

Microsoft Mobility @ Eclipse Foundation SDV Contribution Day

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June, 30th 2022



Initial Contribution

Eclipse Chariott

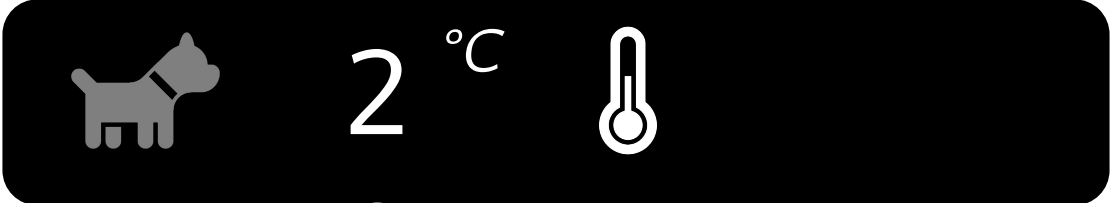
[Eclipse Chariott | projects.eclipse.org](https://projects.eclipse.org)

The Eclipse Chariott project aims to simplify and enhance in-vehicle software **developer productivity** by providing a **metadata-driven** modern **application programming model** and vehicle abstraction.

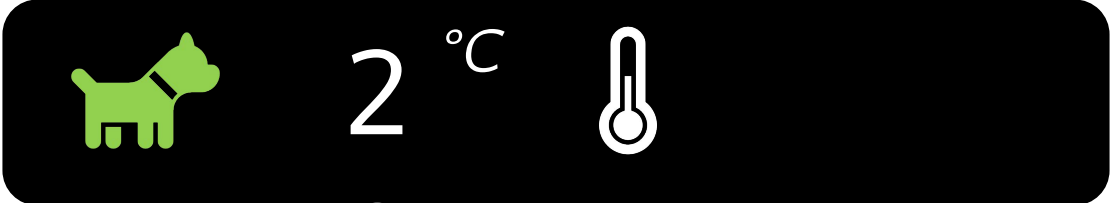
Through a **digital representation of vehicle state and capabilities** this provides an extensible and dynamic architecture to access the vehicle hardware, sensors and capabilities.



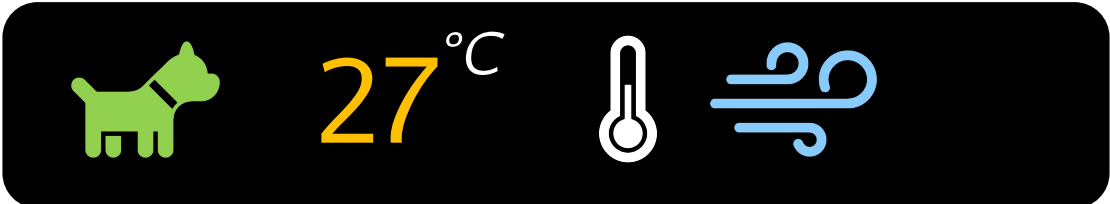
Dog Mode Sample Application Scenario

A black rounded rectangle containing a grey dog icon, the number '2' followed by a degree Celsius symbol, and a white thermometer icon.

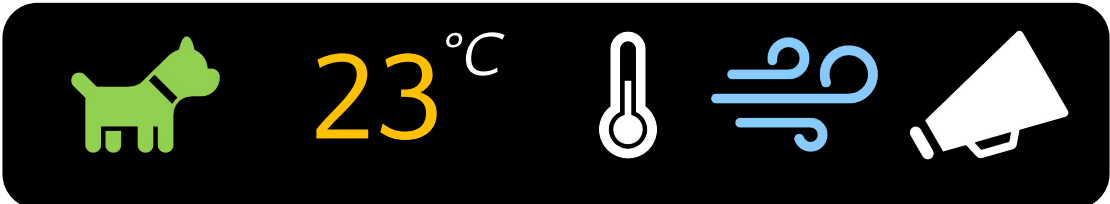
Dog mode is off

A black rounded rectangle containing a green dog icon, the number '2' followed by a degree Celsius symbol, and a white thermometer icon.

Dog mode is on

A black rounded rectangle containing a green dog icon, the number '27' followed by a degree Celsius symbol, a white thermometer icon, and a blue fan icon.

