Network development solutions come in different formats to support a variety of applications, such as network analysis or node emulation. Network analysis is crucial throughout the development of any networked system or module. The ability to capture, view, and record messages allows monitoring of bus integrity or troubleshooting functionality of the modules on the network. Whether developing a concept or preparing for production, access to the network is essential. Node simulation can be done with hardware or software components depending on whether the environment is on the bench or in the vehicle.

Software Solution Features

Node Emulation
During network development, in many instances there is a point where the 'real' hardware is not available for testing. Node emulation, done by hardware or in software, is used in its place. CANLab Network Analysis Software provides all the features needed to send and receive messages just as an ECU would - including send on changes, send on receipt, time based sending, etc.

Scripting
Scripting has almost become a required function in networking analysis tools. There are always unique situations where scripting is essential to automate tests, simulate nodes, or initiate messages based on network activity. The script itself should be easy to use and based on an environment familiar to most developers, making their implementation fast and efficient.

Post Data Analysis
Traditional bus analysis tools provide little functionality for analyzing the data contained in CAN messages. Expectations of these tools are getting higher, since passive monitoring is not enough. With programmable conditional highlighting of monitors, virtual channels, and the ability to mix real-time and recorded data, good post analysis tools empower users. It allows them to streamline and enhance every aspect of their jobs.