Redis
 - Coordination:
 - Feeder/Storage: Redis, Apache IoTDB, Feeder news
 - Join: meetings and AMM session

2022-03-28 Eclipse Kanto Deep Dive

Agenda:

1. Bosch introduce Eclipse Kanto. It's relation to CVII Tech Stack and VSS eco-system and suggestions for possible collaboration.
2. Discussion

Presentation:

[20220315-Eclipse Kanto_covesa_pitch.pptx](#)

Minutes (summarised after the event):

- Konstantina Gramatova introduced Kanto.
- Live demo (see ppt for details)
 - Bosch IoT Suite (serverside) providing container image to Kanto.
 - Image contains Kuksa.val as VISS data server.

- Kanto used to orchestrate running image.
 - GPS used to provide input to data feeder into kuksa.val which was read out to web.
- Recap of some known possible points for container orchestration collab around details missing in current OCI specs for auto needs.
- Kanto team interested in community collab. Team encouraged to feed in the gaps they see.

2022-03-23

Agenda:

1. Regular project recap
2. Meeting time for next two weeks before Europe switches to daylight saving
3. Develop the [deep dive](#) page: What (detail)? When (priority)?
4. AMM workshops

Related projects walk-through (every week):

Project	Person reporting	Updates
• Kuksa.VAL	Sebastian (Bosch)	No update this week
• W3C VISS specification (v2)	Ulf Ted as backup (both Geotab)	Ted: open request around discussion of implementations. Hope for WAI and BMW Android VSS integration RoE at AMM. Waiting for detail on latter.
• WAI VISS server implementation in Go	Ulf	Redis support added: https://github.com/w3c/automotive-viss2/pull/28 WAI configurable whether you want to use SQLite or Redis for statestorage.
• VSS & Tools	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	Discussed AMM workshops, e.g. VSS Layers. Ulf refactoring vss2binary.
• VSSo	Daniel W Ted	Doodle going out to arrange the proposed bi-weekly VSSo call.
• VSC & Tools	VSC team members	Tim Grieshammer from MBition finding his feet as the lead
• CCS-components	Ulf	Ulf has pushed to ccs-components update to livesim component to make connection to updated state storage component to provide feeder for redis/sqlite, e.g. https://github.com/COVESA/ccs-components/commit/327e6757adfd54066800bd939bb4091583acc9d9
• AOS	Artem (EPAM)	No update this week
• Android Automotive VSS Vehicle Properties Code Generator		Direction discussions planned for AMM - see schedule
• Covesa GraphQL components	Alexander Domin (BMW)	No update

<ul style="list-style-type: none"> • Eclipse Kanto <p>(proposed. worth tracking in CVII call?)</p>	(Thomas S)	Deep dive for next Monday 28th at 4pm CET
<ul style="list-style-type: none"> • vss-otaku 	Steve (Renesas)	Data feeder now writing to Apache IoTDB timeseries DB, with latter acting as VSS Data Store.

- Minutes:
 - eco-system
 - Ted: Discussion planned with CCC (BMW representative) regarding coordination. They have traction around their digital key (keyless entry) and there are possible connections to VSC, VSS.
 - Eclipse Kanto
 - Thomas wants to go for next Monday 28th at the 'old CCS meeting' time for presentation.
 - Show of hands showed some ppl were available and Thomas wants to go ahead.
 - Rough plan for meeting is approximately 30 mins on Kanto from developers, followed by 30 mins on discussion. Focus is on the business of CVII Tech Stack and VSS eco-system, i.e. shared collaboration on non-differentiating technology.
 - VSS Data Storage
 - Discussion of attaching timeseries DB to CCS statestorage to provide "last value" backend for VISS.
 - Obvious first step. Does not preclude other processes from directly accessing timeseries data.
 - Wider discussion of how timeseries can be helpful, e.g. query and data processing, can follow on.
 - AMM
 - Discussion of CVII Tech Stack and issues around co-existing with parallel VSS track.
 - e.g. VSS has a VSS Layers discussion planned many will want to attend.
 - Deep dive
 - Ulf reminds we should not neglect CSS/Northbound to Cloud. Although we need participation from ppl in that area.
 - CVII Tech Stack workshop
 - Seb: I am less interested in architecture discussion.
 - Ulf, Seb and Steve all express interest in discussion on feeders, data storage and data servers.
 - Working idea is for that to be the focus for a workshop. Possibly in afternoon to allow VSS workshop attendance.
 - More detailed discussion points need to be developed ahead of time.

2022-03-16

Agenda:

1. Regular project recap
2. Meeting time for next two weeks before Europe switches to daylight saving
3. Develop the [deep dive](#) page: What (detail)? When (priority)?
4. AMM workshops

Related projects walk-through (every week):

Project	Person reporting	Updates
<ul style="list-style-type: none"> • Kuksa.VAL 	Sebastian (Bosch)	No update this week
<ul style="list-style-type: none"> • W3C VISS specification (v2) 	Ulf Ted as backup (both Geotab)	See last week summary - working towards v2
<ul style="list-style-type: none"> • WAI VISS server implementation in Go 	Ulf	Improved and bug fixed curve logic functionality. Pushed to master.

<ul style="list-style-type: none"> • VSS & Tools 	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	<p>Discussion of documentation PR with regards to license.</p> <p>See github for closed issues</p>
<ul style="list-style-type: none"> • VSSo 	Daniel W Ted	<p>Workshop was held this week:</p> <ul style="list-style-type: none"> • Minutes: https://www.w3.org/2022/03/14-auto-minutes.html • Video: https://www.youtube.com/watch?v=p8_wYihOVMY <p>Met goal of increasing participation. Ford, Volvo and Blackberry present in addition to usual suspects for example.</p> <p>Probably will form bi-weekly group.</p>
<ul style="list-style-type: none"> • VSC & Tools 	VSC team members	<p>Magnus provided positive update on MBition involvement in project.</p> <p>Tom has a draft diagram for the potential wiper demo. Will add to the VSC page.</p>
<ul style="list-style-type: none"> • CCS-components 	Ulf	No update this week
<ul style="list-style-type: none"> • AOS 	Artem (EPAM)	No update this week
<ul style="list-style-type: none"> • Android Automotive VSS Vehicle Properties Code Generator 		No update this week
<ul style="list-style-type: none"> • Covesa GraphQL components 	Alexander Domin (BMW)	No update this week
<ul style="list-style-type: none"> • Eclipse Kanto <p>(proposed. worth tracking in CVII call?)</p>	(Thomas S)	No update this week
<ul style="list-style-type: none"> • vss-otaku 	Steve (Renesas)	<p>Progress made on feeder to VSS Data Store prototype. Concentrating on a few data points initially to keep it simple. Feeder is a websocket server. Successfully receives sim data and converts to VSS data model. Currently working on writing to Apache IoTDB DB.</p>

- Apologies:
 - Sebastian
- Minutes:
 - Deep dive
 - VSS and VSC cohabitation
 - Tom would like to see the VSS and VSC cohabitation discussion get going before the AMM.
 - Ulf sees a topic connection to VISS.
 - Steve doesn't feel ownership for the topic in tech stack. Clearly it strongly connects to VSC and VSS.
 - Discussion about kick starting. Decision to bring it up in Monday's VSC call, then depending on that possibly take it onto Tuesdays VSS call.

2022-03-09

Agenda:

- Regular project recap
- Decide on timing for extra meetings.
 - Fill out the timing [doodle](#) if you have not already.

- Deep dive/AMM topic planning
 - Develop the [deep dive](#) page. What (detail)? When (priority)?
 - We need also to work on the topics for the AMM workshops.
 - Deep dive is an obvious input into that. Currently we have 1 hour scheduled. Is that enough?

Related projects walk-through (every week):

Project	Person reporting	Updates
• Kuksa.VAL	Sebastian (Bosch)	No change this week
• W3C VISS specification (v2)	Ulf Ted as backup (both Geotab)	Closing out remaining issues for v2. Discussion of extending filtering (range/compound) see https://github.com/w3c/automotive/issues/450 . Looking to keep v2 changes to minimum, before starting bigger changes/new features towards v3
• WAI VISS server implementation in Go	Ulf	Ulf planning to add new Redis (CCS component) statestorage support. Timeline in 1-2 weeks.
• VSS & Tools	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	<p>Spec changes: int16->float for pitch/roll/yaw for better precision https://github.com/COVESA/vehicle_signal_specification/pull/422</p> <p>Spec Changes: ADAS states also for EBD (Electronic brakeforce distribution) and EBA (Emergency Brake assist): https://github.com/COVESA/vehicle_signal_specification/pull/418/</p> <p>Decision to try to release VSS V3.0 before All Members Meeting (end of April)</p> <p>Discussion about what to do on AMM (to be collected in Wiki), and some roadmapping discussion, (layers, metadata, tools rewrite.. to be collected in Wiki) https://github.com/COVESA/vehicle_signal_specification/wiki/COVESA-AMM-Spring-22</p>
• VSSo	Daniel W Ted	VSSo published as a First Public Working Draft at W3C https://www.w3.org/TR/vsso-core/
• VSC & Tools	Gunnar	Discussion of AMM demo around window wiper ECU service continuing. Tom working on draft high level arch diagram.
• CCS-components	Ulf	See Redis support last week.
• AOS	Artem (EPAM).	No major update this week. Work continuing.
• Android Automotive VSS Vehicle Properties Code Generator		No change
• Covesa GraphQL components	Alexander Domin (BMW)	No update this week
• Eclipse Kanto (proposed. worth tracking in CVII call?)	(Thomas S)	<p>Maintainers can do from March 28th for presentation.</p> <p>Getting started guide (website) https://www.eclipse.org/kanto/docs/getting-started/ GitHub: https://github.com/eclipse-kanto</p>

<ul style="list-style-type: none"> • vss-otaku 	Steve (Renesas)	Currently working on feeder to VSS Data Store code.
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- Minutes:
 - Project Summary
 - Kanto
 - Tom reports that Maintainers can do a presentation from March 28th.
 - Discussion of content. Focus of deep dives is the scope of CVII Tech Stack, e.g. shared collab areas and understanding big architecture picture of how components fit together. Suggestion that 50% of time be presentation, 50% discussion of raised collab points.
 - Deep dive scheduling
 - Doodle results
 - 5pm CET has good support but clashes with bi-weekly HV call. Paul would prefer to avoid rescheduling it.
 - 4pm CET (old CCS time) slightly worse in support terms. Sebastian may not be able to attend some but says group should go ahead. Ted thinks he can reschedule clashing meeting.
 - Conclusion:
 - Try 4pm CET.
 - Deep dive topics
 - VSS / VSC integration
 - Seb: this overlaps with VSS and VSC groups and each has different participants. Needs coordination.
 - Steve: agree. I don't think "where" is important, i.e. not "owned" by Tech Stack, what is important is the topic.
 - Group participants are going to need to coordinate the topic. Upcoming AMM is going to be a good moment for everyone to be together.
 - Who is going to AMM?
 - Seb, Tom, Paul, Steve, Ulf, Florian (maybe), Nick (maybe), Erik, Philippe, Ted (would like to but obviously trans-atlantic)
 - General
 - Steve: please add your thoughts and topics to the deep dive page. Other the coming weeks we should refine and then prioritise to actually start the meetings.
- AMM
 - Steve: Is one hour enough?
 - Agreement that two hours would be better for workshop. Is that possible?
 - Paul will discuss with schedule planners.

2022-02-03

Agenda:

- Regular project recap
- Continue the extra meeting discussions. Work on the "deep dive" topic list.k
 - Fill out the timing [doodle](#) if you have not already.
 - Add to the [deep dive](#) page.
- AMM topic planning
- Tech discussion with remaining time.

