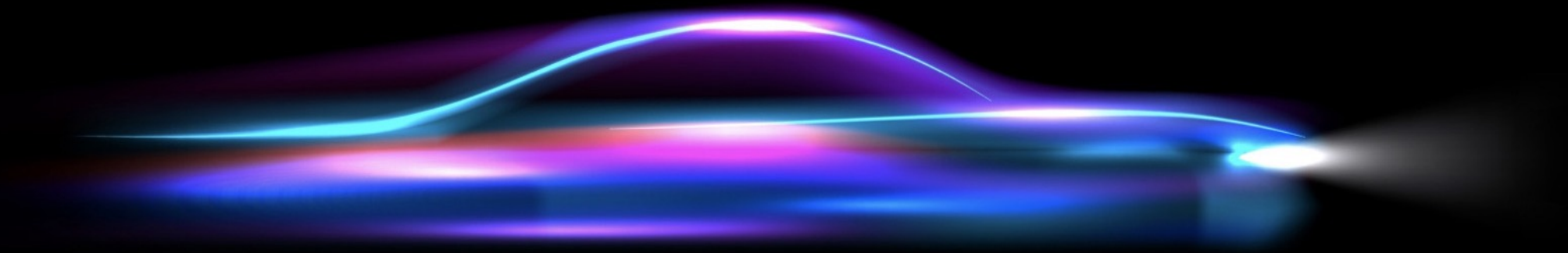


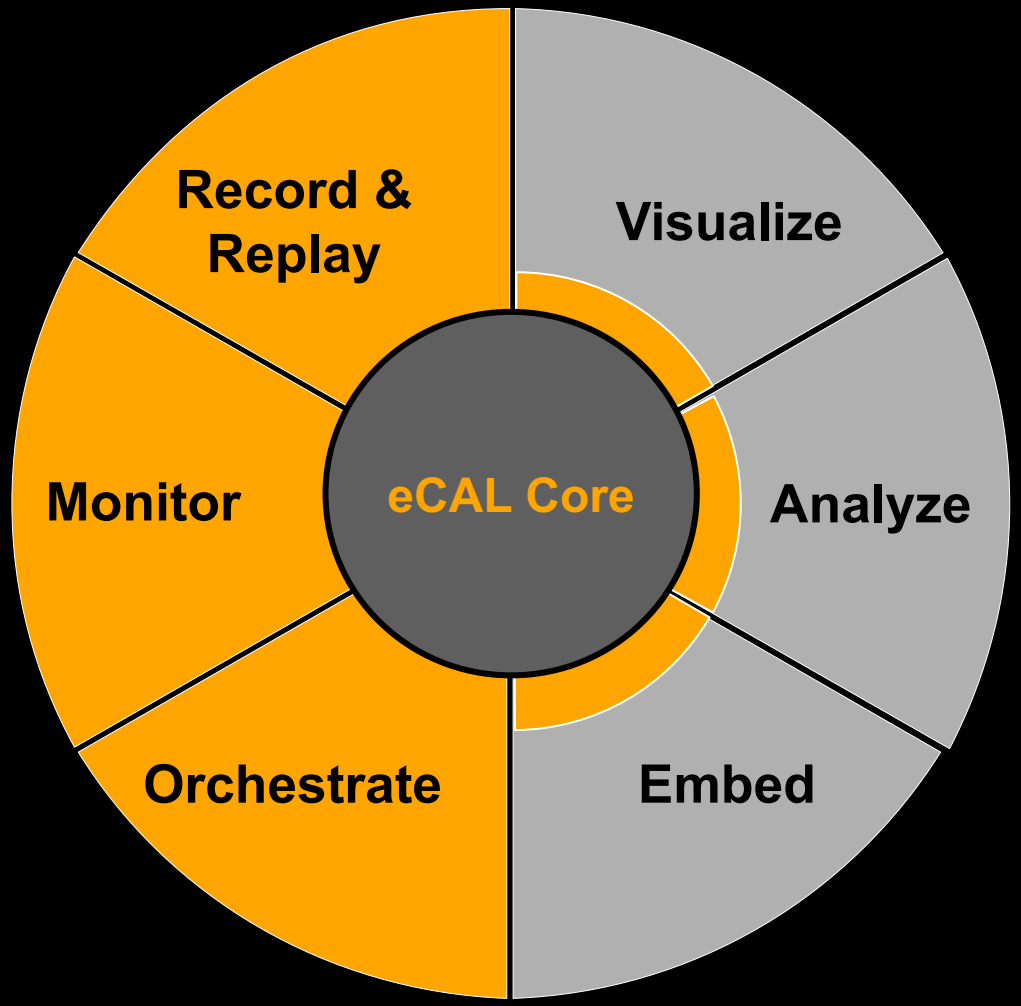
eCAL ecosystem

Visualizing Data using Foxglove Studio

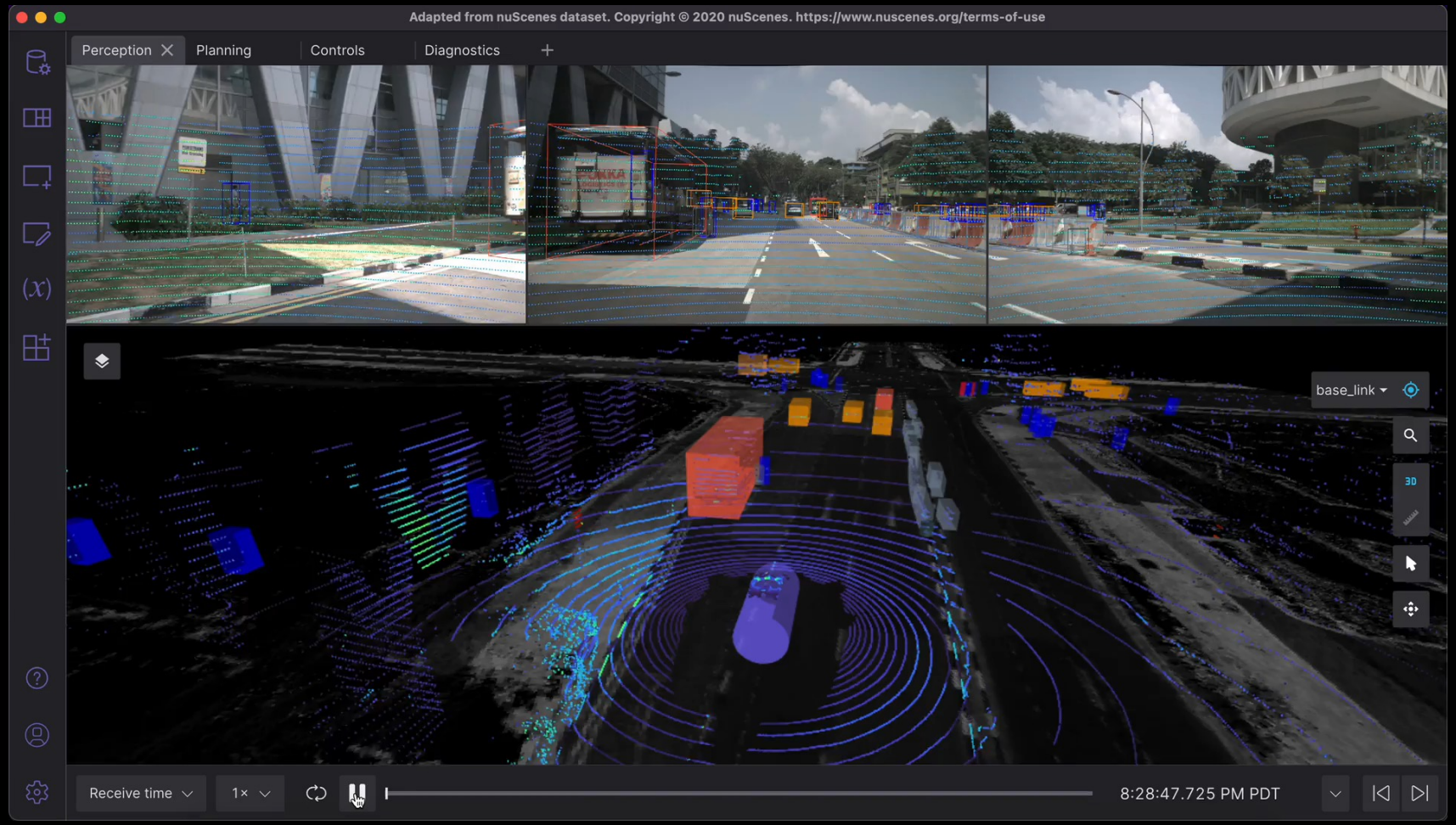
http://ecal.io

About us

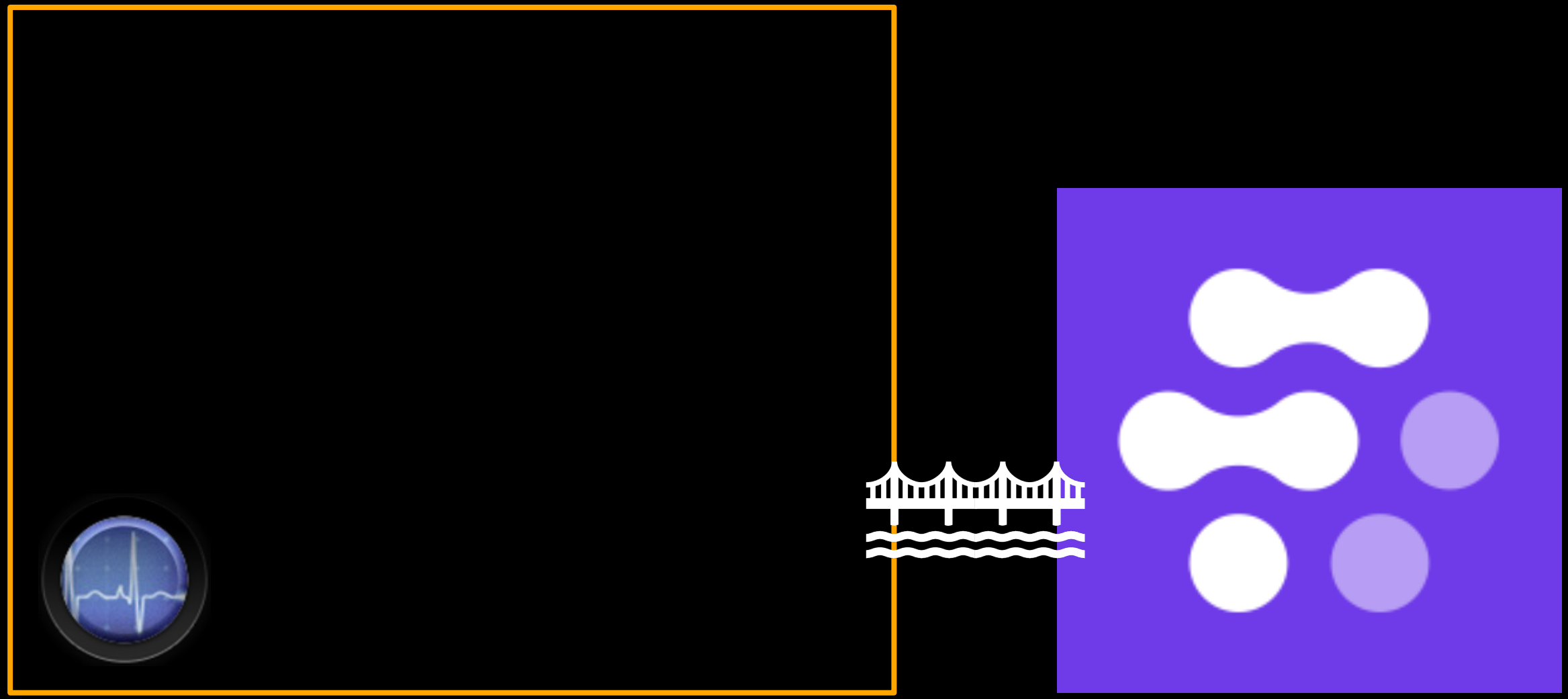
eCAL ecosystem



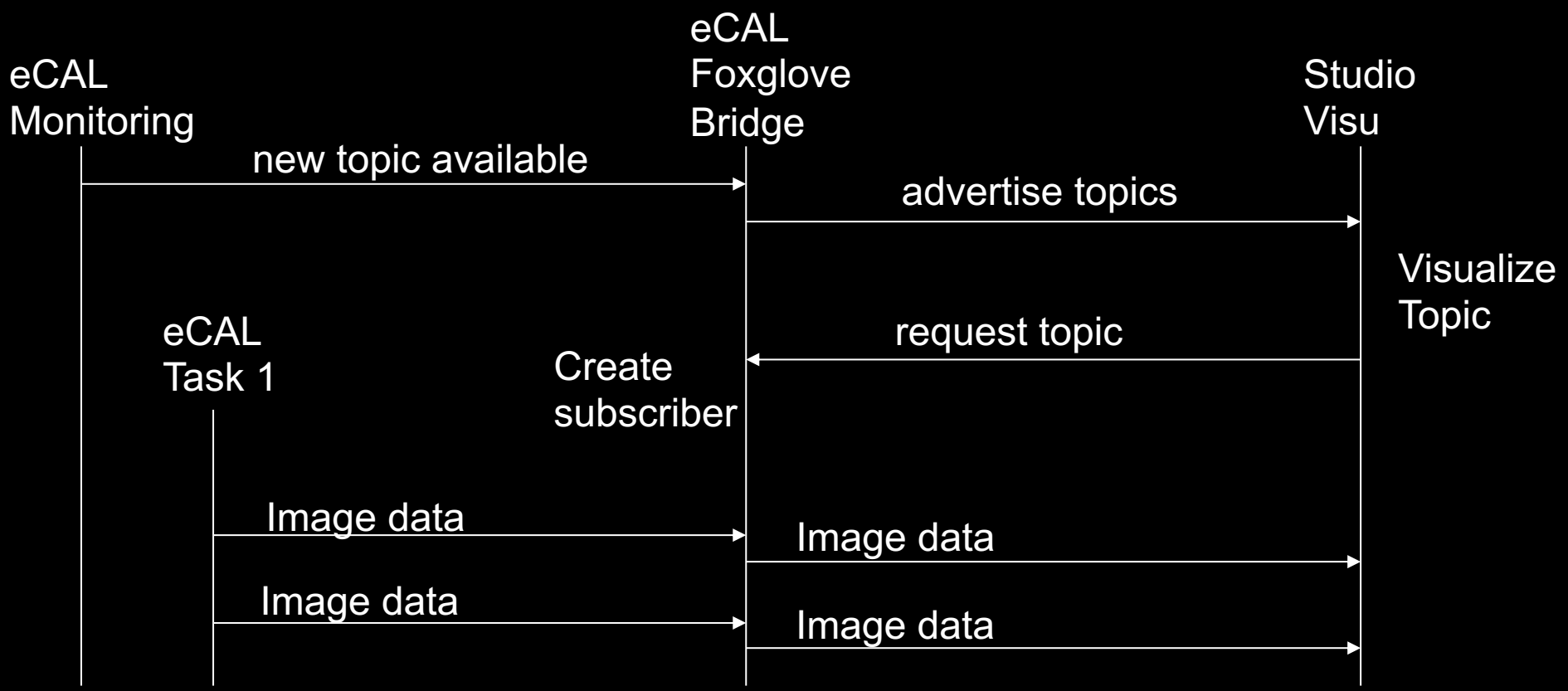
Foxglove Studio



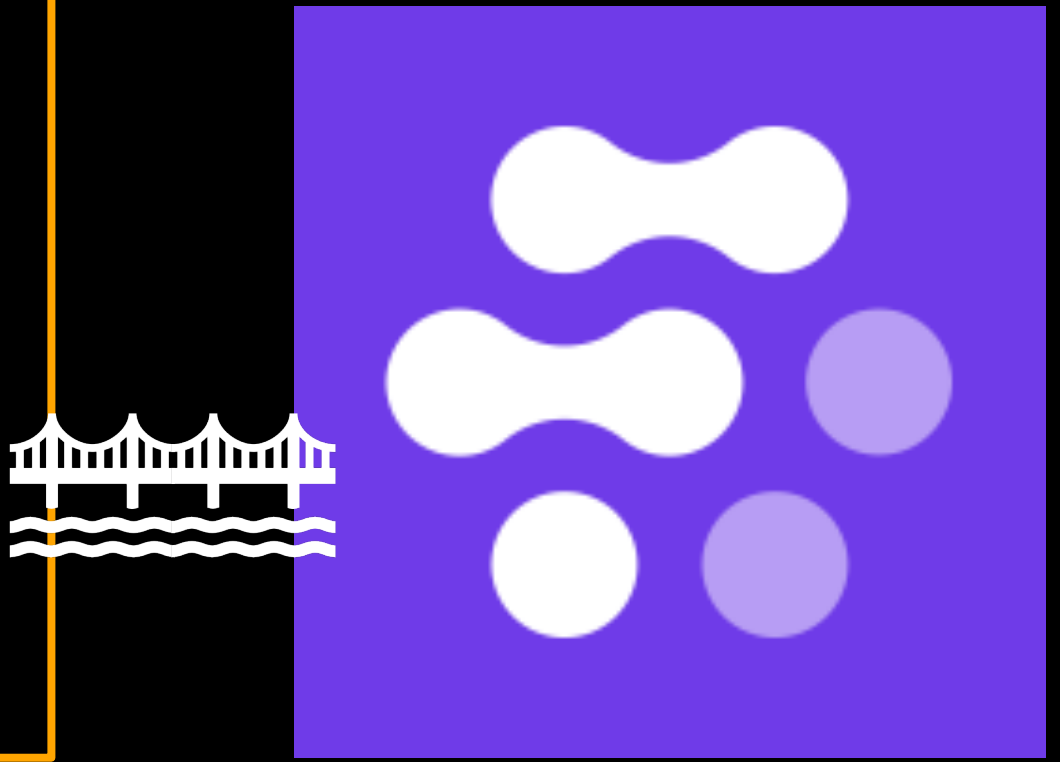
eCAL Foxglove Bridge architecture



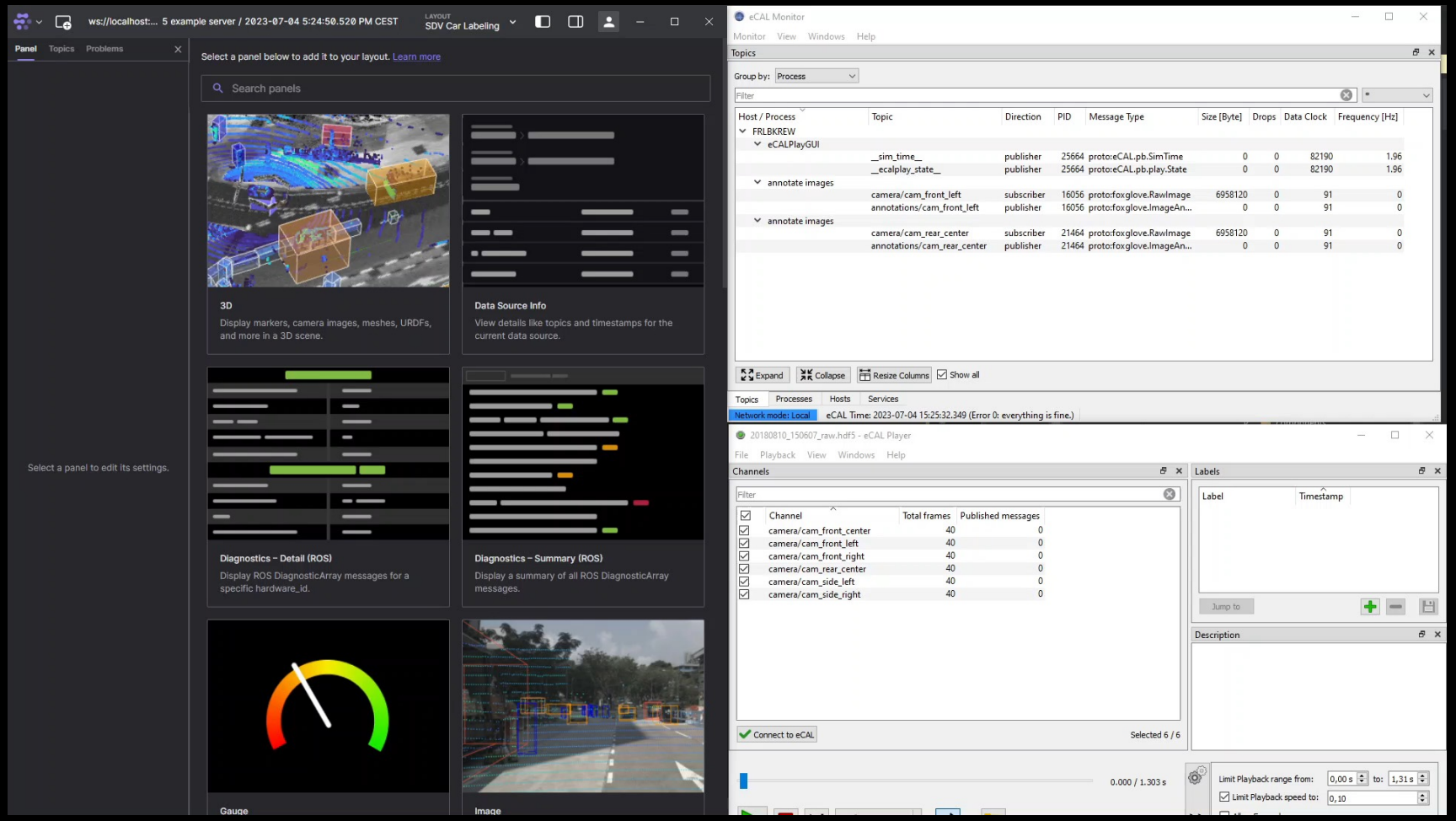
