



# SDV Process - Maturity Badges

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# AGENDA

- SDV Process
- SDV Maturity Badges
- SDV Evaluations & Badges
- Currently In Work
- Future Activities

# SDV Process

- Scope, Purpose, Goal
- Criteria
- Adherence



# SDV Process - Scope, Purpose, Goal

## □ **Scope**

The scope of the SDV Process is limited to the Projects of the SDV Working Group of the EclipseFoundation. Moreover, it has voluntary appliance and projects will have to give their written consent for adhering to the SDV Process and for being evaluated against it.

## □ **Purpose**

The purpose of the SDV Process is to define and establish, through community collaboration and consensus, a set of Best Practices that would be relevant for Software Defined Vehicle Projects in the Open Source Software ecosystem.

This set of Best Practices would be put together based on practices enunciated in relevant standards for the Automotive industry like A-SPICE, Functional Safety, Safety of the Intended Functionality, Cyber Security, etc.

## □ **Goal**

The goal of the SDV Process is to increase the quality of the SDV-WG's Projects and their adoption by other parties

# SDV Process - Criteria

Read more details in [Definition of Badges and their Flavours](#)

## REQUIREMENTS

- LEVEL 1
- LEVEL 2
- LEVEL 3

## TESTING

- LEVEL 1
- LEVEL 2
- LEVEL 3

## DOCUMENTATION

- LEVEL 1
- LEVEL 2
- LEVEL 3

## CODING GUIDELINES

- LEVEL 1
- LEVEL 2
- LEVEL 3

## RELEASE PROCESS

- LEVEL 1
- LEVEL 2
- LEVEL 3

## INTEGRATION (Blueprint)

- ONE LEVEL

SDV  
Desire

## OSS BEST PRACTICES (Generic)

- ONE LEVEL

EDP  
Required



# SDV Process - Adherence

## ❑ **Adoption & Adherence**

The adoption of the SDV Process is **not** mandatory.

Each Eclipse SDV Project has the chance to opt for adopting the process or not. The choice has to be expressed in writing by each project (through their Project Leads) so that this can be recorded and archived.

The adoption of the SDV Process, however, comes together with the understanding that the respective project(s) will be **evaluated** against the Criteria defined in the Process.

## ❑ **Evaluations**

Adherence to the SDV Process of the adopting Eclipse SDV Projects will be evaluated in two stages: **Automated & Manual**.

The Automated evaluations focus on ensuring that the artefacts necessary for each criteria exist for the respective Projects.

The Manual evaluations focus on the contents of those artefacts and their quality.

# Maturity Badges

- Program
- Design v.1.0
- Example



# Maturity Badges - Program

- ❑ **Scope**  
The scope of the Maturity Badges Program is limited to the Eclipse SDV Projects that choose to adopt and adhere to the SDV Process
- ❑ **Purpose**  
The purpose of the Maturity Badges Program is to underline the Process Criteria that the respective Projects fulfil, by awarding them with the respective associated Badges
- ❑ **Goal**  
The goal of this Badges Program is to showcase the maturity of the SDV-WG's Projects, to increase confidence in their quality and, as a result, to increase their adoption by other parties



# Maturity Badges - Design v.1.0.

Documentation

Requirements

Coding Guidelines

Testing

Release Process

GOLD



SILVER



BRONZE



# SDV Maturity Badges - example

## SDV Process Criteria

### REQUIREMENTS

This Criteria is referring to the requirements of a given project: whether they exist, if they are properly managed (change and versioning), if they are traced through the project, etc.

LEVEL 3

The requirements are referenced by commits / PRs and test cases

LEVEL 2

The requirements are comprehensive (100% of exposed features) and their changes are tracked in the release notes

LEVEL 1

The project requirements are documented

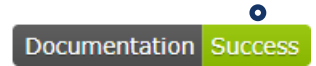
# SDV Evaluations & Badges

- Automated Evaluations
- Badges Display
- Manual Evaluations

# SDV Automated Evaluations



- ❑ **The SDV badges are hosted on the Eclipse Metrics website.**  
This website provides up-to-date information about Eclipse projects and working groups. It is entirely regenerated every night. See the website at [https://metrics-vm1.eclipse.org/wgs/eclipse-software-defined-vehicle/#tabs-wg\\_basics-0](https://metrics-vm1.eclipse.org/wgs/eclipse-software-defined-vehicle/#tabs-wg_basics-0).
- ❑ **The badges are computed and regenerated every night** by a Python script + Jenkins job.  
The script generates two outcomes:
  - The **badges** themselves, that will be hosted on any page and links to the results page. These are the first levels (bronze) of each badge
  - A **results file** that lists the tests and provides more details about results and computations.  
Example: [https://metrics-vm1.eclipse.org/projects/automotive.ankaios/#tabs-project\\_basics-5](https://metrics-vm1.eclipse.org/projects/automotive.ankaios/#tabs-project_basics-5)



# SDV Maturity Badges Display #1 - Projects List



## Eclipse Ambient Light Services Automotive

The Eclipse Ambient Light Services showcase visualizes possible new lighting concepts which are adaptive to different specific driving scenarios, like e.g.