Related projects walk-through (every week):

Project	Person reporting	Updates
<ul style="list-style-type: none"> • Kuksa.VAL 	Sebastian (Bosch)	Upgraded GRPC dependency to enable build on current Raspberry OS (and other platforms using similarly new GCC) https://github.com/eclipse/kuksa.val/issues/250
<ul style="list-style-type: none"> • W3C VISS specification (v2) 	Ulf Ted as backup (both Geotab)	No update this week (Ulf and Ted absent)
<ul style="list-style-type: none"> • WAI VISS server implementation in Go 	Ulf	<p>Ulf has pushed the Redis statestorage support mentioned last week, you can find it here: https://github.com/COVESACCS-components/tree/master/statestorage</p> <p>Publication for its use in WAI on the VISSv2 server github pending.</p> <p>Steve reports that Renesas have integrated WAI onto the R-Car S4 SoC using the AGL Linux distro, with a data feeder for a simulator writing VSS data to the statestorage DB. Planning to demo this PoC at the AMM.</p>

<ul style="list-style-type: none"> • VSS & Tools 	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	<ul style="list-style-type: none"> - spec: Doc/wording clarification, that sensors, actuators and attributes are all considered „signals“ https://github.com/COVESA/vehicle_signal_specification/pull/408 - spec: Slight refactoring of GPS coordinates (separate vertical/horizontal accuracy) https://github.com/COVESA/vehicle_signal_specification/pull/417 - spec: Max Line length recommendation https://github.com/COVESA/vehicle_signal_specification/pull/409 - tools: vss2ttl (aka ontology) converter merged do official vss-tools repo https://github.com/COVESA/vss-tools/pull/141 - tools: Unify codebase of 2json, 2csv and 2yaml converters https://github.com/COVESA/vss-tools/pull/146 - tools: Fixed warning on badly escaped regexp strings https://github.com/COVESA/vss-tools/pull/147 <p>- FAQ being collected. Github wiki will be used to collect inputs. Not up yet, but now draft on Covesa wiki here: VSS FAQ - Draft Questions and Answers</p>
<ul style="list-style-type: none"> • VSSo 	Daniel W Ted	<p>Ted update to ML:</p> <div> <p><i>We have decided to cut back this workshop to one day for three hours, specifically 14 March from 7-10PDT / 10-13EDT / 16-19CET.</i></p> <p><i>Those who want to propose items for the agenda may do so in Github although with more limited time we have less flexibility.</i></p> <p>https://github.com/w3c/vsso/issues/26</p> </div>
<ul style="list-style-type: none"> • VSC & Tools 	Gunnar	<p>Discussion of AMM demo around Bosch washer ECU service. Outline will be delayed by about a week whilst VSC Lead relocates continents.</p> <p>Next task: architectural diagram and task splot</p>
<ul style="list-style-type: none"> • CCS-components 	Ulf	See statestorage above
<ul style="list-style-type: none"> • AOS 	Artem (EPAM)	No update this week.
<ul style="list-style-type: none"> • Android Automotive VSS Vehicle Properties Code Generator 		Work continuing on Android 12 emulation environment
<ul style="list-style-type: none"> • Covesa GraphQL components 	Alexander Domin (BMW)	No update this week
<ul style="list-style-type: none"> • Eclipse Kanto <p>(proposed. worth tracking in CVII call?)</p>	(Thomas S)	<p>Kanto devs in Bosch wish to present VSS aspects of Kanto:</p> <ul style="list-style-type: none"> • 20 min overview + 10 min Q&A • See minutes
<ul style="list-style-type: none"> • vss-otaku 	Steve (Renesas)	Time limited this week. Work continues on data model conversion.

Apologies:

- Ulf

Minutes:

- Kanto
 - Thomas reports that project leads in Bosch working on Eclipse Kanto would like to present project
 - Source now available on Eclipse github
 - When?
 - Discussion about how to do 30+min session as this meeting has limited time
 - One approach is to do it as a "deep dive". Paul concerned about having people new to CVII having to sit through rest of the meeting.
 - Al: Thomas will get devs to add it as a topic to deep dive page and get feedback on when.
 - 5pm CET Monday is most liked time slot in Paul's deep dive doodle. Paul realises now that clashes with HV bi-weekly.

- Al: Paul will consider timings.
 - What, why?
 - Assumption is that presentation is focused on CVII Tech Stack goals. Understanding architecture components and non-differentiating areas of collaboration.
 - From initial presentation discussion we can determine collab areas.
 - Some points that came up in first discussion:
 - Service definition
 - Container orchestration configuration
- Extra meeting / deep dive
 - Doodle results show preference for "old CCS time" of Monday 5pm CET.
 - Please update the "deep dive" topics page with your thoughts and ideas. This page will be used as driving force for organisation of coming meetings.
- AMM planning
 - Little time left to discuss. Please think about topic list.

2022-02-23

agenda:

- project recap
- extra meeting discussion
 - [CVII Tech Stack: "Deep-dive" topics](#)
- dev org
 - recording task list
- AMM prep
- AoB

Related projects walkthrough (every week):

Project	Person reporting	Updates
• Kuksa. VAL	Sebastian (Bosch)	Added a 150MB CAN trace with a lot more signals than before and mapped some of them to VSS, see https://github.com/eclipse/kuksa.val/tree/master/kuksa_feeders/dbc2val Or here https://github.com/eclipse/kuksa.val/blob/master/kuksa_feeders/dbc2val/mapping.yml Also upgraded Websocket dependency in Python package (security)
• W3C VISS specification (v2)	Ulf Ted as backup (both Geotab)	Ulf clarified comments about sensor r/w from last week. The current spec says sensors are read only, however discussions continue to change the normative language to allow r/w where it makes sense such as an ECU setting the state in another ECU or data store. He expects that change to be made for v2 of the specification. Discussions to add an additional method API to allow updates will take more time and is expected for spec v3.
• WAI VISS server implementation in Go	Ulf	See CCS
• VSS & Tools	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	Merged fix to instantiation error #144 https://github.com/COVESA/vss-tools/pull/144 Refactoring of charge plug signals https://github.com/COVESA/vehicle_signal_specification/pull/405 Welcomed new participants from AWS. Questions came up about structured data types and informed about status of discussions.
• VSSo	Daniel W Ted	No update
• VSC & Tools	Gunnar	Discussions continue on possible Wiper ECU example Discussion also of cohabitation of VSS and VSC in-vehicle. Topic will take some time to talk through. Added this topic to the CVII Tech Stack Deep Dives list.

<ul style="list-style-type: none"> • CCS-components 	Ulf	Ulf is implementing Redis DB as the data store for the CCS State Storage component . Currently SQLite is used. Code not yet pushed. Will then be used in WAI as VSS Data Store. See minutes for more details.
<ul style="list-style-type: none"> • AOS 	Artem (EPAM)	
<ul style="list-style-type: none"> • Android Automotive VSS Vehicle Properties Code Generator 		
<ul style="list-style-type: none"> • Covesa GraphQL components 	Alexander Domin (BMW)	
<ul style="list-style-type: none"> • Eclipse Kanto <p>(proposed. worth tracking in CVII call?)</p>	(Thomas S)	See discussion in minutes
<ul style="list-style-type: none"> • vss-otaku 	Steve (Renesas)	Minor updates. Setting up environments. Hacking sim2vss code generator continues. Plan to hack some sim2iotdb feeder code to create prototypes for what Jinja templates in code generator need to produce.

Minutes:

- Project sync
 - CCS
 - Ulf summarises architecture. CCS State Storage as it is the component in WAI architecture that administrates the WAI VSS Data Store. Implementation allows a plugin approach to data backends. Once done will interface updated component into WAI.
 - Ulf happy to have seperate meeting to discuss details.
 - Sebastian mentions that dapr has a state-storage API to abstract DB backends [State management overview | Dapr Docs](#)
 - Work related to what steve is wanting to do with VSS Data Storage in vss-otaku.
 - Having three DBs should give good scope to discussions about VSS Data Stores and their interfacing.
 - Kanto
 - No updates since this project was first added. Should we keep it in the table?
 - Gunnar: We should list projects that have VSS functionality else we could list all dev tools.
 - Sebastian: No public source yet.
 - Proposal to remove it from table for now. We can add it back when needed. Any dissenters? None.
 - AWS
 - Gunnar reports that AWS mentioned they may have some VSS tooling to contribute
- Extra meeting / deep dive
 - Steve introduces [CVII Tech Stack: "Deep-dive" topics](#) page. Please add comments and topics.
 - Plenty of topics to get us started. Missing piece is when..
 - Open AI for Paul to post Doodle
- AMM (short of time)
 - Paul: We have CVII Tech Stack slots in the draft schedule. We need to decide if they are wanted and what the topics are.
 - AI: A wiki page will be created to work on the detailed Tech Stack talks

2022-02-16

agenda:

- project recap
- extra meeting discussion

- dev.org
 - recording task list
- AoB

Related projects walkthrough (every week):

Project	Person reporting	Updates
• Kuksa.VAL	Sebastian (Bosch)	Skipped - no Bosch engineer this week
• W3C VISS specification (v2)	Ulf Ted as backup	Ulf: Volvo starting on "explainer" of v2 which is a needed deliverable for finalising the v2 spec. Discussions about enhancements for access between ECUs concluded cost/benefit of allowing sensor values to be set by VISS were too high.
• WAI1 VISS server implementation in Go	Ulf	No change - WAI1 fully implements VISS v2 spec so no plan for large functional enhancements currently
• VSS & Tools	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	Some signals in private branch of standard catalog have uncertain license and useage. Decision taken to delete for now. Work on re-formatting of standard catalog signals to fit tightened guidelines continues.
• VSSo	Daniel W Ted	Published first working draft. Considering how best to handle workshop - something at AMM? MS willing to do DTDL talk about mapping. Ted will talk to Paul offline
• VSC & Tools	Gunnar	Discussions about Wiper ECU test case continue.
• CCS-components	Ulf	No change - expected as CCS meetings suspended as discussions about extra CVII Tech Stack meeting, in which CCS may be merged, continue.
• AOS	Artem	No major change. Fuller documentation being worked on. Various smaller source update.
• Android Automotive VSS Vehicle Properties Code Generator		Discussion about improvements to the packaging of the converter.
• Covesa GraphQL components	Alexander Domin (BMW)	Skipped - Alex not present. Its noted there have been some fixes pushed to the components.
• Eclipse Kanto (proposed. worth tracking in CVII call?)	(Thomas S)	Skipped - no Bosch engineer this week
• vss-otaku	Steve	Published data model for simulator in vspec. Working on code generator. Have identified common code in VHALL source than can migrate to shared "utils" area for use across multiple projects.

Minutes:

- Extra meeting discussion
 - Steve: I emailed a proposal to the list
 - After the extra meeting discussion last week I thought of one proposal on how to run them. In the Hypervisor group we would have what we called "deep dive" topics. A meeting dedicated to a single subject. We could do the same for the extra meeting. It would be on a set day and time to be agreed for continuity. However it will only go ahead if a topic has been agreed ahead of time, in the regular meeting. This avoids the trap of unproductive meetings and allows people to be selective about their interests.
 - Ulf: I like it.
 - Paul also supports the idea.
 - No other proposals made,
 - When?
 - AI: Paul will put up a doodle to identify some options of when ppl are available
 - Old CCS time should be one option: 4pm CET Monday
 - Time zones. More than one time slot may be needed. Doodle might gives us a couple of options from which we could select depending on topic participants.
 - Why?
 - Ulf: Integration of CCS scope including PoC for tech stack and CCS architecture diagrams.
 - Similar with Tech Stack work to date.
 - Anchoring discussions in shared architecture and terminology. Mapping prop
 - Naming
 - Weds: Tech Stack - eco-system/project coordination/sync
 - 1st half: recap
 - 2nd half: design work
 - New meeting: Tech Stack - detailed design
 - Topics backlog:
 - AI: Steve add page to add topic descriptions
 - (Alex) GraphQL implementation with VSS data feeders and storage. AI: Steve ask Alex to expand
 - Gunnar: Can translation is common request.
 - Gunnar: Refer CVII component list, e.g. protobuf, grpc.
 - Steve: Interfacing VSS Data Storage to VSS Data Servers
- Dev org
 - JIRA tickets
 - List things people can pick-up
 - In-progress collaborative development, e.g. VHAL project showing what tasks are planned, which in turn defines when work is done.

