Configure automation better with PACT*ware*

PACT*ware*

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PACT*ware* – the adjustment software for all field instruments and protocols

A tool with great user benefits

PACT*ware* brings together companies with a wide range of competencies. Designed as a manufacturer and fieldbus independent solution, the software forms the framework for standardized device configuration in the area of automation. It serves the entire range of existing field instruments, and that via any communication channel.

With PACT*ware*, all instruments in a system or entire plant can be configured, operated and diagnosed. Free of charge for users, the software has become the most widely used FDT frame application. PACT*ware* is extremely flexible under a wide variety of operating conditions; whether deployed at an engineering station or directly on site: PACT*ware* performs reliable work from any location.
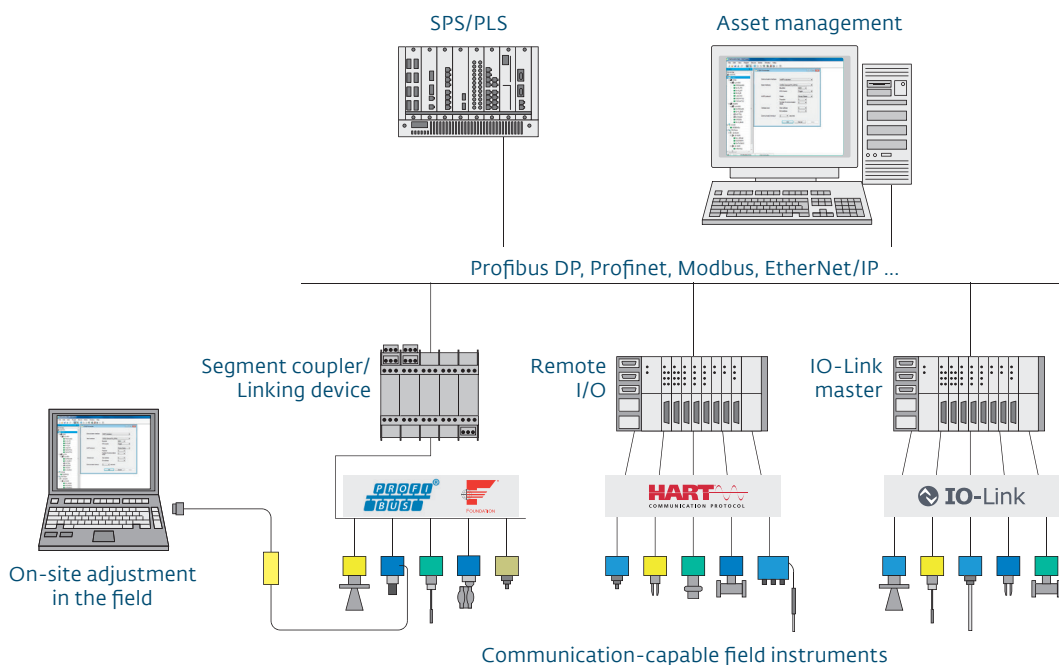
Why PACT*ware*?

Quick adaptation to any measuring task

When the user interface of PACT*ware* was being designed, the focus was on clarity and intuitive, user-friendly operation. The overall view of a system or plant can be quickly adapted to the individual measuring points, making them easy to recognize and understandable. PACT*ware* accompanies the user step-by-step through the configuration of instruments: no matter whether they draw on internal presettings or require customized solutions based on special parameters.

Compatible with all communication protocols

PACT*ware* supports all current communication protocols – regardless of device type or function. Thanks to its manufacturer-independent, standardized interfaces and exchange formats as well as modular structure, PACT*ware* integrates well into all areas of a heterogeneous system landscape.

This is made possible by the globally established standards FDT (Field Device Tool) and DTM (Device Type Manager). FDT ensures standardized data exchange between instruments and PACT*ware*, while DTMs make certain that all field instruments are adjusted according to standard procedures.

