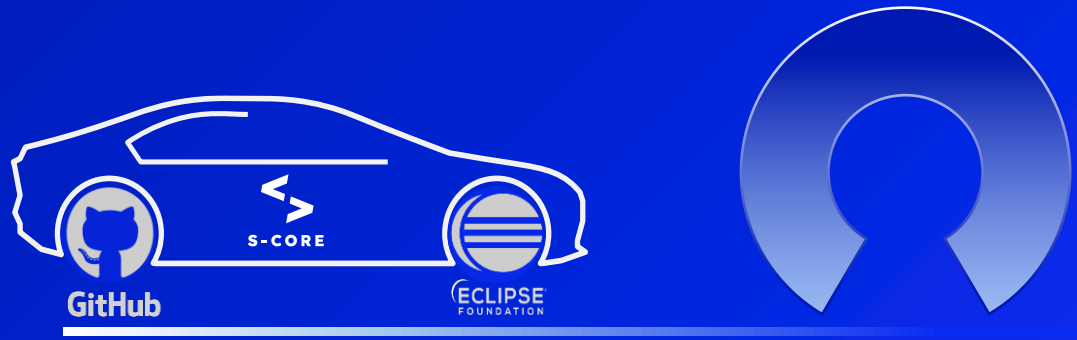


open source

S-CORE, A HOLISTIC APPROACH FOR AUTOMOTIVE TOWARDS OPEN SOURCE.

ECLIPSE SDV COMMUNITY MEETUP – **SEOUL** , DEC 4TH 2025.

MEMSUD GODINJAK, BMW GROUP
SR. MANAGER SW-PLATFORM STRATEGY

BJÖRN REISTEL, ETAS
SDV ECOSYSTEM DEVELOPMENT & COMMUNITY MANAGER

OUTLINE | ECLIPSE SDV COMMUNITY MEETUP SEOUL – DECEMBER 4TH 2025.

1 ECLIPSE S-CORE
BACKGROUND/ INTRO & STATUS

The **goal** of Eclipse S-CORE is **to provide a SW-Platform for safety-critical in-car components.**

Besides code, S-CORE comes with **additional work products**.

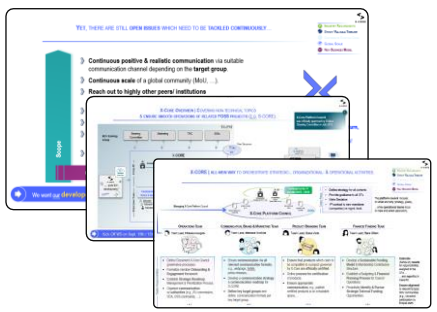
The **project is up and running**, has a **solid community** with more and more **global members**.

2 ECLIPSE S-CORE IS **NOT JUST** ANOTHER **OPEN-SOURCE PROJECT!**

Being the **first open-source standard to be deployed in safety-critical automotive series projects, …**

…S-CORE faces **several challenges**, which we´ve **started to tackle.**

3 X-CORE | AN ALL-NEW WAY TO ORCHESTRATE STRATEGIC-, ORGANIZATIONAL & OPERATIONAL ACTIVITIES.



X-CORE –
An all-new organizational unit **helps us to boost needed ecosystem for S-CORE**
(...and for future upcoming open-source projects).

4 THE **BEST WAY** TO TACKLE GIVEN CHALLENGES **IS TO DELIVER!**

First public release "S-CORE 0.5 alpha" is out since Nov. 17th.

Main deliverables,
4 modules, almost all development processes certified, …

5 OUTLOOK, WHAT´S PLANNED IN 2026.

In January 2026, "**S-CORE 0.5 certifiable**" will be available, and we´re on it to **launch S-CORE 1.0 by the end** of the year 2026.

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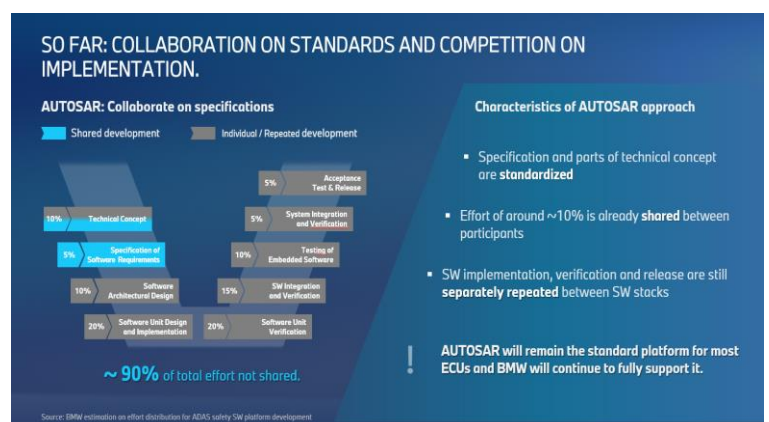
WHY **SW PLATFORMS**? WHY **OPEN SOURCE**?

- **HPCS (HIGH PERFORMANCE CONTROLLER)**
  to a greater extent **common in automotive.**
  Further integration of performance compute, zone architecture etc.

- **INCREASING SW-COMPLEXITY IS A CHALLENGE!**
  To control the complexity and to encourage **re-use**,
  we need performant SW platforms (Operating Systems, Middleware etc.).

- **STANDARDIZED SW-STACK IS THE KEY,**
  since (one-time) proprietary solutions require **high effort & costs** (make)
  or bear the risk for **Lock-In** (buy).

- **CLASSICAL STANDARDIZATION** -based on specifications-
  are not sufficient, due to the **high** implementation **effort**
  (multiple time in the industry) and **time consumption**.



OPEN SOURCE …A **PROMISING SOLUTION** FOR EXISTING CHALLENGES AS CAN BE OBSERVED IN SOFTWARE INDUSTRY.

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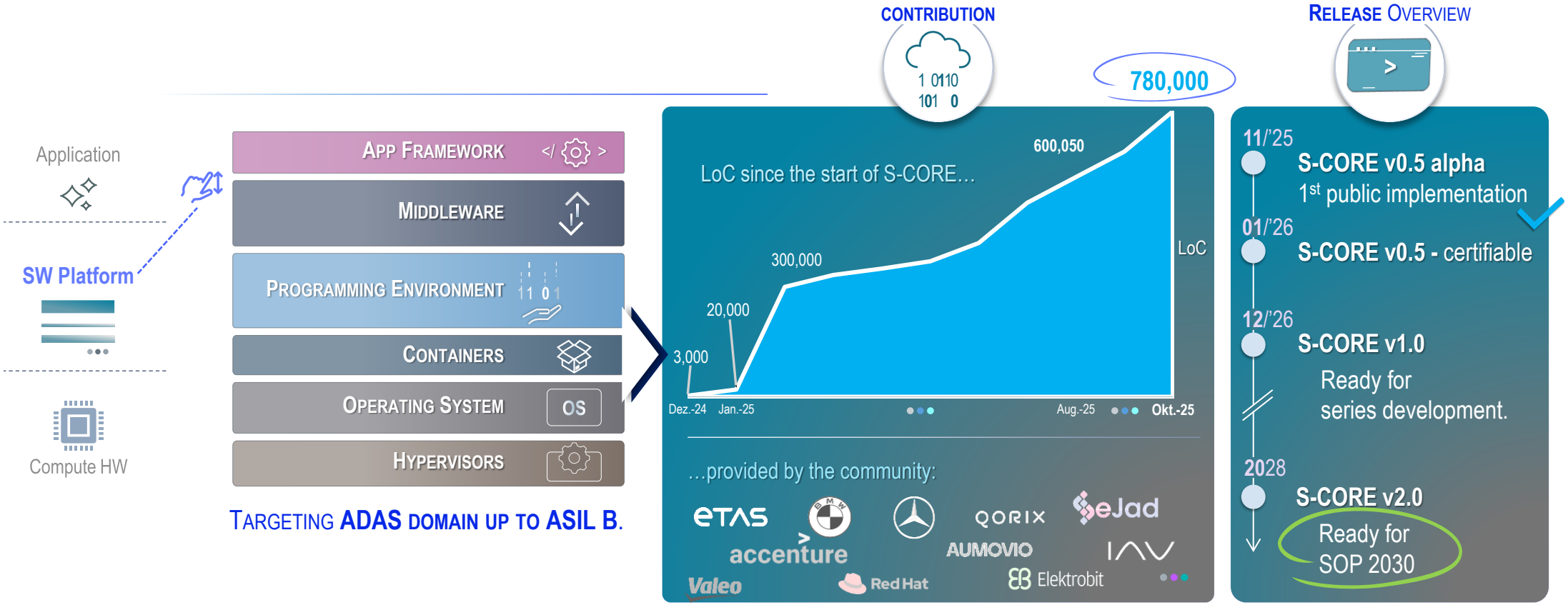
S-CORE IN A NUTSHELL |

THE PROJECT IS UP AND RUNNING, AND ON TRACK ACCORDING TO OUR RELEASE PLAN.

S-CORE, **first open-source standard** to be deployed **in safety-critical automotive series projects**.

After ~1 year, the project is up and running, … and on-track to **provide a complete solution by 2028**.



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ECLIPSE S-CORE | NOT JUST ANOTHER OPEN-SOURCE PROJECT, IT´S THE FIRST FREE & OPEN-SOURCE SOLUTION TO BE DEPLOYED IN SAFETY-CRITICAL AUTOMOTIVE SERIES PROJECTS

…& FACES 5 MAJOR CHALLENGES.

#1 INDUSTRY REQUIREMENTS

S-CORE must consider **strict requirements** of the automotive industry, e.g., safety (ISO 26262), security (ISO 21434).

#2 STRICT/ RELIABLE TIMELINE

S-CORE follows a **strict and reliable timeline** in order to be used in automotive industrialization projects.

S-CORE

#3 CONTRIBUTE EXISTING CODE

S-CORE doesn´t start on the greenfield, a way to **contribute existing implementation also from non-automotive domains and enhance them to meet the automotive industry requirements**.

#4 GLOBAL SCALE

S-CORE needs **a solid global ecosystem** in order **to scale** …which **consists of different players** (OEMs, Tiers, SoC providers, …).

#5 NEW BUSINESS MODEL

S-CORE comes with new **business models** for all parties involved.