2022-02-09

Related projects walkthrough (every week):

Project	Person reporting	Updates
• Kuksa.VAL	Sebastian (Bosch)	Skipped - no Bosch engineer this week
• W3C VISS specification (v2)	Ulf Ted as backup	Final stages towards v2 spec. Discussions about enhancements for access between ECUs. Ted: Looking for industry feedback on VISS protocol. Whats' good, what's missing. Etc.
• VISS server implementation in Go	Ulf	No change
• VSS & Tools	Daniel Wilms (BMW) (Erik J or Sebastian S as backup)	Adding FAQ documentation Update vss-tools submodule Updates to standard data catalog to follow new naming conventions, etc. (some things still pending) Weird fundamental bug/problem: keywords like "on" "off" interpreted as booleans (true /false). Studying formal YAML specification, as well as behavior of python libraries to sort this.
• VSSo	Daniel W Ted	Advancing onto formal standards draft Planning to hold couple day workshop. See https://lists.w3.org/Archives/Public/public-automotive/2022Feb/0001.html

<ul style="list-style-type: none"> • VSC & Tools 	Gunnar	Good session preparing these ideas: <ol style="list-style-type: none"> 1. Introducing VSC-interface reference in AOS definition of service containers. (Still needs to be discussed with AOS leads) 2. More examples of useful services in a standard catalog. Bosch is proposing Wiper functions (concrete proposal not yet) 3. Plan to reach out to interface-tooling/methodology team at Bosch (OpenAPI more generic interface language)
<ul style="list-style-type: none"> • CCS-components 	Ulf	No change
<ul style="list-style-type: none"> • AOS 	<u>Artem</u>	No change
<ul style="list-style-type: none"> • Android Automotive VSS Vehicle Properties Code Generator 		Stefan Wysocki at TietoEvry taking over
<ul style="list-style-type: none"> • Covesa GraphQL components 	Alexander Domin (BMW)	GraphQL fixes. Android VHAL team can now check their issue. Small patch to improve build process.
Eclipse Kanto (proposed. worth tracking in CVII call?)	(Thomas S)	Skipped - no Bosch engineer this week

Apologies:

- Sebastian S (Bosch)

Minutes:

- Project coordination
- Android VHAL
 - Ted: W3C talking to Google Cloud ppl. They want to learn more about VSS to AOSP VHAL properties converter. Who to loop in to explain to them?
 - Paul: Loop me in.
 - Gunnar: Stefan from TietoEvry leading the work.
- VSC
 - Heads up on discussions in VSC call.
 - Followed by illustration from Gunnar on specifying protocol and access control for VSC APIs and mapping the latter to existing systems, e.g. in GraphQL and VISS.
- Extra meeting
 - Continue discussion of whether to repurpose the CCS meeting into a wider CVII Tech Stack meeting dedicated to deep diving design discussions. Do we want to do it? If so when?
 - Ulf, Steve would like to see it continue. Alex is interested but is time constrained.
 - Two CVII Tech Stack meetings:
 - Weds: CVII Tech Stack: project coordination
 - This call. Coordination update as already done, followed by general discussion with time remaining.
 - TBD: CVII Tech Stack: detailed design
 - New call. Scope is deep dive on tech stack topics not specific to the VSS, VSC specific calls. Engineering focus. Will be small # of topics, known in advance.
 - AI: Create Doodle for timing
 - Deep dive topic list:
 - Alex: Discussion of connecting VSS Data Store to GraphQL
- Remaining 10 mins:
 - Southbound x2VSS conversion and code generators
 - Outline of two methods we currently have for conversion:
 - Android VHAL design pattern using JINJA template and yaml conversion description
 - vss-otaku is looking at a variant to the VHAL pattern that uses VSS vspec rule set to define the source data model. Outcomes will include pluses (vss-tools function set) and minuses (need to avoid polluting VSS standard catalog with source data types and units) of that approach.
 - We expect to need to expand the VSS Terminology set to include converters and generators. Please consider what they should be. A good set will ease coordination in and outside the group.
 - In-vehicle VSS Data Store
 - Steve outlined the direction of travel for VSS Data Store investigations in [vss-otaku](#)

- Some universal themes to investigate collectively for Tech Stack such as connections between VSS Data Feeders, Data Stores and Data Servers.
- Alex: I would really like to have a deep dive on the VSS Data Store and how it relates to what we are doing with GraphQL. To share our viewpoint and align.
- Steve: Would love to. Your production/OEM perspective would be invaluable to guide later work connecting Data Stores to Data Servers.
- Steve: This would also be a perfect topic for the proposed CVII Tech Stack Detailed Design meetings. Added it as a starting topic above.

2022-02-02

Related projects walkthrough (every week): SKIPPED

Apologies

- Ulf, Thomas,

Agenda / Minutes

- Project updates (skipped this week)
- **New person introductions**
 - **Andreas Warnke** (EB)
 - **Alan Freedman** (Autonomic/Ford)
 - **Dimitri** (Zync)
- Meeting structure
 - VSC - Vehicle Service Catalog - IDL language and catalog content
 - VSSo and VSS meeting - Vehicle Signal Specification - VSS model / catalog-content
 - + VSSo breakouts
 - CCS (*not currently, restart or replace?*)
 - W3C Automotive and Transportation WG
 - Primarily working on VISS but it is starting to be complete new topics come up
 - CVII Tech Stack (this meeting)
 - Reports/Updates on all projects
 - Technical architecture and software discussions, solving problems
 - + Breakout meetings when the need comes up
- Service definition (VSC) in comparison to AOS service definition format
 - Service API definition
 - Improve the description of data-services in the service definition format.
 - Related aspects: resources, device, permissions
CVII related sub-tasks that we ought to work on:
 - Better description of which protocols are used
 - ... and the exact interface if it is a RPC protocol (i.e. reference a "VSC interface")
 - ... and a common methodology for permissions definitions.


permissions:




```
vis:
  Attribute.Body.Vehicle.VIN : "r"
  Attribute.Body.Vehicle.VIN : "r"
```

- VSS data protocols
 - Methods, access control etc
- VSS Data Stores
 - VSS Data Server backend abstraction layer possible?
 - Comms between zone controllers
 - DB data (sync, replication, partial send) vs Data Server protocol (e.g VISS)

Wednesday 2022-01-26

Related projects walkthrough (every week):

Project	Person reporting	Updates
<ul style="list-style-type: none"> • Kuksa.VAL 	Sebastian (Bosch) 	Sys arch documentation to clarify use of VISS for reading and writing data (ref previous week's discussion) https://github.com/eclipse/kuksa_val/blob/master/doc/system-architecture.md

<ul style="list-style-type: none"> W3C VISS specification (v2) 	Ulf  Ted as backup	No discussion about spec (presentation MongoDB instead)
<ul style="list-style-type: none"> VISS server implementation in Go 	Ulf 	Nothing this week.
<ul style="list-style-type: none"> VSS & Tools 	Daniel Wilms (BMW)  (Gunnar, Sebastian as backup)	<p>Removing min/max in standard catalog because they appeared arbitrary.</p> <p>Added new signal for SAE autonomy level.</p> <p>Tools versioning , and how it relates to versioning of VSS standard catalog</p> <p>Recommendation for allowed_values names/strings. Used in standard catalog (whenever it is possible to define it from scratch, not constrained by system already).</p>
<ul style="list-style-type: none"> VSSo 	Daniel W Ted	<p>Switched to W3C reSpec tooling. New version including signal definitions derived from VSS catalog. First public working draft hopefully within a week or so.</p> <p>Discussed W3C workshop (virtual) in early March and/or in-person meeting in combination with COVESA AMM (Leipzig, end of April)</p>
<ul style="list-style-type: none"> VSC & Tools 	Gunnar	<p>Narrowing down tech solution to promote Franca IDL + YAML format as core description format. (Strategy to allow interchange with other technologies of course still in place)</p> <p>Increase catalog scope with more proposals to gather interest.</p>
<ul style="list-style-type: none"> CCS-components 	Ulf	Nothing new
<ul style="list-style-type: none"> AOS 	Artem	
<ul style="list-style-type: none"> Android Automotive VSS Vehicle Properties Code Generator 		Maintenance may be taken over by Stefan at TietoEvery
Eclipse Kanto (proposed. worth tracking in CVII call?)	(Thomas S)	Possibly focus next wednesday?

Minutes

- Project update (above)
- AOS update, more comprehensive:
 - AOS code now [in GitHub](#).
 - Apache License
 - Framework to orchestrate containers
 - Several services in different repositories
 - Working on code coverage for CI tests
 - Follow the README documentation
 - Already used on some production projects
 - May lead to standards for orchestration, control, etc.
 - This covers all the software that runs on the embedded systems
 - meta-layers for Yocto
- Thomas:** Can we get a demo? To understand the concept better?
- Artem:** If you have a Renesas starter kit or similar. You can also try it in a VM on desktop. Yes to demo (in a week or two)
- Artem:** We have our own CNI for plugins, firewall, = networking configuration for containers.
... not using docker.
...Using **crun** currently (previously **runc** but now **crun**).
- ...Working on introducing standard K8S APIs
- Artem:** Data side, we wish to stay with CVII work and VSS specifically
- Artem:** We have a YAML based description format. Also monitoring any OCI standards that may apply
- Gunnar:** As noted we should set up a time to discuss overlap of the services description format in AOS and VSC.
Gunnar/Artem: Agreed joint desire to consider service description ability using a common language, as VSC project intends to achieve.
- For information: Data Privacy Initiative
 - COVESA is discussing a Data Privacy oriented project (led by member companies in the legal space)
 - Overview of current rules and regulations, legal risks, counteractions.
 - Create an environment of collaboration to discuss these aspects, in general terms.

- This topic requires a combination of business management, legal, technical, ...
 - Please reach out to your colleagues (including management, legal) to evaluate interest
 - Likely webinar/Q&A discussion in Feb/March + focus in AMM
- Meeting CCS tech architecture.
 1. Meeting 1? – 30 min overview. 30 min any other topics
 2. Meeting 2? – Technical work? Is it implementation focus? Architecture focus?
 Agendas are important
 One slot is shorter?
 Thomas: Workshop planning - 1h not enough. (4h, less frequently)?
- Ted: Possibly fewer calls instead?

Relevant links:

- [CVII Tech Stack](#)
- [Towards CVII pluggable components](#)
- [CVII Tech Stack Terminology](#)

Wednesday 2022-01-19

Related projects walkthrough (every week):

Project	Person reporting	Updates
• Kuksa.VAL	Sebastian (Bosch) ✓	Upgrade CI infra to GH actions
• W3C VISS specification (v2)	Ulf ✓ Ted as backup	Feature freeze agreed. Polishing ongoing. W3C process steps.
• VISS server implementation in Go	Ulf ✓	Protobuf used to encode messages (used as efficient binary/compression of the messages, compared to JSON format) over Websocket/MQTT. Might also be on HTTP. Compared to JSON as a "compression ratio".
• VSS & Tools	Daniel Wilms (BMW) ✓ (Gunnar, Sebastian as backup)	enum allowed_values rename. (another enum concept is still possible/pending) Signal list - quality improvements. Documentation updates
• VSSo	Daniel W Ted	As discussed, document is complete, going through a release process.
• VSC & Tools	Gunnar	Biweekly to weekly meetings Exact time TBD, planning process
• CCS-components	Ulf ✓	ovds-client (VISS client) updated to also support protobuf feature.
• AOS	<u>Artem</u> ✗	next week full update
• Android Automotive VSS Vehicle Properties Code Generator		Request for new main developer/maintainer.
Eclipse Kanto (proposed. worth tracking in CVII call?)	(Thomas S)	Thomas will be an ambassador for this project. Exact VSS connection not known yet.

Minutes

- [CVII Tech Stack](#)

- [Towards CVII pluggable components](#)
- [CVII Tech Stack Terminology](#)

Wednesday 2021-12-22

Project	Person reporting	Updates
• Kuksa.VAL	Sebastian (Bosch) ❌	
• W3C VISS specification (v2)	Ulf ❌ Ted as backup	• <i>All open questions have been resolved (for the moment)</i>
• VISS server implementation in Go	Ulf ❌	
• VSS & Tools	Daniel Wilms (BMW) ✅ (Gunnar, Sebastian as backup)	Meeting series postponed until January
• VSSo	Daniel W Ted	(See previous week)
• VSC & Tools	Gunnar	Meeting series postponed until January
• CCS-components	Ulf	--
• AOS	Artem ✅	<i>Publishing has started on GitHub, and is still ongoing</i>
• Android Automotive VSS Vehicle Properties Code Generator		<ul style="list-style-type: none"> • "Simple compile check" in CI system (stubbed out dependencies). See GitHub actions, currently on this branch here for example. • Updated to generate all type=conversion functions on the fly. Track Manu's vss-tools fork / PR for status.
Eclipse Kanto (proposed. worth tracking in CVII call?)		<i>not discussed today</i>

Apologies

[Ulf Bjorkengren](#)

Agenda/Minutes:

- Project updates, see above.
- BMW / GraphQL – end 2 end demo
 - <https://github.com/COVESA/graphql-vss-data-server> is the latest repo (see also related ones).
 - Still to come: Code generator from GraphQL schema itself. Classes (stubs) that are implemented by the developers to make the binding connections.
 - The demonstration and part of the discussion was **recorded** for future use (**link pending**)
- **Reminder to review [Towards CVII pluggable components](#), and [CVII Tech Stack Terminology](#) to give feedback**
- Also the CVII Tech Stack components area (presented last week)

Wednesday 2021-12-15

- <https://github.com/slawnr/vss-otaku>
- <https://drive.google.com/file/d/1kVXB7bdTarzQdiwtZyNqCK-vHihJeW0w/view?usp=sharing>

Wednesday 2021-12-08

Project	Person reporting	Updates
• Kuksa.VAL	Sebastian (Bosch)	Released last month's recent changes into a tagged version. See changelog. https://github.com/eclipse/kuksa.val/releases/tag/0.2.0
• W3C VISS specification	Ulf ✓ Ted as backup ✓	<ul style="list-style-type: none"> Discuss optional features Decision around the API to query feature-capability of the VISS server. <p>Very few open questions at the moment, so it seems like the specification is starting to be considered "complete", thus starting planning for formal proposal</p>
• VISS server implementation in Go	Ulf ✓	Protobuf trials are coming for the payloads (next year)
• VSS & Tools	Daniel Wilms (BMW) ✓ (Gunnar, Sebastian as backup)	<p>Enum functionality discussion</p> <ul style="list-style-type: none"> Does the current function suffice? Discussion about extended feature/capability of assigning fixed values, etc.
• VSSo	Daniel W ✓ Ted	<p>Documentation up to date. https://w3c.github.io/vsso/ Publishing plans in January. Workshops being planned, February.</p>
• VSC & Tools	Gunnar	meeting delayed
• CCS-components	Ulf	--
• AOS	Artem	no news today, awaiting open-source release
Eclipse Kanto (tbd)		IoT/edge cloud connector piece (to be determined the association to data-model/services-model)





Apologies

Agenda/Minutes:

- Sebastian: GitHub Packages are recommended, for container images for example.
- Stephen: Common implementations? E.g. AOS has VISS server, KUKSA.val has VISS server, etc. Upgrades to latest protocol version - shared implementation?
- Alexander: Additional code is coming from BMW (ref: last week's walkthrough). The implementation of the actual GraphQL server is coming next.
- Further discussion on how to organize joint development projects:
- Provide feedback to component names in: **CVII Tech Stack Terminology** - temporarily stored on GENIVI Wiki:
 - <https://at.projects.genivi.org/wiki/pages/viewpage.action?spaceKey=MIG&title=CVII+Tech+Stack+Terminology>
- Also read (again) [Towards CVII pluggable components](#) and consider if these are obstacles to collaboration, and which ones we can overcome.