[Read more...](#) | [Report an Issue](#) | [Contact the Project Team](#)

Download ▾

Badges



## Eclipse eCAL™ (enhanced Communication Abstraction Layer) Automotive

Eclipse eCAL™ (enhanced Communication Abstraction Layer) provides a middleware that enables scalable, high performance interprocess communication on a single computer node or between different node

[Read more...](#) | [Report an Issue](#) | [Contact the Project Team](#)

Latest release: 5.12.0

Download ▾

Badges

# SDV Maturity Badges Display #2 - Project's Page

Home / Projects / Eclipse Automotive / Eclipse Autowrx

## Eclipse Autowrx

Overview Downloads Who's Involved Developer Resources Governance Contact Us

Eclipse Autowrx is the open source implementation of digital.auto (<http://digital.auto>), an industry-wide initiative enabling the automotive industry to establish a new, digital-first approach for the creation of next-generation customer experiences and data-driven mobility services. Designed as an open ecosystem with a very use-case-centric approach, digital.auto is bringing together automotive original equipment manufacturers (OEMs), suppliers and partners to drive transformation of the industry. The global initiative builds on two key pillars of automotive technology development: the software-defined vehicle (SDV) and standardized vehicle APIs. Eclipse Autowrx aims to combine existing standards with appropriate methods and best practices to translate technology into business value. Co-initiators include Robert Bosch GmbH as well as software companies Dassault Systèmes and LeanIX. The initiative is hosted by Heilbronn-based Ferdinand-Steinbeis-Institut (FSTI) as a neutral, non-profit facilitator and was launched in November 2022.

The ultimate goal of Eclipse Autowrx is to support digital value creation for OEMs in close alignment with the development of the physical elements of the vehicle.


**State:**  
Incubating


**Industry Collaborations:**  
Eclipse Software Defined Vehicle

**Licenses:**  
The MIT License (MIT)

The content of this open source project is received and distributed under the license(s) listed above. Some source code and binaries may be distributed under different terms. Specific license information is provided in file headers and in NOTICE files distributed with the project's binaries.

**Active Member Companies:**  
Member companies supporting this project over the last three months.

 **BOSCH**  
Invented for life

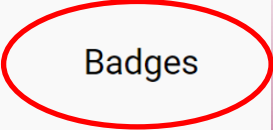


**ECLIPSE**  
INCUBATION





**RELATED PROJECTS** ⌵

Project Hierarchy:

- » Eclipse Automotive
  - » Eclipse Autowrx



# SDV Maturity Badges Display #3 - Project's Page


 Eclipse Ankaïos 0.2   Search  eclipse-ankaios/ankaios v0.2.0 ☆ 37 🗨 12

[Welcome](#) [Architecture](#) [Getting started](#) [Reference](#) [Development](#) [Support](#)

Welcome



Eclipse Ankaïos

-  Table of contents
- Scope
- Next steps
- Background
- Badges**





# SDV Manual Evaluations

**This has yet to be defined!**



# Currently In Work

- Project / Repository Config Files
- Automated Generation of Config Files



# SDV Project / Repository Config File(s)

**The subject has been discussed over the past 2 months of SDV Process Meetings and we have some ideas of the metadata we'd need and a prototype for it.**

**We intend to use the “SDV Process hands-on Workshop: Setting up project configuration files” track on 20<sup>th</sup> of March to reach the final conclusion.**



# SDV Automated Generation of Config File(s)

**The subject has been discussed over the past 2 months of SDV Process Meetings and the conclusion was to code this as a Git-Action (for both GitHub and GitLab) and make this actions part of the Release Workflow for each project / sub-project.**

**We intend to use the “SDV Process hands-on Workshop: Setting up project configuration files” track on 20<sup>th</sup> of March to reach the final conclusion.**

# SDV Process - Future Activities

- Short Term
- Intermediate
- Long Term

# Future Activities - Short Term (next 2 months)



## Process Release

Release of SDV Process  
v.1.0 – Mid April



## Deployment

Deploy Automated  
Evaluation onto all  
“adopting” SDV WG  
Projects – Mid April



## “Show-Off”

Maturity Badges of the  
SDV WG Projects are to be  
displayed on the Eclipse  
SDV and Eclipse  
Foundation websites –  
Mid-April



## Publish Instructions

Publish the “SDV Process  
– Maturity Badges  
Handbook” to help project  
teams and project  
adopters understand the  
context – End April

# Future Activities - Intermediate (next 4 months)

- **Dana to document the Eclipse ThreadX development process and bring it back to the SDV community**
- **Project teams to take the time to implement the SDV Process into their projects**  
Create the artefacts needed to fulfill levels 2 & 3 of the defined Process Criteria

# Future Activities - Long Term (next 6 months)

- ❑ **Define & establish rules around Manual Evaluations**
- ❑ **Start Manual Evaluations for Projects**
- ❑ **Discuss Eclipse ThreadX Process (vs. SDV Process)**  
and see what parts could be taken into the SDV Process as well



**THANK YOU!**