SPS/PLS   Asset management

Profibus DP, Profinet, Modbus, EtherNet/IP …

Segment coupler/
Linking device

Remote
I/O

IO-Link
master

On-site adjustment
in the field

Communication-capable field instruments

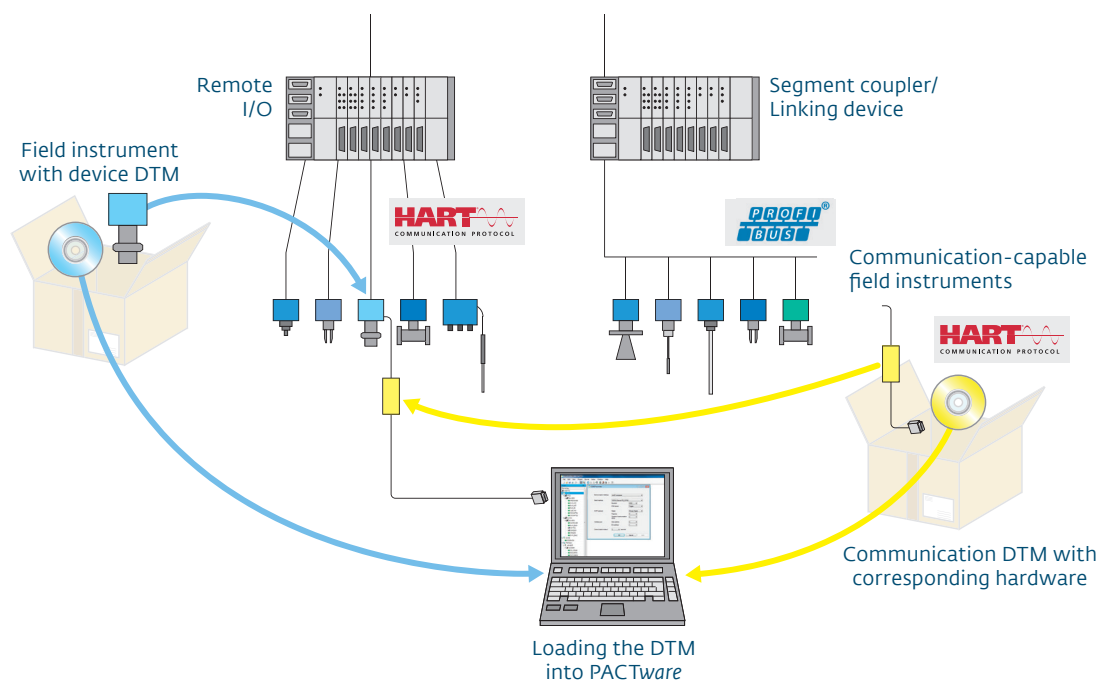# FDT + DTM: The technology behind PACT*ware*

Field Device Tool (FDT)

FDT is the interface definition between field instrument, DTM and PACT*ware*. It defines the data exchange between components independently of the type of fieldbus communication. This allows the FDT interface to carry out data exchange uniformly, even taking fieldbus or instrument specific features into account.

Device Type Manager (DTM)

Just like printer drivers in the office world, the separate drivers of field devices, the DTMs, guarantee good communication between the system level and field devices in the FDT world. The DTM combines all functions and data of a device. And it works for a single field instrument, an interface module or an entire instrument family.

Two who understand each other well: Equipped with FDT, the field instrument can speak the system-level language via its own specific DTM.

Field instrument with device DTM

Remote I/O

Segment coupler/ Linking device

HART COMMUNICATION PROTOCOL

PROFI BUS®

Communication-capable field instruments

HART COMMUNICATION PROTOCOL

Communication DTM with corresponding hardware

Loading the DTM into PACTware

PACT*ware* – simple and efficient configuration

For all field instruments, for all protocols: PACT*ware* uses a standardized adjustment and interface concept.

Optimal adjustment, minimal effort

Unlike simple device descriptions, DTMs also offer extended functions for display and user guidance. Thanks to its standardized technological basis, the PACT*ware* adjustment concept works well for all the very different field components from different manufacturers, and always presents a recognizable interface to the user. This minimizes the workload, lends certainty to the application and at the same time reduces the amount of training required.

Clarity saves time

The first thing PACT*ware* does is combine all the device drivers of a system or plant, including the communication drivers, into one project. The DTMs are selected from the device catalogue and inserted into the project. This small amount of effort creates clarity and, thanks to the resulting improved workflow, also saves time:

- when adjusting the configuration
- when changing individual parameters (also at a later time)
- when simulating functions
- when making detailed diagnoses
- when creating documentation

Well-established technology

PACT*ware* has been proving its worth as a stand-alone tool for configuring and diagnosing field devices and interface modules since 2001, the year the consortium behind it was founded. Manufacturer-independent collaboration has led to the creation of a high-quality product and contributed to the resulting broad acceptance by users. A large number of tools are available for creating DTMs: be it through modular building block systems or through automatic conversion from simple device descriptions or more complex FDI packages.

Advantages of PACT*ware*

- simplifies instrument configuration and diagnostics through standard technologies

- supports the full functionality of all instruments

- fieldbus-independent, open to new standards and thus future-proof

- runs on any Windows PC or tablet

- free of charge and available for download from many instrument manufacturers

PACT*ware* – function overview

Configure

With PACT*ware*, the system structure of a project can be easily modelled, as a whole or in part, on a PC. Application-specific views can be generated and the individual instruments easily configured. An online connection is not necessary for this.