Wednesday 2021-12-01

Project	Person reporting	Updates
• Kuksa.VAL	Sebastian (Bosch)	--

• VISS server implementation in Go	Ulf 	–
• VSS & Tools	Daniel Wilms (BMW)  (Gunnar, Sebastian as backup)	<ul style="list-style-type: none"> v 2.2 tagged (1 week ago) Review update proposals in VSS standard catalog on several points (open for review another week) Redefining enum was further discussed
• VSSo	Daniel W  Ted	Draft spec proposal for reading
• VSC & Tools	Gunnar	referring to last week's updates
• W3C VISS specification	Ted  Ulf	VSSo was discussed on the WG meeting Simpler authentication flow, change was accepted.
• CCS-components	Ulf	–
• AOS	Artem	Still working on logistics of publishing open source

Apologies

- Ulf

Agenda/Minutes:

- Project updates
- Demonstration of end-2-end SOME/IP signal source / GraphQL VSS server (Alexander Domin, BMW)
 - Walkthrough of existing repos, reasons and intentions behind.
 - Live demo
 - Create GraphQL schema with tool
 - Only a single Query / entry point that is matched against the whole Vehicle Tree. GraphQL schemas can define multiple, but this is how it is done here.
 - Subscription queries are supported
 - Query can include all values of any (sub)type in the tree, or only some, it is very flexible.
 - RECORDING ATTACHED

Wednesday 2021-11-17

Project	Person reporting	Updates
• ioTEA/Vehicle Edge	Mike Haller (Bosch) Thomas Spreckley	Further development of these components (from Bosch side) has been halted in favor of building a new infrastructure based on DAPR framework Rules engine in iot-event-analytics still of interest - either reuse or write similar functionality into DAPR CES demo
• Kuksa.VAL	Sebastian (Bosch)	Plans are unchanged (not more, not less). Small feature sprints. Still being maintained.
• VISS server implementation in Go	Ulf	Nothing this week. Will be updated soon due to latest changes in VISS spec.

<ul style="list-style-type: none"> • VSS & Tools 	Daniel Wilms (BMW) Gunnar (Sebastian as backup)	<ul style="list-style-type: none"> • Preparation of 2.2 release • (VSS catalog) Remove empty branches • (VSS and vss-tools, documentation etc.) Change links from genivi to covesa • (Makefile) Specifying PYTHONPATH for contrib builds • Bugfix handling of non-core attributes. Fix strict checking #118 • Bugfix config.yaml not found for contrib tools Adding config.yaml to setup.py #119 • upcoming: "comment" field - meaning is being proposed
<ul style="list-style-type: none"> • VSSo 	Daniel W Ted	
<ul style="list-style-type: none"> • VSC & Tools 	Gunnar	Nothing this week (biweekly sync meeting) - see last week's minutes Bosch interface tools - see minutes below
<ul style="list-style-type: none"> • W3C VISS specification 	Ted Ulf	Additional updates on access control: - Optional usage of vehicle-identifier in security tokens. (Optional when not required such as inside-vehicle access - only one vehicle is relevant, the one that is "connected") ... but mandatory when required - e.g. access from cloud to (many) vehicles. - One new flow in access-control model. Low-complexity flow (PR coming)
<ul style="list-style-type: none"> • CCS-components 	Ulf	Updated images in README explaining the usage of different component parts
<ul style="list-style-type: none"> • AOS 	Artem	<i>Awaiting open-source code publication</i>

Apologies

- *Ted – conflicting meeting*

Agenda/Minutes:

- Project updates according to above table
- Ted and Gunnar will be presenting **W3C**, **COVESA**, **CVII** and **VSS** on a **Workshop on Future Automotive Research Datasets**, organized by **SR I international**
- Thomas: Bosch preparing a presentation of interface-related tooling (OpenAPI) to VSC meeting for alignment of IDL needs and definition. The example will be modeling comfort services.
- First code repositories created for GraphQL (and more) related tools from BMW.
- The code is ready to go, but unfortunately the responsible has become ill, so we're waiting for the first code push still.
 Planned content:
 - [test-someip-service](#)
 - Example interface for showing the mapping from GraphQL-server to SOME/IP signal source
 - [test_franca2vss_mapping_layer](#) - Proposing a VSS layer format to define where each VSS signal can be fetched, from a service interface described by Franca IDL.
 (similar to the ideas in the [ongoing VSS-to-Android mapping files](#))
 - [vss2graphql_schema](#) - Tool (generator) creating GraphQL schema definition from a VSS catalog. (Possible inclusion into **vss-tools** later on)
- DAPR - looking at connection points
- (Renesas) - Started development of internal-simulator2VSS mapping job, and [Apache IoTDB](#) implementation.
 - Who's behind this, who created, maintain... ? Renesas?
 - Stephen: It was created at a Chinese university before being contributed to the Apache Foundation.
 - A natural? choice for an embedded time-series
 - s DB (if you need that).
 - Strong connections to other Apache tools.
- AVRO serialization [status on this branch](#)
- Proposed: (shared) C++/and-or other language library - client library / convenience API for data serialization.
- Reminder: Gunnar update CCS-component picture with proposed changes.

Wednesday 2021-11-10

Meeting minutes pending.

Wednesday 2021-11-03

Project	Person reporting	Updates
• ioTEA/Vehicle Edge	Mike Haller (Bosch) Thomas Spreckley	
• Kuksa.VAL	Sebastian (Bosch)	
• VISS server implementation in Go	Ulf 	
• VSS & Tools	Daniel Wilms (BMW) Gunnar (Sebastian as backup)	
• VSSo	Daniel W Ted	
• VSC & Tools	Gunnar	Agreement to include a full-featured error-handling mechanism directly in IDL.
• W3C VISS specification	Ted Ulf	
• CCS-components	Ulf	
• AOS	<u>Artem</u>	


Next week's agenda

Agenda/Minutes:

Minutes

- Alexander: BMW publishing code around GraphQL server, mapping VSS to GraphQL, and resolving requests by translating how to get the data from underlying platform (.e.g. through Franca defined interfaces, etc.)
Also, a demo

Wednesday 2021-11-03

Project	Person reporting	Updates
• ioTEA /Vehicle Edge	Mike Haller (Bosch) Thomas Spreckley	Devs are AWOL. 
• Kuksa. VAL	Sebastian (Bosch)	Devs are AWOL. 

<ul style="list-style-type: none"> VISS server implementation in Go 	Ulf	No code changes this week
<ul style="list-style-type: none"> VSS & Tools 	Daniel Wilms (BMW) Gunnar (Sebastian as backup)	Discussing upcoming PRs (improvements and additions to VSS catalog) but not merged.
<ul style="list-style-type: none"> VSSo 	Daniel W Ted	FYI, (again) More in-depth workshop planned (mid-January)
<ul style="list-style-type: none"> VSC & Tools 	Gunnar	No VSC meeting this week, and no change (see last week's info)
<ul style="list-style-type: none"> W3C VISS specification 	Ted Ulf	Discussions around consequences of MQTT addition. Also how to identify the vehicle in different usage environments (currently spec uses the "VIN" name, but the actual VIN is considered privacy sensitive, so it should be clarified if pseudo-VIN or other identification is to be used).
<ul style="list-style-type: none"> CCS-components 	Ulf	Diagrams in README updated a few times.
<ul style="list-style-type: none"> AOS 	<u>Artem</u>	Approved to publish open-source licensed code! Coming soon... Control-plane APIs still being developed (for deployment more than vehicle data access specifically). Proposals on what to choose? (Kubernetes APIs are gRPC-only...)

Next week's agenda



Agenda/Minutes:

- **Stephen/Renasas:** plans and thoughts about component development.
- **Manu/Bittium:** demonstrate progress on VSS code generator (Android properties)
- Continued: [Towards CVII pluggable components](#)
- AOB

Minutes

- Discussion: SOAFEE looking somewhat similar to AOS.
- Reminder: Cool to discuss any overlap of projects, such as deployment-strategies, access-control but looking to be focused on core of CVII Tech Stack = all technologies dealing with VSS and VSC.
- Stephen presented slide deck as planned, according to agenda. Discussion, Q&A
- Manu demonstrated code generator, according to agenda. Discussion, Q&A

Wednesday 2021-10-27

Project	Person reporting	Updates
<ul style="list-style-type: none"> ioTEA/Vehicle Edge 	Mike Haller (Bosch)  Thomas Spreckley 	<ul style="list-style-type: none"> ■ Repo moved to GitHub/COVESA (iot-event-analytics, vehicle-edge)

• Kuksa.VAL	Sebastian (Bosch) ✓	VSS release 2.1 file included in download. Fix on feeder (SocketCAN). All data sent as strings (JSON format already, VISS)
• VISS server implementation in Go	Ulf ✗	--
• VSS & Tools	Daniel Wilms (BMW) ✓ Gunnar (Sebastian as backup)	Repo moved to GitHub/COVESA <ul style="list-style-type: none"> Finally merged the support for adding own units (and changing implementation of existing units). Agreed IgnitionOnState signal which created new discussions about related signals.
• VSSo	Daniel W ? Ted ✓	<ul style="list-style-type: none"> Intention to bring to first public working draft status soon. Microsoft meetings resumed at smaller scale. More in-depth workshop planned (mid-January) for planning activities with MS and others.
• VSC & Tools	Gunnar ✓	Repo moved to GitHub/COVESA <ul style="list-style-type: none"> First discussion with Bosch on how interface handling (and tools) are done for interface handling. Proposal for Standard Error codes
• W3C VISS specification	Ted ✓ Ulf ✗	<ul style="list-style-type: none"> Ashish made presentation of his research into policy control of data access including: access control, sticky-policies, proxy-re-encryption, prioritization of (computing) resources, etc. Access Control - new proposal (Bosch) considered. BMW input also further discussed (attribute-based access control, and some other details sorted out) INAGO (autonomous vehicles). Project arrow - implemented VSS+VISS, presentation coming.
• CCS-components (new name)	Ulf ✗	Repo moved to GitHub/COVESA
• AOS	Artem ?	--

Apologies

- Thomas Spreckley

Agenda/Minutes

1. (Permanent agenda item)

Report recent progress on each of the relevant* projects.














2) Other discussions

- Catch-up with TietoEvry (Piotr Krawczyk ✓, Adam Konopa ✓)
 - Piotr: Plan to set up and test [FARACON toolchain](#), update to latest AUTOSAR and then look into other conversion opportunities.
- AVRO based binary VSS value encoding: See [serialization](#) branch for latest updates
- Progress on Android code generation. ([Work in progress PR](#)) Generated code compiles. Still todo: set up test environment to run it in Android system.

2. Deep dive discussion on the current state of the tech stack work

Reviewed and discussed [Towards CVII pluggable components](#) page further.

