



## Testbed.CONNECT™

Where testing meets virtual

### THE CHALLENGE

Numerous vehicle and driveline variants, an extensive integration of complex systems, and high requirements for safety, efficiency and comfort mean that shifting development tasks from road to testbeds has become a necessity, not just an option.

#### Frontload Tests

While most sub-disciplines already use advanced simulation models in the office for frontloading purposes only a few of these models find their way into the overall vehicle development process. On the one side this is due to the limited capabilities of the testbed but also due to existing department boundaries. Utilizing these models allows for a whole new holistic testing approach in early development phases, by replacing missing real components with already existing simulation models. Therefore, the simulation capabilities of testbeds are getting more important than ever.

### Unlock the Power of Models

In addition, to the testbed capabilities OEM's face another challenge when implementing sustainable frontloading: overcoming department boundaries and ensuring a seamless connection between the advanced office simulations and their utilization in the testfield.

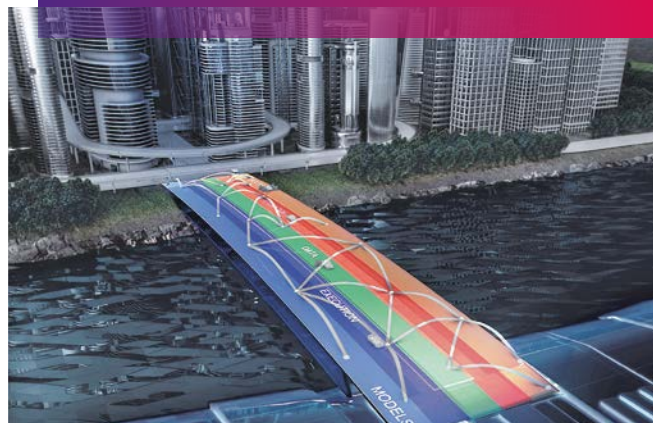
### THE AVL SOLUTION

Testbed.CONNECT™ helps you harness the benefits of model-based testing. As an open platform it facilitates early integration tests by connecting simulation models to the testbed. In alliance with Model.CONNECT™ it opens the testbed to the whole world of office simulation. This prevents long wait times for prototype components and vehicles and allows for quicker and more powerful decision-making throughout the entire development cycle. Testbed.CONNECT™ ensures a seamless connection between advanced office simulation and their utilization in the testfield: be ready to overcome department boundaries.

## GET MORE FROM YOUR INFRASTRUCTURE

Testbed.CONNECT™ offers flexibility that reduces testbed down-times due to task changes to a minimum. You can rely on safe and stable testbed operations, and focus on value-adding tasks, such as testing the numerous variants in your project in an early stage of development. Especially by utilizing advanced office models, configuration changes are done within minutes right at the testbed. By feeding the test results back to the office, the quality of the system models can be improved with each version.

Many applications such as RDE, engine start/stop strategy evaluations or electric drivetrains can already be tested on the testbed by using existing in-house simulation models to gain comparable results throughout the development process.



As part of AVL's Integrated and Open Development Platform (IODP), Testbed.CONNECT™ is uniquely qualified to help you create more efficient and flexible environments for testing the next generation of smart vehicles.

## THE ADDED VALUE

- Easy and stable connection of simulation models to the testbeds
- New testing possibilities using sophisticated simulations even without model compilation
- Utilization of non-compiled models in conjunction with Model.CONNECT™
- Re-use and continuous improvement of component and system models
- Open to different types and vendors of testbeds or simulation tools

## HIGH SIMULATION PERFORMANCE ON THE TESTBED



Simple model execution



Transfer of non-compiled models to the testbed



Interface to various testbed types



Hard real-time up to 10 kHz



Online model parametrization and analysis



Model synchronization to the testbed



Real-time online recording



Easy model roll-out in the testfield

## FIND OUT MORE

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