

# GENy

## Integrated Solution for Configuring Embedded Software Components

GENy is the comfortable configuration tool for Vector software components. It was created for development processes of the future such as those defined by AUTOSAR.

GENy is used to configure CANbedded components or the flash bootloader for use in production ECUs.

### Features and Advantages

GENy is a developmental offshoot of CANgen and DBKOMgen. The GENy architecture was completely redesigned based on Vector's experience with those two tools.

The following properties characterize the design:

- > Thoroughly modular structure due to its static framework, stand-alone graphic user interface (GUI) and dynamically reloadable components
- > Reloadable hierarchies make it well suited for any configuration task (CANbedded, LIN, FlexRay, OSEK OS, etc.)
- > A cleverly designed framework mechanism interprets and manages dependencies in configuring components
- > XML is used throughout as the file format, both for the components descriptions (Attributes) and data saving
- > Open interfaces mean simple expandability

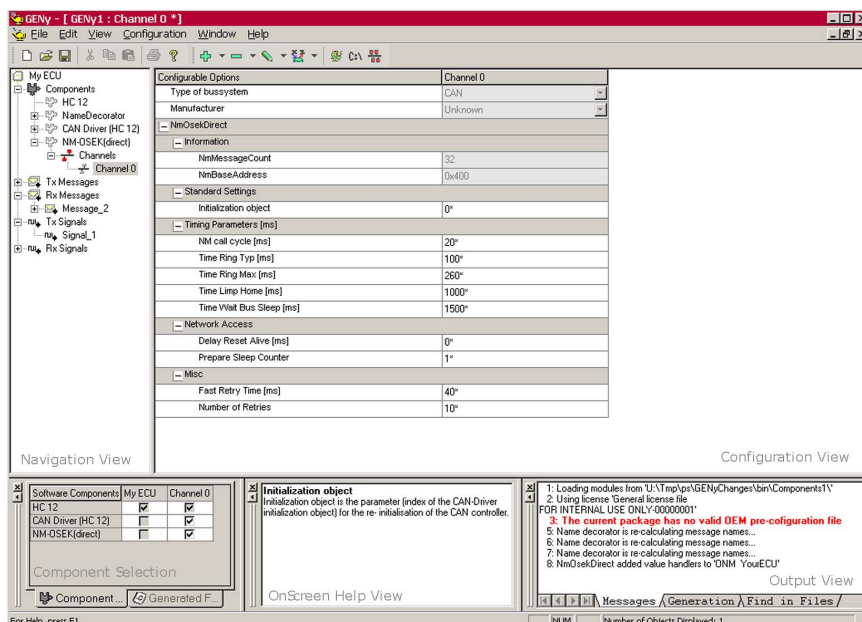
This makes GENy a scalable and fully generic configuration editor/generator that permits consistent configuration from a single integration environment, even of complex heterogeneous systems. Vector's many years of experience in the area of ECU development ensures optimal workflows between OEM and suppliers without altering their tasks or roles.

GENy is a collection of components (not a rigid program block); therefore it can also be expanded very easily by adding auxiliary components.

GENy's graphic interface is very easy to use and intuitive. GENy always appears with the same "look and feel" independent of the components to be configured. The configuration data is shown and processed in a hierarchical tree structure. This makes navigation user friendly, and the user gets a clear view of all options. Wizards provide a guided "step-by-step" procedure.

The Configuration View can be modified manually or via an external XML file. The latter is essential for an OEM-specific appearance of GENy's GUI and guarantees that parameters will have functionally relevant preset values.

Tool tips and the online help function save time and immediately give you the information you need about possible component settings. Plausibility tests prevent invalid settings and thereby prevent errors.



GENy Program Window

### Future Advance Developments

- > software development kit for developing your own configuration components
- > Configuration of I/O layers

For up-to-date information on this kit see: [www.geny.de](http://www.geny.de)

### Training Workshops

As part of our CANbedded training program the configuration tool GENy is also explained.

Further information on individual training events and schedules can be found on the Internet at: [www.vector-academy.de](http://www.vector-academy.de)

The generation process is logged in the Message Window, and this indicates potential errors (e.g. mistakes in configuring) and other important information. This is done to avoid tedious debugging efforts.

Characteristics of the standard version:

- > Configuration templates for different application types
- > System-wide parameters only need to be configured once
- > There is only one XML-based configuration file
- > Expandable due to open interfaces
- > Standard version is already integrated in the CANbedded packet
- > For the Windows operating systems 2000, XP and Vista

Furthermore, a COM interface can be provided upon request, whereby the configuration tool can be used together with modeling tools or test environments for automated tests.

Supplemental services offered at additional charge:

- > Various GUI modes (for system architect or component developer)
- > Support of distributed development processes
- > Configuration description
- > Semantic differences between configurations
- > Configuration Assistant (Wizard)
- > COM interface

### Functions

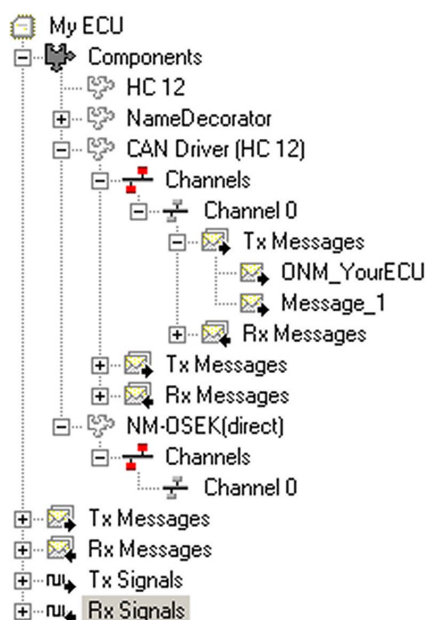
GENy is the tool for configuring any software component. Configuration and parameter files can be generated to integrate them in the application project.

Functional capabilities of GENy include the configuration of:

- > Embedded software components for CAN, LIN, and FlexRay
- > Flash Bootloaders
- > Operating systems
- > GENy can read XML and CAN database files (DBC) as well as LIN (LDF) and FlexRay files (Fibex)
- > The CANdela database (CDD) can be read
- > Im- and Export of AUTOSAR ECU configurations

### Application Areas

The GENy configuration tool is always used in conjunction with other Vector software components for communication and diagnostics. GENy fulfills all AUTOSAR Consortium requirements.



GENy Navigation View