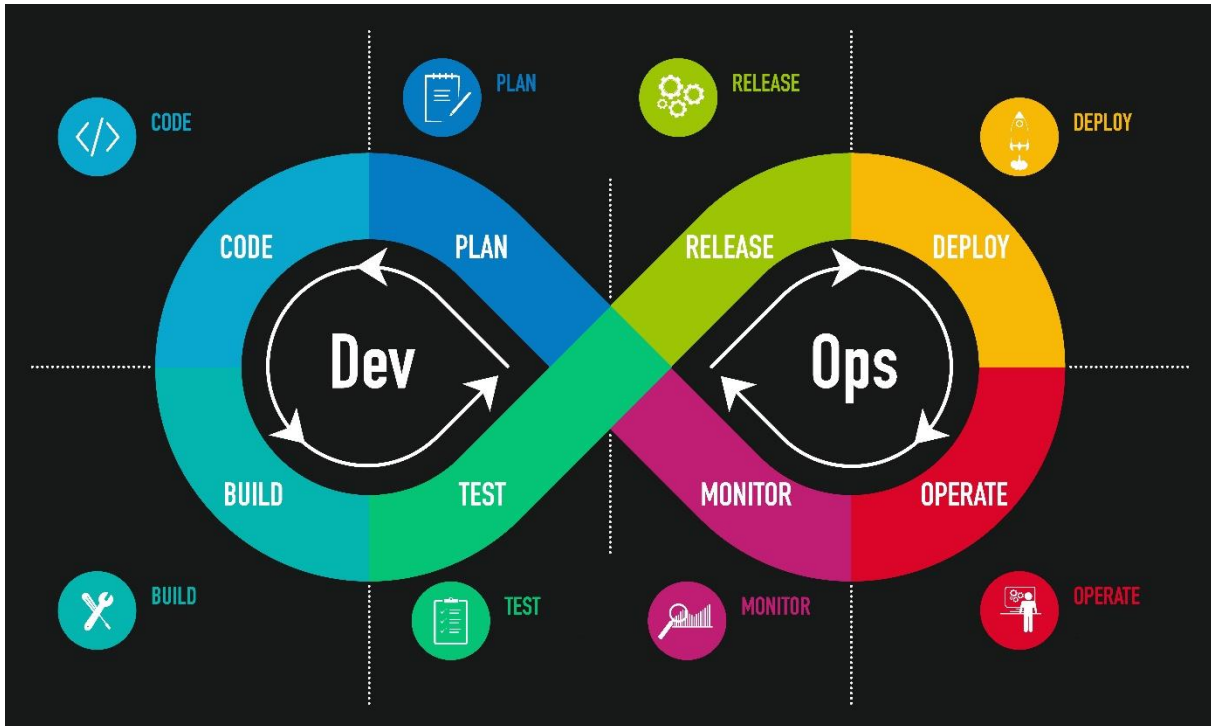


# OPEN CALL – LIVING INNOVATION LAB

## DevOps for ADAS Software, Systems Engineering and Simulation



### BACKGROUND & ADDRESSED CHALLENGE

DevOps is a set of practices intended to reduce the time between committing a change to a system and the change being placed into normal production, while ensuring high quality. The use of DevOps is considered state of the art for many tech companies and already quite widespread.

Nevertheless, DevOps was mainly developed for pure software development, while it is not that common in simulation and engineering due to slightly different methods and expertise.

Especially the ISO26262 for automotive safety plays a dominant role. The standard demands high standards on the developed software, and the latest version

For engineers to focus on their development work DevOps methodology has to be integrated to allow a seamless workflow for development in embedded systems and simulation.

### OFFERED TECHNOLOGY

We can provide in-house infrastructure and knowledge for DevOps demonstrations:

- CI infrastructure including Jenkins/Bamboo, Ansible, Virtualization Technologies (Docker, KVM), Git

- (Co-)Simulation Technologies like MATLAB/Simulink, Carla, ViresVTD, Model.Connect, FMI, etc.
- Graph-based service which uses a NoSQL Graph Database which allows easy design of workflows and automatic generation of CI pipelines.

## EXPERIMENT SCOPE

The addressed scope should be an extension of classical DevOps methodologies and tools to be better suited for systems engineering and embedded systems and simulations.

The scope of targeted experiments is broad.

Possible experiments could target:

- Automatic Deployment of software on hardware and vehicles
- Development of Computer Aided Risk Analysis and Assessment methods regarding safety in accordance with ISO26262
- Improvement of usability of existing services to enable better usage for non-experts.

