



AVL TESTLIFE 1™

Leading efficiency





TEST LIFECYCLE MANAGEMENT

THE CHALLENGE

Efficient Interaction

From test request and planning to test evaluation, testing processes imply more and more people who interact with each other. Increasingly large amounts of data and information are being exchanged in various formats. Meanwhile, errors resulting from inadequate information have to be reduced. Standardization and control of this process is necessary in order to improve the overall test interaction.

Optimized Resource Utilization

While the complexity of processes and the variety of systems in test facilities are still on the rise, there is a need to cut testing costs. To this extent, unproductive time due to incorrect methodology or erroneous test run definitions have to be reduced, tending to continuous utilization of testbeds.

Optimized Workflow

Testing process reliability, quality, and reproducibility need to be continuously improved. A significant productivity gain in terms of workflow optimization can be achieved by standardizing procedures and using reusable templates, in order to reduce administrative efforts and downtime.

THE ADDED VALUE

- Optimized utilization of testbeds (typical increase of 20 % according to an AVL study)
- Improved interaction between test requestor and lab operations
- Increased process stability and reusability from test requests to test results

The AVL Solution – Increase Efficiency and Quality during Test Operations



AVL TESTLIFE 1™ Workflow

Since the beginning of networking testbeds in the early 1980s, AVL – as the first provider of Host Systems for engine testbeds – has been working on optimized solutions to support employees in the field of test information management. To form a highly efficient information chain from development to test facilities, the continuity between the individual components makes an important contribution, makes an important contribution to increasing the efficiency of the overall development process.

The AVL TESTLIFE 1™ is the first end-to-end system for the standardization and automation of core processes in the test facility with automation systems from AVL or other testbed suppliers.

The core tasks of the system include managing all data and activities related to test jobs, test equipment and unit under test. By rationalizing work steps such as test definition, resource scheduling and inventory & calibration work, AVL TESTLIFE 1™ reduces testbed downtime, unproductive test time and redundant work. All data, information, and documentation relevant in each work phase are provided in one tool, thereby facilitating testing knowledge and significantly improving test reproducibility and traceability.

The existing system within the test facility doesn't need to be replaced: AVL TESTLIFE 1™ easily integrates and interacts with the existing systems through the standardized ASAM ODS database model and Web Services interfaces. Due to seamless integration into the test process, it is possible to realize important gains in terms of efficiency:

With AVL TESTLIFE 1™, the utilization of the testbeds can be increased by 20 %, according to an AVL study.

AVL TESTLIFE 1™ supports the whole test process from test definition to result analysis by managing resources, data, information, and workflow:

Resource Management

All tests are planned and prepared with one single tool, which manages test orders, testbeds and measurement equipment.

Data & Information Management

Those involved in the process are provided with data, information, and documentation relevant in each work phase.

Workflow Management

AVL TESTLIFE 1™ enables continuous and long-term process improvement, by controlling work progress and costs.

AVL TESTLIFE 1™ - LEADING EFFICIENCY

YOUR BENEFITS

Improved Interaction from Test Request to Test Result

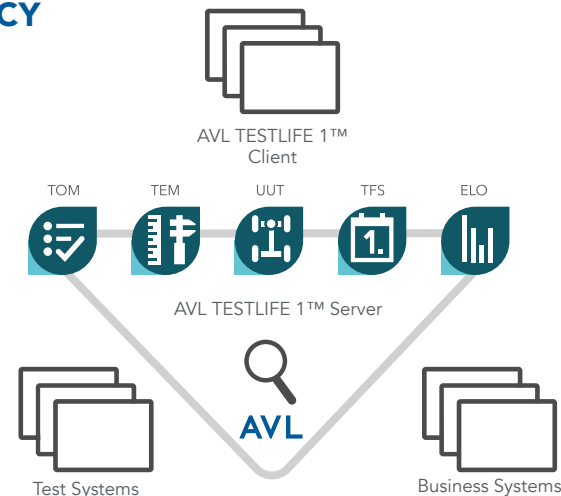
Turning test requests into valid results is a process of several steps involving a certain number of people. AVL TESTLIFE 1™ supports seamless execution of tests by standardizing and controlling the process information. Time is saved by having all people informed about the next steps electronically with proper data or documentation. Unproductive testing time and delays resulting from inadequate information are dramatically reduced.