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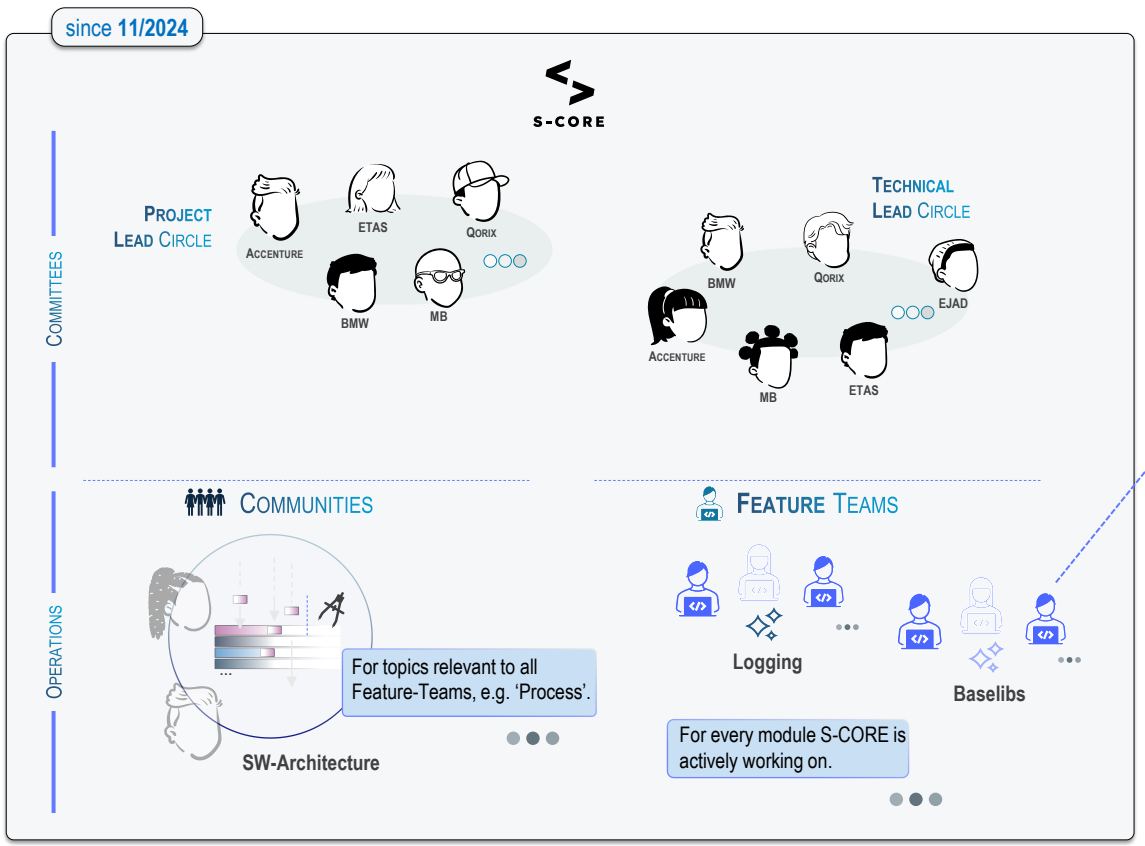
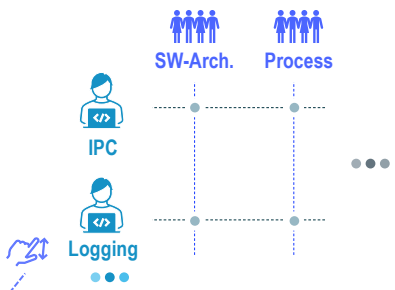
S-CORE HAS A SUSTAINABLE PROJECT SETUP WHICH **ENSURES EFFICIENT DEVELOPMENT OF SOFTWARE AND COMPLIMENTARY WORK PRODUCTS.**

- INDUSTRY REQUIREMENTS
- STRICT/ RELIABLE TIMELINE
- CONTRIBUTE EXISTING CODE
- GLOBAL SCALE
- NEW BUSINESS MODEL





Collaboration, FTs/ Communities

Breaking the silos by introducing communities & cross-functional feature teams.

...more **Details** on **next page**

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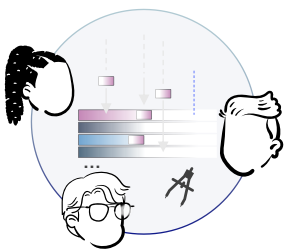
S-CORE COMMUNITIES | DEEPLY INVOLVED IN THE DEVELOPMENT PROCESS

- INDUSTRY REQUIREMENTS
- STRICT/ RELIABLE TIMELINE
- CONTRIBUTE EXISTING CODE
- GLOBAL SCALE
- NEW BUSINESS MODEL

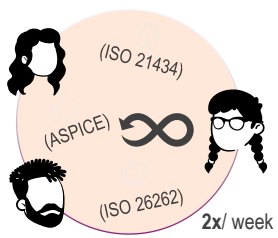
SOFTWARE ARCHITECTURE



In this community, the **overall software architecture** of our stack is planned.

Join here to get the **recent information** about **next features** for S-CORE.

SOFTWARE DEVELOPMENT PROCESS

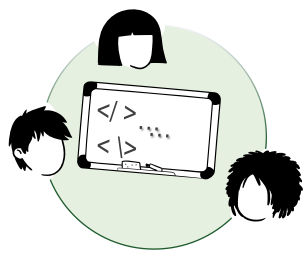


2x/ week
5-6 participants

Due to our goal to deliver a stack which is safety certifiable, we need **well defined software development processes**.

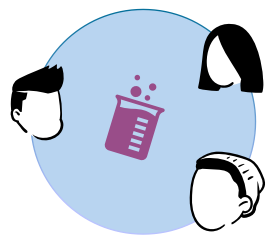
This community is **continuously designing & improving our processes**.

INFRASTRUCTURE



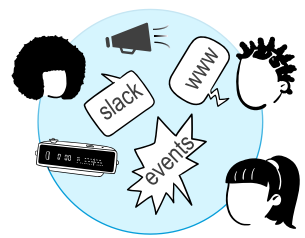
To enable a **fast and reliable development**, this community is setting up the build infrastructure, the **tooling**, process **enabling**, the CI/CD pipelines, and more…

TESTING



To meet our **quality goals**, S-CORE needs to be tested – In this community, experienced test managers and testers are ensuring exactly this.

MARKETING & COMMUNICATION



S-CORE can only be **successful**, **when more and more** members are joining! –

This community ensures, that the **great results** -provided by S-CORE teams- are **communicated** to the **automotive community**.

S-CORE Communities

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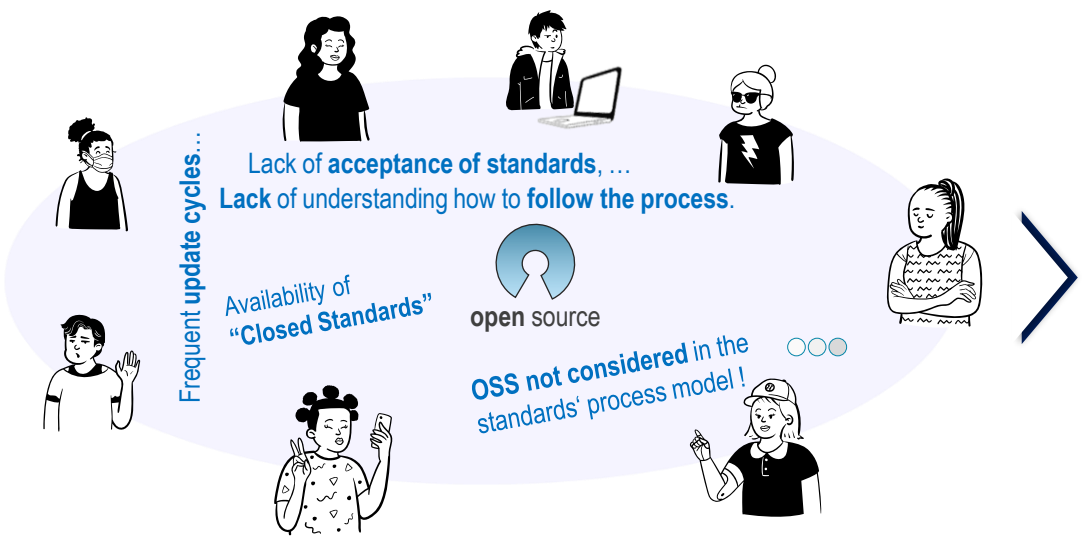
CONTRIBUTOR ROLES | CONTRIBUTOR, COMMITTER & SAFETY, SECURITY, AND QUALITY MANAGER.

S-CORE

- INDUSTRY REQUIREMENTS
- STRICT/ RELIABLE TIMELINE
- CONTRIBUTE EXISTING CODE
- GLOBAL SCALE
- NEW BUSINESS MODEL

FROM… Open source world, with **less awareness** regarding **safety & security** standards…



…TO Ensure that **relevant industry standards are fulfilled!**

SAFETY	Ensure 'ISO 26262' is fulfilled, up to ASIL B.
SECURITY	ISO 21434

Contributor develops OSS based on existing **S-CORE process guidelines**.

Committer

Committers have **awareness about all relevant standards** and define S-CORE **process guidelines** accordingly. (continuous update if needed)

Safety/ Security & Quality Manager

Ensures result´s compliance (to relevant standards), e.g., ISO26262, ISO 21434.

Continuous **external audit** ensures that S-CORE **guidelines are compliant** to the relevant standards. DeepDive

ECLIPSE FOUNDATION — **Trustable** Software Framework — open source

Bazel — Entirely **open source toolchain**, lowering the entry barrier for newcomers. — open source

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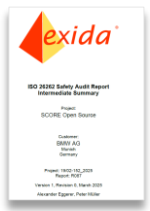
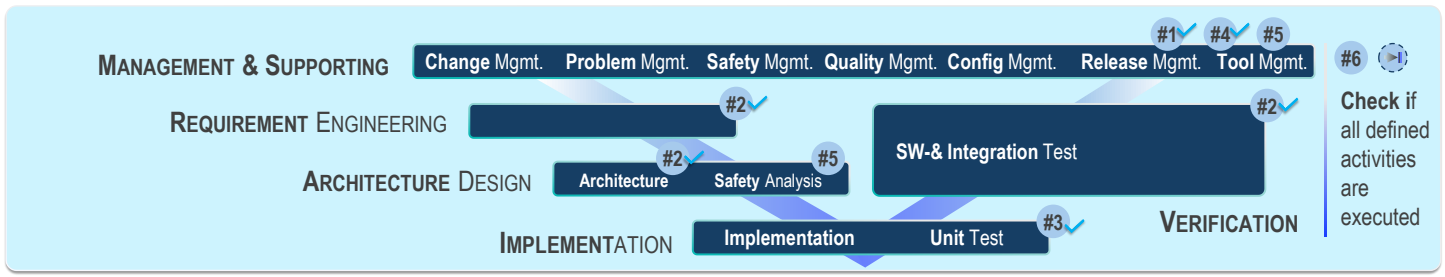
SDV Eclipse Software Defined Vehicle

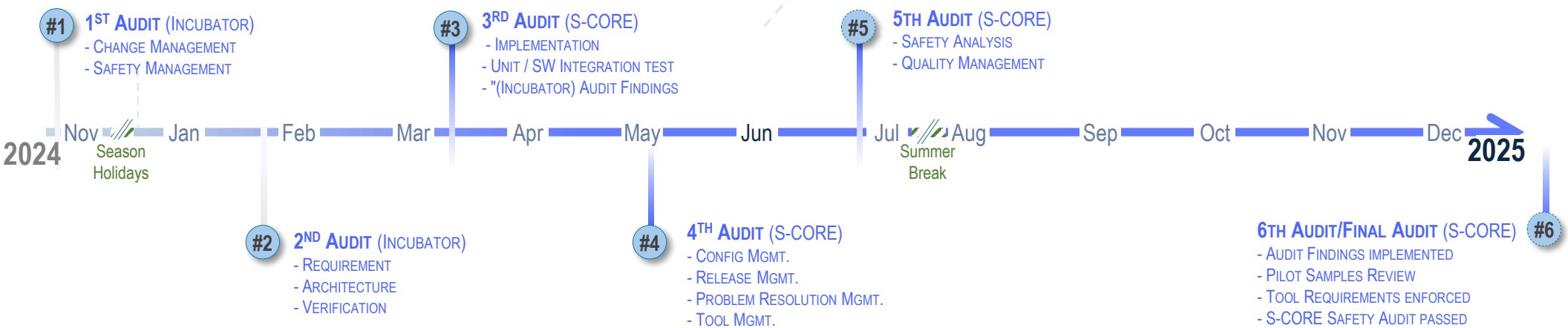
S-CORE´S PROJECT SETUP **ENSURES EFFICIENT DEVELOPMENT OF SOFTWARE AS WELL AS COMPLIMENTARY WORK PRODUCTS.**

- INDUSTRY REQUIREMENTS
- STRICT/ RELIABLE TIMELINE
- CONTRIBUTE EXISTING CODE
- GLOBAL SCALE
- NEW BUSINESS MODEL

Exida is **continuously conducting Safety Audits** of S-CORE, in order to **ensure standard compliance.**







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S-CORE IS PLANNED AS A GLOBAL INITIATIVE – COMMUNICATION OF THE NEXT BATCH PLANED FOR CES 2026.

- INDUSTRY REQUIREMENTS
- STRICT/ RELIABLE TIMELINE
- CONTRIBUTE EXISTING CODE
- GLOBAL SCALE
- NEW BUSINESS MODEL

MoU initiated by VDA in Europe…

…**now** handed over to the **ECLIPSE Foundation** **to foster an international ecosystem**.

1st batch of MoU signees, **published** in AEK Ludwigsburg, **June 2025**

Signed **MoU**

The MoU is a **voluntary commitment** by all signees to actively contribute to open source SW (w/ focus on S-CORE) development for automotive. Additionally, the OEMs voluntary agree to use open source SW in their products.

