

Microsoft Eclipse Foundation SDV 2nd Contribution Day Eclipse Chariott Update

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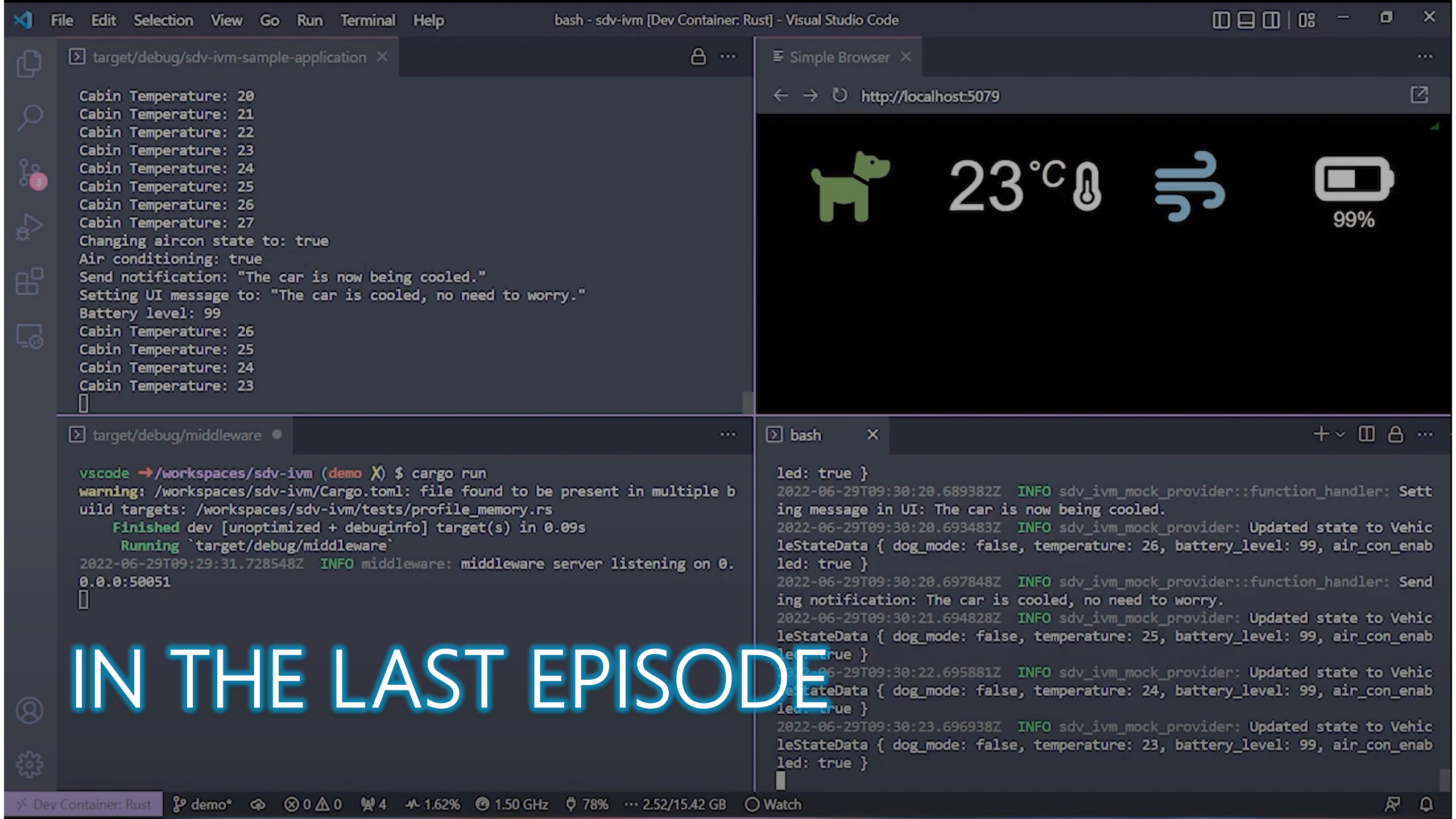
September, 22nd 2022



Democratizing in-vehicle application development

Capability oriented model for App-to-App and App-to-Digital Twin Communications





IN THE LAST EPISODE



23°C



15%



File Edit Selection View Go Run Terminal Help

bash - Untitled (Workspace) - Visual Studio Code

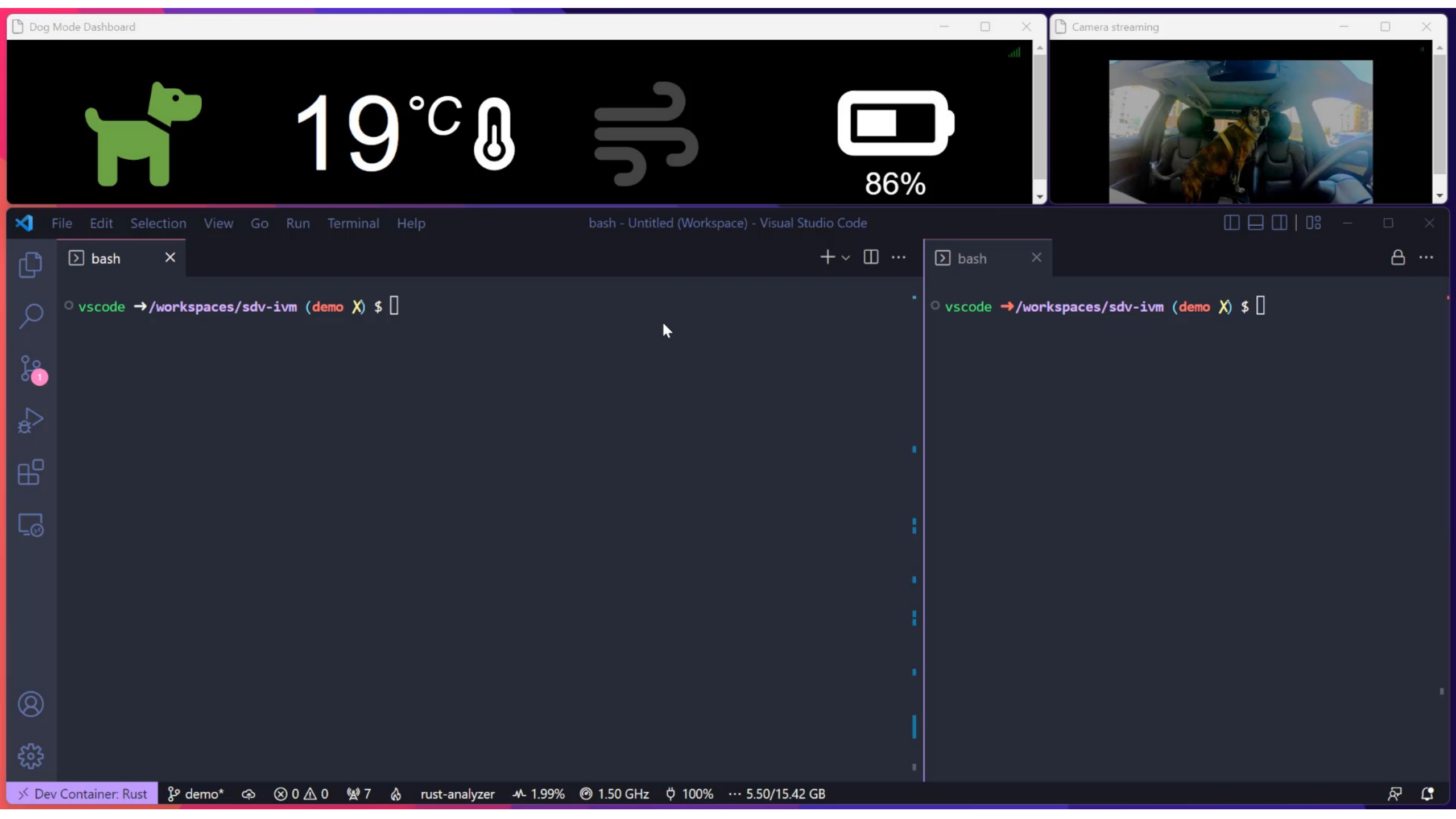
```
bash x charc
vscode ->/workspaces/sdv-ivm (demo X) $
```


```
bash x
vscode ->/workspaces/sdv-ivm (demo X) $
```


