

CANoe.MOST 7.1

The comprehensive Analysis and Test Tool for Multimedia Applications

MOST® (Media Oriented Systems Transport) is used to transmit audio, video and control data over fiber optic cables. The development of modern multimedia system requires professional software tools, and CANoe.MOST is the ideal solution.

Features and Advantages

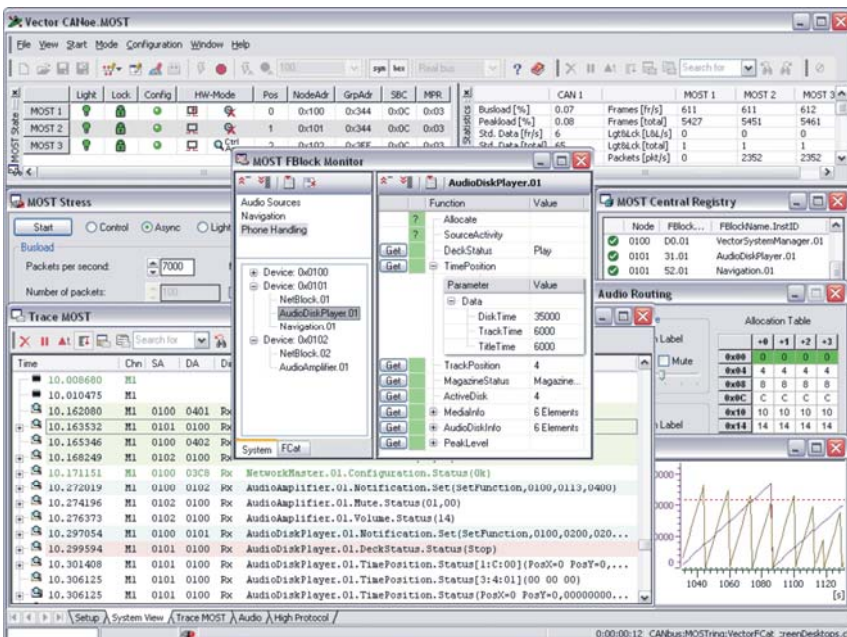
CANoe.MOST combines a wide range of analysis and testing capabilities for MOST systems with a convenient user interface. Besides offering user-friendly interactive analysis of the overall system, its automated analyses and tests are especially useful in boosting efficiency in ECU development and system integration. The network services required for single component tests are provided, including the means for performing a remaining bus simulation.

Primary Functions

- > Access to the control, asynchronous and synchronous channel
- > Support of MOST High Protocol
- > Stress functions (bus load, Light & Lock errors)
- > Monitoring of application states
- > Display of parameter values in Data and Graphic Windows
- > Statistical evaluation of the bus communication
- > Display of allocation table, configuration status, Light & Lock
- > Chronological analysis of the central registry contents
- > Network services (AMS, Notification Service, Address Handler, etc.)
- > Analyzes and tests can be automated
- > Core and Profile Compliance Tests available

Interactive Analysis

- > The user can observe the whole **bus communication** on the MOST system's control channel and asynchronous channel. The MOST specific application filter allows a flexible selection of relevant messages. Direct integration of the XML function catalog permits a structured display of all parameters in the Trace Window. Individual color highlighting of MOST events enables quick visual analysis of the bus communication. Protocol observer for AMS and MOST High Protocol allow the disassembly of the application data and identify protocol violations.
- > In the **Audio Window** the user can select channels from the **Allocation Table** for listening to or feeding-in audio data.
- > The **FBlock-Monitor** displays an overview of all application states which are communicated over the bus.
- > The content of the **Central Registry** is displayed in a dedicated window, and can easily be checked against a reference content.
- > The **Interactive Generator Block for MOST** can be used to send, any desired message or sequences via CMS, AMS or the asynchronous channel.
- > In the **Stress Window** a convenient user interface allows to generate bus load on the control channel and/or asynchronous channel and to introduce unlock sequences into the MOST ring.



MOST specific functions in CANoe.MOST

Automated Analysis

- > The Replay Block and Macro Recorder can be used to introduce message sequences and/or user actions into the system.
- > The integrated CAPL programming language supports analysis and synthesis of messages, as well as packets. The access to the MOST controller and all network states is also possible. Furthermore, stress functions may be started and integrated in test sequences by program control.
- > The streaming API in CAPL allows an automated analysis of the synchronous channels.
- > The logging feature creates a record of control messages, asynchronous channel packets, changes of the network and MOST controller states, each with a precise time-stamp. The tool's off-line mode supports the user optimally in later visual or automated analysis of the overall system.

Device and System Tests

- > Test modules support the user in device and system testing by providing a clear sequential test flow and clear, understandable reporting in XML or HTML.
- > CAPL test modules can stimulate the MOST ring and wait for reactions from MOST devices, system events or user actions. Inline input assistance based on the function catalog facilitates an efficient creation of test scripts. Access to system states and to the MOST controller is also possible.

Services

As part of our support and services program we can perform project work to implement customized solutions with CANoe.MOST. We also offer MOST training at our classrooms as well as on-site at our customers.

For further information on our MOST solutions go to:

www.vector-worldwide.com/most/en

- > XML test modules are used to configure frequently recurring test patterns, and they may be supplemented by CAPL programming if necessary.
- > In both types of test modules the user can focus on development of the actual tests, because most part of the reporting is done automatically. Typical MOST checks can be started with minimal effort, e.g. to determine whether critical unlocks occur during the test procedure. CANoe.MOST monitors these conditions in background.
- > Customers with maintenance contracts can test the MOST conformance of their system with the provided **Core Compliance Tests**.

Simulation Functions

The application socket of the simulation core contains all network services typical of MOST devices, such as NetBlock, Address Handler, Notification Service, AMS, etc. Furthermore, the integrated Network Master and Power Master can be activated on demand. Besides facilitating remaining bus simulations, CANoe.MOST ensures a proper start-up of a device during single device tests.

Gateway Functionality

CANoe.MOST also supports you in gateway development. Efficient prototyping, analysis, and testing are trouble free, with access to both buses and a common time reference.

New Functions of Version 7.1

- > **MOST High Protocol:** Test or simulation nodes can now handle multiple MHP connections at the same time. Additional commands for test nodes make it easier to test MHP connections
- > **Interactive Generator:** This block allows to send strings in different encodings and can now also be used in CANoe Realtime configurations
- > **Compliance Tests:** Core Compliance 1V2 (MOST versions up to 2V4) Sink/Source Tests and Connection Management Profile Tests are available as test modules with CAPL source code
- > Improved support of the analysis of audio transmissions
- > Compatibility to third-party soft- and hardware (Remote Controls (OCI); Logging file formats IMG, OP2, CCO, CC3 and Optolyzer Box of SMC)

VN2610: The MOST Hardware Interface for CANoe.MOST

- > The MOST interface with USB 2.0 supports both Node and Spy mode simultaneously. It offers access to the control and asynchronous channels with very short latencies and the full bandwidth of MOST. Headphone output and LineIn, as well as S/PDIF input and output allow access to audio channels
- > The streaming of all synchronous data via USB into the PC allows for a precise analysis of multi-channel audio streams
- > Accurate measurement of unlock times, precise time-stamps with 1 µs resolution for all events and time synchronization with hardware interfaces of Vector's XL-Interface family completes the functionality
- > Additionally the wide range of supply voltage makes VN2610 suitable for tests and analyses in the vehicle
- > VN2610 is fully compatible with its established predecessor VN2600