



Qualified safety  
according to  
EN 61508-3:2010  
EN 50128:2012

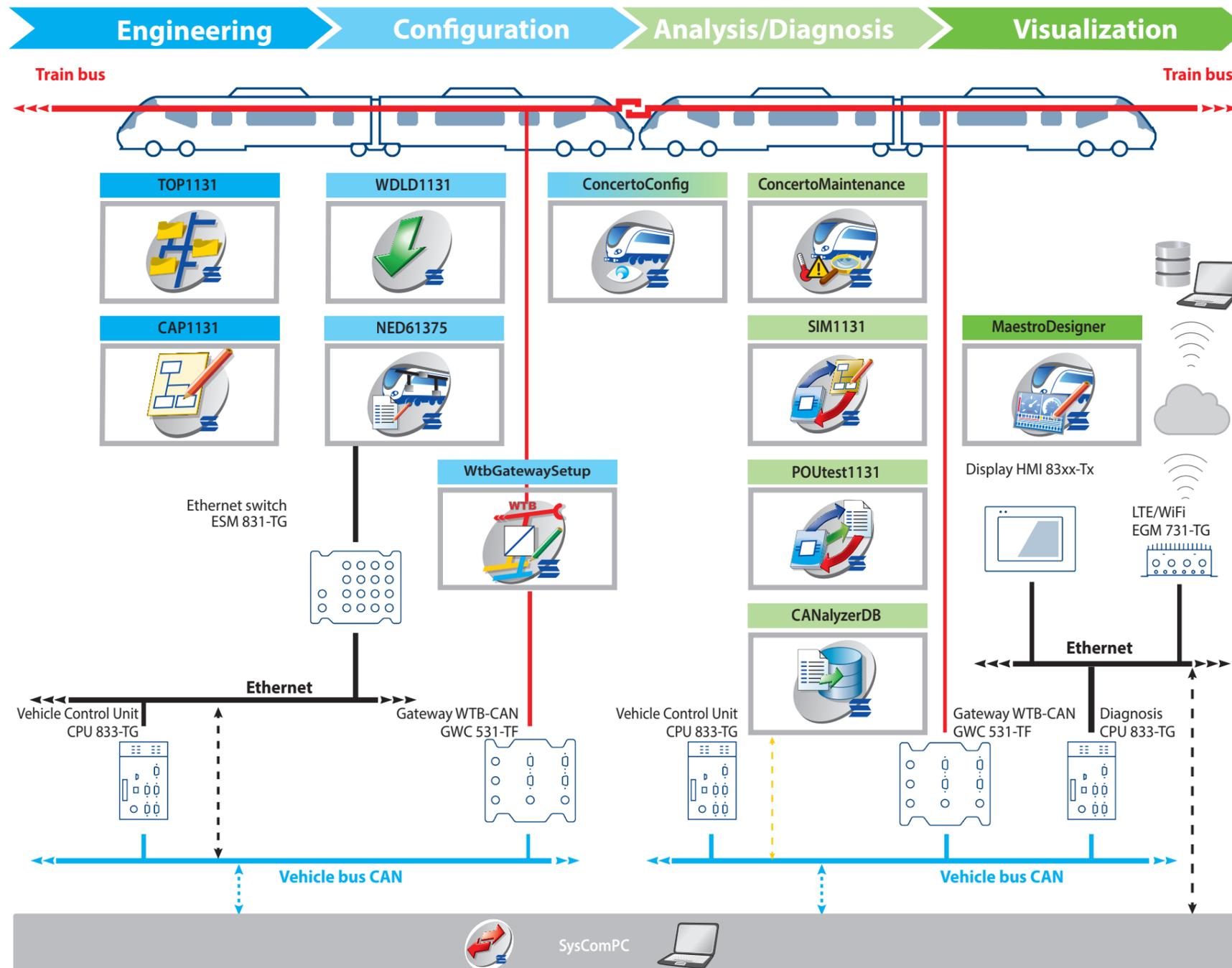
# INCREASE PRODUCTIVITY

REDUCING ENGINEERING EFFORTS  
WITH INTEGRATED SOFTWARE TOOLS



**SELECTRON**

# INTEGRATED, EFFICIENT, AND TRANSPARENT SOFTWARE



## SYMPHONY® SUITE

Behind the title of **Symphony® Suite** lies the complete **development environment** for our **MAS System** (Modular Automation System), designed to be transparent, self-documenting, and user-friendly. For **every project phase**, we offer the **perfect software tool** for your needs.