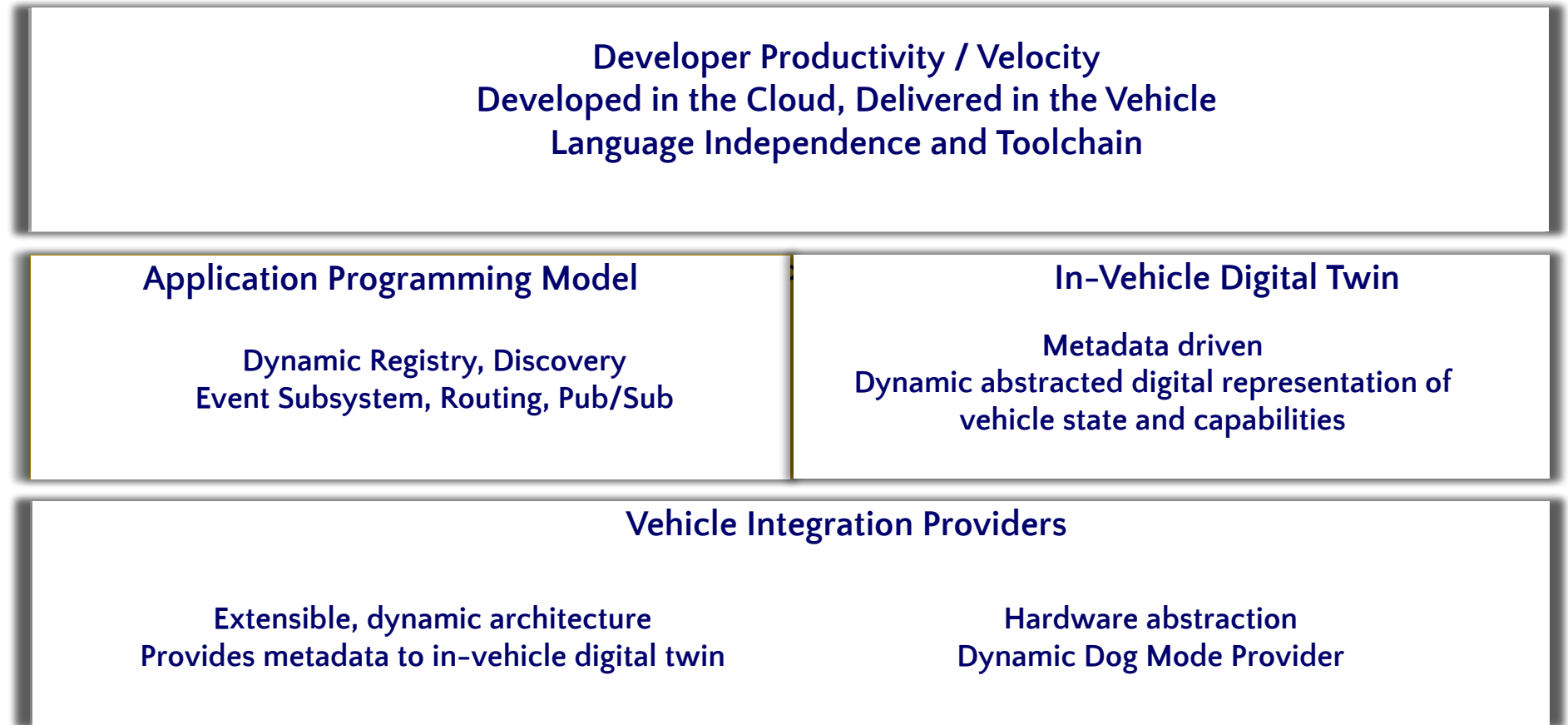
Temperature > threshold

A black rounded rectangle containing a green dog icon, the number '23' followed by a degree Celsius symbol, a white thermometer icon, a blue fan icon, and a white megaphone icon.

Air-conditioning is on
Notification sent



Capabilities Oriented Architecture and Concepts



Code Demo




File Edit Selection View Go Run Terminal Help bash - sdv-ivm [Dev Container: Rust] - Visual Studio Code

bash x

```
vscode → /workspaces/sdv-ivm (demo X) $
```

Simple Browser x

← → ↻ http://localhost:5079



bash x







```
vscode → /workspaces/sdv-ivm (demo X) $
```

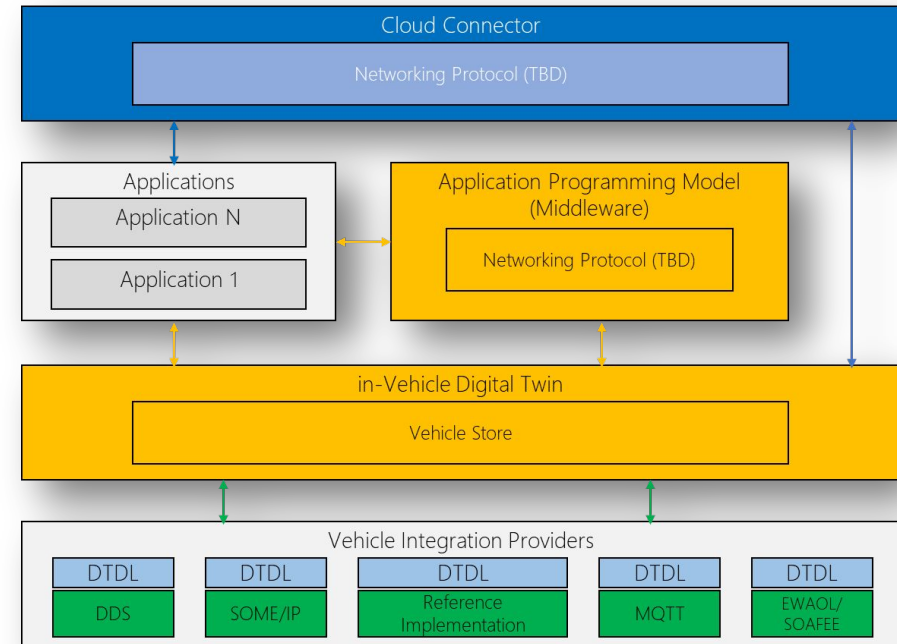
bash x

```
vscode → .../sdv-ivm/samples/providers/mock-provider (demo X) $
```

Dev Container: Rust demo* 0 0 2 0.75% 1.50 GHz 79% 2.50/15.42 GB Watch

Closing Remarks & Moving Forward

-  **Community driven**
-  **Secure**
-  **Dynamic and extensible**
-  **Componentized**
-  **Single and Multi Node**
-  **Platform and cloud agnostic**



Developed in cloud, delivered in the vehicle

ALEX PFAU – Program Manager
ATIF AZIZ – Software Engineer
BASTIAN BURGER – Software Engineer
BORIS SCHOLL – Architect
DANIEL HEINZE – Software Engineer
DANIEL LUEDDECKE - Microsoft @ ESDV SteerCo Member
DANIELE ANTONIO MAGGIO – Software Engineer
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MATTI SUOKKO – PM Manager
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TIM PARK – Software Engineer



Thank YOU.

[se.org](#)