	SIGNED & PUBLISHING PLANNED IN CES LAS VEGAS 01/2026	IN DISCUSSION ORAL COMMITMENT EXISTS
OEMs	**+2 OEMs**	
Other signees	**+11** international **members** 11 **01**	**+5** additional **members** 11 **01**

We´re approaching potential members directly, …yet **we´re open for proactive communication by interested companies** as well.

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COMMUNICATION | S-CORE´S SUCCUSS STORY IN EVENTS AND OTHER FORMATS.

- INDUSTRY REQUIREMENTS
- STRICT/ RELIABLE TIMELINE
- CONTRIBUTE EXISTING CODE
- GLOBAL SCALE
- NEW BUSINESS MODEL

Events

March 25th/ 26th — **SDV COMMUNITY DAYS**, ROTTERDAM
TOP: "Status S-Core & Safety Audit" (M. Godinjak, M. Schu)

AEK, LUDWIGSBURG/ June 24th -25th
MoU communication

May 13th — **AUTOMOTIVE OPEN SOURCE SUMMIT 2025**, STARNBERG
TOP 1: Panel (H. Grandy)
TOP 2: S-Core (M. Stetter, MB)

April 3rd — **USEBLOCKS COMMUNITY DAYS**
TOP: Status S-Core (M. Bechter)

VDA AUTOMOTIVE SYS, BERLIN/ June 25th/27th
TOP: OSS in Automotive, Challenges & Solution approaches (M. Godinjak)

May 22nd — **Automotive Softwa re Strategies Conference**
TOP: 'BMW Keynote, One year later' (H. Grandy)

March 31st — **S-CORE TOWNHALL**
"Status S-Core"

June 4th — **SDV COMMUNITY DAYS**
Top: Architecture Deep-Dive (ETAS, MB)

Nov 17th — **ECLIPSE ALL-MEMBERS MEETING**
TOP: S-CORE 0.5 alpha Insights

Oct. 15th/16th — **ELIV**, BONN
Panel, 2 talks

Oct. 7th — ECLIPSE COMMUNITY DAYS, USA/ DETROIT
TOP: Eclipse S-Core, Why join? (T. Fleischmann)

Dec. 11th — **ECLIPSE**, JP/ YOKOHAMA

Sept. 30th -Oct. 2nd — ECLIPSE **HACKATHON**, PORTO & BERLIN

Dec.4th — **Today**
ECLIPSE COMMUNITY DAYS, KOREA/ SEOUL (LG)

Sept. 11th — **IAA**, MUNICH
TOP1: Talk & Panel Discussion (VDA).
TOP2: Panel Discussion (Red Hat).

Oct. 27th-29th — **EXIDA AUTOMOTIVE SYMPOSIUM**, SPITZINGSEE
TOP: Achieving Functional Safety with Open-Source Software in Automotive

Apr — Easter — May — Jun — Pentecost — Jul — Aug — Summer Break — Sep — Oct — Nov — Dec — Season Holidays — 2025

S-CORE 0.5 ALPHA

Other formats

Press Release | QNX

Website | go live

S-Core | Article

X-Core | Go-Live

Press Release | Qualcomm

S-CORE 0.5 alpha | Campaign

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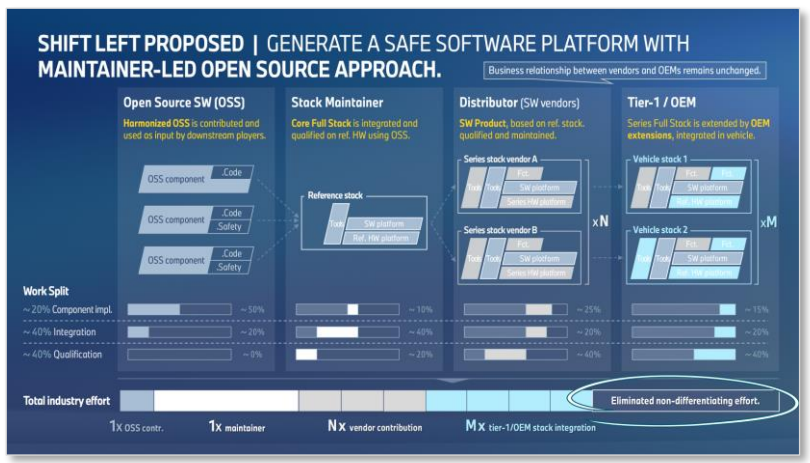
Business Model | With open source, the business model will change for all parties involved. We make sure, there is a positive impact for the whole community.

Originally, we have proposed a **collaboration model** and **business model** which suits the automotive industry…

…yet, **despite changes** in the industry, **Software won´t be for free/ business will** still **exists** !



AEK Kongress 06/2024 –
"Software-centered board net development towards the software-defined vehicle", Dr. Chris Salzmann

By **developing an OSS platform jointly**, …

…the **effort w/out customer value** can be **reduced**.

…a **common ground for cooperations** is built.

…**time to market** is reduced (reuse, contributions, …).

	Change	Benefits
OEM	**Commitment** to bring OSS S-Core to production.	**Re-use** S-Core for future generations. **Less risk** for **vendor lock-In**.
HW Tier	**Different competencies** and responsibilities.	
SW Tier	**Change** of **business model**, e.g., no licenses. Readiness for **pre-investment**.	**Better Scaling**: Implement once/ offer to more customers. (By far) **less effort** for HW- and SW-integration.
SoC Supplier	**More transparency** (future plan, grant insights to own technology).	**Less middleware** implementation → **less effort** **Impact** via contribution/ **Early info** reg. SoC req.
Service Provider	Readiness for **pre-investment**.	**Scaling**: Provide engineering services to all. **Business decoupled** from SOP on OEM-side
Tool Provider	**Dual business model** (open and closed).	Knowledge, needed tools by the community. → **Better scaling** via standardization.

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YET, THERE ARE STILL **OPEN ISSUES** WHICH NEED TO BE **TACKLED CONTINUOUSLY**…

S-CORE

- INDUSTRY REQUIREMENTS
- STRICT/ RELIABLE TIMELINE
- CONTRIBUTE EXISTING CODE
- GLOBAL SCALE
- NEW BUSINESS MODEL

Scope

- **Continuous positive & realistic communication** via suitable communication channel depending on the **target group**.
- **Continuous scale** of a global community (MoU, …).
- **Reach out to highly other peers/ institutions** (EU commission, VDA, PFA, ANFIA, Korean authorities??).
- **SPOC** for new members.
- **Onboarding** of new members.
- Ensure **potential funding** and establish **future business model** for every player involved.
- **Evaluate commercial products** related to S-CORE.

Continuous delivery…

x-core

Additional **organizational structure, to speed-up** non-technical topics yet relevant for the projects!

We want our **developers** to stay focused on **delivering work products**, so we´ve **established an all-new organization**.

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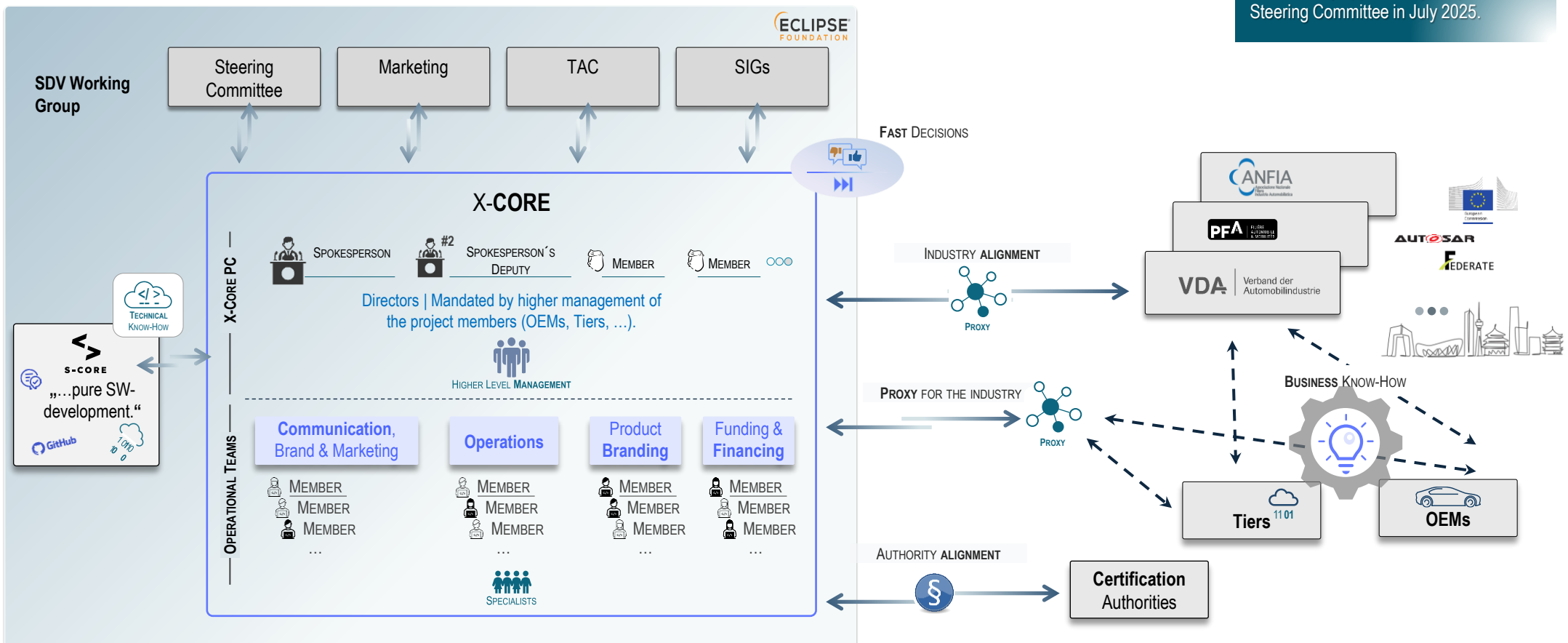
SDV Eclipse Software Defined Vehicle

X-CORE OVERVIEW | COVERING NON-TECHNICAL TOPICS & ENSURE SMOOTH OPERATIONS OF RELATED FOSS PROJECTS (E.G. S-CORE).

X-Core Platform Council
was officially approved by Eclipse Steering Committee in July 2025.



Kick-Off WS on Sept. 15th / 16th to detail X-CORE setup (Platform Council & Operational Teams) and to start w/ discussion about high priority TOPs.

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X-CORE | ALL-NEW WAY TO ORCHESTRATE STRATEGIC-, ORGANIZATIONAL- & OPERATIONAL ACTIVITIES.

- INDUSTRY REQUIREMENTS
- STRICT/ RELIABLE TIMELINE
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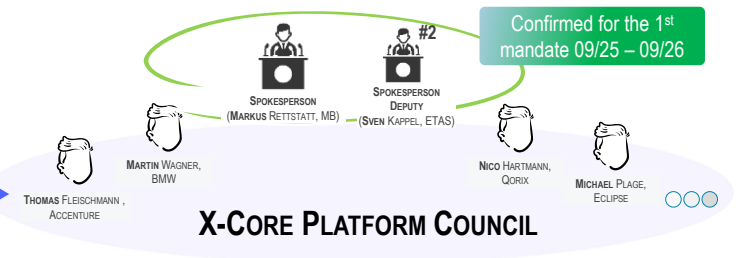
Managing X-Core Platform Council



Tasks/ Resp.

- **Define strategy** for all contents
- **Provide guidance** to all OTs
- Make **Decision**
- **1st contact** to **new members** (companies) on mgmt. level.

The **platform council** focuses on ***what*** and ***why*** (strategy, goals),

…while **operational teams** focus on ***how*** and ***when*** (execution).

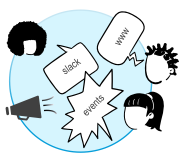
OPERATIONS TEAM

Team Lead, **Filmona** Mulugeta

- Define/ Document X-Core Council governance processes.
- Formalize member **Onboarding & Engagement** framework.
- Establish **Strategic Roadmap** Management & Prioritization Process.
- Organize **communication w/ authorities** (e.g., EU commission, VDA, OSS-community, …).

