**What is CANape?**
The primary application area of CANape is in optimizing parameterization (calibration) of electronic control units. During a measurement process, you can simultaneously calibrate parameters and record signals. The communication between CANape and the ECUs takes place via protocols such as XCP or via microcontroller-specific interfaces with the VX1000 measurement and calibration hardware. CANape supports various ADAS sensors such as radar, LIDAR and video. Combined with high-performance hardware, CANape can store multiple gigabytes of data per second. Calibration data management and convenient measurement data evaluation including data management as well as reporting make CANape a complete tool for ECU calibration. Of course, CANape also provides access to bus data, diagnostic data and analog measurement data.

**Overview of Advantages**
- Open and flexible platform, since it is based on standards
- Acquire and log measurement data from a wide variety of sources time-synchronously, and, if necessary, analyze it in vMDM – a cloud-based measurement data management system
- Convenient calibration and management of parameters and direct transmission to server-based or cloud-based calibration management systems
- High-performance connection to controllers and sensors (radar, LIDAR, video ...) with outstanding measurement data rates
- Reliable ADAS logging solution for comprehensive testing
- Easy integration of analog measurement equipment with high sampling rates

*CANape user interface with simultaneous use of multiple configurations*
> Automatic measurement data evaluation through data mining
> User-friendly visualization of Simulink/Stateflow models
> Rapid prototyping platform as an efficient runtime environment for code and models
> Open interfaces for hardware integration with third-party suppliers

**CANape Options**
> **Option Driver Assistance**
Object verification for driver assistance including high-performance data acquisition from ADAS sensors
> **Option vMDM**
Direct connection between CANape and vMDM for the provision and analysis of measurement data
> **Option vCDM**
Convenient exchange of parameter sets and values within a team
> **Option Simulink XCP Server**
Visualize, measure and parameterize Simulink models easily and efficiently at runtime
> **Option Bypassing**
Bypassing computation with deterministic time behavior
> **Option Thermodynamic State Charts**
Display of thermodynamic data and informative state charts for online and offline analysis

**CANape log for Challenging ADAS Logging Tasks**
CANape log, in combination with Vector logger hardware, is a robust and easy-to-use solution for logging measurement data from a wide variety of sources – time-synchronously and with high performance. You benefit from CANape's broad range of functionality and its flexible scalability when used as a stand-alone data logger in the automotive environment. In particular, CANape log can achieve the very high data rates which are needed in complex data acquisition scenarios in the ADAS field. CANape log is available with a CANape 17.0 service pack. You will need a separate license to use it.

**Hardware Interfaces and Protocols**
> Bus monitoring of CAN, CAN FD, Automotive Ethernet, SOME/IP, FlexRay, LIN, SAE J1939, GMLAN, CANopen and MOST
> XCP on CAN, CAN FD, FlexRay, Ethernet, RS232
> High-speed controller interfaces such as JTAG, DAP, LFAST, RTP/DMM, Nexus AUX, AURORA via Vector’s VX1000 measurement and calibration hardware
> Fast PCIe processor interface over VX1000
> Interfaces for video sensors
> DoIP (Diagnostics over Internet Protocol)
> CCP
> ISO 14230 (KWP2000 on CAN) and ISO 14229 (UDS), ISO/TF2 and VW-TP2.0 transport protocols
> ISO 14229 (UDS) over FlexRay with the ISO transport protocol and the “AUTOSAR” and “BMW” transport protocols upon request
> KWP2000 on K-Line
> Measurement technology from many third-party manufacturers

**More information:** www.vector.com/canape