eCAL Foxglove Bridge architecture



Demo Setup



Demo


ws://localhost:... 5 example server / 2023-07-04 5:24:50.520 PM CEST
LAYOUT
SDV Car Labeling
Panel
Topics
Problems
Select a panel below to add it to your layout. Learn more
Search panels
3D
Display markers, camera images, meshes, URDFs, and more in a 3D scene.
Data Source Info
View details like topics and timestamps for the current data source.
Select a panel to edit its settings.
Diagnostics – Detail (ROS)
Display ROS DiagnosticArray messages for a specific hardware_id.
Diagnostics – Summary (ROS)
Display a summary of all ROS DiagnosticArray messages.
Gauge
Image
eCAL Monitor
Monitor
View
Windows
Help
Topics
Group by:
Process
Filter
Host / Process
Topic
Direction
PID
Message Type
Size [Byte]
Drops
Data Clock
Frequency [Hz]
FRLBKREW
eCALPlayGUI
__sim_time__
__ecalplay_state__
annotate images
camera/cam_front_left
annotations/cam_front_left
camera/cam_rear_center
annotations/cam_rear_center
Expand
Collapse
Resize Columns
Show all
Topics
Processes
Hosts
Services
Network mode: Local
eCAL Time: 2023-07-04 15:25:32.349 (Error 0: everything is fine.)
20180810_150607_raw.hdf5 - eCAL Player
File
Playback
View
Windows
Help
Channels
Filter
Channel
Total frames
Published messages
camera/cam_front_center
camera/cam_front_left
camera/cam_front_right
camera/cam_rear_center
camera/cam_side_left
camera/cam_side_right
Connect to eCAL
Selected 6 / 6
Labels
Label
Timestamp
Jump to
Description
0.000 / 1.303 s
Limit Playback range from:
0,00 s
to:
1,31 s
Limit Playback speed to:
0,10

Summary

- eCAL comes with powerful tools
- eCAL has been integrated with existing tools
- Foxglove Studio is the newest integration for the eCAL ecosystem
- Which existing tool should we integrate next?

Attributions

- eCAL: Welcome to Eclipse eCAL™ — Eclipse eCAL™ (eclipse-ecal.github.io)
- ROS: ROS: Home
- MathWorks: MathWorks – Entwickler von MATLAB und Simulink - MATLAB & Simulink
- Foxglove: Foxglove - Visualizing and debugging your robotics data – Foxglove
- Driving Dataset: Driving Dataset | a2d2.audi
- Object Detection: Object detection task guide | MediaPipe | Google for Developers