Wednesday 2021-10-20




Project	Person reporting	Updates
<ul style="list-style-type: none"> ioTEA/Vehicle Edge 	Mike Haller (Bosch)  Thomas Spreckley 	
<ul style="list-style-type: none"> Kuksa.VAL 	Sebastian (Bosch) 	
<ul style="list-style-type: none"> VISS server implementation in Go 	Ulf 	Minor fixes
<ul style="list-style-type: none"> VSS & Tools 	Daniel Wilms (BMW)  Gunnar (Sebastian as backup) 	This week: VSS-layers discussion. Refer to minutes below.
<ul style="list-style-type: none"> VSSo 	Daniel W  Ted 	
<ul style="list-style-type: none"> VSC & Tools 	Gunnar 	See presentation from last week's AMM https://at.projects.genivi.org/wiki/display/WIK4/Slide+Decks+and+Videos
<ul style="list-style-type: none"> W3C VISS specification 	Ted  Ulf 	Discussions on how to modify specification to better support in-vehicle web apps. (Access control) Questions around Service discovery, versioning of VSS (how to know what "interface version" (VSS) you are speaking to)
<ul style="list-style-type: none"> CCS-client repository 	Ulf 	
<ul style="list-style-type: none"> AOS 	Artem 	Completing review towards open source code publication.

Apologies

Agenda/Minutes

- (Permanent agenda item)
Report recent progress on each of the relevant* projects.
- Deep dive discussion on the current state of the tech stack work

Wednesday 2021-10-13

Project	Person reporting	Updates
<ul style="list-style-type: none"> ioTEA/Vehicle Edge 	Mike Haller (Bosch)  Thomas Spreckley 	
<ul style="list-style-type: none"> Kuksa.VAL 	Sebastian (Bosch) 	

<ul style="list-style-type: none"> VISS server implementation in Go 	Ulf ✓	Minor fixes
<ul style="list-style-type: none"> VSS & Tools 	Daniel Wilms (BMW) ✗ Gunnar ✓ (Sebastian as backup)	This week: VSS-layers discussion. Refer to minutes below.
<ul style="list-style-type: none"> VSSo 	Daniel W ✗ Ted	
<ul style="list-style-type: none"> VSC & Tools 	Gunnar ✓	See presentation from last week's AMM https://at.projects.genivi.org/wiki/display/WIK4/Slide+Decks+and+Videos
<ul style="list-style-type: none"> W3C VISS specification 	Ted ? Ulf ✓	Discussions on how to modify specification to better support in-vehicle web apps. (Access control) Questions around Service discovery, versioning of VSS (how to know what "interface version" (VSS) you are speaking to)
<ul style="list-style-type: none"> CCS-client repository 	Ulf ✓	
<ul style="list-style-type: none"> AOS 	Artem ✓	Completing review towards open source code publication.

Apologies

Minutes

- Report out from VSS layers discussion
- Relatively long discussion on VSS versioning (see note on VISS above)
- Still preparing/approval process for a set of VSS related tool implementations from OEM.
- Artem: VSS, VISS, implementation optimizing for edge-computing (different/comprehensive access control mechanism). Transports. CNI.

Wednesday 2021-09-29

Project	Person reporting	Updates
<ul style="list-style-type: none"> Kuksa.VAL 	Sebastian (Bosch)	--
<ul style="list-style-type: none"> VISS server implementation in Go 	Ulf ✓	--
<ul style="list-style-type: none"> VSS & Tools 	Daniel Wilms (BMW) ✗ Gunnar ✓ (Sebastian as backup)	
<ul style="list-style-type: none"> VSSo 	Daniel W ✗ Ted ✓	Formal publication plans continue. Transition to W3C working group. VSSo DTDL translation (still) exists.
<ul style="list-style-type: none"> VSC & Tools 	Gunnar ✓	
<ul style="list-style-type: none"> W3C VISS specification 	Ted ✓ Ulf ✓	Access control PRs moving forward, and some specification text changes. (more details see last week's minutes on COVESA Wiki)
<ul style="list-style-type: none"> CCS-components 	Ulf ✓	Updated picture (PR sent)

• AOS	Artem	Publishing started. Hopefully links to source within a week.
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- DAPR - evaluation, discussion, plans for VSS integration
- Initial code drops from BMW. Full signal-source (SOME/IP) to GraphQL data server, serving VSS data.
Note: All parts of the end-to-end are not here yet, but these initial 3:
 - https://github.com/COVESA/vss2graphql_schema
 - https://github.com/COVESA/test_franca2vss_mapping_layer
 - <https://github.com/COVESA/test-someip-service>
- VSS serialization reusable C++ library? *(not discussed today in particular - but note that serialization/messaging format remains a need for connecting to the frameworks such as DAPR and other transparent "transports" that do not define a format yet.)*

Wednesday 2021-10-13

From now on, refer to [COVESA Wiki](#)

Wednesday 2021-10-06

No regular meeting due to [ongoing AMM](#)

Wednesday 2021-09-29












Project	Person reporting	Updates
• ioTEA/Vehicle Edge	Mike Haller (Bosch) Thomas Spreckley	Automated package/docker container image deployment. Gunnar prefers to delay upgrade of account types (GitHub, Docker Hub etc) until after next week.
• Kuksa.VAL	Sebastian (Bosch)	
• VISS server implementation in Go	Ulf	Access control and curve logging planned demo for AMM so those features have been tested and some fixes recently.
• VSS & Tools	Daniel Wilms (BMW) Gunnar (Sebastian as backup)	Implementation proposal for unit file. Close to ready but some details (e.g. where to store config) are pending. VSS-Layer discussion planned 2 weeks from now
• VSSo	Daniel W Ted	(Preparing presentation for AMM)
• VSC & Tools	Gunnar	Parser/generator working with updated service-description file (which includes some changes to the IDL language).
• W3C VISS specification	Ted Ulf	Discussion/finalizing updates on access control: - bandwidth savings and server-caching of tokens - alternative (simplified) access-control model proposal
• CCS-client repository	Ulf	
• AOS	Artem	

Apologies

Minutes

- AASIG code gen, some progress. Working on adding type-conversion into generated code. Code still in Manu's fork. PR not sent yet.
- Stephen: Started looking into time-series databases. Plan to connect VSS data server (using Go-implementation VISS?) to the database APIs. InfluxDB, IoTDB, ...

Wednesday 2021-09-22

Project	Person reporting	Updates
• ioTEA/Vehicle Edge	Mike Haller (Bosch)  Thomas Spreckley 	CI/CD integration mostly finished. Extended reports (JUnit) Unit testing working. SDK bug fix, was not reading config files. Vehicle Edge - phase 2, seat-adjuster demo. (Discussions on VSC started, driven from this). Focus on internal stakeholders but open-sourcing pending.
• Kuksa.VAL	Sebastian (Bosch) 	Pending PR allowing Kuksa.VAL to load several VSS files at start up (supporting layer idea)
• VISS server implementation in Go	Ulf 	Minor bug fixes
• VSS & Tools	Daniel Wilms (BMW)  Gunnar  (Sebastian as backup)	Accessory setting for ignition switch was missing, proposed to be added in a PR Dynamic unit list: implementation needs rework, new proposal next week
• VSSo	Daniel W  Ted	
• VSC & Tools	Gunnar 	No VSC meeting this week (biweekly)
• W3C VISS specification	Ted  Ulf	Major discussion on caching of access-tokens, mandatory or optional, behavior of server and client if token is used but not found in cache, etc. Multi-set values (actuators) in a single call still open.
• CCS-client repository	Ulf 	Minor fixes.
• AOS	<u>Artem</u> 	Discussions about how to design edge-computing, with one Tier1 and one IAS provider, with relationship to CVII topics.

Apologies

- Florian (DENSO)

Minutes

- VSS-tools, A bit of *additional* progress in Android Automotive Vehicle Properties (VHAL code-generation) (Follow along in code_generation branch in vss-tools (and Manu's fork))
- Discuss possible automatic unit/scaling
- Time-series database implementation, see [CVII Tech Stack](#)
 - Discussion with Stephen/Renesas about this point.
- Stephen: There is a dataset that exists from previous demos. (Values and timestamps) that could be used as data (after aligning it to VSS standards)
- Stephen (sharing screen): Many values look like Snapshots (according to [this definition](#)), i.e. several signals measured the same time.
 - Gunnar: Yeah, the snapshot format suggests to only store the timestamp once, if it is measured at the same time.
 - Gunnar: Note "same time"/simultaneous might include a short time interval since the meaning of simultaneous is a bit sketchy in a discrete system.

- Tom: You can also reduce size of time stamps by transferring a delta-time compared to some reference.
- Gunnar: Good point, worthy of adding a note to [Data serialization / value formats](#) page.
- Reminder: [Register for AMM](#) if you haven't.

Wednesday 2021-09-15

Project	Person reporting	Updates
• ioTEA/Vehicle Edge	Mike Haller (Bosch) ✓	Preparing to publish docker images (using GitHub package releases) Gunnar to support with Docker Hub or GitHub package support for GENIVI organization. Idea brewing: Educational (University) involvement - build curriculum / community of students?
• Kuksa.VAL	Sebastian (Bosch) ✓	
• VISS server implementation in Go	Ulf ✓	
• VSS & Tools	Daniel Wilms (BMW) ? Gunnar ✓ (Sebastian as backup)	First presentation of a set of new VSS signals proposed by ExcelFore and eSync Alliance in the areas of SOTA-metrics, Battery Mgmt, ... Proposal for defining allowable units in a config file is almost done. Just a rename remaining. v2.2 release is being prepared. No breaking changes, but additions and fixes to the catalog. Also some new contrib tools and such of course included there. vspec2yaml finally merged.
• VSSo	Daniel W Ted ?	
• VSC & Tools	Gunnar ✓	Bosch joined this week's meeting. Discussion about current state and opportunities.
• W3C VISS specification	Ted ✓ Ulf	Continued improvement issues. Lots of discussion on multi-set values (actuators) in a single call
• CCS-client repository	Ulf ✓	-
• AOS	Artem ✗	-

Apologies

- Ted, Piotr, Artem

Minutes

- Discussion about how to integrated (tagged) version of VSS into IOTea out of the box. Generated files are automatically inserted into Hugo documentation and can be downloaded from there, but otherwise using the git tag.
- (Bosch) Idea brewing: Educational (University) involvement - build curriculum / community of students?
- Android Automotive Vehicle Properties (VHAL code-generation) is now making progress (Follow along in code_generation branch in vss-tools (and Manu's fork))

Wednesday 2021-09-08

Wiki was down so these minutes were taken offline, and later added:

1. Standard project updates

Kuksa

- Unit tests for gRPC code
- Investigating switching from Jenkins to GitHub actions
- IoT-event-analytics / vehicle-edge
- Working on npm packaging (npmjs organization account now exists)
- Quality checks/
- Suitcase demonstrator including hardware, includes gRPC to communicate with Vehicle
- API. RPi ARM 64 bit.

VSSo

- Refine first version
- A bit more structure to the process
- Discussions continued with Microsoft, conversion to DTDL

VSS

- Continued discussions on units and datatypes

AOS

- Additional discussions with various stakeholders in industry. Want to get the code and the container (definition) specification into the open. Registration framework.
- Some inputs drive toward constrained environments. Small efficient implementations required for data-servers The full Go-lang VISS server might not fit, k3s and others might also not "fit".
- Higher modularity is preferred

VSC

- PR + examples added to master branch in the VSC repository.
- vss-tools (Android)
- A document provided to outline plan, and basic file structure
- Looking for strengthening the implementation team




VISS

- Improvements being done from feedback (pull requests) based on the first public working draft

2. Other minutes

- Mike Haller (Bosch) introduces himself. New product owner for IoTEA.
- Artem EPAM might have developers free in 2-3 weeks
- AMM update, reminder to register

Wednesday 2021-09-01

Project	Person reporting	Updates
<ul style="list-style-type: none">• ioTEA/Vehicle Edge	Thomas Spreckley (Bosch) 	Integration test pull-request, renamed test APIs. More friendly integration in CI pipeline npmjs.org now has a package for ioTEA , with information PyPi will get a package as well Prepare release process, 0.6.0 release is imminent
<ul style="list-style-type: none">• Kuksa.VAL	Sebastian (Bosch) 	
<ul style="list-style-type: none">• VISS server implementation in Go	Ulf 	







• VSS & Tools	Daniel Wilms (BMW) ✗ Gunnar ✓ (Sebastian as backup)	Discussing some new topics related to possibly new strategy for instantiation of branches ...
• VSSo	Daniel W ✗ Ted ✓	
• VSC & Tools	Gunnar ✓	Magnus F taking some open issues. Inclusions of nested namespaces still to be merged/decided.
• W3C VISS specification	Ted ✓ Ulf	
• CCS-client repository	Ulf ✗	-
• AOS	Artem ✓	-

Minutes

- Sebastian and Daniel W, Ulf, sent apologies
- Thomas working on AMM presentation
- eSync Alliance, upcoming
- OPIN, upcoming
- A bit of progress on AVRO encoding.
- (Repeated info), ongoing work on Android VSS-to-Android properties
 - The goal is to create something like this: [aasig-vhal-demo/tree/main/src repository](#) this should already compile in AOSP (HAL implementation), but that example has a fixed set of signals. Instead it shall be possible to code-generation from an arbitrary list of VSS signals
 - Here is a planning/background page named [VSS to AOSP translation - WBS](#)
 - The code generator implementation will be a kind of combination of VSS-tools (to read VSS) and vsc-tools (that shows how to use [Jinja2](#) templates for generation). The tools will need to consume also a "VSS layer" (deployment model) that describes how VSS signals are mapped to their respective Android counterparts.
Example of such mapping is on [VSS to AOSP translation - WBS](#)

Wednesday 2021-08-25



Project	Person reporting	Updates
• ioTEA /Vehicle Edge	Thomas Spreckley ✓	Node.js and python for containerized integration tests. DAPR integration demo Bugfix Seat adjuster demo. Developed, not pushed public though.
• Kuksa. VAL	Sebastian ✓	Merged first gRPC, no docs yet and don't ask... :) First logging feature impl. Useful for debug/development.
• VISS server implementation in Go	Ulf ✓	Working on TLS implementation
• VSS & Tools	Daniel Wilms ✗ Gunnar ✓ (Sebastian as backup)	For values that are defined in model (default, or min/max limits), shall "0" be valid if the signal datatype is float, or shall we require it to be "0.0"? Discussion on Structured datatypes support? Major discussion opened, it is a fairly major change if included. And of course discuss syntax in that case. Extensible (new) datatypes and units, no progress yet. vss-tools: "vspec2yaml" proposal. vspec is already yaml, but this expands all instances and flattens into a single output file, and includes uuid values. Not yet accepted, maybe rename tool since vspec is basically yaml already.