Parameterize

Settings in field instruments and interface modules can be made or changed via point-to-point communication as well as via bus systems. The intuitive user interface makes it possible to read out all device information quickly and write data and changed settings into the device with absolute reliability.
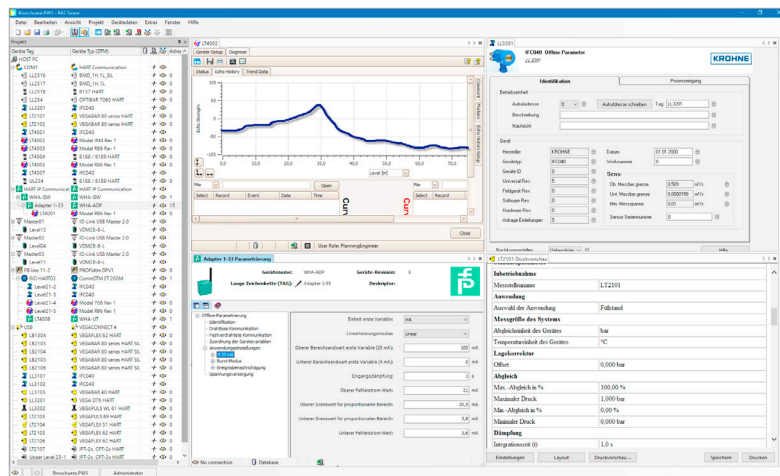
Simulate

During commissioning, the signal flow in an application can be tested by simulating a specific process value. This allows signals to be tracked and analysed across different measuring points and any errors to be detected and rectified at an early stage.
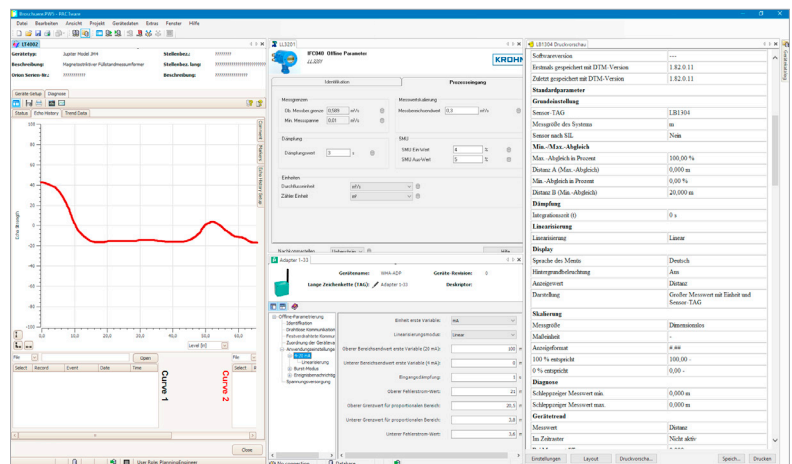
Analyse

The "Diagnostic Scan" function saves and updates the status of all devices combined in a PACT*ware* project. In addition, measured values can be recorded without limit, viewed over longer time periods and evaluated.

Document

Project structures and settings can be conveniently saved and printed out with PACTware. Moreover, important information such as the instrument description, manufacturer identification, serial number and firmware version in the DTM are also available for documentation.

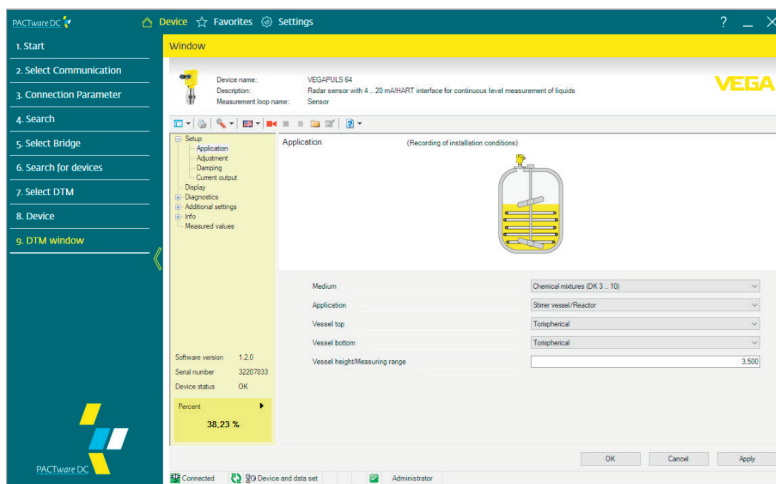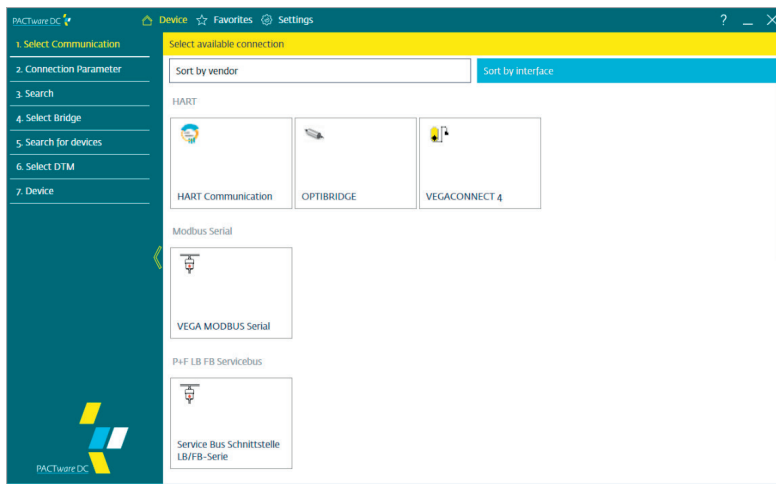# PACT*ware* DC revolutionizes point-to-point connection