COMMUNICATION, BRAND & MARKETING TEAM

Team Lead, **Memsud** Godinjak



- Ensure **communication via all relevant communication formats**, e.g., webpage, SoMe, press releases,…
- Develop a **communication strategy** & **communication roadmap** for S-CORE.
- **Define key target groups** and define communication formats per key target group.

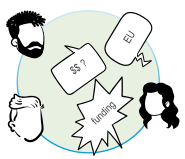
PRODUCT BRANDING TEAM

Team Lead, **Dana** Vede

- **Ensure that products** which claim to be compatible to a project governed by X-Core **are officially certified**.
- Define **process for certification** of products.
- **Ensure appropriate communication**, e.g., publish certified products is on a trustable space,…

FINANCE/ FUNDING TEAM

Team Lead, **Sara** Gillian



- Develop a **Sustainable Funding Model** & Membership Contribution Structure.
- Establish a Budgeting & **Financial Planning Process** for Council Operations.
- Proactively **Identify & Pursue Strategic External Funding** Opportunities.

Tasks/ Responsibilities

Elaborate (hands-on) **results** for responsibilities assigned to the OTs …
…and **report to X-Core PC**.

Ensure alignment to relevant Eclipse SDV communities (e.g., via active participation by Eclipse staff).

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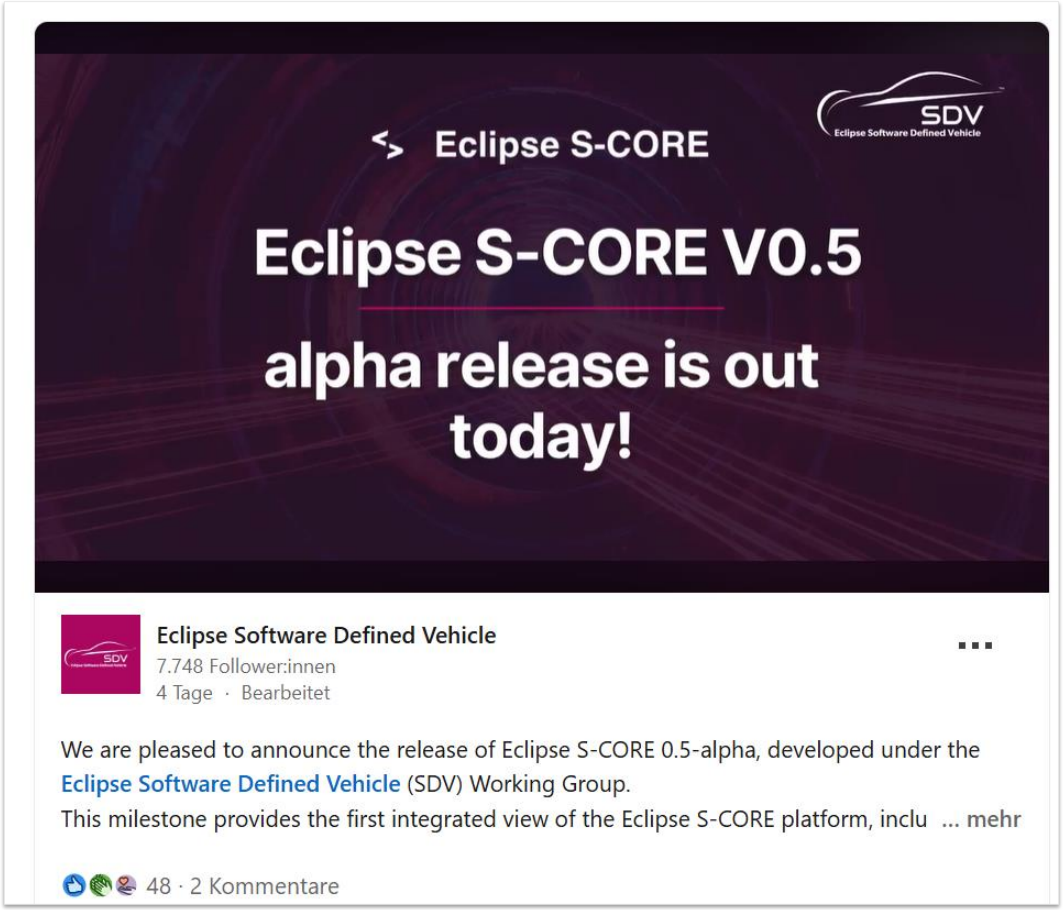
S-CORE RELEASE V0.5-ALPHA

ECLIPSE S-CORE V0.5-ALPHA RELEASE IS AVAILABLE | PUBLISHED NOVEMBER 17TH!

- **Why:**
  - Establish release processes
  - Lower the barrier to start using and developing Eclipse S-CORE
  - Engage with the community
- **How:**
  - Reference Integration Repo & Release Documentation
- **What:**
  - Initial release of core SW modules
  - Infrastructure for Build & Test
  - Multi-target integration capabilities
  - Execute example applications



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ECLIPSE S-CORE RELEASE V0.5-ALPHA | FIRST RELEASE
WITH A BROAD SET OF DELIVERED ELEMENTS

01

Initial Core Modules:

- Communication (zero-copy shared memory)
- Persistency
- Orchestration (including Kyron async runtime for Rust),
- Basic utility libraries

02

Robust CI/CD Workflows:

- Implemented CI/CD (including build and test)
- Comprehensive integration testing of all modules

03

Foundational Infrastructure

- Process_description module for organizational rules (ASPICE, ISO 26262 aligned)
- Docs-as-code tooling
- ITF (Integration Testing Framework) with test_scenarios for robust verification.

04

Multi-Platform Support:

- Provided experimental reference images for
  - QNX
  - Red Hat AutoSD Linux
  - Elektrobit Corbos Linux for Safety Applications

05

Reference Integrations:

- Sample demo application for multiple experimental target images, showcasing practical application deployment.

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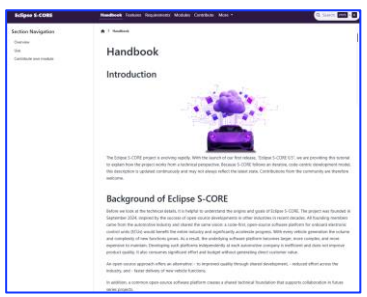
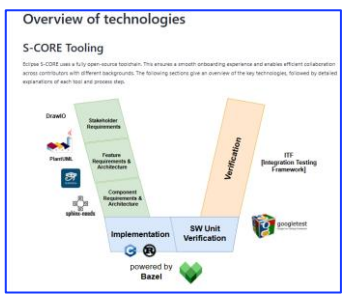
ECLIPSE S-CORE RELEASE V0.5-ALPHA | FIRST RELEASE
WITH A BROAD SET OF DOCUMENTATION

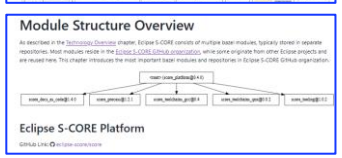
Dev Docu Website



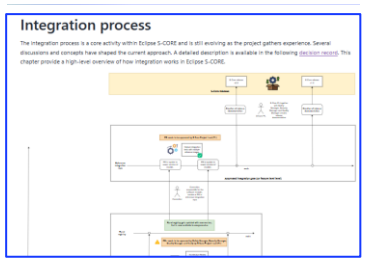
S-CORE **introduction** & **background**, and what´s **out of scope**.



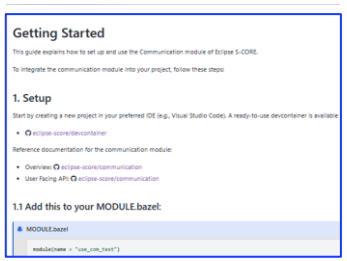
S-CORE **technology**, e.g. **tools**, **repo structure**, **programing languages.**



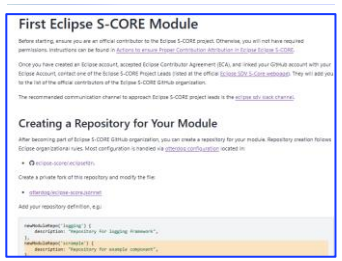
SW-Architecture & **Module Structure** Overview.



Description of the **Integration Process.**



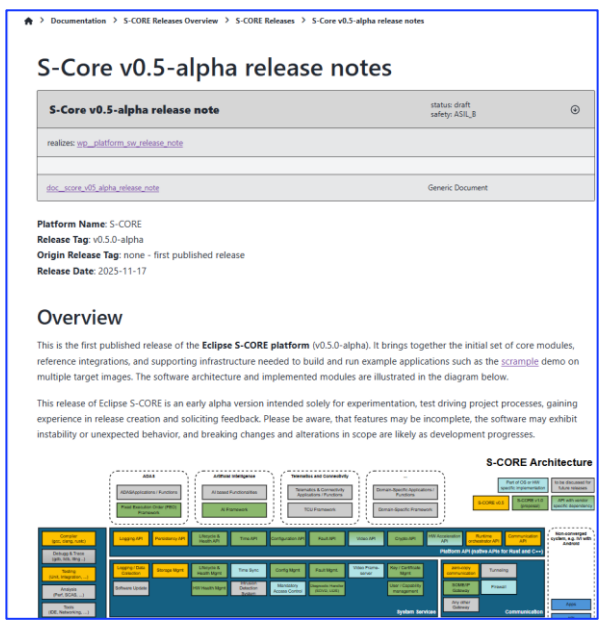
Step-by-Step description on **How to setup** the “Communication” **module**.



Step-by-Step description, **How to create an own module** “scrample”.

Open the Handbook

Dev Docu Website



Overview of **contained modules** (link to code), the **reference integration**, bug fixes & improvements etc.

Release notes

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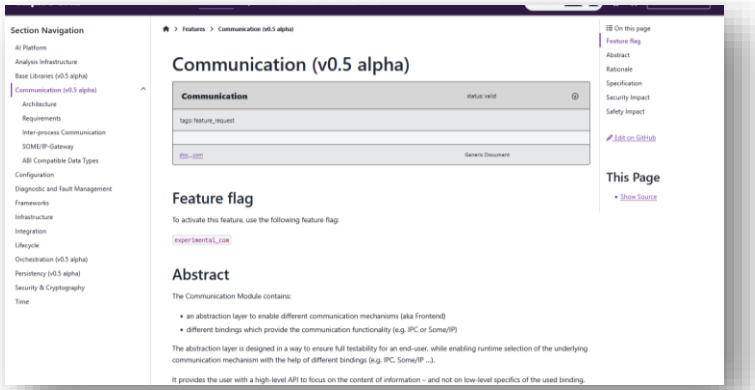
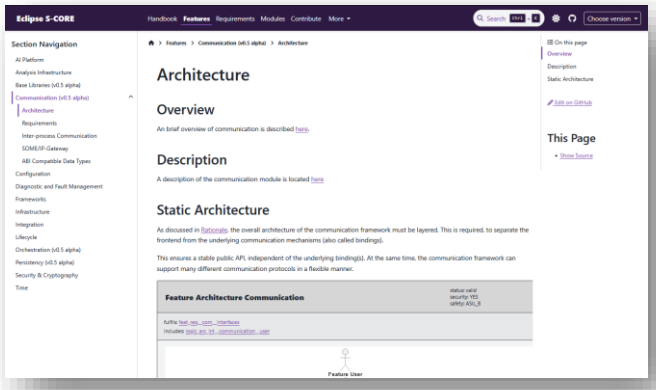
ECLIPSE S-CORE RELEASE V0.5-ALPHA | FIRST RELEASE