• VSSo	Daniel W  Ted 	Rudimentary automated mapping VSSo<->DTD
• VSC & Tools	Gunnar 	Fix needed to use python 3.8 (currently works only on 3.9) GitHub actions now run unit tests README updates to document gen() function changes
• W3C VISS specification	Ted  Ulf	Feedback on first public working draft: <ul style="list-style-type: none"> • Minor bug - all messages to provide timestamp uniformly • Bandwidth usage due to access token sent with every request. Discussing if the token could be used like a session, for example by sending only the signature as a reference to a token that had already been authenticated. Traditional session-cookie possibly going out of style in the future?
• CCS-client repository	Ulf 	-
• AOS	<u>Artem</u> 	-

Minutes/Agenda

- New participant: Francisco Uribe. Quick roll-call/introduction.
- Project updates, see table.
- (VSS input)
 - Alexander: Is OBD branch really required? Is it useful to model the data according to the channel where it is distributed. (For example vehicle speed could be fetched on OBD, but also in other contexts)
 - Gunnar: Understood and it is a known issue, but this is not only about the channel of distribution but also of the signal definition. Sometimes an existing defacto list of data already exists, and occasionally it might be useful to reproduce it without changing it so that people recognize the signals they are used to. We are aware there are certain cases where this would lead to the same signal value being in more than one place, so it's a continuous discussion. If the majority thinks the OBD branch should not be there, then it can be changed. For every case, bring the discussion to the specific VSS call on Tuesdays.
- Update/plans on upcoming open source code for tools, from BMW:
- Alexander D (BMW): We have for a while explored how to distribute VSS data in our platforms. MQTT looked at before but we saw benefits with GraphQL. Flexible queries! GraphQL "invented" shortly after VISS v1? Good community. Implementations exist. Possibility to tie signal sources in the system (SOME/IP services, REST services, CAN? ... etc.) to a single signal schema. The schema is hierarchical, following VSS model (but possibly including more signals?) Created python tools that generate the GraphQL schema from VSS. There are some local extensions we have made (coming in second wave of tool release).
 - Mapping using a VSS-layer type (deployment model) which explains how to fetch the values from the system via an interface that is described using Franca IDL.
 - With this as input the tools generate code (e.g. resolvers for the GraphQL server)
 - Plan: Define a "ugly" Franca IDL interface and show examples of VSS-signal mappings on it. The purpose is to include some "misuse" of Franca, or put another way, challenges in mapping VSS to "difficult" existing services.
 - First (partial) release of code fairly soon.
- Gunnar: First tests on serialization using AVRO. See [branch](#). Will investigate python and C++ implementations first.
- Work started on VSSAndroid property C++ binding code. Just investigating VSS-generators and VSC/Jinja2 generation methods so far.
- AMM planning CVII topics

Wednesday 2021-08-18

Project	Person reporting	Updates
• ioTEA /Vehicle Edge	Thomas Spreckley 	
• Kuksa.VAL	Sebastian 	gRPC, Visual Studio dev containers for easier development

• VISS server implementation in Go	Ulf	No updates.
• VSS & Tools	Daniel Wilms Gunnar (Sebastian as backup)	<ul style="list-style-type: none"> Dropped travis file because GitHub actions cover all now Seat signals were sensors, now actuators VSS meeting group continues discussion of extensible datatypes and units (each separately). At the moment it's basically a fixed list. <ul style="list-style-type: none"> - Which datatypes and units are predefined as part of the standard VSS model? - Are these also used in the current standard catalog? Are there "standard" types that are not used at all? - Shall the model allow extension with new datatypes? ... and/or with new units? - If it shall, what is the method of extension? Shall the datatypes and units be defined in the program source code or read in from a configuration file. Progress is being made on these questions but all (many) stakeholders need to have time to weigh in. Early hints on upcoming issues: Supporting struct data types (or not, as now), and possibly revisiting the definition of the enum type.
• VSSo	Daniel W Ted	
• VSC & Tools	Gunnar	<ul style="list-style-type: none"> vsc-tools: Generator function now uses type introspection on nodes, so there is no need to specify the node type in the template any longer. (Issue #16) vsc-tools: Unit test framework in place (pytest) with a first test example (#13) VSC/RPC meeting this week discussed way forward, and outreach to companies for one-on-one input regarding preferences gRPC, OpenAPI, and other standards are important to get into the mix, as well as Franca usage or migration path as described before. A new Franca input parser may need to be programmed from scratch, but this should be straight forward.
• W3C VISS specification	Ted Ulf	
• CCS-client repository	Ulf	
• AOS	Artem	<p>Trying to find common ground around authorization etc. Need a proposal for community to react.</p> <p>Service representation spec. also of interest (VSC (and VSS) related discussion).</p>

Minutes/Agenda

- Several vacation/apologies this week from Bosch, BMW, ...
- Project updates above, for those that are available
- Catch up with Artem regarding AOS issues
 - See above
 - Also working on modularity - identifying components for reuse.
- VSC and tools
 - synergy opportunities with gRPC support in KUKSA.VAL?
 - Let's discuss "decisions" taken during this development how to find consistency with the VSC-related work (which intends to integrate gRPC and other technologies as needed).
- Awareness: [CVII-TS: Binary encoding for VSS-based data transfer](#)
 - synergy opportunities with gRPC impl. also here?
 - Artem: We have seen some problems with binary encodings, so JSON mostly for now, which is adequate for a lot of the needs at the moment. We see potential need (for binary efficient encoding) however.
 - Sebastian: For gRPC we replace some of the JSON protocol parts of course, but data encoding is often still using strings for simplicity at the moment.
 - Gunnar: OK, I conclude this is still important and interesting to together define one or two canonical binary encodings for VSS.
- Updates/discussion on other priority-list projects:
 - [VISS v2 server Planning / Work Breakdown page](#)
 - Needs a proper "need"/request for resource allocation. Discussion on if current development frameworks (using python, NodeJS and other) are acceptable in in-vehicle embedded space or if this need actually *does* exist already.
- Android AAASIG update
 - Plan to start implementing [VSS to AOSP translation - WBS](#) using a combination of [VSS-tools](#) examples for reading VSS and [VSC-tools](#) examples for code generation using jinja2. Bittium is leading.

Wednesday 2021-08-11

- No meeting this week.
-

Wednesday 2021-08-04

- Kuksa; Sebastien reports that students are working on the GRPC binding, no new feature in the pipe for the time being
 - Eclipse: Philippe indicates that the contact is established with the Eclipse Foundation, a new call is scheduled at the end of the month
 - AMM: Philippe indicates that the upcoming AMM will be virtual due to the delta variant
 - Kubernetes: Stephen Lawrence reports that there is an on-going experiment for running kubernetes on R-Car, please look at [https://elinux.org/R-Car/k8s\(J\)](https://elinux.org/R-Car/k8s(J)), this is in Japanese but can be translated using the usual tools
 - there will be NO CALL NEXT WEEK due to Summer low activity period, meeting schedule is the following
 - 11 August -- No meeting
 - 18 August -- meeting as usual (and back to weekly schedule).
-

Wednesday 2021-07-21

Project	Person reporting	Updates
• ioTEA/Vehicle Edge	Thomas Spreckley	(Bootable image): Working on encoding the documentation of licenses and other needs for binary image release. Planned docker support in Apertis for (next) binary release based on Apertis
• Kuksa.VAL	Sebastian	New release https://github.com/eclipse/kuksa.val/releases/tag/0.1.11 <ul style="list-style-type: none">• extra transformations (mapping/math) in DBC feeder• last release before switching to more VissV2 like responses for get Work on GRPC on-going
• VISS server implementation in Go	Ulf	
• VSS & Tools	Sebastian Daniel W Gunnar (Sebastian as backup)	vss-tools: (python-fu...) Optimization of reverse-lookup of types among available types vss-tools: bugfix: include dirs now searched in given order instead of undefined behavior VSSo tools update merged Made progress on discussion on "custom" Data-types (leaning towards not supporting, and showing how to get to a solution in other ways). Similar discussion on Units, pushed to later.
• VSSo	Daniel W Ted	VSSo tools update merged, see above.
• VSC & Tools	Gunnar	
• W3C VISS specification	Ted	(Finalizing details to push first public working draft). Vacation pause in meetings.
• CCS-client repository	Ulf	
• AOS	Artem	

Minutes/Agenda

- Project updates, see above
- AMM, discuss candidates for sessions / presentations
- Follow-up and further planning on [3 prioritized development topics](#)
- Vacation/attendance planning for upcoming weeks

Wednesday 2021-07-14

Project	Person reporting	Updates	Comments
• ioTEA/Vehicle Edge	Thomas Spreckley	- Hoping to make Vehicle Edge repo more capable / updated - Raspberry pi image (as noted last week) is done, and (so far) used internally	
• Kuksa.VAL	Sebastian	VSS v2 support?	
• VISS server implementation in Go	Ulf		
• VSS & Tools	Gunnar Sebastian Daniel W	Fundamental discussions on flexibility / growth of data types and units. vss-tools, some bugfix (standard catalog did not make use of this feature)	
• VSSo	Ted	(Breakout call with Microsoft). Design choices still discussed, comparison to DTDL, trying out automated conversions and evaluating the result.	
• VSC & Tools	Gunnar	No news. Still establishing individual outreach and necessary questions to establish the "choice" of the established IDL.	
• W3C VISS specification	Ted	First public working draft is almost ready to go.	
• CCS-client repository	Ulf		
• AOS	Artem	Still working on documentation and internal agreements for possibility to open-source.	

Minutes:

- Project updates according to above.
- Thomas: How/where to host the "ready-to-go" RaspberryPi images mentioned previously? Let's discuss how to make it more visible.
- Gunnar: Reiterating that out-of-the box experience is good, but we also need to "break apart" frameworks into reusable components, to promote and help a collaborative tech-stack development.
- Thomas: Daniel K has some ideas for APIs for cloud-to-device.
- Went through the currently three highlighted development projects at the top of [CVII Tech Stack](#)
 - VISS server (C++)
 - Artem / AOS likely to plan resources
 - VSC-based proof of concept
 - Bosch interest - Thomas to set up initial chat with Daniel Krippner.
 - Binary serialization specification
 - Call for volunteers
- Overall, these three seemed to still be high on interest/priority list.