IN THIS EPISODE


Code Demo








19°C




86%



File Edit Selection View Go Run Terminal Help

bash - Untitled (Workspace) - Visual Studio Code

bash

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

bash

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

Dev Container: Rust

demo*

0 0

7

rust-analyzer

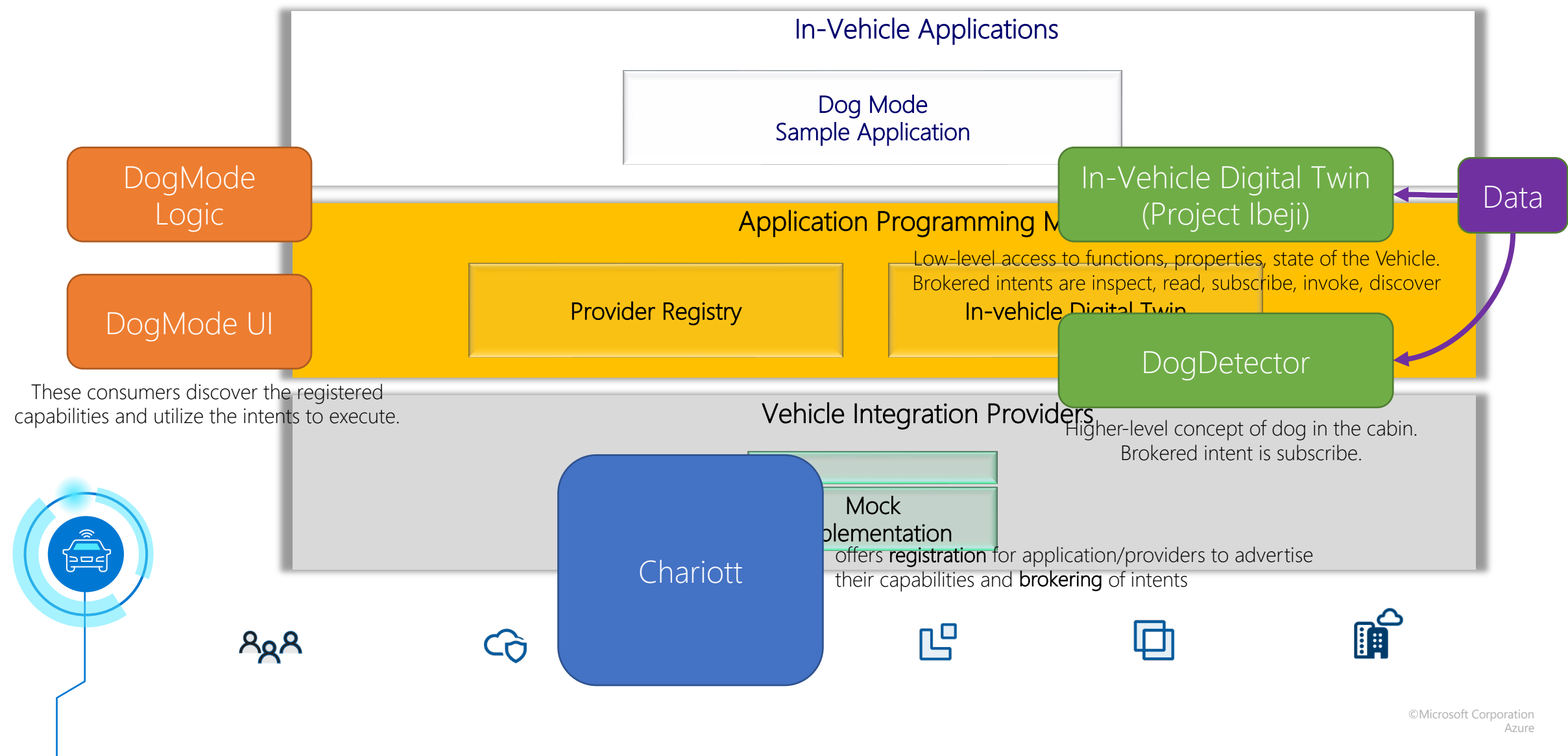
1.99%

1.50 GHz

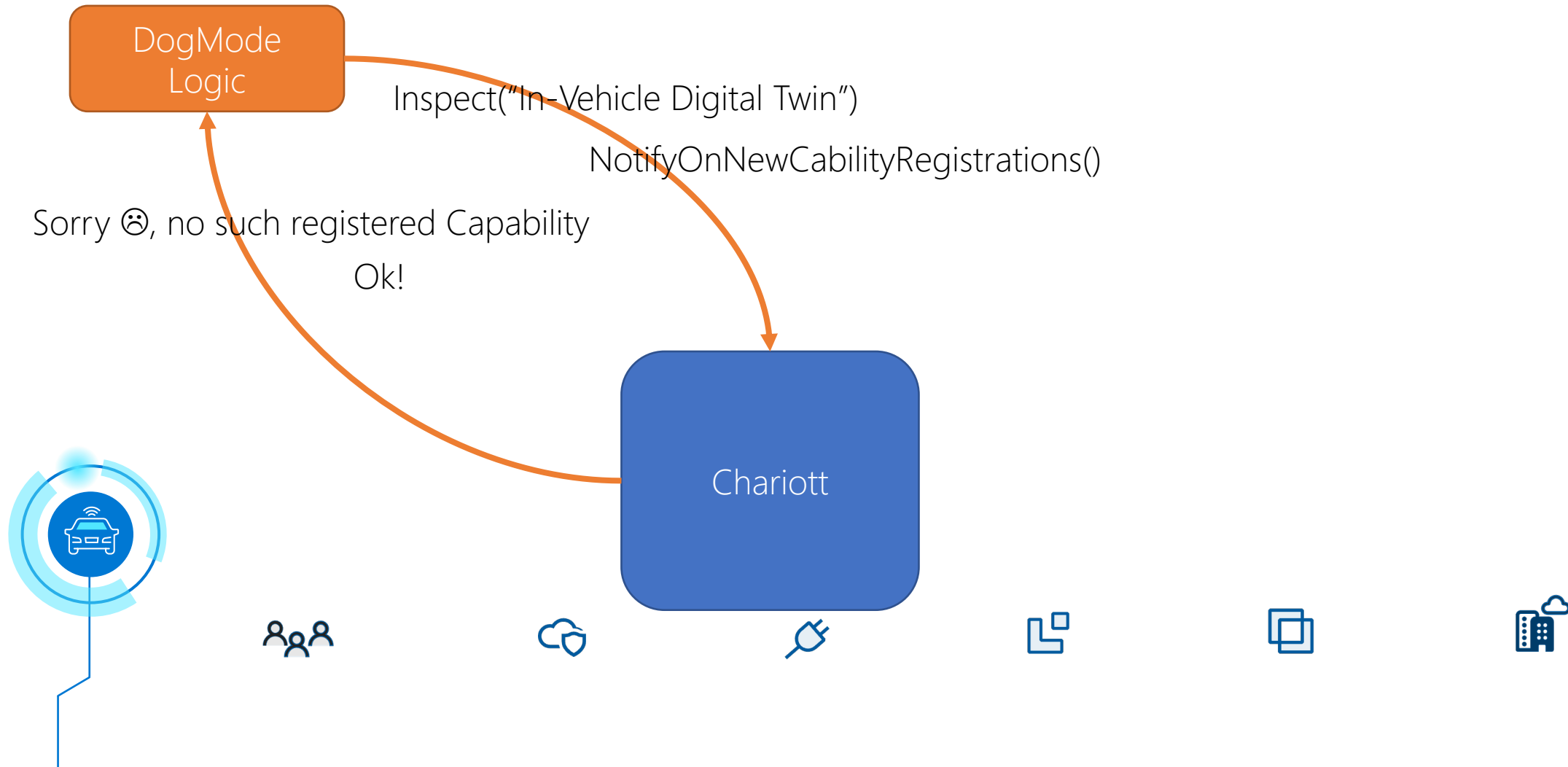
100%

5.50/15.42 GB

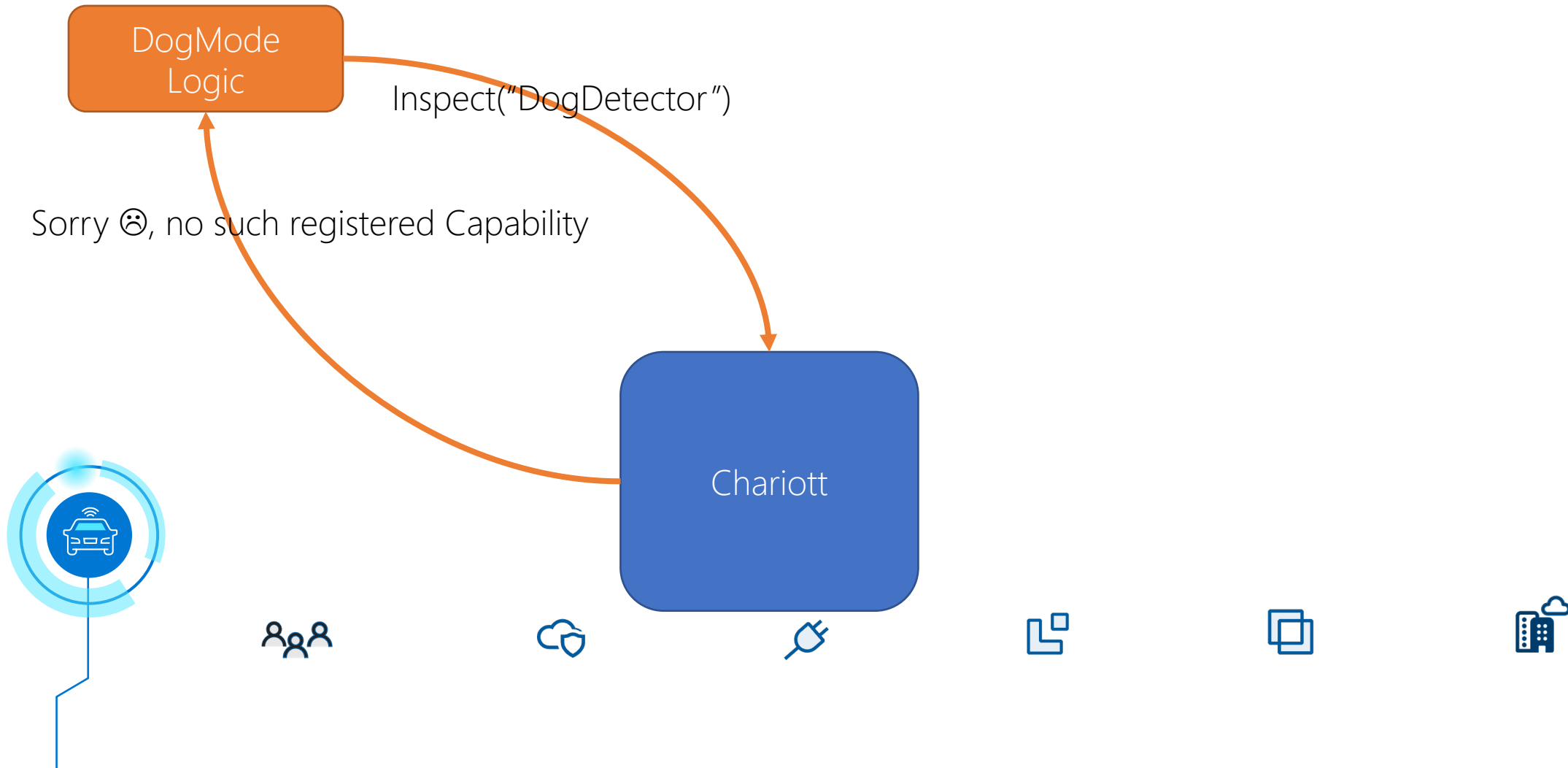