EACH MODULE COMES WITH A COMPREHENSIVE DOCUMENTATION

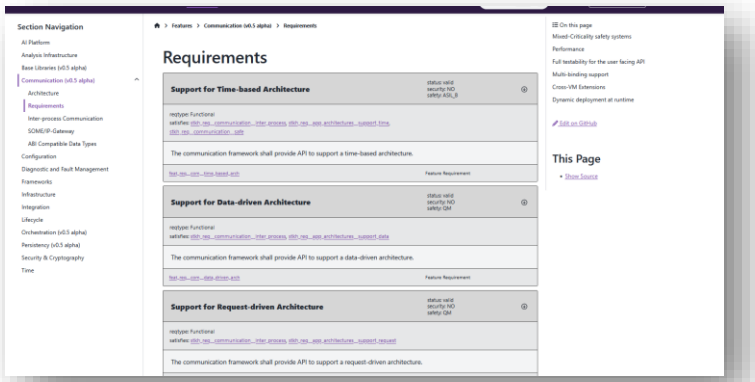
Feature Request



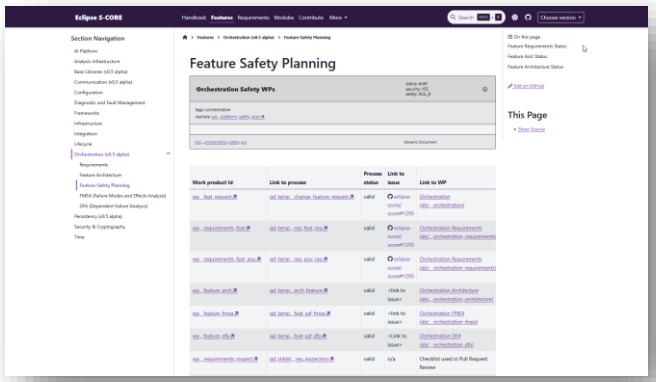
Architecture



Requirements



Safety Planning



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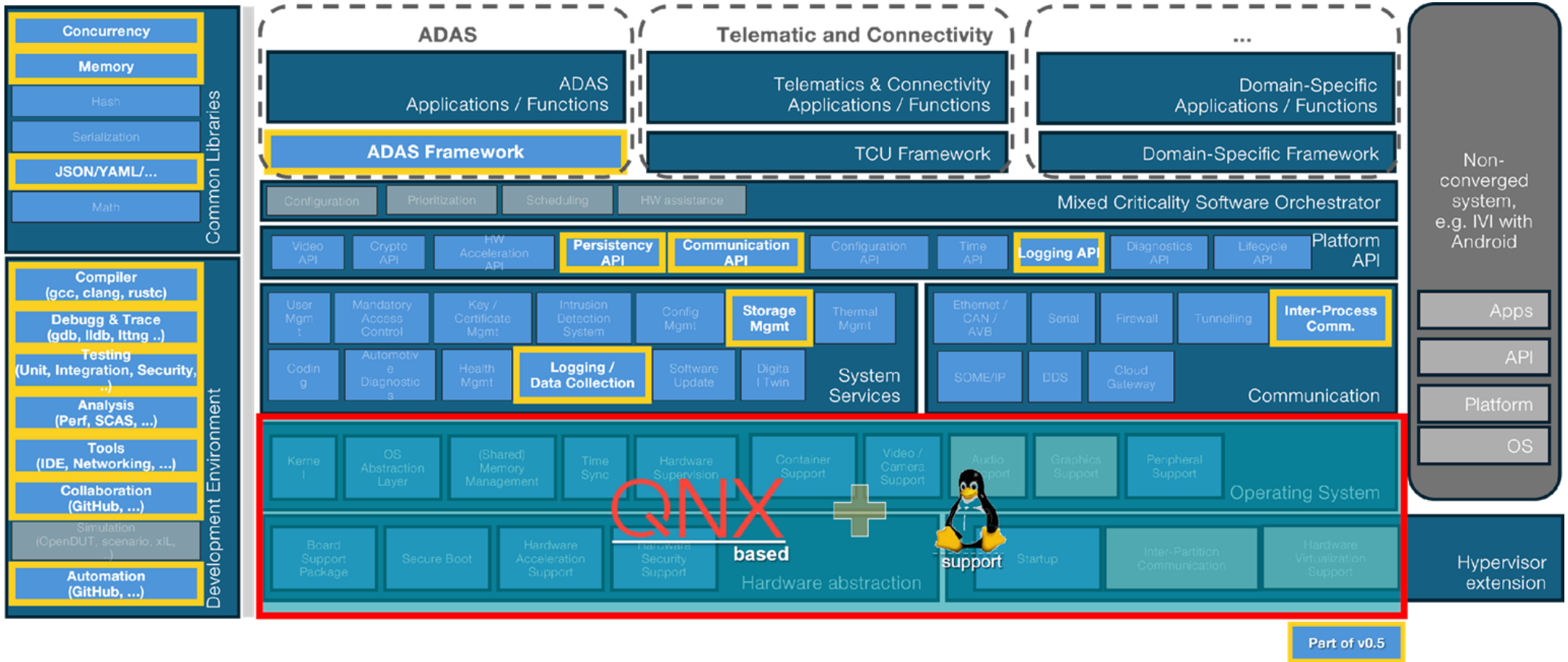
SCOPE & HIGH LEVEL ARCHITECTURE



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WITH A BROAD SET OF DELIVERED ELEMENTS

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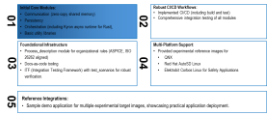
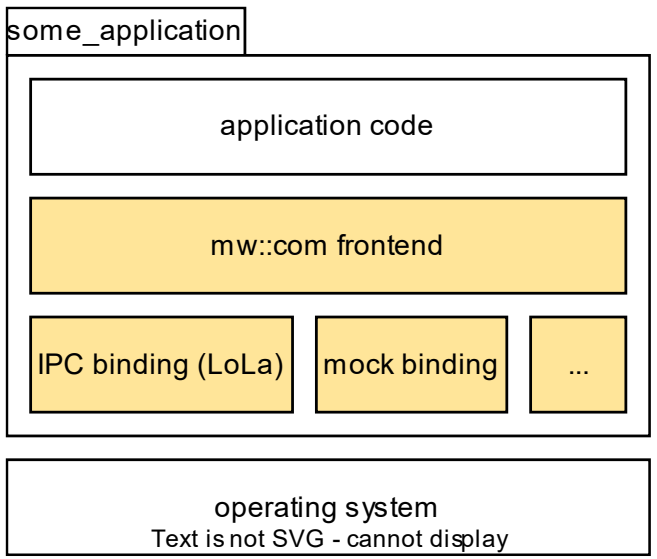
ECLIPSE S-CORE RELEASE V0.5-ALPHA | FIRST RELEASE

INITIAL CORE MODULES: COMMUNICATION



- **Core Functionality:** Provides a versatile communication framework.
- **Key Components:**
  - **Abstraction Layer (Frontend):** Enables various communication mechanisms.
  - **Multiple Bindings:** Offers specific communication functionalities (e.g., IPC, SOME/IP).
- **Benefits:**
  - **Enhanced Testability:** Designed for full end-user testability.
  - **Runtime Flexibility:** Allows dynamic selection of communication mechanisms via bindings.
  - **High-Level API:** Users focus on data content, not low-level binding specifics.



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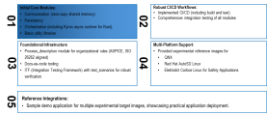
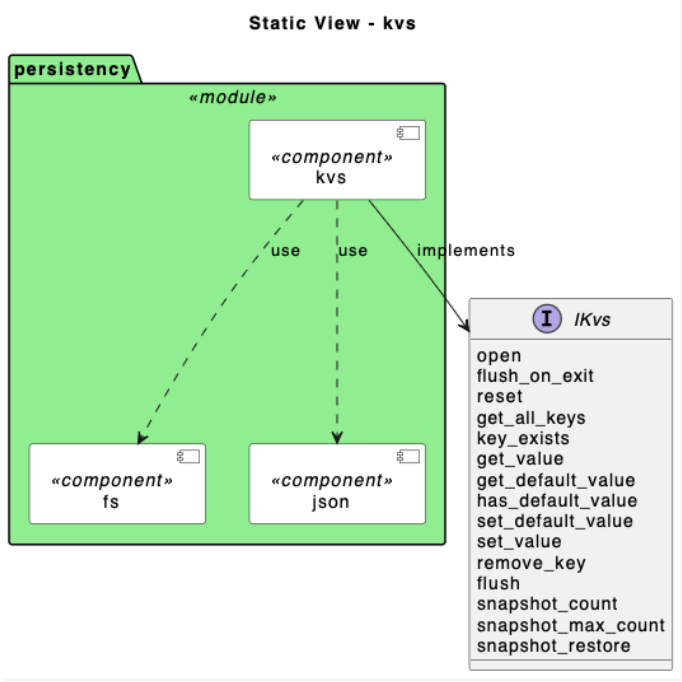
INITIAL CORE MODULES: PERSISTENCY



- **Core Feature:** Ensures long-term storage and retrieval of data within S-CORE.
- **Mechanism:** Key-Value Storage (KVS) for easy data persistence.
- **Purpose:**
  - Preserves application state and data integrity over time.
  - Enables seamless system resumption after shutdowns or failures.
  - Guarantees persistence of critical data (user content, configurations).
- **Key Benefits:**
  - **High-Level Access:** KVS accessible from any supported language via native interfaces.
  - **Automotive Relevance:** Ideal for storing application data (e.g., car settings for seamless user experience).
  - **S-CORE Optimized:** Addresses specific S-CORE needs, unlike current solutions.
  - **Advanced Features:** Designed for specific data types, rollback/replay, and simplified analysis tool integration.
  - **Unique Selling Point (USP):** Integration of a tracing framework for event interaction analysis.



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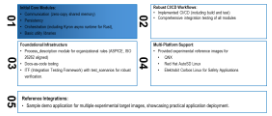
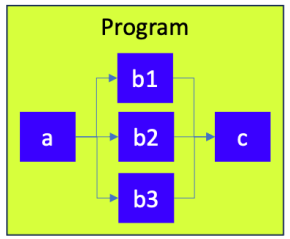
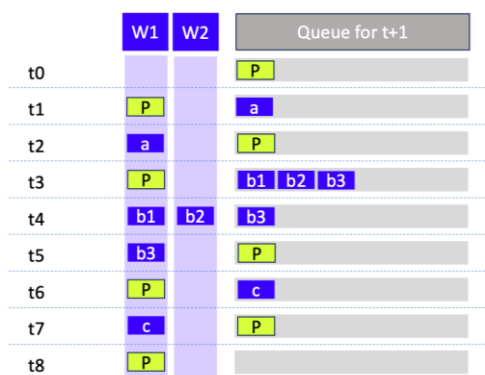
INITIAL CORE MODULES: ORCHESTRATION



- **Core Purpose:** Frameworks for deterministic, scalable, and maintainable execution of mixed-criticality software.
- **Executor: Cooperative Multitasking:** Configurable thread pool for user-space tasks.
  - **Reduced Overhead:** Improves control over scheduling without one-thread-per-task models.
  - **Key Features:** Supports safety-critical preemptive tasks, dedicated blocking threads, and structured observability.
- **Orchestrator:**
  - **Declarative Model:** Defines cause-effect chains, timing, and fault handling logic.
  - **Runtime-Static Graphs:** Maps programs to Executors, separating logic from deployment.
  - **Integration Workflows:** Distinguishes developer and system integrator responsibilities.
- **Combined Benefits:**
  - **Reduced Integration Effort:** Simplifies complex system assembly.
  - **Improved Predictability:** Enhances timing and cross-component timing chain validation.
  - **Enhanced Observability:** Correlates application logic with OS scheduling for debugging.
  - **Robustness:** Prevents runtime surprises from implicit assumptions in threading and timing.