Optimized Resource Utilization

Making optimal use of test resources is a complex planning task requiring data from various sources. AVL TESTLIFE 1™ is an up-to-date central inventory and administration platform for all test equipment in the test factory. Delivering information at the right time and place, it increases the testbeds utilization and productive time.

Increased Process Know-how and Reusability

Automating the know-how of people involved in the test process, AVL TESTLIFE 1™ uses reusable standards and templates that considerably reduce administration work. The process is not only optimized, but also traced and reproducible.



To accommodate the needs of both user roles and a variety of repetitive activities, users operate AVL TESTLIFE 1™ via different product modules.

PRODUCT FUNCTIONS

AVL TESTLIFE 1™ acts as the interface between product development and test facility. All people are informed electronically about the next steps and are provided with the relevant data and documentation. The user easily browses physical inventory, such as testbeds, as well as logical items, such as test orders and results. AVL TESTLIFE 1™ facilitates the everyday work of test requesters and test coordinators, test and R&D engineers as well as test facility managers.

The **test requester** receives support in the preparation of test orders and units under test, ensuring complete and accurate test request information submitted to the lab.

The **test coordinator** manages all work orders and resources during their life cycle with one single tool. To simplify the scheduling, conflicts are automatically detected in advance. The scheduling information is distributed to the people concerned, thereby avoiding delays.

The **test engineer** relies on electronic checklists and centrally managed work instructions: with the test preparation being simplified, he can focus on analyzing daily feedback.

With the help of AVL TESTLIFE 1™, the **R&D engineer** ensures traceability of test results: the equipment applied for each test result is easily traced back. The calibration data is also managed: with just a few clicks, calibration reports with all data regarding calibration status and measurement curves are generated.

AVL TESTLIFE 1™ enables continuous process improvement for the **test facility manager**, who can control work progress and costs.

POWERTRAIN DEVELOPMENT IS A TEAM SPORT

Today's requirements in powertrain development move forward every second. Complex systems, shorter times to market and a global world of opportunities challenge you to be better, more flexible and faster than your competitors.

Development tasks aren't stand-alone. And it's not (just) about how good single individuals or tools are...

... it's about how well they work together.

AVL Team SUITE™

SUCCESS BASED ON INTERPLAY





**COMBINE YOUR STRONG TEAM
FLEXIBLY OUT OF COMPATIBLE,
COMPLEMENTARY PLAYERS TO
MEET YOUR NEEDS.**

-  AVL PUMA Open 2™
-  AVL EMCON 6™
-  AVL LYNX 2™
-  AVL SANTORIN MX 2™
-  AVL TESTLIFE 1™
-  AVL CAMEO 3™
-  AVL CRETA 4™
-  AVL CONCERTO 4™
-  AVL-DRIVE 4™
-  AVL VSM 4™
-  AVL ARTE.Lab 4™
-  AVL InMotion 4™
-  AVL IndiCom 2™
-  AVL iGEM 2™
-  AVL TESTGATE 1™
-  AVL ISAC 6™

... and more joining soon

SUCCESS BASED ON INTERPLAY

Technical Data	
Server Operating System	MS Windows 2012
Office PC Operating System	MS Windows 10, 32 or 64 bit
Data Storage	ASAM ODS compliant host database based on Oracle 12 c
Standards Applied	TCP/IPv4 network protocol ASAM ODS database model .net 4.0 Web Services
Supported Test Automation Systems	AVL PUMA Open 1.3.2 and 1.4.1, AVL PUMA Open 2012 and higher Support of 3 rd party Test Automation Systems via standardized interface and customer specific data converter on request

Basic Functionalities	
Test Factory Server with Test Factory Explorer	Navigation Reporting Central security for projects and users
Modules	
Test Order Manager (TOM)	Processes test requests and provides/tracks related data
Test Equipment Manager (TEM)	Manages test equipment, testbeds and pallets including calibration and maintenance data
Unit Under Test Manager (UUT)	Handles the technical data related to the unit under test over life cycle
Test Factory Scheduler (TFS)	Supports the planning of test orders, testbeds and test equipment
Electronic Logbook (ELO)	Captures and analyzes data while providing performance indicators

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