Chariott – What Changed



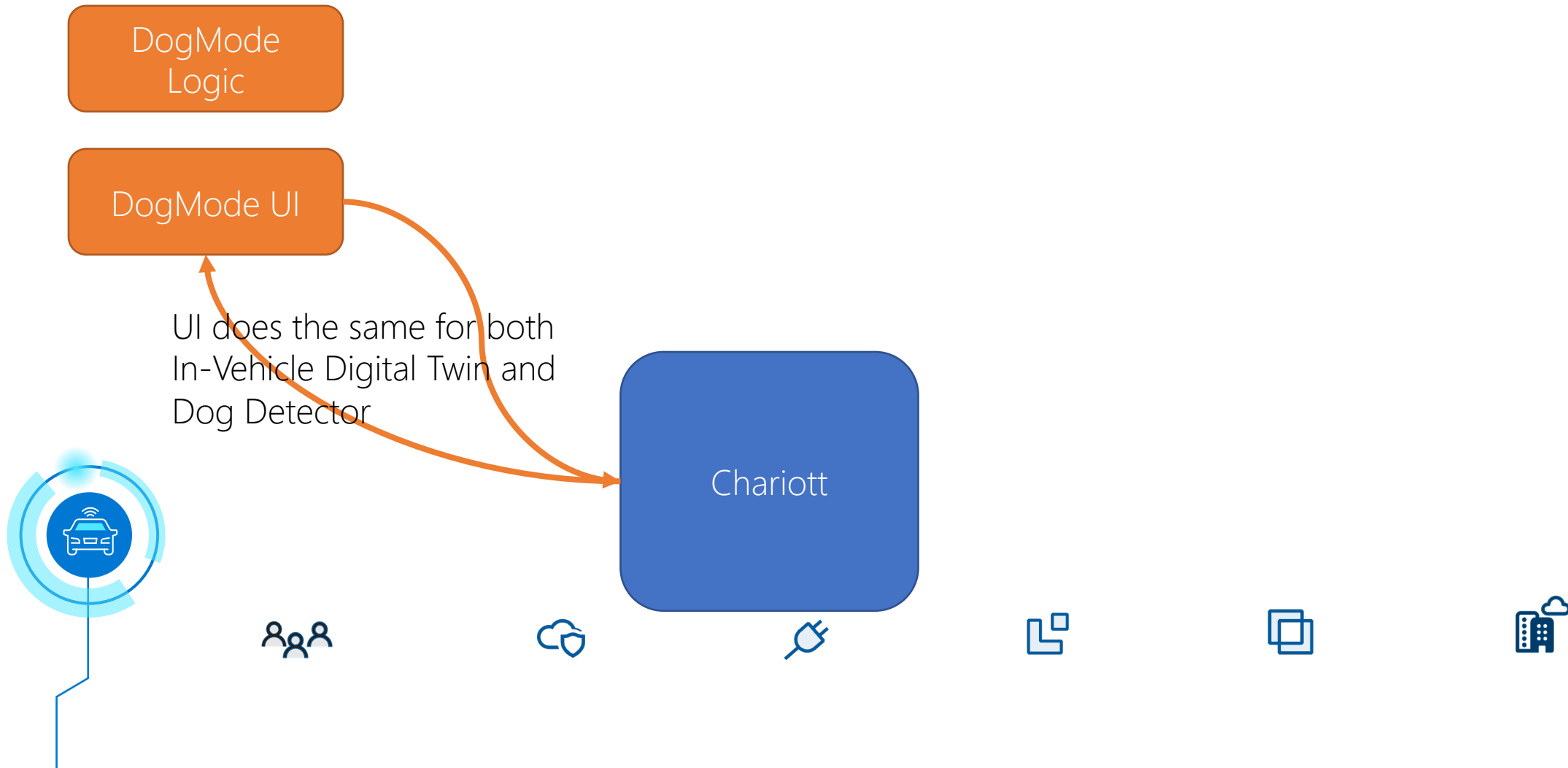
Chariott - Dynamic App Programming Model in Action



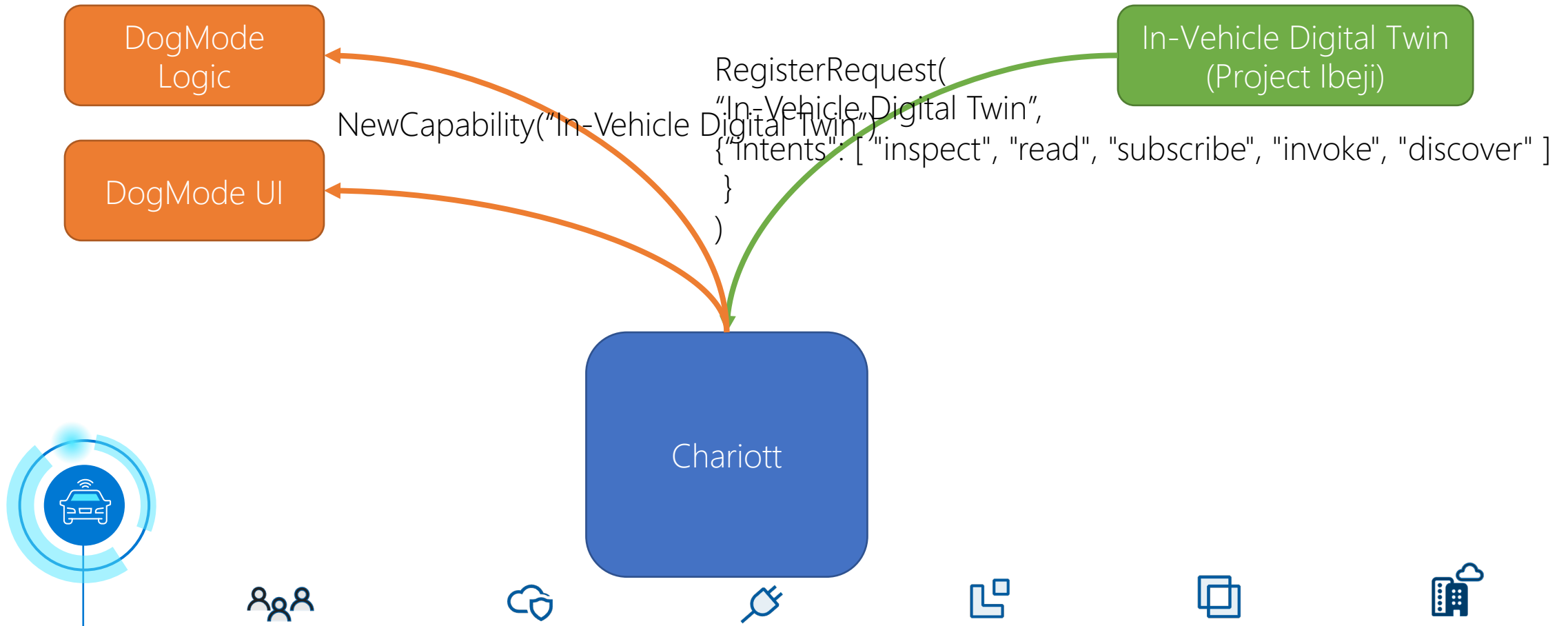
Chariott - Dynamic App Programming Model in Action



