**vTESTstudio**

Comfortable Development of Automated Test Sequences for Embedded Systems

**What is vTESTstudio?**
- A high-performance development environment for creating test sequences
- Can be used in all product development phases – from model tests, to tests that support development, to tests on the HIL test bench
- Seamlessly integrates both proven and new types of test design methods and test notations
- Generates test sequences which can be executed with the CANoe test sequencer in real-time and evaluated in detailed reports

**Overview of Advantages**
- **Broad range of applications** through the use of various test design editors
- **Flexible parameterization** of test sequences with scalar values, test vectors and stimulation curves which can be accessed from all test design languages
- **Universal variant support** for structure, implementation and parameterization of tests
- **Simple maintenance** of test projects on account of the modular structure and a variety of structuring options such as libraries and folders
- **Direct access to XIL test environment symbols** in the test sequences (HIL, SIL, MIL, ...)
- **Universal traceability** of externally defined requirements and test specifications in test implementation and test report
- **High test coverage** without extensive programming thanks to the support of parameterized test case lists
- **Open interfaces** for simple integration into existing tool landscapes

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**Highlights of Version 5.0**
- **Verifying the software robustness** by automatically generating fuzz tests with the help of the Test Table Editor
- **Support of Distributed Objects (DOs)** in CAPL and C#.
- **Easier layout of graphical elements** with new formatting options in the Diagram Editors
- **New parameters of type message, node, network available in parameter files** for defining reusable functions
- **Freely configurable path** via options dialog for value table templates of system variables

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**Fast overview of all trace items available in the project and their test case links through the Traceability Matrix of vTESTstudio.**
**Test Design Editors**

Depending on the task and requirements involved, users can switch between the various complementary test design techniques integrated into vTESTstudio for the development of automation sequences.

- **Test tables**: Creation of test sequences from pre-defined and self-defined test commands in tabular form without the need for programming skills
- **Programming in CAPL and C#**: Definition of sequential or event-based test flows for asynchronous preprocessing of measurement values
- **Graphical test design notations (as separate option)**: Modeling of test sequences in graphical notation or state diagrams for automatic test case generation simplifies reviews of complex test scenarios

**Interfaces, Bus Systems and Protocols**

- **Test sequencer**: CANoe is required for test execution. The range of functions that can be used in vTESTstudio depends on the CANoe version.
  - Minimum: CANoe version 11.0 SP3 / 12.0
  - Recommended: CANoe version 13.0
- **Test data management**: IBM Rational DOORS from Version 8.1
  - IBM Rational DOORS NG / RQM
  - Intland codeBeamer ALM
  - Jama Connect
  - PTC Integrity
  - Siemens Polarion ALM
  - Open interfaces for integration into third party systems
- **Bus systems**: CAN, LIN, FlexRay, Ethernet, WLAN, ARINC 429
- **Protocols**: J1939, KWP2000, UDS, K-Line
- **Calibration**: XCP

More information: www.vector.com/vTESTstudio