Wednesday 2021-07-07

Project	Person reporting	Updates	Comments
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• ioTEA /Vehicle Edge	Thomas Spreckley ✓	Still working on "ready-to-go" Raspberry images (with Ubuntu and Apertis)	
• Kuksa.VAL	Sebastian ✓	GRPC interface: Work ongoing Eclipse SAAM slides and talk, also pitching vss available at: https://www.eclipse.org/kuksa/blog/2021/06/24/2021-06-24-eclipsesaam-scr-anti-tampering/ for all SAAM talks check https://events.eclipse.org/2021/saam-mobility/	
• VISS server implementation in Go	Ulf ✗		
• VSS & Tools	Gunnar ✓ Sebastian ✓ Daniel W ✗	Discussion around units (kph, m, kg,...) and datatypes (int16, string, float,...) : How to "add" new ones, should this really be encouraged, or rather discouraged. Discussion ongoing Fixed a small datatype bug in Wheel specification Small bugfixes in tooling	
• VSSo	Daniel W ✗	No updates. Meeting with MS upcoming (how to map to MS ecosystem)	
• VSC & Tools	Gunnar ✓	Has been discussed during CVII workshop July 1st CVII Workshop July 1, 2021	
• W3C VISS specification	Ulf ✗		
• CCS-client repository	Ulf ✗		
• AOS	Artem ✗	Has been presented during CVII workshop July 1st CVII Workshop July 1, 2021	

Minutes:

- Project updates above.
- Mentioned Backlog heading on main page, and the placeholder page for [User Identification \(CVII\)](#)

Wednesday 2021-06-30

Project	Person reporting	Updates	Comments
• ioTEA/Vehicle Edge	Thomas Spreckley ✓	Bugfixes in VSCode extension, and a NodeJS spawning fix. RPi4 image. A full Apertis image will be created. Added required dependencies for ioTEA /VehicleEdge.	
• Kuksa.VAL	Sebastian ✗		
• VISS server implementation in Go	✗ awaiting Ulf's return		
• VSS & Tools	Gunnar ✓ Daniel W ✓	PRs for documentation improvement, some merged Progressing tickets and major discussions (still open tickets)	
• VSSo	Daniel W ✓	Break-out discussion, with Microsoft, still working with some postponement (vacations etc.) VSS2TTL small tweaks.	
• VSC & Tools	Gunnar ✓	<i>Preparation for the workshop discussion tomorrow.</i>	

• W3C VISS specification	 awaiting Ulf's return		
• CCS-client repository	 awaiting Ulf's return		
• AOS	<u>Artem</u> 	Some licensing discussions. Updating to VISS v2.	











Minutes:

- Introduction (for Marc mostly) on various topics, organization etc.
- Artem: There are fundamental topics I would like to have workshop on. How to identify services. Authorization....
- Blackberry+AWS **IVY project** was mentioned. Bosch working on setting up a first discussion / onboarding.

Wednesday 2021-06-23

Fixed Agenda:

Project updates (<= 2-4 min each)

Project	Person reporting	Updates	Comments
• ioTEA/Vehicle Edge	Thomas Spreckley 	Improved unit-tests (especially on protocol gateway) Vehicle Edge repo improvements, hardware support (RPi4)	
• Kuksa.VAL	Sebastian 	Perfect.	
• VISS server implementation in Go			
• VSS & Tools	Gunnar  Daniel W 	GitHub actions VSS catalog now not using list-format, better consistency UUID no longer using an input file. Improved package dependency handling	
• VSSo	Daniel W 	Short meeting. Plan deep-dive this week on format of TTL file (Turtle - Terse RDF Triple Language), and checking if conversion tools work, etc.	
• VSC & Tools	Gunnar 		
• W3C VISS specification			
• CCS-client repository		Future: possibly split up parts into repos, prepare for proper "microservices" usage.	
• AOS	Artem  Stephen	Ongoing discussion about existing code becoming open-source, and identify new collaboration areas.	

Project planning, other topics

Participants

- Christian K
- Philippe R
- Dirk
- Stephen
- Thomas
- Piotr
- Ted
- Gunnar

Minutes

Subprojects / tracks updates

- Development projects, in table above

Bosch Framework

- [IoT-event-analytics](#) and [Vehicle-Edge projects](#) – Thomas will help out to fill this in
- [deployment.md documentation file](#) is useful new input

General

- Is the (old but actively developed) [JOYNR project](#) of interest in CVII context?
- Eclipse Foundation project [Tractus-X](#) – worth starting an alignment discussion

AUTOSAR

- CVII was presented / discussed with AUTOSAR steering committee today. (Good Q&A and discussions but further details not shared here)
- We want to discuss the ability to use AUTOSAR based systems as signal sources
- Connecting AUTOSAR and "non-AUTOSAR worlds"
- Can there be a gateway doing (any) necessary translation (if needed), and/or mapping between protocols

Wednesday 2021-06-16

Fixed Agenda:

Project updates (<= 2-4 min each)

Project	Person reporting	Updates	Comments
• ioTEA/Vehicle Edge	Thomas Spreckley ✓	Technology transport abstraction (protocol gateway) C++ support Integration test framework + test suites Rust experiments starting (not visible yet)	
• Kuksa.VAL	Sebastian ✓	Paper describing working with Kuksa (gather data from exhaust system and analyze the values)	
• VISS server implementation in Go	Ulf ✓	Support for Curve Logging. Implementation better verified now (connected and compared to Geotab Go-device implementation)	
• VSS & Tools	Gunnar ✓ Daniel W ✓	Travis broken... 😊 Discussion on attributes (constants), how often and if they can change (for example between driving cycles)	
• VSSo	Daniel W ✓	vss2vsso ready to merge.	
• VSC & Tools	Gunnar ✓	PR open tweaks some concepts, nested namespaces, clarifies properties. Properties = VSS signals. Similar setup. Discussion on whether it can be done only "in VSS" instead. NOTE: Planning in parallel a " <i>fundamental</i> " discussion on the creation of the common services/interface language likely on July 1 workshop.	
• W3C VISS specification	Ulf ✓	VISS version 2, process started to send it out as First Public Working Draft (first working group approves to go to this state). Discussion on if some features should be optional. Candidates for optionality are in the areas of filtering and access control.	
• CCS-client repository	Ulf ✓	Some smaller fixes after testing in new environment. Planning to have a tool to transform from Geotab collected data into VSS. The first step was implemented (to interpolate curve logging formatted data).	
• AOS	Artem ✓	<i>Awaiting big-picture plan first (see below)</i>	

Project planning, other topics

Participants

Minutes

- Quick updates done
- AOS:
- Artem: We are working on publishing the appropriate open-source parts. Protocols, authentication, ...
- Authorization service. Defining access rights.
- Gunnar: Definition of access control rights, permissions, etc. are worthwhile to make standard. Different environment have different needs (e.g. VISS spec, Android Automotive permissions model, etc.) but there are opportunities to design this together.
- AUTOSAR connection
- Piotr: TietoEvry has talked with AR community to propose some concepts. VehicleGateway (Cloud-to-vehicle connection), conceptual phase started. Piotr tracking but not part of main design team. Adam can tell us more.
- [Fill out survey](#) (and ask colleagues who are not as connected to CVII already)
- [July 1 Workshop planning](#)
- Ted: Best Practices for automotive applications, is progressing well (recent discussions on accessibility aspects).

Wednesday 2021-06-09

Project planning, other topics

- Student development project (security) – brainstorm implementation topics
- CVII Workshop planning
- AOS presentation by Artem

Participants

- 16 participants
- Florian, Jeff, Johan, Ulf, Stephen, Gunnar, Philippe, Ted, Daniel W, Artem, Christian K, Dirk, Christian H, Ravi
- Apologies: Iyyaz

Minutes

- Development project updates were skipped (missed). Postponed until next week.
- Round-table due to new mix of participants
- Discussed student dev project ideas, link above
- Discussed CVII workshop plan, link above
- Artem presented AOS overview
- Discussions around future plans (overlay architectures from AOS, Bosch-IoTea/Vehicle Edge, CCS and other. Identify work areas).

Wednesday 2021-06-02

Fixed Agenda:

Project updates (<= 5 min each)

Project	Person reporting	Updates	Comments
<ul style="list-style-type: none">• ioTEA/Vehicle Edge	Lars-Erich?, Jochen? ✗	Waiting for the right people next week.	
<ul style="list-style-type: none">• Kuksa.VAL	Sebastian ✓	<ul style="list-style-type: none">• Bugfix on test / validation of VSS• DBC feeder improvements• Old experiment on permissions removed (newer approach to JWT based access remains)• stress test (new student developer)	
<ul style="list-style-type: none">• VISS server implementation in Go	Ulf ✗	Curve Logging implemented (Ulf can explain more later)	

• VSS & Tools	Gunnar Daniel W	VSS: default should be only for attributes, fixed in tools and removed from non-attributes in VSS itself Documentation generation fixes vss-tools new graphql schema generator vss to vssso converter still under review (PR)	
• VSSo	Daniel W	vss to vssso converter still under review (PR)	
• VSC & Tools	Gunnar	A VSC generation tool/framework exists. Templates still todo. Reconsidering the language definition (maybe use standard Franca IDL?)	
• W3C VISS specification	Ulf		
• CCS-client repository	Ulf		
AOS?			

Updates on liaisons, alignment track, etc.

Project planning, other topics

- Starting conversations with/about AOS today
- CVII Workshop date set for 1 July (1600 CEST, 3h duration)

Minutes

- Introductions (Artem's first meeting)
- Brief discussion on AOS (principles, not the technology). Embedded parts are planned to be open-source. Process ongoing (outlook - a few months).
- Artem to give AOS architecture/tech overview next week
- Artem mentioned Android HAL using a VISS-protocol external server was implemented and shown by EPAM a few years ago.
 - Gunnar: So this was before AASIG was started... It is good input, although current work has considered GraphQL as the protocol for the internal VSS-data server.
 - => Artem to provide a link to the published code.
- New table-based tracking of wanted/expected/missing tech stack components was added to the [CVII Tech Stack](#) overview page Feedback /changes welcome!
 - This could drive priority discussions also
- Sub-topics moved to separate pages for deeper analysis, e.g. [protobuf](#) (already existed), [mqtt](#) (new), etc.
- Eclipse: short discussion on the liaison with Eclipse, to be followed up with the Bosch team

Wednesday 2021-05-25

Project updates (<= 5 min each)

Project	Person reporting	Updates	Comments
• ioTEA/Vehicle Edge	Lars-Erich?, Jochen?		
• Kuksa.VAL	Sebastian	VISS server - PR 190 - now apply default values if given in input catalog.	
• VISS server implementation in Go	Ulf	Full implementation of Curve Logging (see Tech Brief page) included now.	
• VSS & Tools	Gunnar Daniel	vss-tools: Array size support (caused warnings before) Bug in instantiation code fixed.	
• VSSo	Daniel		

• VSC & Tools	Gunnar		
• W3C VISS specification	Ulf		
• CCS-client repository	Ulf		
AOS?			

Updates on liaisons, alignment track, etc.

- Main topic right now is liaison with ISO group W6 for Extended Vehicle to discuss (potentially) introduction of data model definition in ExVe work.
- Plan for a small-scale meeting with some engineers involved in the activity.
- A deeper technical alignment work is required for SENSORiS. It could be done by a volunteer or a small working group meeting (doing the work, not talking about what *could* be done).

Project planning, other topics

- Upcoming - overlay architectures and plans from VehicleEdge, CCS, AOS, plus the VSS-tools, VSC-tools and various [plans discussed in this meeting](#). The purpose is to combine these into a view of the full tech stack.
- Gunnar reached out to EPAM for participation

Minutes

- Many vacations in Germany this week affects today's attendance.
- Gunnar: Some things might need to be repeated next week, but let's run a dress-rehearsal of the fixed agenda today. Starting with updates.
- Sebastian: Note the upcoming [Eclipse Conference](#). There will be a presentation on KUKSA.VAL, but also other interesting things.
- Gunnar: (Tip from Stephen). Note also this [Embedded virtual conference](#) starting June 3rd (several strong embedded Linux talks in the agenda).
- AOS, first look for related code:
 - [aos-sdk](#)
 - [Yocto meta layer](#)

Wednesday 2021-05-19

- Sebastian suggests every meeting should start with a project-update from each component development project, including IOT-event-analytics, and others.
 - Start this next week.
- Gunnar notes that we should have clearer indication of who is attending/not every week. Better structure and discipline for attendance, (and for agenda of course). Time-boxing can be used if people only want to be on part of the meeting.
- Not much progress on VS* to AUTOSAR tooling this week. Piotr had to leave meeting.
- Basic **VSC** generation framework now on GENIVI github [vsc-tools](#)
- More **VSS**-to-bindings tools might come out open-source licensed, from another OEM's development
- A look at [aoscloud.io](#) - Renesas and EPAM. Some open-source components. Renesas has used VSS and VISSv1 in previous demos. We are hopeful for setting up collaborative work on overlapping areas.
- Collecting up some more related SW project (some older, some newer):
 - <https://github.com/aShinjiroUrata/vehicle-information-service-spec>
 - <https://github.com/aos-sdk/>

Wednesday 2021-04-21

Agenda

- Development related to integrating with AUTOSAR
- "Plan B" on VSC tooling development - discuss options
- Bosch I-O-Tea and Vehicle Edge evaluation

Notes

- Integrations to AUTOSAR
 - Tieto platform running, ready to use for investigations
 - Gunnar: For "Any"2Autosar tooling, first step is usually a definition of the mapping (spread-sheet showing language features that map to each other, where is it simple, where are challenges, etc.)
- VSS2ara would be basically solving the "autosar side" of the system, similar to how Franca AUTOSAR XML converter was used with AUTOSAR.
- Alternative is to first focus on the "non-AUTOSAR" side of systems, e.g. generate a SOME/IP binding directly, or DDS, or other. (VSS/VSC to SOME/IP binding directly).
- ASAM service oriented diagnostics seems interesting.

