

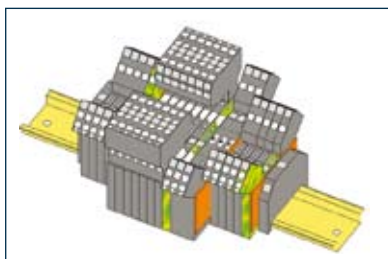
## SUCCESS STORY: THE INTRODUCTION OF eCATALOGSOLUTIONS BY CADENAS GMBH AT WAGO KONTAKTECHNIK GMBH & Co. KG

### INDUSTRIAL SECTOR AND SYSTEM ENVIRONMENT

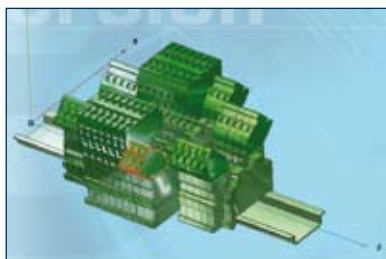
WAGO uses a configuration program for terminal blocks, the ProServe software. The circuit diagram is created in a CAE system and transferred to the smartDESIGNER, where the terminal blocks are designed with their accessories and the configuration is verified mechanically and electrically, assuring error-free functionality. Until now, the customer was required to manually recreate this configuration in CAD using individual modules. This has now been automated by the integration of the CADENAS technology in the background of the ProServe software. WAGO decided for CADENAS because this South German company can supply the desired CAD export formats (native and intelligent solids and assemblies) and also offers further flexible export options. Thus, the whole and tested configuration out of ProServe can be transferred as a complete assembly with accessories into any CAD system. WAGO offers optimized service to customers working with ProServe, saves time and reduces product development costs. The customers are delighted with the end-to-end capability of the workflow from CAE to CAD.

### END-TO-END WORKFLOW CAE TO CAD

1. Creation of circuit diagram in a CAE system or configuration of terminal strip in the WAGO smartDESIGNER
2. Automatic test of the terminal strips plausibility
3. Export to the CAD system with CADENAS' PARTdataManager



CAD export from WAGO smartDESIGNER



WAGO is an industry leader in the field of screw-less connection technology. Our motto: »innovative connections«. Since its founding in 1951, the company has focussed on the development, production and distribution of innovative terminals and plug-in connectors, screw-less clamping spring terminals, as well as strip-free contacting.

In 1995, we added the Automation division, where especially the WAGO-I/O-System achieved a prominent position in the market place. The modular fieldbus system soon became an industrial standard.

Highest possible quality of all products is the top target. In order to achieve this in the production process, a manufacturing-friendly design is a cornerstone in the product development, materials and suppliers are selected with utmost care and production is performed using machinery optimized for the requirements. Intending to offer optimized service to the customer, WAGO now uses eCATALOGsolutions by CADENAS.

»We are very happy with the cooperation with CADENAS. In CADENAS, we found a partner who reacts flexibly to innovative task specifications and quickly recognizes marketing opportunities. Our questions were answered quickly, friendly and competently and the joint work at our customers progressed quickly and professionally.«

Simone Brinkmann-Tewes  
WAGO GmbH

**2,800,000 PROSPECTIVE CUSTOMERS**  
**120,000,000 PAGE IMPRESSIONS IN 2005**  
**12,000,000 PART DOWNLOADS IN 2005**

## BENEFIT: END-TO-END WORKFLOW CAE TO CAD USING ProSERVE AND CADENAS

The WAGO ProServe software (and especially the WAGO smartDESIGNER) is a program to combine whole terminal blocks including accessories. Mechanical and electrical tests can be performed assuring that the configured terminal blocks functions correctly. These completely mounted assemblies may now exported in whole as .dxf, .dwg, step and iges, i.e. in 2D and 3D. For this, PARTsolutions runs in the background creating the same terminal block from the individual modules and preparing them for export.

Many clients are thus able to work from their CAD system, create the circuit diagram and export this specification to WAGO smartDESIGNER (ASCII and bidirectional XML interfaces to standard CAE system, such as E<sup>3</sup>, ELCAD and EPLAN are supplied). The terminal block is then tested in smartDESIGNER, supplemented by required accessories and exported to the CAD system. Redundant and error-prone data management is minimized.

## WHERE IS CADENAS SOFTWARE USED?

The technology connected to the WAGO product configurator in order to supply all formats, was created by eCATALOGsolutions and PARTsolutions. The smartDESIGNER provides data for the establishment of the geometry. eCATALOGsolutions then creates the terminal block which may be transferred to nearly every CAD system as native geometry, using various interfaces (developed by PARTsolutions Technology).

## OUTLOOK

Starting immediately, WAGO markets all components with eCATALOGsolutions and provides worldwide 3D CAD product data via the PARTserver and other web portals.

The WAGO components are modelled by the company itself, individual variants of the products are defined with tables and finally stored in a centralized multimedia database. Seamless service for WAGO customers and potential customers is the goal. The geometries from the electronic catalog will be available for integration into all CAD system with just one button.

The format will be the native format of the respective CAD system, due to the adapted interface technology by PARTsolutions, assuring optimum quality.

»Innovative Connections« at WAGO does no longer mean innovative terminals and plug-in connectors only, but also top-of-the-line customer communication using eCATALOGsolutions. Existing and new customers with direct contact to WAGO are already supplied with the ProServe CD-ROM assuring seamless workflow through the integration of the CADENAS technology.

»eCATALOGsolutions has won the benchmark because it is the only system capable of supplying the desired export formats (extremely high quality from native formats and »smartPART« - intelligent parts with optional additional data) and also flexible further export options. The maintenance capability was also important.«

Hans-Jürgen Strubel  
WAGO GmbH

»The response from our customers was generally positive, and our key-account customer in particular, recognized how much they will profit from an end-to-end workflow from CAE to CAD with corresponding Wizards.«

Simone Brinkmann-Tewes  
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