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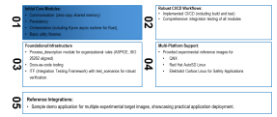
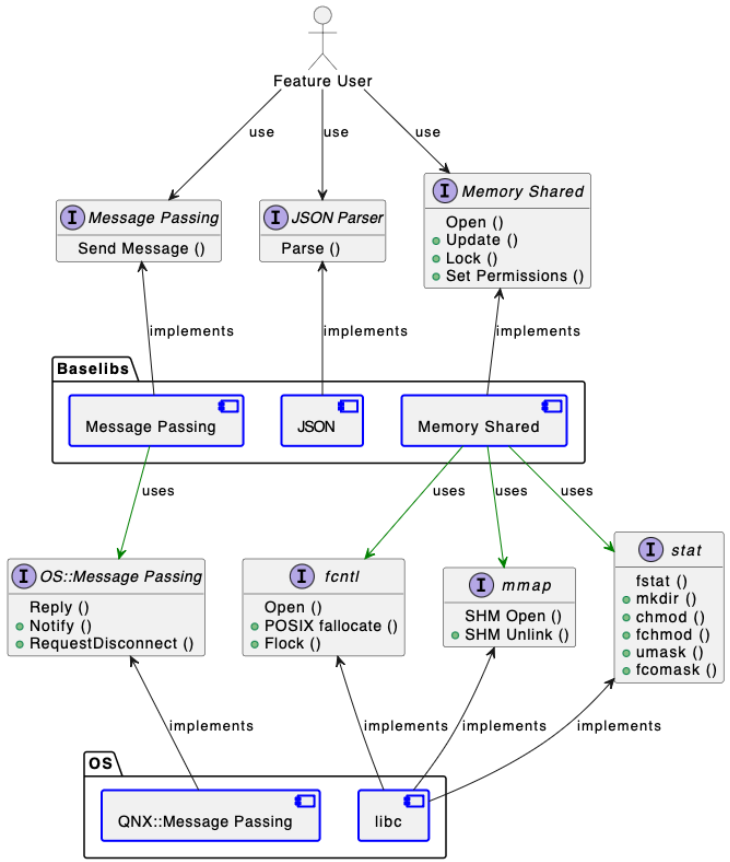
INITIAL CORE MODULES: BASE LIBRARIES



- **Core Purpose:** Provides essential C++ and Rust libraries for S-CORE components
  Offers common, reusable functionalities
  - Ensures consistent implementations across S-CORE
  - Reduces code duplication
  - Promotes interoperability between components
- **Included Utilities:**
  - Bit manipulation
  - Concurrency management
  - Containers
  - JSON processing
  - Filesystem operations
  - Memory handling
  - OS abstraction
  - Error handling
  - Serialization
  - Logging
  - And other common utilities



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ECLIPSE S-CORE RELEASE V0.5-ALPHA | FIRST RELEASE
WITH A BROAD SET OF DELIVERED ELEMENTS

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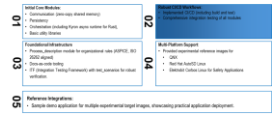
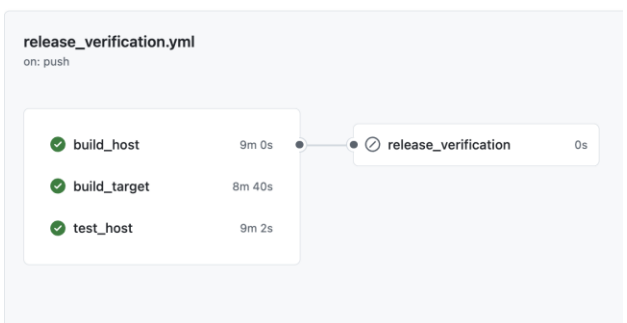
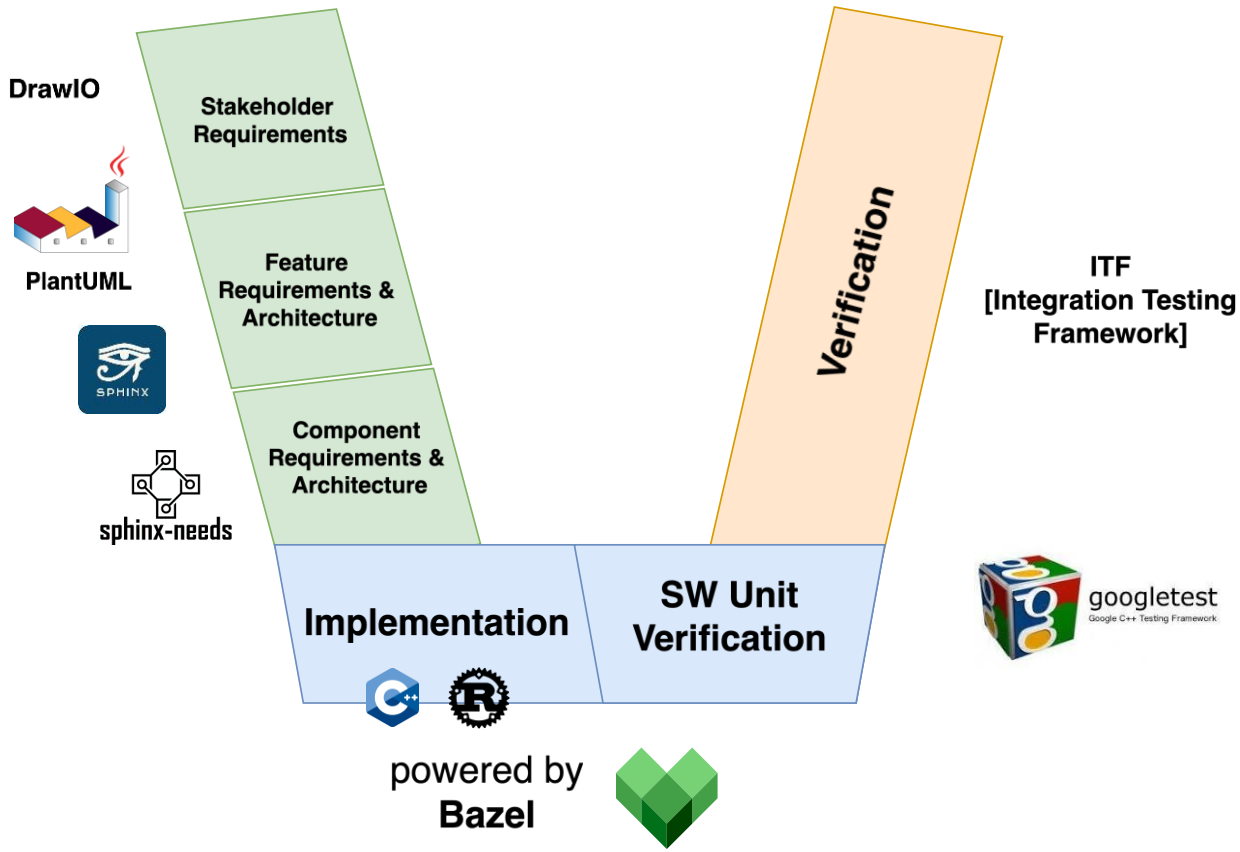
ECLIPSE S-CORE RELEASE V0.5-ALPHA | FIRST RELEASE
ROBUST CI/CD WORKFLOWS



S-CORE, **the open-source SW standard with implementation** to be deployed **in safety-critical automotive series projects**.



GitHub Actions



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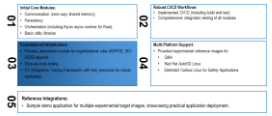
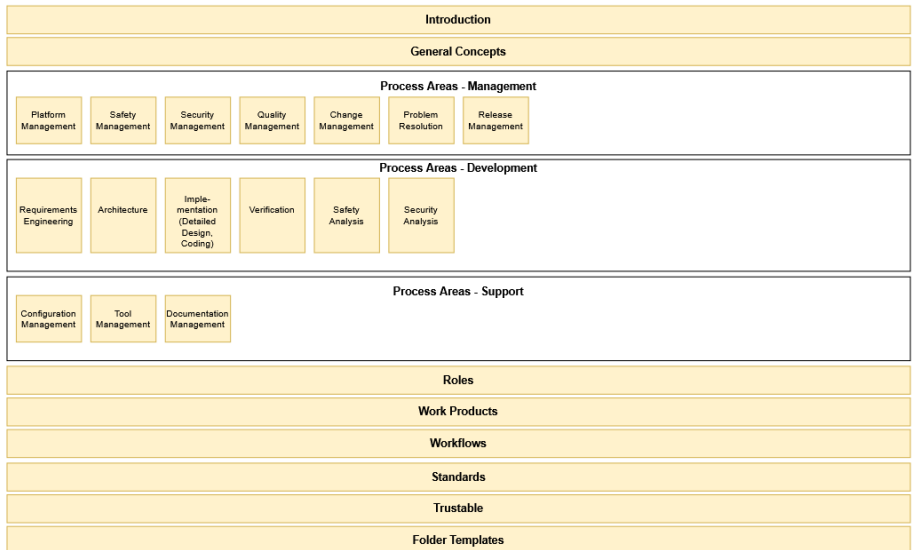
FOUNDATIONAL INFRASTRUCTURE



- **Motivation:** The process model aims to establish organization rules for developing open source software in the automotive industry, which can be used in safety and security context.
- **Objectives:** Conform to state-of the art standards
  - ASPICE
  - ISO 26262
  - ISO 21434
  - ISO PAS 8926
- **Approach:**
  - We aim for a process model as common basis for process documentation
  - We work code centric (trace text as code) and iteratively.
  - We aim to develop the process in conformance to the targeted standards
  - We aim to establish traceability from the beginning
  - We aim to verify conformity and traceability by tool automation as much as possible
  - We aim for an iterative collaboration model initiated by change requests



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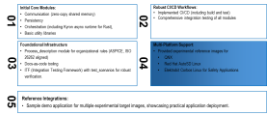
MULTI-PLATFORM SUPPORT



QEMU

+

QNX SOFTWARE SYSTEMS

Red Hat AutoSD *

Automotive Stream Distribution

Elektrobit *

EB corbos Linux

Built on Ubuntu

*(Experimenta supportl)

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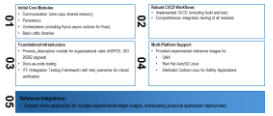
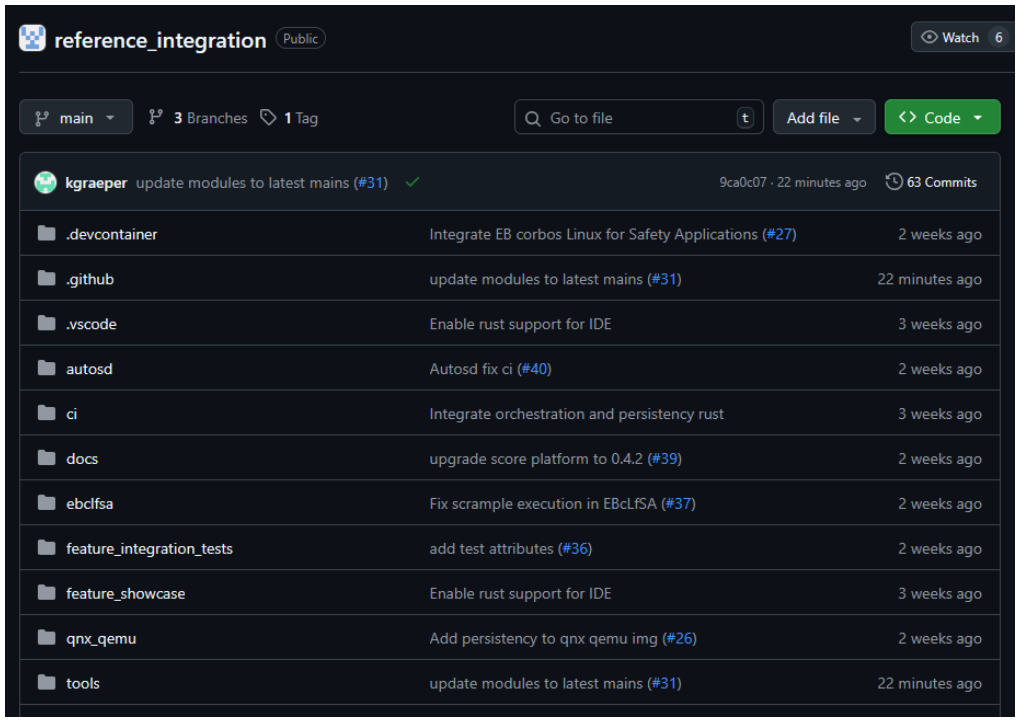
REFERENCE INTEGRATIONS REPOSITORY



- All Eclipse S-CORE modules are integrated together to ensure, that they match to each other. It integrates all software modules into reference images (e.g., a qnx x86 image) to verify that:
  - all module dependencies are consistent
  - modules work correctly together
  - feature requirements are fulfilled
  - Feature integration tests are executed on these reference images to validate the complete platform.