- "Plan B"
 - The VSC-related tooling is taking even longer time to go through company legal reviews and final approvals for releasing it with an open source license, although there is a clear desire to get it done.
 - A discussion started on how to develop a first set of tools in parallel with waiting for the other.

Wednesday 2021-04-14

Notes

- Tieto: AUTOSAR analysis ongoing. Need tooling soon.
- VSC tooling seems held up by something. End of this week consider if we should launch plan B. Talk to Magnus about it.
- VSC:
 - Piotr: Has ASN.1 been considered as a definition language? (it could be an alternative to protobuf?)
 - ... the compilers are often able to generate a compact binary format
 - ... likely less availability of open-source tools. There should be some however.
 - Gunnar: For VSS I think it's "overkill" since VSS has very simple datatypes but for VSC and arbitrarily complex data definitions, maybe
 - Gunnar: FYI: [OpenAPI](#) and [AsyncAPI](#) have however come up as potential reuse or inspiration for VSC definition. Franca IDL is still a strong basis however. OpenAPI is only REST-focused and AsyncAPI seems to describe primarily a pub/sub direction.
- VSS
 - Stephen: I was recently reading about GraphQL Federation that allows separation of concerns and for domain teams to create parts of the data graph that are then federated into a whole. The separation of concerns resonated with in-vehicle engineering where you have for example services with very different safety and security requirements. Could this help us?
 - Background reading:
 - [video: Apollo GraphQL Federation introduction](#)
 - Netflix uses it to scale their APIs and have some good blogs and a video on its use that have some nice practical illustrations:
 - [blog: How Netflix Scales its API with GraphQL Federation \(Part 1\)](#)
 - [blog: How Netflix Scales its API with GraphQL Federation \(Part 2\)](#)
 - [blog: Beyond REST](#)
 - [video: How Netflix Scales Its API with GraphQL Federation](#)
 - [blog: Open Sourcing the Netflix Domain Graph Service Framework: GraphQL for Spring Boot](#) (added after meeting)

Cloud

- Iyyaz: Regarding demo (AMM). Docker-based stack and Terraform is being developed.

Wednesday 2021-04-07

Notes

- Reviewing and amending [IoT-event-analytics and Vehicle-Edge projects](#) page. UML diagram overview. Dennis supporting.
- Tieto setting up internal meetings to figure out what to do next with the plans on AUTOSAR interoperability.
- ... planning to build on VSC tooling
- ... Gunnar: Plan translation mapping and templates can start early
- Iyyaz has prepared some notes. E.g. what is "the edge" by definition?

Wednesday 2021-03-31

Notes

- Review of wiki page [IoT-event-analytics and Vehicle-Edge projects](#)
- content of the wiki page is considered very useful by the participants

Wednesday 2021-03-24

- pipeline and configmanager come from IoT-event-analytics repository = Northbound
- kuksa val, hal interface+adapter, vss2iotea part of vehicle-edge = Southbound
- Dirk: There should be some useful UML diagrams.
- Christian to find the presentations/pictures that are useful here and attach to [CVII Tech Stack](#) page.
- Tieto still working on setting up AUTOSAR environment and planning.
- Discussed the need to coordinate development plans (e.g. bindings to DDS, SOME/IP, and-or code generators) to avoid overlap.
- Gunnar create a home page for Vehicle-Edge stack analysis and information.

Wednesday 2021-03-17

Notes

- Update on protobuf tool ([merged](#))
- Bosch code released for [IOT-event-analytics](#) framework, and the [vehicle-edge](#) project to bring together all parts of the stack.
- Discussion on AUTOSAR tooling
 - TietoEVRY to continue to seek out relevant people, bring into a design discussion meeting.
- Franca / FARACON vs VSC development
- VSC code generation framework coming soon. Discussing what to expect.
- Planning the CVII related sessions at GENIVI AMM, May 4-7.

Wednesday 2021-03-10

Agenda

- Updates on topics below
- [Protobuf](#) continued.
- Bosch

Notes

- Bosch: Code related to the demo on the CVII workshop will be on an open repository within 1-2 weeks.
- Discussion about organization of the different parts of CVII. **TODO** link for "org.chart" and [Common Vehicle Interface Initiative - Activity Matrix](#).
- confirming Signal2Service not a likely input to our work (no demonstrator, no plans at the moment)
- ZOOM 😊 KEEPS KICKING ME OUT...
- Waiting....
- Can someone take over leadership?

Wednesday 2021-03-03

- Adam K / Piotr: AUTOSAR - Signal2Service is not really implemented yet.
 - Some VSS to AUTOSAR tooling seems to make sense therefore
 - Tieto want to start working on this. First steps is getting runtime platform setup working. Then the design of VSSAUTOSAR can start (and be discussed).
- Quick look at [CVII Tech Stack technologies - Protobuf](#) again.
- Need for full software architecture focus in this project.
 - Separation of safety-critical technologies and info/entertainment/other. What is being targeted exactly?
 - Where in a typical architecture are we working?
 - VSS itself is orthogonal to safety/other question. However, the chosen technologies and implementations may need to be classified from safety perspective.
 - Clarify where different proposals belong. E.g. "MQTT is unlikely in safety domain, right?"
 - Agreement on which technology to use where.
- Images to show architecture.
- Big software release announcement next week...
- Virtualization important aspect to consider.
 - Gunnar informed about [Automotive Virtual Platform Specification](#) work ongoing in GENIVI.
 - Let's discuss in the future if there are particular aspects to consider in this area.

Wednesday 2021-02-24

- AUTOSAR - Tieto/EVRY still interested but other priorities came up so the time plan not clear at this point.
- Signal2Service - [check if spec released and if applicable](#)
- Look at [defining the representation of data in AUTOSAR-XML](#) (to prepare VSS to ARXML conversion)
 - FARACON tool would be one approach. Create a Franca IDL file with some observable data ("Attributes" in FIDL) and run the conversion, study the result. There is a comprehensive mapping between Franca ARXML that should be correct.
- MQTT
 - VISS over MQTT (Ulf) has been described in W3C Automotive working group.
 - It is embedding VISS in MQTT with a small control protocol defined (over MQTT).
 - Access control strategy is identical to standard VISS.
 - Topic needs to be "protected" somehow or anyone could listen/inject to traffic.
 - Give some time to let this idea mature before it becomes part of any official specifications. New ideas and improvements may come up.
 - A more direct VSS-to-MQTT topic mapping is a different and complementary alternative
 - Sebastian: Publishing to MQTT is easy. For writing more work required (because access control details not done yet).
 - **Steps: Define the payload message format**
 - **Steps: Describe the access control strategy (clients have access to a subset of topics)**
 - **Steps: Deciding implementation language and reuse libraries**
- Protobuf – think about how to represent messages - [this page](#)

Wednesday 2021-02-17

Workshop preparation

Shortlist of working items:

- General efficient message format (JSON and Binary). For use in many contexts, e.g. MQTT, and SOME/IP and other.
 - For JSON, consider VISS spec
 - VISS spec also has a "compressed" format (unique to VISS)
 - Discussion about having a more "standard" format for binary/efficient encoding. MsgPack is somewhere in between (like compressed /binary JSON) whereas describing a schema in Protobuf or AVRO or similar will generate an efficient encoding from the schema.
- Define mapping to AUTOSAR technologies, ARA:COM (AUTOSAR XML) and/or SOME/IP or DDS specifically. In other words how is a signal definition converted to a 'Service'? Or should it simply be observable properties (Fields in SOME/IP).
- The AUTOSAR spec Signal2Service seems still unclear to many. Perhaps further investigation required.
- Can we define the actual purpose of the specification? If so, there is opportunity for any one here to propose potential solutions or to 'unstuck' this activity somehow.

Wednesday 2021-02-10

MQTT (and general design) discussion

- SSL/TLS setup between MQTT server and MQTT client could have bi-directional authentication (checking also client certificate)
- Authentication method for the initial CONNECT can be any one that client+server both support.
- One approach is to allow any client to get any MQTT topic, but the data itself is encrypted and then only those who can decrypt have access to the data in practice.
- Another (VISS and other) consider applying filters on the signals (MQTT:topics) that you can actually request. E.g. Vehicle/Cabin /Temperature. E.g. Mosquitto plugins can be used for this.
- VSS Layer (<link) a possibility to define permissions groups (for any of the technology choices or approaches above).
- Bosch proposes the use of the SSI approach: https://en.wikipedia.org/wiki/Self-sovereign_identity
 - ... but SSL/TLS is also required in some environments e.g. across internet

Open areas for getting started on implementation

- Mapping VSS to popular cloud/infrastructure technologies Apache Kafka/Spark/NiFi etc.
- What about VSSo?
- Which existing technologies do VSSo fit into?
 - VSSo maps well to GraphQL (or SPARQL of course). Web-of-things is there an obvious implementation/framework to use in implementing?
 - For GraphQL there is Apollo, Neo4j, maybe others.
 - Protege / Webprotege development/analysis of ontology/data?

Action: Collect more information from more companies about preferred technologies/implementations.

Wednesday 2021-02-03

US friendly time 17:00 CET

Agenda

- project scoping
- upcoming CVII workshop

Participants

- Christian H, Christian K, Dirk, Sebastian (Bosch)
- Niclas (Volvo Cars)
- Kevin (High Mobility), Ulf (Geotab), Iyyaz (Cobrasphere) (GENIVI CCS project participants)
- Piotr, Michal, Dariuz, Adam, Stefan, (TietoEVRY)
- Ted (W3C), Gunnar, Stephen, Philippe (GENIVI)

Notes

project scoping

- review of [CVII Tech Stack](#), updated on line
- Dirk shows latest status of Bosch VAPP project implementation, slide deck can be shared once the code is published in the open

upcoming CVII workshop

- please have a look at [Common Vehicle Interface Initiative \(CVII\) Working Session Details](#)

Wednesday 2021-01-27

US friendly time 17:00 CET

Agenda

- project scoping
- AOB

Participants

- Sebastian, Christian K, Dirk, Gerald (Bosch)
- Niclas (Volvo Cars)
- Kevin (High Mobility), Ulf (Geotab), Iyyaz (Cobrasphere) (GENIVI CCS project participants)
- Rex (Saferide)
- Piotr, Michal, Dariuz, Adam, Stefan, (TietoEVRY)
- Ted (W3C), Gunnar, Stephen, Philippe (GENIVI)

Notes

Project scoping

- discussion starts with MQT, discussion is based on the content of [CVII Tech Stack](#)
- Sebastian: this is a preferred techno, but what should be the reference implementation for the mapping of VSS to MQTT ?
- discussion on code vs specs
- Christian K: code does not lie
- Ted: but it can have bugs (as can specs)
- Ted: a server in cloud could return VSS JSON or VSSo RDF (or other formats) through content negotiation from the same end points based on client preferences
- Christian K: I am convinced there will other standards than CVII in the air, Sensoris for instance, we have already vehicles in development that use Sensoris and I would like to give an opportunity to sync with CVII in the future
- TODO Christian K to contact Sensoris and make the liaison happen with them
- discussion on the interface to AUTOSAR
- Sebastian: we do not need to dig deeply into Adaptive Autosar, our interface point is rather someip for instance
- Dirk: I would assume both data & service mapping with Autosar
- Rex: signal-to-service mapping
- Ted: back to SENSORIS, a mapping may be sufficient for this activity and translators can be created by those who need them. likely would be welcome in GENIVI repo if created, HERE previously showed me some mappings they maintain
- Christian K: TSN, ARA::COM are deeply embedded when we go so deep, we will lose the opportunity to do any abstraction
- TODO all to define what are the high level objectives of constructing an AUTOSAR connection
- Christian K: AUTOSAR is so much in the safety world that it will be difficult to build cool things with them
- Sebastian: we want the data from below, i.e. from the safety world, do we want to write safety critical applications on top of VSC ?
- Gunnar: IMHO VSC can describe a safety critical application but will not implement it
- Dirk: what is the targeted runtime environment ? is the vehicle computer or a deeply embedded ECU ?
- short discussion between Christian K, Dirk and Gunnar
- Gunnar: IMHO the model could apply to any system whatever it safe or not
- Christian: we will take this offline
- Michal: VSS to MQTT , what is the preferred language to implement the translation ?
- Dariuz: I have some experience with MQTT and I am interesting in this translator but not familiar with C++ for instance
- SebastianLet's all use RUST :)
- Gunnar: we could start with python first and see where it goes, but if Tieto says we use Rust, please do it, you know the industry better
- Michal and Dariuz: volunteer for the translator
- Adam: we can bring some feedback on AUTOSAR for the next call