Possible results:

- an overview of favoured standards and tools
- industrial applications or use cases and innovative solutions
- best practices how available technologies can be exploited
- Conference papers and journal publications.

The expected outcome of the experiments is further development of ideas and publication.

## FUNDING OPPORTUNITIES

Aligned with the defined long-term COMET K2 research program **fast-track experiments (up to 6 months)** and **lighthouse experiments (7 - 12 months)** executed at VIRTUAL VEHICLE are public (co-)funded up to 50% based on a bilateral agreement.

**Seed Actions for Start-ups and SMEs will be free of charge.**

Your application will be reviewed by our Scientific Assessment Board. The board will evaluate the applicants proposals and select proper candidates. The final number of applications being selected in each call might be different.

Only selected applications will be funded.

## CALL INFORMATION

<b>Call Opening</b>	01/02/2021	<b>Proposal language</b>	English, German
<b>Targeting Group</b>	Start-ups, SME, mid-caps or LEs from EU member states		
<b>Project Duration</b>	Seed Action: first try-outs Fast-track experiments: 1 - 6 months Lighthouse experiments: 7 - 12 months	<b>Indicative Total Budget</b>	Seed Action: VIRTUAL VEHICLE support is free of charge Fast-track experiments: < 50.000 € Lighthouse experiments: < 200.000 €

If you have a promising smart idea, we are happy to receive your application!

Please use our online application form to send us your proposal and describe:

- In which technology field or discipline are you active
- Your planned application concept and its expected use
- The preliminary benefit
- The industrial relevance and potential impact of your experiment, as well as your plans for exploitation of the results and the future business outlook

Your experiments should be designed to be completed in a maximum of 6 months for fast-track experiments and a maximum of 12 months for lighthouse experiments.

Experiment proposals are very welcome from organisations located in any EU member state and must be written in English or German. Submissions done in any other language will not be evaluated.

**Contact:** [lil@v2c2.at](mailto:lil@v2c2.at)

*By transmitting your proposal for the "Open Calls – Living Innovation Lab", you agree to our Data Protection Notice and that your submitted application will be evaluated by an expert jury of VIRTUAL VEHICLE representatives. Virtual Vehicle reserves the right to reject any application at any time without giving reasons. The decision is binding and final. The right to appeal at court is excluded. Further details will be agreed in a separate agreement between accepted applicants and Virtual Vehicle. Any liability of Virtual Vehicle is excluded, except as stipulated by applicable mandatory law. Furthermore, you confirm that the contents of the submitted proposal are independently developed by you without the use of confidential information from third parties and are free of third-party rights to the best of your knowledge.*

## LIVING INNOVATION LAB – CLOSING THE GAP



**VIRTUAL VEHICLE funds SMEs, Start-ups, and Enterprises to experiment and innovate with new technologies.**

The LIVING INNOVATION LAB facilitates the transfer of knowledge – from academia to industry and the development of highly innovative product solutions. Together with academic and industrial partners, VIRTUAL VEHICLE is trying to bridge “The Chasm” between investigating innovative concepts and early technology adopters by funded open call experiments.

Successful demonstrations of highly innovative technologies lead to a maximum benefit in exploitation and realistic chances for market uptake. For this reason, the LIVING INNOVATION LAB initiates open calls for experiment proposals to expand and strengthen the transfer of technical capabilities and making innovative solutions, platforms, and data available for experimentation.

### YOUR PARTNER: ACCELERATING INNOVATION WITH VIRTUAL VEHICLE

The Virtual Vehicle Research GmbH is Europe’s largest R&D center for virtual vehicle technology with 300 employees. Research priority is in supporting the virtual vehicle development process, which leads to a powerful HW-SW whole system design and automation of testing and validation procedures. This focus on industry related research makes VIRTUAL VEHICLE the innovation catalyst for future vehicle technologies.

### WHO CAN APPLY?

**If you are...**

- developing smart, innovative concepts in digital future technologies,
- bridging the physical and virtual worlds with advanced approaches and industrialized solutions,
- interested in experiments in cooperation with VIRTUAL VEHICLE to speed up development,
- wishing to access VIRTUAL VEHICLEs many years of experience in interdisciplinary and virtual system development

...then do not miss this opportunity and apply to one of the open calls to realize your innovative approach!

### Do you prefer first a quick experimental study?

If you first want to try out your ideas at VIRTUAL VEHICLE quickly, we offer Start-ups and SMEs our free, light touch “**Seed Action**”: a first try-out of potential solutions with the support of VIRTUAL VEHICLE’s expertise.