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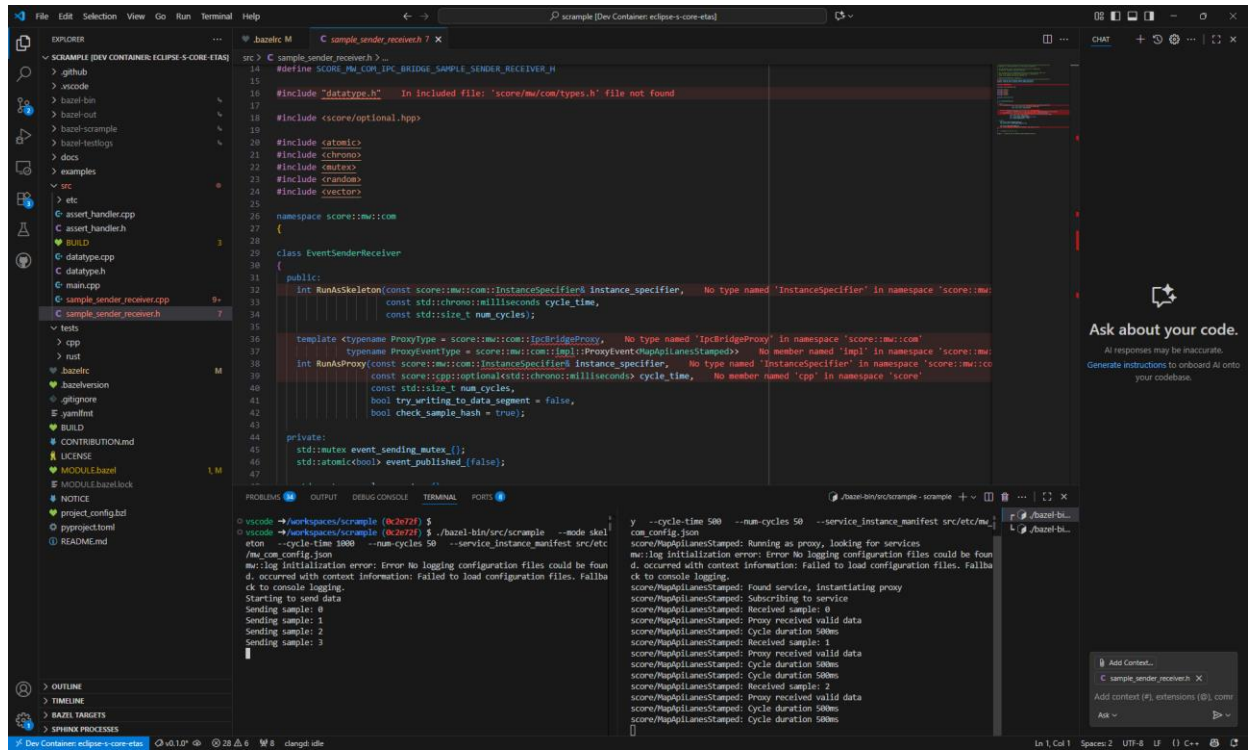
ECLIPSE S-CORE RELEASE V0.5-ALPHA | LIVE DEMO – SCRAMPLE APP

DEMONSTRATES A PRODUCER-CONSUMER PATTERN USING S-CORE'S MIDDLEWARE COMMUNICATION LAYER

- **The Demo illustrates:**
  - Event-based communication using the S-CORE middleware (`score::mw::com`)
  - Shared memory IPC for high-performance data transfer between processes
  - Type-safe serialization of complex automotive data structures
  - Skeleton-Proxy pattern following established concepts
  - The sample exchanges `MapApiLanesStamped` messages containing lane information data structures, simulating real-world automotive HD map data exchange scenarios.



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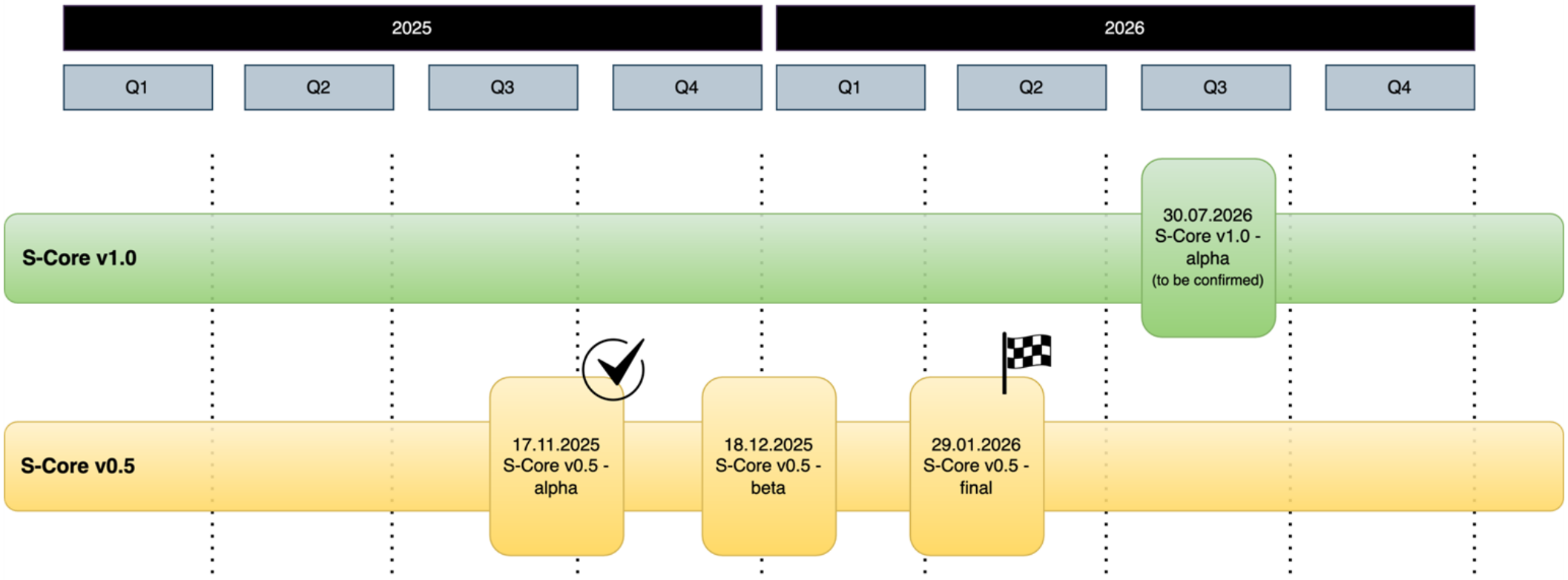
ECLIPSE S-CORE RELEASE V0.5-ALPHA | FIRST RELEASE

S-CORE V.05 RELEASE PLAN



Detailed planning overview

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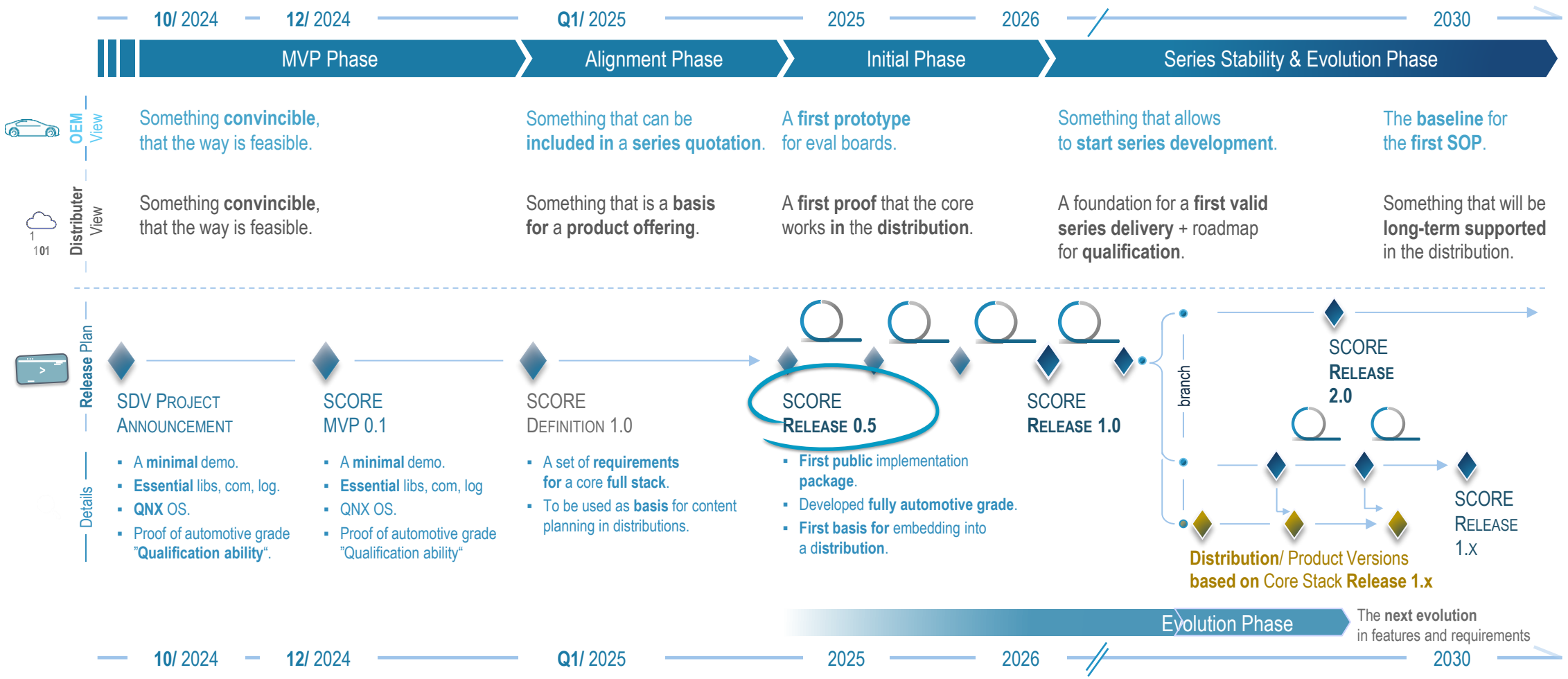
ROADMAP TO ECLIPSE S-CORE V1.0

ECLIPSE S-CORE
MILESTONE PLAN 2026 AND FOLLOWING



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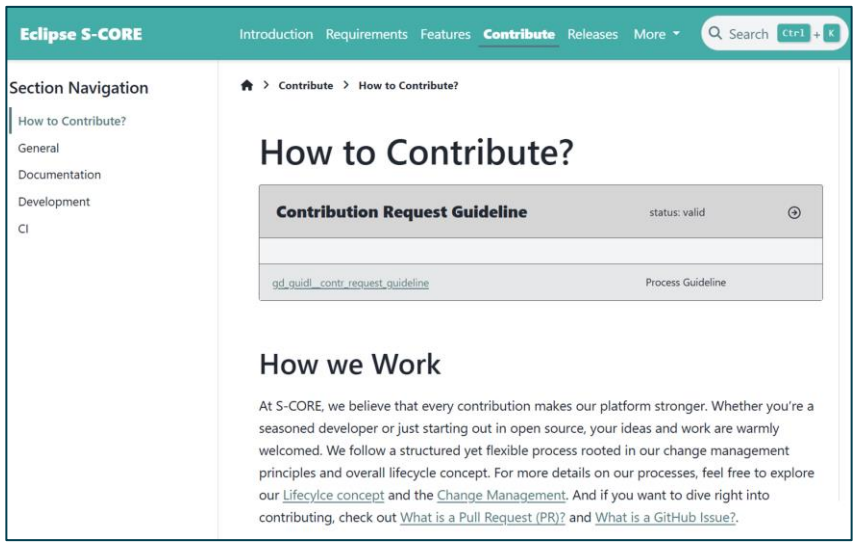
S-CORE SW-PLATFORM |
Let's collaborate!