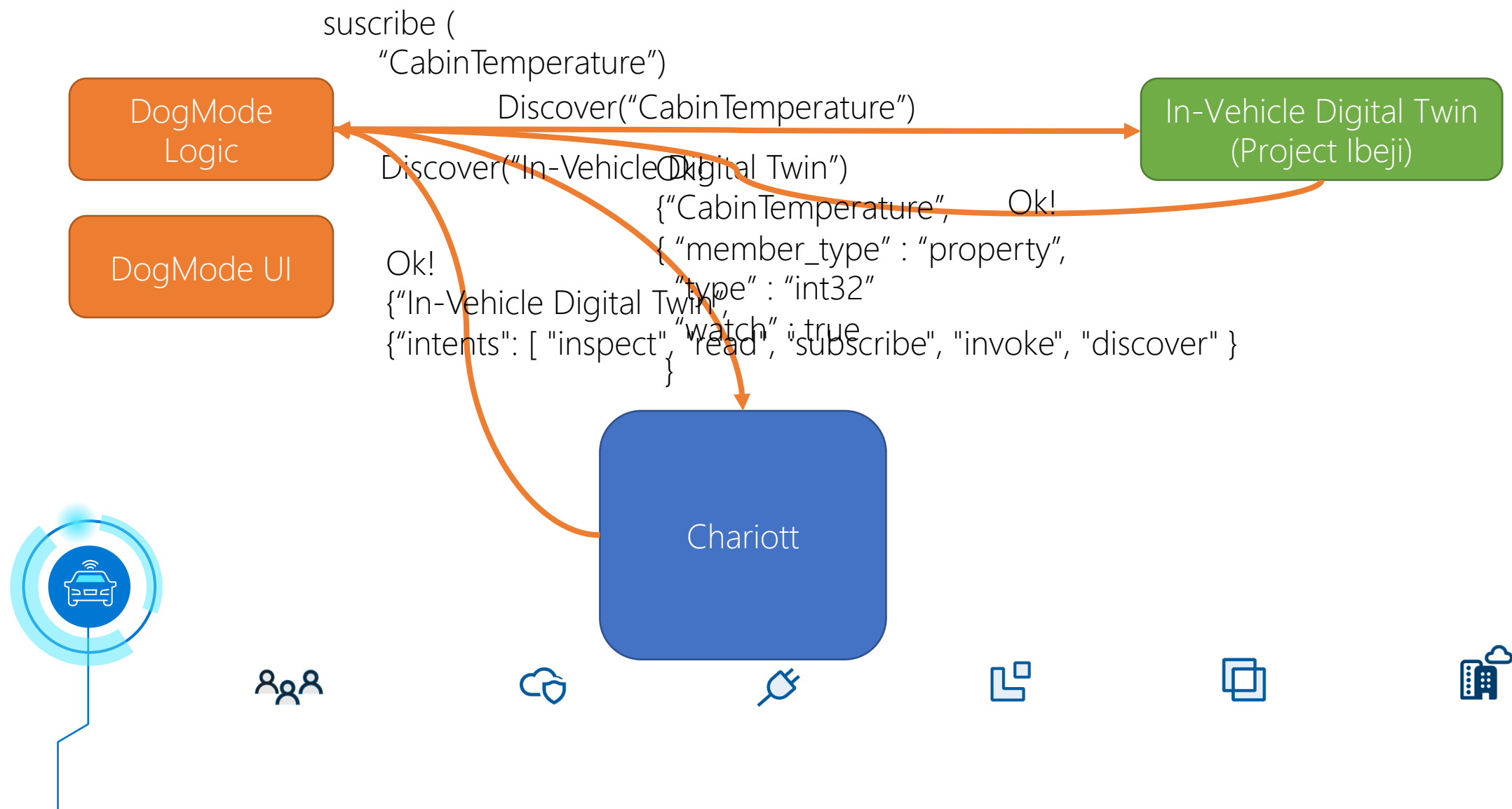
Chariott - Dynamic App Programming Model in Action



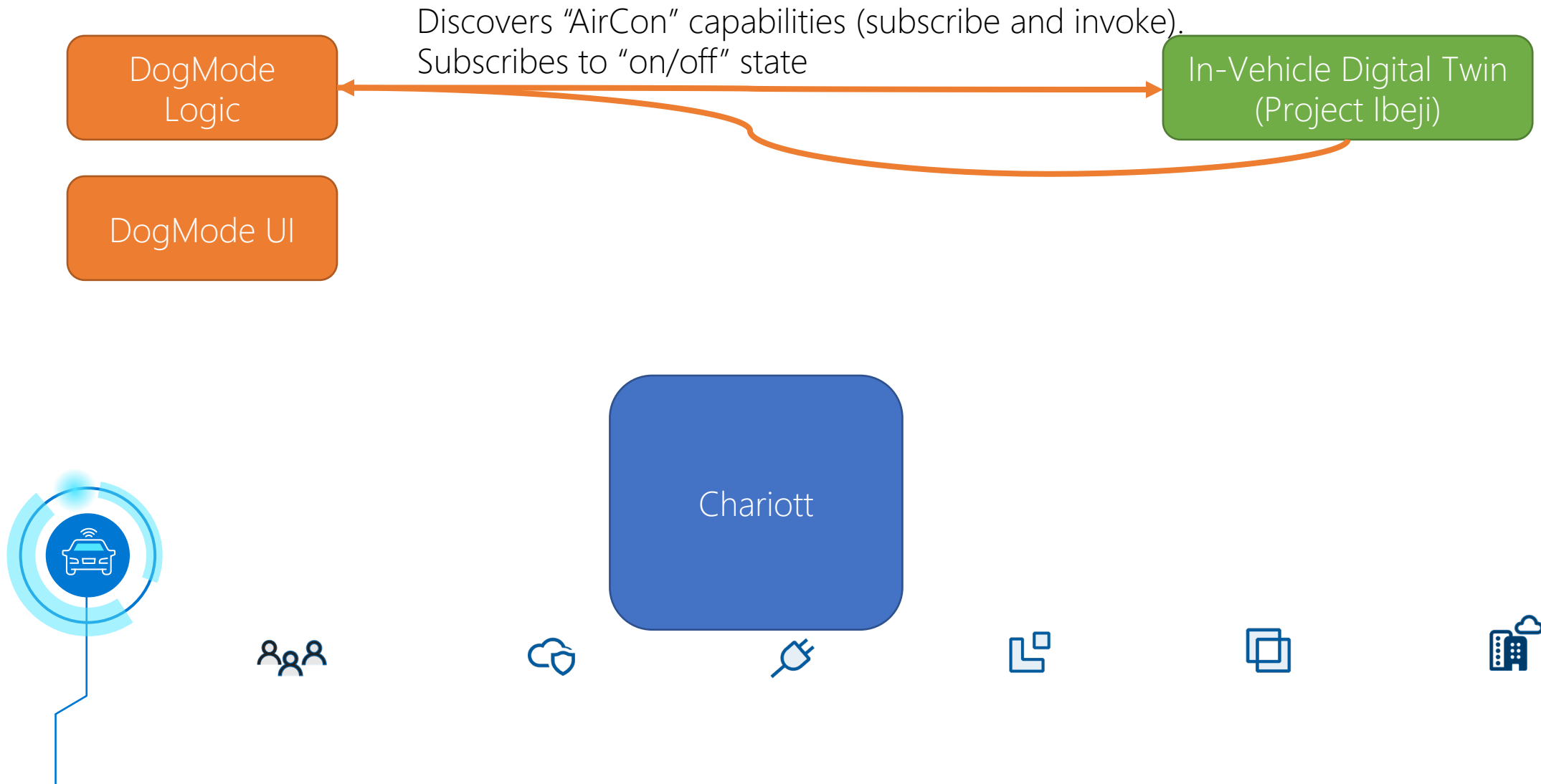
Chariott - Dynamic App Programming Model in Action



