

AutomationDesk Version 2.3:  
Enhanced Test Handling and Reporting

# Taking the Tedium out of Testing

Creating and executing tests, and then evaluating them, can be a tedious routine task. To make the tester's job as easy as possible, we have extended AutomationDesk, our test and automation software. Numerous aspects of its user interface and handling have been revised and enhanced.

## Simplified Test Development

The new AutomationDesk makes it much easier to verify test sequences – even while they are still being developed. To switch out a test step or sequence, a user can simply comment it out, and then switch it back in again just as easily. Being able to switch off specific sections this way

is extremely useful during test development, and facilitates error-finding.

## Comprehensive Test Report

When test execution is complete, AutomationDesk can generate a report showing which test sequences were executed successfully and which were not. Each report begins

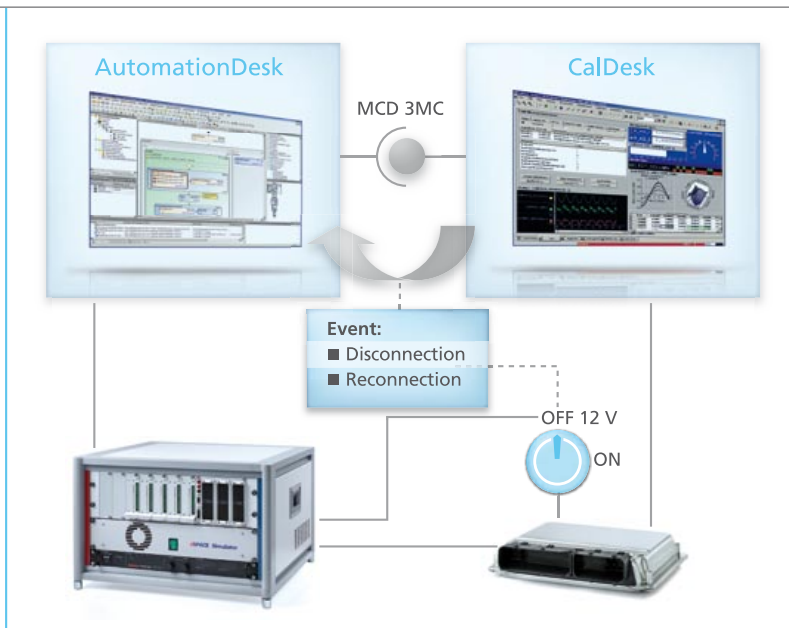


*The statistics on the test results provide quick information on the current status of the software quality.*

with statistics on all the test results. The user can then ask for a more detailed report to be output, including the statistics, or use the statistics alone. These present all the important results in a concise form, making it easier to evaluate and assess the software quality of the electronic control unit (ECU) under test.

### Enhanced Process Integration

Smooth cooperation between our individual software products is important to us at dSPACE. So we have enhanced the interaction between AutomationDesk and CalDesk, dSPACE's measurement and calibration software. For example, if the connection to an ECU is lost during a HIL test, CalDesk reports this to AutomationDesk via the MCD 3MC interface. The ECU can be disconnected intentionally by switching it off manually, or accidentally due to an error. The purpose of intentional disconnection is usually to test how the rest of the system behaves if one ECU fails. The test can be made to



CalDesk and AutomationDesk interact closely in the test process.

### AutomationDesk is constantly being extended to meet all users' new requirements.

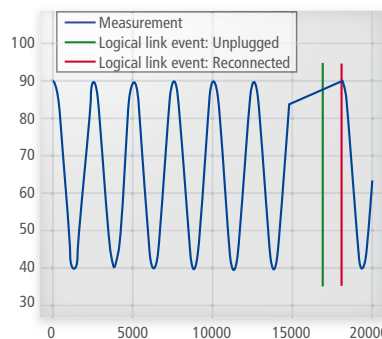
react to the ECU's disconnection, and if necessary also to its reconnection. The points in time when this occurs are shown graphically in the test report.

There is also an extended COM-API to facilitate access to AutomationDesk from the outside. Users can create, read, and parameterize all the available data objects, and they can also

execute test sequences. This means that tests can be automated and executed with different parameterizations.

#### Managing Real-Time Tests

AutomationDesk comes with several different libraries containing ready-made test steps that support a wide range of applications. Now a new, special library has been added to

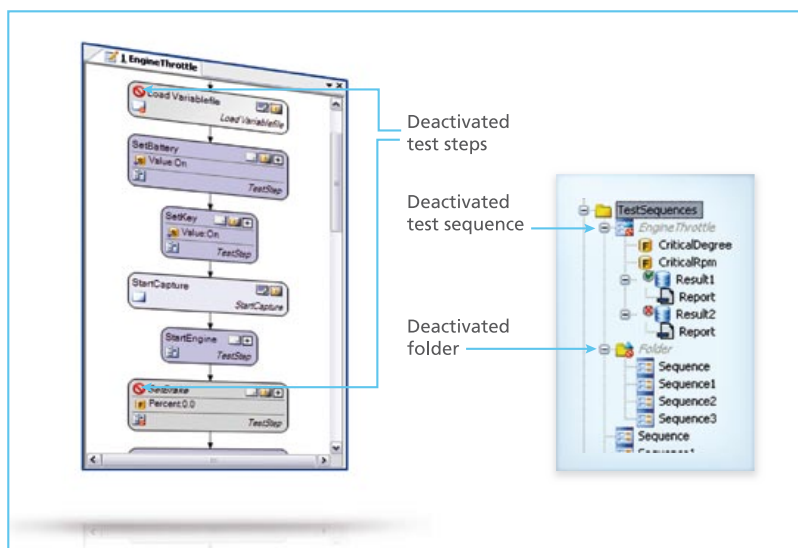


The test report documents the disconnection and reconnection of an ECU.

simplify the management of real-time tests in AutomationDesk test sequences. These can now be loaded to the hardware-in-the-loop simulator and executed via special test steps from within an automated test. Users can view the test status at any time.

#### Testing in Real Time

Another new library, RS232 Real-Time Library, allows direct access to the on-board RS232 interfaces of the dSPACE DS1005 and DS1006 processor boards. So when users want to address a simulator's RS232 interfaces, they no longer need Real-Time Interface (RTI) blocks in their models or scripts on a PC. This means that the RS232 data exchange can be configured completely from within a real-time test and controlled under real-time conditions. ■



Test steps and test sequences that are commented out are deactivated. They are highlighted in the graphical test sequence and the library structure, and ignored in test execution.