- **Have a new idea?**
  Start by raising a new feature request to help expand the scope of our platform.
- **Ready to code?**
  Submit a contribution pitch for a specific feature request if you have a solution you'd like to share.
- **Looking to improve what's already there?**
  Contribute enhancements to existing implementations or get involved with one of our feature teams.

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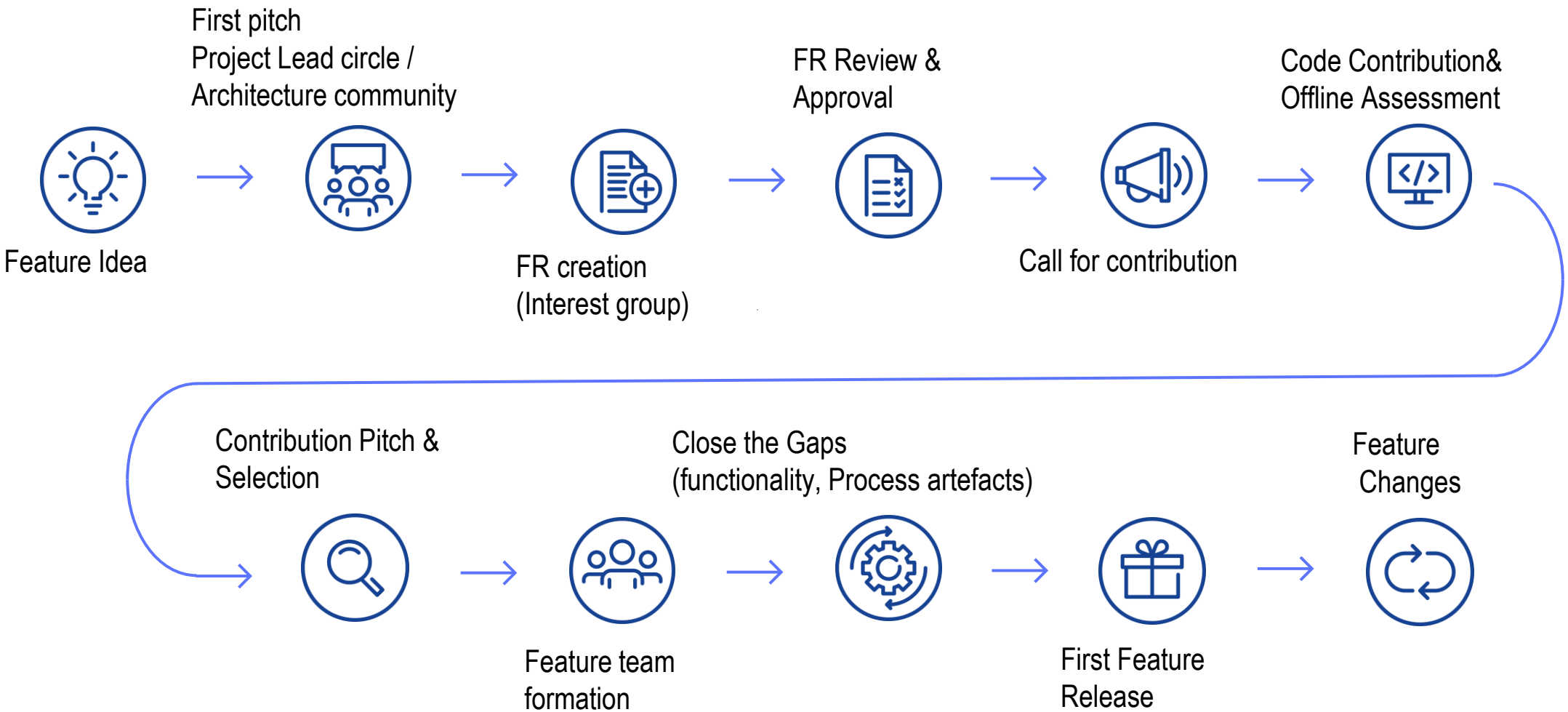
ECLIPSE S-CORE: HOW TO PARTICIPATE? |

A STEP-BY-STEP JOURNEY FROM A FEATURE IDEA TO ITS RELEASE



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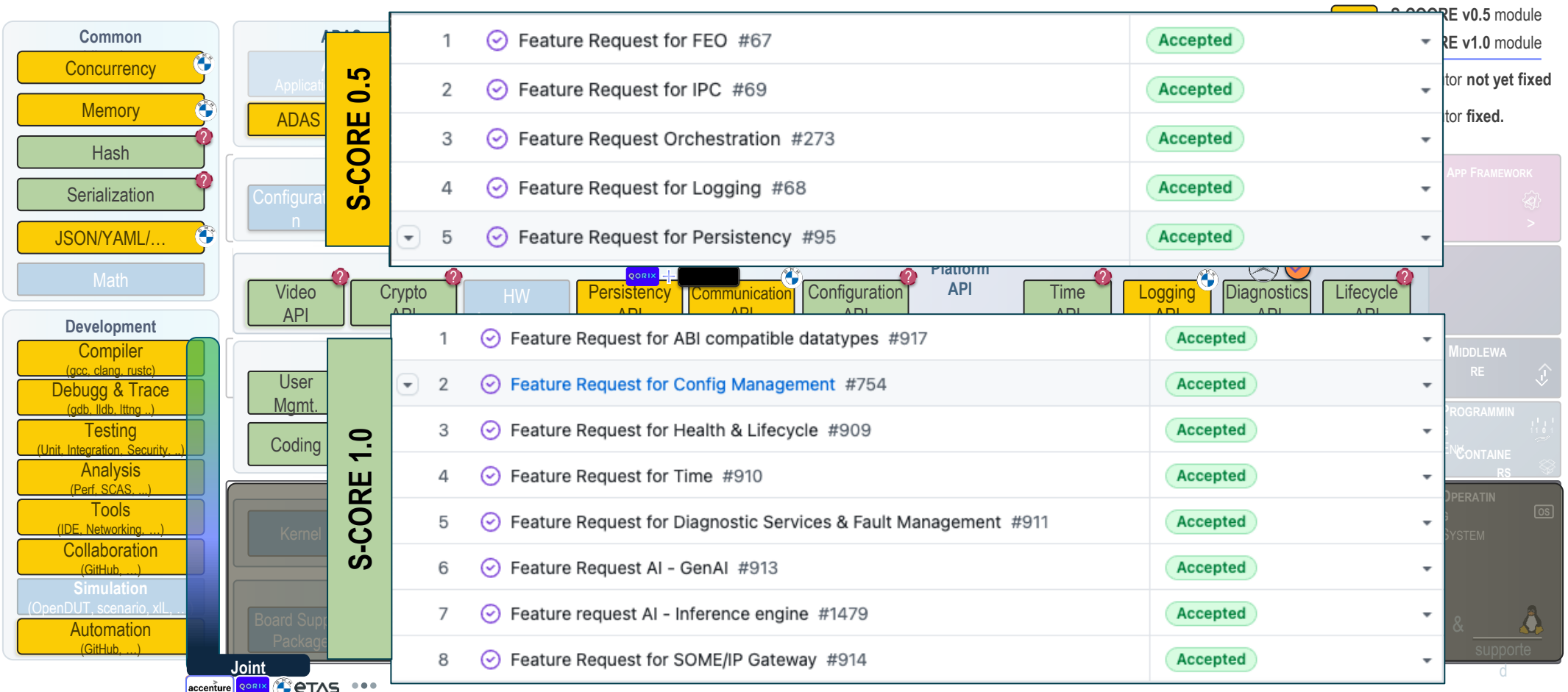
S-CORE SW-PLATFORM | THE MIDDLEWARE IS IN FOCUS OF THE RELEASE 0.5.
RELEASE 1.0 WILL HAVE A BIGGER SCOPE & COVER MOST PARTS OF THE SW-PLATFORM



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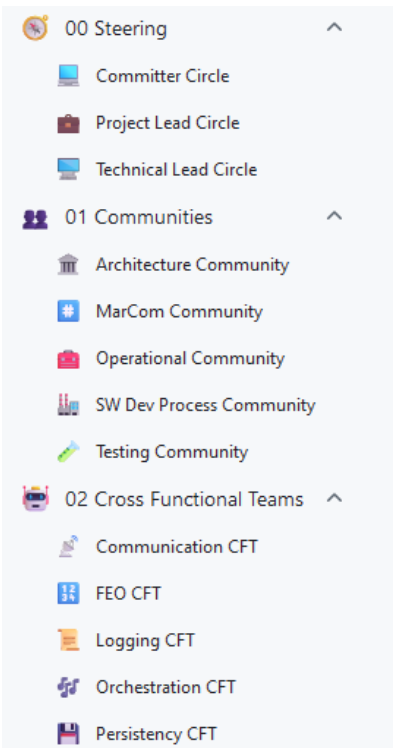
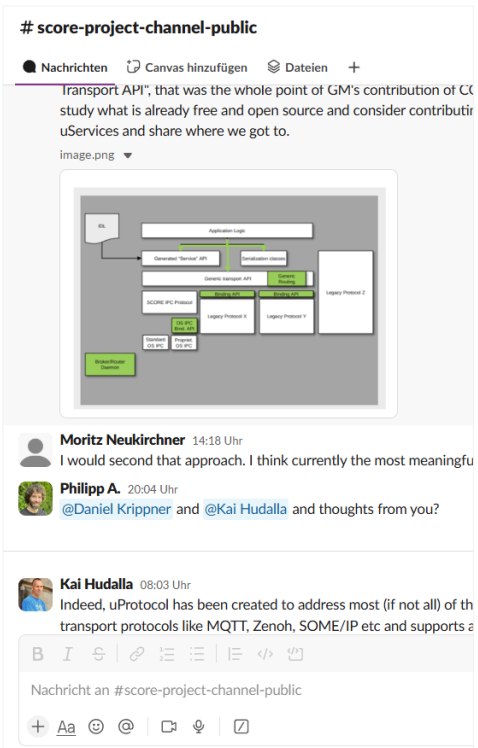
Eclipse S-CORE Project |
Get in Contact!

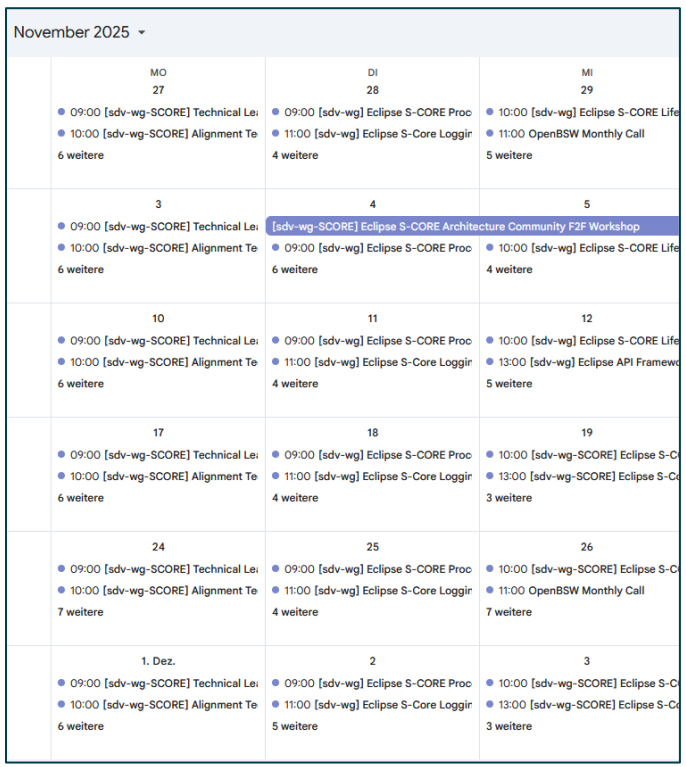
Discussion groups on GitHub (link)



Slack Channel (link)



Meetings (link)



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S-CORE

THANK YOU