

CANalyzer.DeviceNet, Version 6.3

CANalyzer Extension for DeviceNet Users

DeviceNet is a communication protocol based on CAN that is used primarily in factory automation and maintained by the ODVA (Open DeviceNet Vendor Association). DeviceNet is primarily to realize master slave network with plug & play characteristics.

Features and Advantages

In addition to the CANalyzer's high-performance functionality, the DeviceNet extension gives the user a tool that can be used for initial production of the DeviceNet project. The DeviceNet-specific extensions allow the user to concentrate on the actual tasks of data analysis, without detailed knowledge of the DeviceNet protocol. This significantly increases the efficiency when searching for errors. Misinterpretations of CAN frames are avoided as well.

Functions

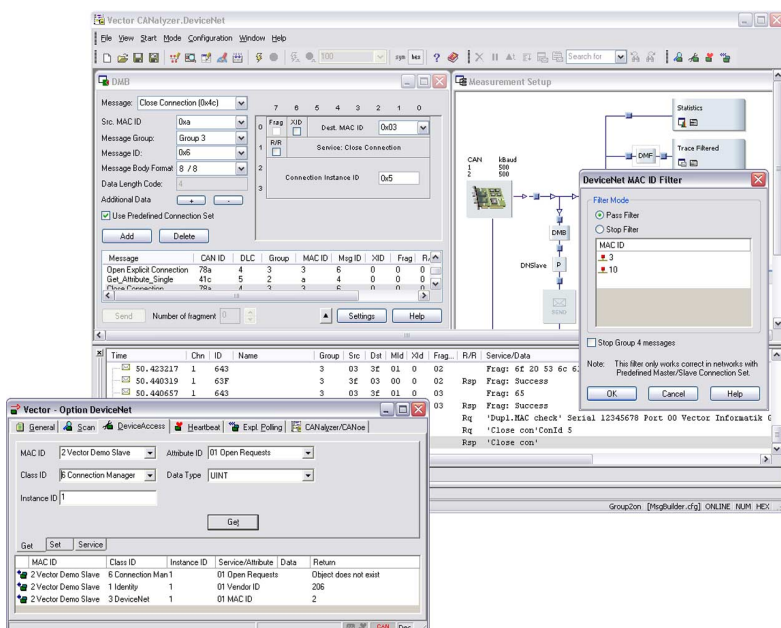
CANalyzer.DeviceNet expands the standard functionality of the CANalyzer with:

- > Protocol-specific display and evaluation of CAN messages in the Trace Window
- > Graphic display and evaluation of all online and offline participants on the network using the scanner

- > The DeviceAccess dialog makes all functions available for communication via explicit message and offers the respective services, classes, and attributes for selection.
- > The Heartbeat monitor allows the activation and monitoring of the heartbeat mechanism.
- > The Explicit Polling function reads cyclical attributes from a device.
- > The integrated dynamic database stores all procedures when establishing a connection. This is necessary in order to derive the meaning of an individual CAN message regarded in isolation, on one hand the identification allocation can occur dynamically (UCMM), on the other hand the data contents can have different meanings depending on the type of associated connection (I/O or explicit). For this reason, the pre-history of a connection must be known.

Application Areas

CANalyzer.DeviceNet is well suited for the development of DeviceNet master or slave components. Here the CANalyzer can be available on the network as a communication partner without having the actual hardware. In addition, the CANalyzer can be used for debugging or startup in existing networks.



CANalyzer.DeviceNet enables DeviceNet-specific interpretation of data in the Trace Window. An individual window allows interactive access to DeviceNet devices.

The extensive Trace Window and the possibilities for filtering messages enable quick isolation of errors and a clear display of communication. Further application areas are the configuration of nodes and usage as a training tool. CANalyzer.DeviceNet offers the opportunity to work with the protocol on the level of services and classes or on the level of CAN messages.

Hardware Interfaces

CANalyzer.DeviceNet is available with unlimited functional scope for all current hardware platforms from Vector.