Chariott - Dynamic App Programming Model in Action

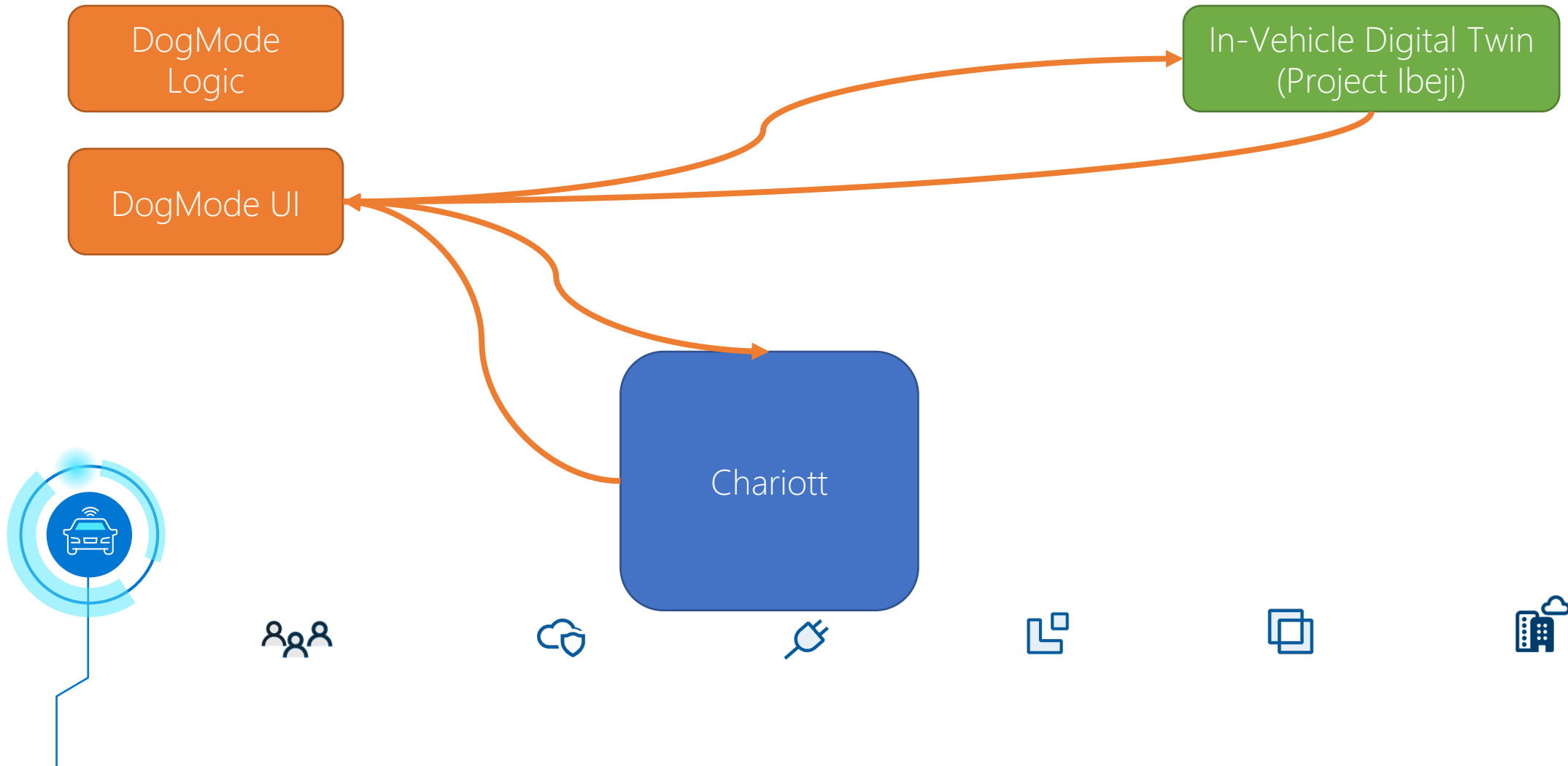


Chariott - Dynamic App Programming Model in Action

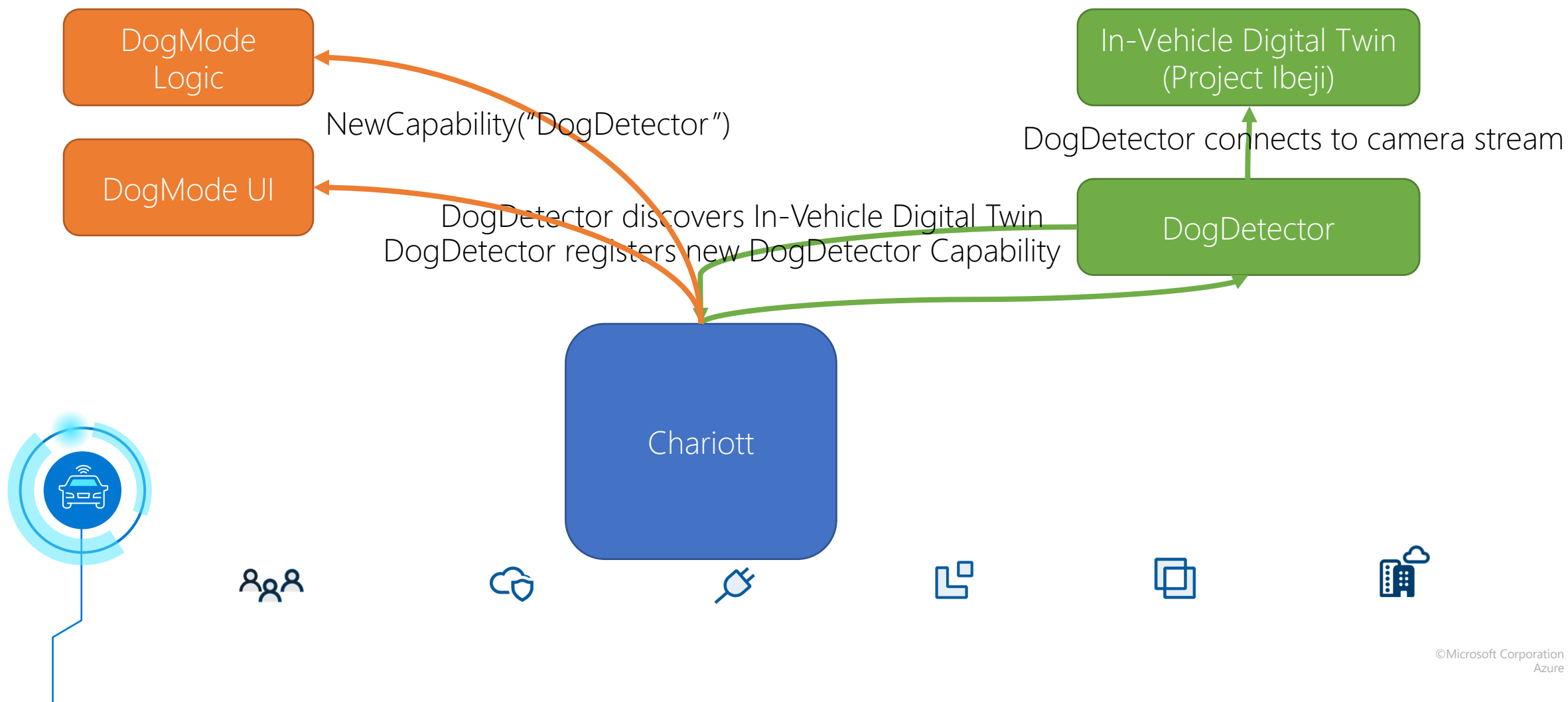