The Symphony® Suite is the central point of entry to the Selectron toolchain. This clearly structured tool collates important information such as software versions, product information sheets, system manuals, catalogs, quality documents – centrally and well-structured to provide you, the user, easy access to downloads at any time. This way, you are kept

### USER BENEFITS:

- **Clear hierarchy:** Clearly arranged structure in the catalog
- **Reduced time to market:** Efficient maintenance of catalog data – consequently, new features can be implemented more rapidly
- **Intuitive to operate:** The menu structure is streamlined and clear
- **Overview:** Provides a brief overview of the entire portfolio
- **Information:** All information can be called up centrally
- **Product decision:** Products can quickly and easily be compared with each other
- **Product search:** Filter functions for finding a product quickly
- **Multilingual capability:** Tools and documents available in several languages
- **Update capability:** The user is automatically informed when new products become available and, with the update functionality, the catalog is always updated
- **Local data:** All data is stored locally, which means it is quickly available to hand, helping commissioning for example
- **Individuality:** The catalog can be adapted and personalized for each user

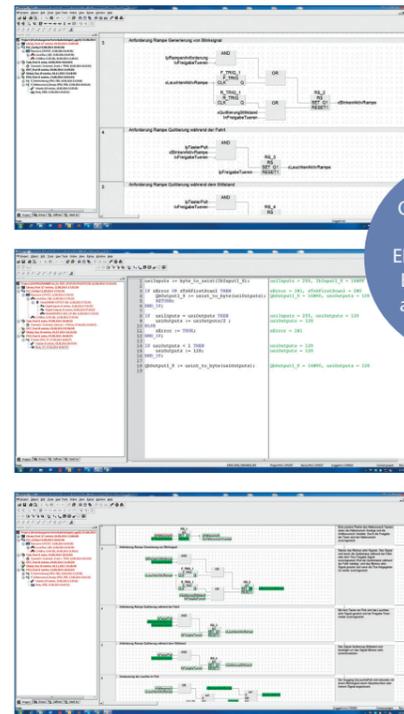
## ENGINEERING



CAP1131

CAP1131 is our standard tool for the automation systems from Selectron. It offers programming according to IEC 61131-3 in the FB, SFC, and ST languages. Parts of a program can also be written in the high-level C (ANSI C) language.

Comprehensive and convenient user libraries clearly provide more efficiency for all auto-mation tasks. Additionally, CAP1131 offers the possibility for configuring and parameterizing the hardware, setting communication parameters, online monitoring, as well as online changes during commissioning. Configuration and parameterization of the installed hardware are only few clicks away

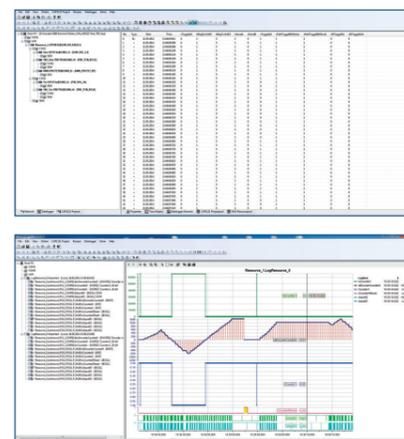


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TOP1131

TOP1131 gives the user the possibility to centrally perform core management tasks for Selectron's MAS controllers within a network. The visual representation of network topology, automated batch updating of controllers, and data logger functionality are just a few of the tool's main functions for supporting users during development and commissioning.

