

AN INTEROPERABILITY FRAMEWORK FOR TRIALS AND EXERCISES

TEST-BED INFRASTRUCTURE

Martijn Hendriks, XVR Simulation ITEC 2019 Conference

DRIVER+ OVERALL OBJECTIVES



To facilitate a **shared understanding** in Crisis Management across Europe

TEST-BED TRAILING

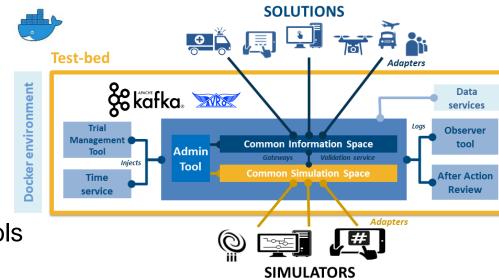
MAIN CONCEPTS & COMPONENTS

TECHNICAL REQUIREMENTS

- Focused on the Crisis Management (CM) domain
- Facilitating information exchange between CM applications & simulators
- Understandable & easy connectivity
- Tools for supporting trials & exercises
- Freely available & open-source (MIT license)

TECHNICAL DESIGN AND IMPLEMENTATION

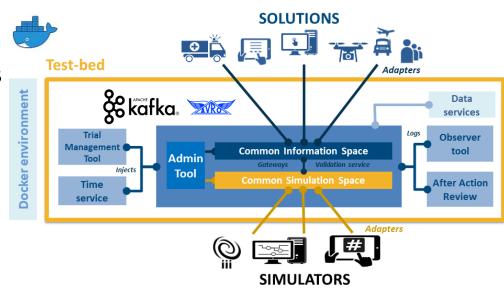
- Using Apache Kafka with AVRO messages
 - Widely used with high message throughput
 - Easily run in the cloud using Docker
- Adapters created in Java, C#, JavaScript, Python and REST endpoint
- Including all kinds of support tools for running trials and exercises



TECHNICAL DESIGN AND IMPLEMENTATION

LIMITATIONS

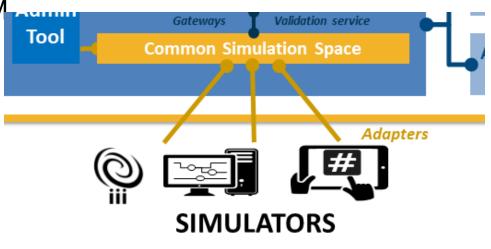
- Time synchronisation between simulators is very simple
- Ownership between simulators is lacking



WHY NOT HLA?

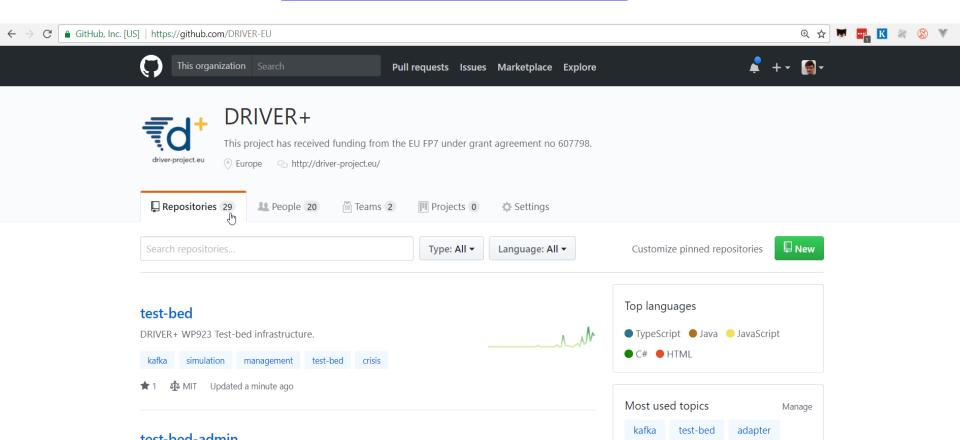
A COMPARISON

- HLA tooling is expensive for CM organisations & the community of practitioners is small
- Java, C++ & C# adapters
- Steep learning curve, long implementation time
- CM domain has different set of requirements & standards
- CM simulators hardly supportHLA



DRIVER+ EMBRACES OPEN SOURCE

49 REPOSITORIES AT HTTPS://GITHUB.COM/DRIVER-EU



THANK YOU. ANY QUESTION?



CONTACT REACH US







Groups: DRIVER Project

DRIVER Project

More information about the project - coordination@projectDRIVER.eu Interested in collaborating with us? - cooperation@projectDRIVER.eu Communication and media contact communication@projectDRIVER.eu



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