Chariott - Dynamic App Programming Model in Action

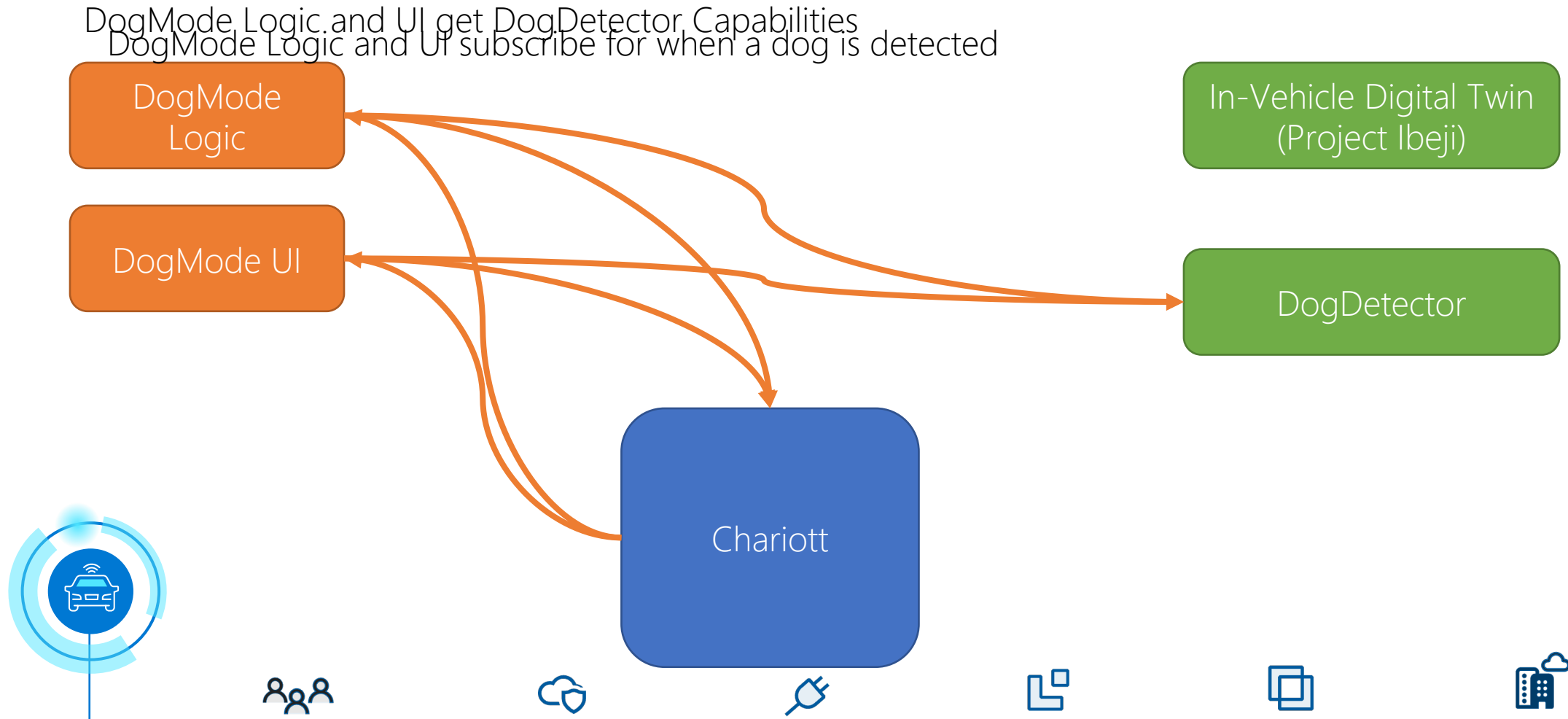
UI discovers and registers for CabinTemperature and AirCon