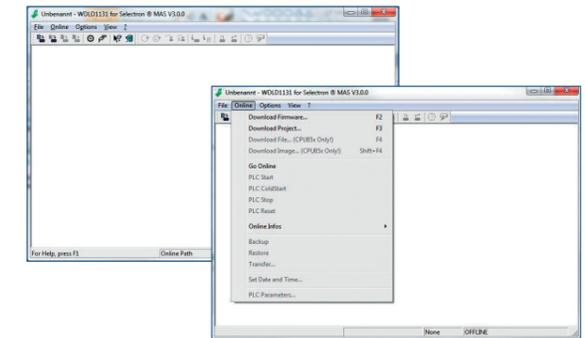


## CONFIGURATION



WDL1131

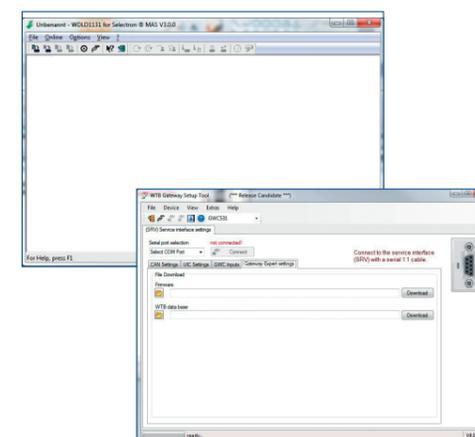
This tool offers an easy and efficient method of setting system parameters (e.g., communication parameters, date & time, etc.). Updates of the firmware and application are easily carried out. During vehicle commissioning, it offers significant advantages.



WTB Gateway Setup

WTB Gateway Setup is a tool for configuring the different parameters of the WTB gateway. The tool enables the user to set the UIC ID of the vehicle, and also CAN bit rates and CAN addresses in cases of WTB to CAN gateways. Furthermore, the tool has a dialog for setting static vehicle properties, which can then be exported as a CAP1131 import format (\*.asc).

There are a number of extra views, allowing the user to download files and monitor the serial communication (SRV).

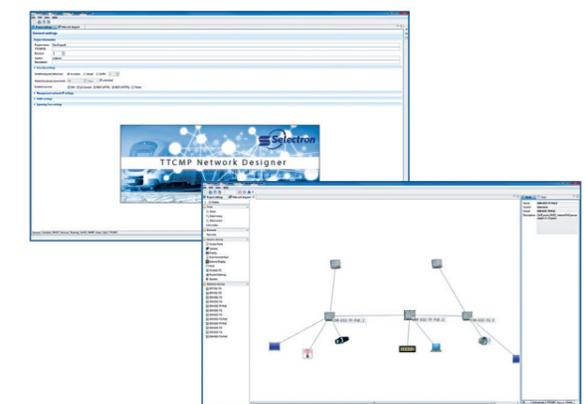


NED61375

The NED61375 ("Network Designer") is a tool for the creation and management of Ethernet networks.

The program provides a graphical user interface (GUI); using the simple drag & drop techniques, Ethernet networks are designed that can then be configured or parameterized.

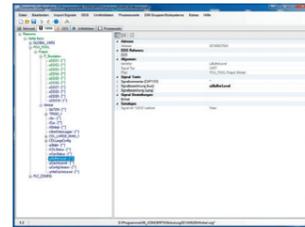
Configure the complete network, not the



## ANALYSIS/DIAGNOSIS



### Concerto® Configuration

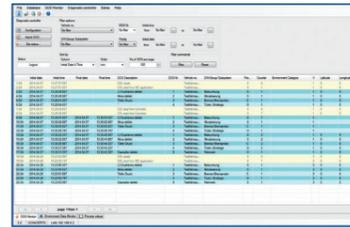


**Concerto®** is a comprehensive diagnostic software package used for recording and evaluating events from rail vehicles. It is a tool for train and maintenance staff to resolve problems and errors on the vehicle quickly and efficiently and to detect wear on machinery early, thus helping to plan any future maintenance.

With **Concerto® Configuration**, DDSs (Diagnostic Data Sets) are configured and environment data, as well as process data groups, are defined.