Whether the task involves fast, on-site parameterization or direct diagnosis of individual devices in a complex system structure, point-to-point connection is the easiest way to do it. Being able to work quickly and intuitively via "touch" saves time and money in servicing. PACT*ware* DC teases out maximum efficiency from point-to-point connections with minimum effort. "DC" stands for a special version that makes direct control of devices much easier.

Automatically ready for use

After selecting the primary communication interface on the control unit or adjustment device, the connection to the field instrument can be established directly and without further configuration. PACT*ware* DC automatically finds the appropriate communication and instrument DTM on the adjustment device and establishes the online connection to the instrument. The field instrument is then automatically ready for immediate parameterization or diagnosis.

Quickly copied instead of newly created

For repetitive system structures, PACT*ware* DC offers the option of saving the structure and the steps necessary for establishing a connection as a "favourite". When setting up a new application later, a favourite can be called up with just one mouse click, bringing the field instrument immediately online.

PACT*ware* –
future-proof automation

PACT*ware* Consortium e. V.

PACT*ware* Consortium e.V. bundles the interests of many companies and drives the concept, as well as the product, forward. This is achieved through active participation in the FDT specification, the integration of additional communication systems, and internationalization. The association coordinates and watches over innovations and enhancements, for example by enforcing strict quality controls and making sure that only mature, industry-proven software is introduced to the market. The result of the consortium's work is a reliable, manufacturer-independent adjustment software for automation – in use now for more than two decades and always up to date.

High software quality

PACT*ware* is available to all full members of the PACT*ware* Consortium as completely transparent source code (Open Source). This makes it easy to locate and fix bugs, and avoid dependencies on individual companies. What is more, the standard software modules initiated by the FDT Group, the so-called "common components", guarantee the best possible basic technology – always up to date.

Equipped for the future

Thanks to its modular design, PACT*ware* not only incorporates all current fieldbus standards but is also open to future ones. Additional functions can be flexibly added via special interfaces, making them available to all DTMs. Such "add-ins" allow progress checks such as "audit trails" or "trending" as well as cloud connection across multiple devices.

High product quality
through open collaboration
and high standards

PACT*ware* – get started right away

Where can I get PACT*ware*?

The PACT*ware* member companies (e.g. instrument manufacturers) provide PACT*ware* as a download with the appropriate DTMs for their instruments. This is ideal for users. Because, whether it's a field instrument, a matching driver (DTM) or the higher-level adjustment software PACT*ware* you need: you can always turn to the same contact person. Service and support also come from the same source – the instrument manufacturer.

Adjustment of HART instruments included

Every PACT*ware* installation allows adjustment of all HART instruments. Setup includes a communication driver for commonly used HART modems as well as a generic HART device DTM.

PACTware members

BOORST Engineering

BOPP & REUTHER MESSTECHNIK

bürkert FLUID CONTROL SYSTEMS

CodeWrights

Foxboro™ by Schneider Electric

FS SOFT

KROHNE

KSB

LÜTZE SYSTEMATIC TECHNOLOGY

MAGNETROL

Matsushima Measure Tech

Microflex

NIVELCO

MOORE INDUSTRIES WORLDWIDE

PEPPERL+FUCHS

PR electronics

optimize! softing

STW STEINBEIS

THORSIS TECHNOLOGIES

TURCK Your Global Automation Partner

Auf lange Sicht VEGA

{w} wetcon industrial it-solutions

WIKA

A current overview of members and their websites can be found at: www.pactware.com

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