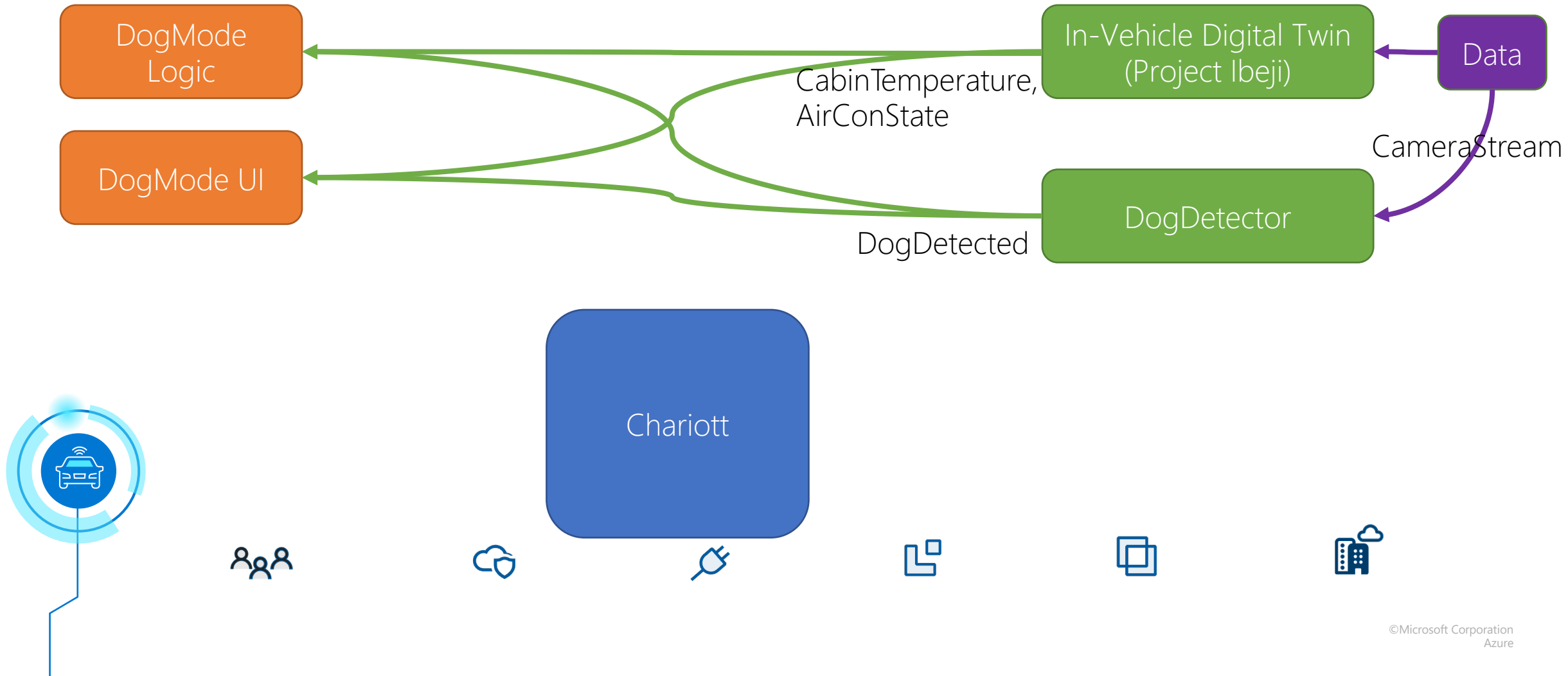
Chariott - Dynamic App Programming Model in Action



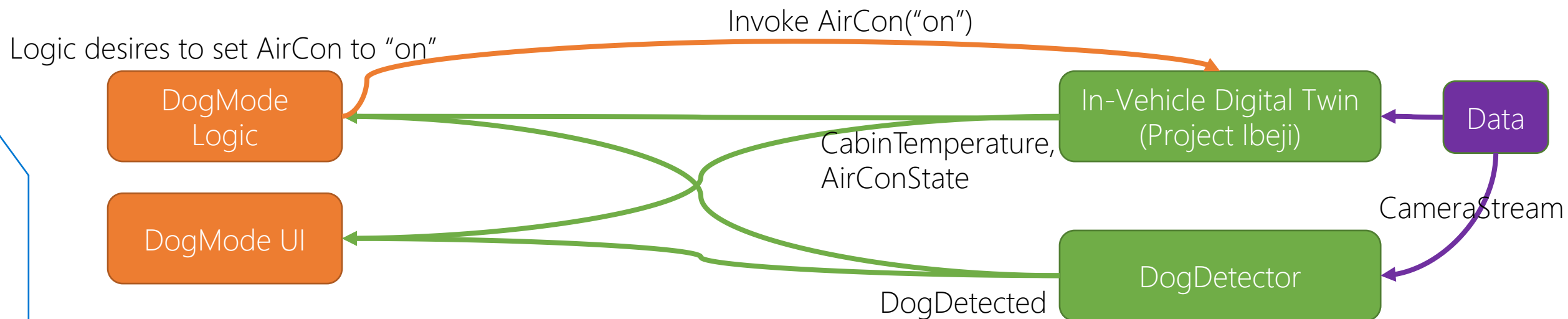
Chariott - Dynamic App Programming Model in Action



Chariott - Dynamic App Programming Model in Action

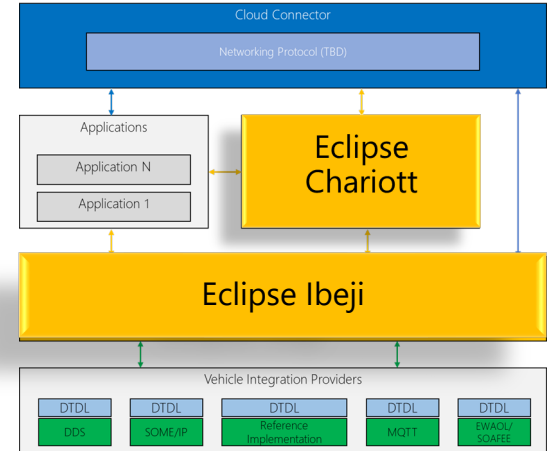


Chariott - Dynamic App Programming Model in Action



Key Takeways

- Remote API based programming model
 - gRPC proto is the contractual API
 - Common operations (inspect, read, write, invoke, discover, etc.)
- Richer brokering system modeling after COA
- Dynamic Discovery supporting direct app to app communication incl. streaming
- Inspection of the system allowing lighting up features in applications
- Readyng it for integration with Ibeji (in-vehicle Digital Twin)



Q&A

Community Discussion

A detailed walkthrough recording is available at [Eclipse Chariott Project website](#).





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Thank YOU.

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