### Concerto® Maintenance

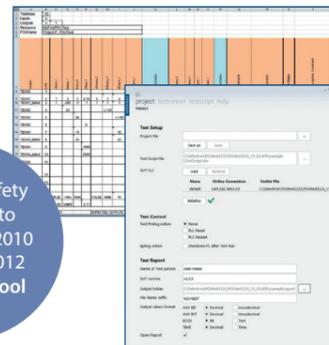


**Concerto® Maintenance** is a PC-based software application with which recorded data, or Diagnostic Data Sets (DDSs), can be saved to a database for offline evaluation. Thanks to its filtering and sorting functions, the frequency and exact times of event occurrences can be analyzed.

The **Concerto® Data Logger** on the other hand is called as a software component directly in the vehicle control unit (PLC), varlist logger, or as a standalone data logger integrated within a CAN network (CAN logger/CAN sniffer). At the same time, Concerto® records data logger events that were



### POUtest1131

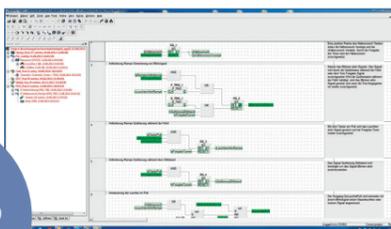


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The **POUtest1131** tool automatically checks CAP1131's Program Organizational Units and applications. The main objectives of the POUtest1131 include automatic testing of IEC 61131-3 code modules and applications, generation of test reports for standards-conforming documentation, as well as early detection and avoidance of regressions.



### SIM1131



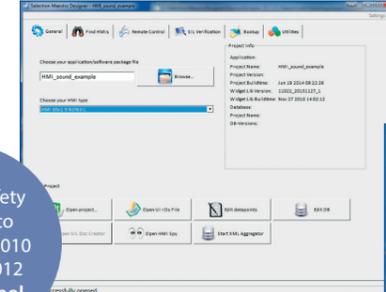
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**SIM1131** offers the user the possibility to simulate CAP1131 applications virtually. This means that short smoke tests or comprehensive module tests (e.g., with POUtest1131) can be carried out without the need for additional hardware.

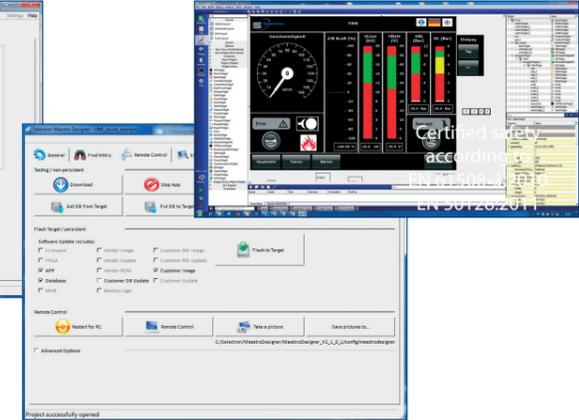
## VISUALIZATION



### Maestro Designer®



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With the programming tool **Maestro Designer®**, Selectron's HMIs are easily programmed within a graphical interface. As well as images and text, it is also possible to use freely configurable dynamic elements such as bar charts, tachometers, etc. Other functions relevant for railway applications, such as trend analysis, alarms, day/night changeover, and language selection, are also available. A Maestro Designer®-developed application can be displayed directly in simulation mode on the developer's PC and tested. Hardware and Tools are implementable for safe applications up to SIL 2.

We provide a graphical design and programming tool to support the programmer. Professional programming know-how is not required. Creating typical railway technology applications, as well as adapting to project-specific customer needs is paramount. This is achieved by a design tool in which numerous **widgets** are integrated. These **widgets** encapsulate functionality specific to railway applications, such as ETCS, tachometer, diagnosis, and video. The visualization can be resized, rotated, mirrored, have areas extracted, and much more. All this functionality is carried out conveniently with a few clicks. Furthermore, all the common widgets known from the desktop PC world (buttons, sliders, labels, pictures, etc.) are also components of



### Fleet Diagnostic



**Fleet Diagnostic** is a web application for collecting process data from the rail vehicles. Error analysis for fast responses, display of the vehicle's location and preventive maintenance are just some points to describe the user benefits. This process data is sent from the controller via the modem to a server, the user accesses the data through a browser.

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