

IVS

Intempora Validation Suite

IVS is a set of software solutions for the test, benchmarking and validation of your ADAS and HAD software functions including perception and deep learning algorithms against large driving sensor datasets stored in big data architectures (cloud or on-premise).



Store and manage efficiently your PetaBytes of recorded sensor data.

WHAT IS IVS?

IVS - Intempora Validation Suite allows automotive engineers to centralize, store and share their recorded driving situations with raw sensor data in the cloud or on-premises, index them, search for particular situations, preview results, prepare and automate the post-processing of such huge amount of driving data on parallel and high-performance computing clusters. **IVS** is made of two main modules.

IDM - INTEMPORA DATA MANAGER

IDM is the core part of the IVS solution. It consists in a centralized big-data database to store, re-index, preview and search for particular driving scenarios among your large amounts of recorded data (up to PetaBytes, including video streams, Lidars, Radars, GPS, CAN, biometrics and any other automotive sensors data)

■ ITM - INTEMPORA TEST AUTOMATION MANAGER

Based on the search results found in IDM, the Intempora Test Automation Manager allows you to inject your own software features, perception and deep learning algorithms in the cloud and automate post-processing tasks in a distributed manner on clusters of computing nodes in your Cloud environment.

COMPLEMENTARY SOFTWARE TOOLS



Thanks to RTMaps (Real-Time Multisensor applications), engineers can develop high-end in car data recording systems and design algorithms and software features for integration, execution and testing. RTMaps can be used in IVS as a post-processing framework.





RTag is a live manual tagging software application available on tactile tablet. Connected to your data recorder, it becomes easy to manually annotate data while driving, in conjuction with potental annotation algorithms running in real-time in your data recorder.



ADVANTAGES

- Tackle the SOTIF (Safety Of The Intended Functionality ISO 21448) recommendations for your perception and deep learning algorithms.
- Seamless workflow between Intempora software products.
- RTMaps for IVS offering an optimized post-processing framework with unprecedented execution performance, saving time and computing resources.
- RTag for IVS offering an easy-to-use manual tagging tool to annotate and monitor your self-driving sessions.
- Support for more data formats and middleware environments (ROS available soon).
- Interoperability with third party labeling sofware tools.
- High capacity and efficient storage based on state-of-the-art big data technologies.
- Blazing fast search for particular situations and corner cases thanks to indexed tags and metadata.
- Direct online driving data preview.
- Transfer the algorithms not the data.
- Make the masses of collected driving data available and share it to all your development, testing and validation teams around the world.
- Take the most out of your cloud infrastructure and drastically reduce offline testing duration and cost.

"Data management and test automation for ADAS/AD functions validation are a longtime request by our users all over the world. We are proud to release the Intempora Validation suite (IVS) and partner with Microsoft Azure to answer to the automotive industry needs»



Nicolas du LAC, CEO of Intempora