

Remotely Parameterizing Process Field Devices

FG-300 & CommDTM from SOFTING

Users of process control equipment can now greatly reduce their efforts and costs to maintain field devices by combining SOFTING's PROFIBUS/Ethernet Gateway with newly available FDT/DTM technology (like Endress & Hauser's FieldCare and PACTware products).

Before FG-300 & FDT:

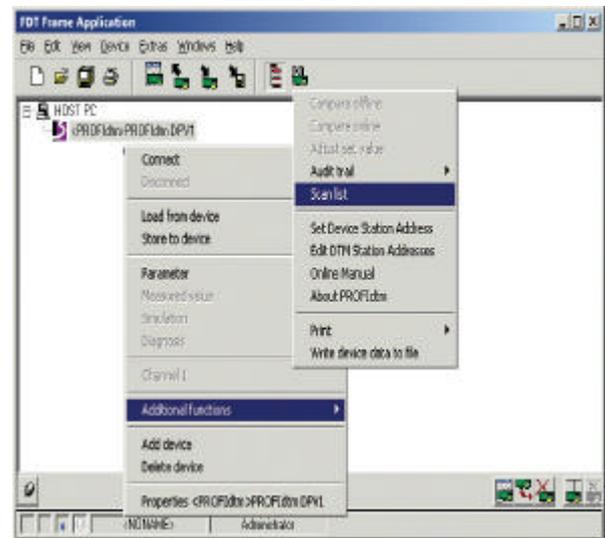
Formerly, plant operators were required to parameterize their many different process field devices with individual parameterization tools. Because these devices were often linked to separate fieldbus networks, the operator had to go down to the plant floor, connect a handheld unit or laptop PC individually to each fieldbus network, and download new parameters to the devices. Whenever the operator needed to modify a parameter (due to a recipe change, for example), he needed to repeat this procedure. Often, fieldbus networks spread out over long distances in large plants and make local parameterization of devices a time consuming, unpleasant process.

The New Approach: FDT/DTM:



Picture 1: FDT: New Configuration and Parameterization Concept for the Process Industry

SOFTING now offers a much easier, cost effective solution to this problem. By implementing new FDT technology, plant operators can provide a standardized interface for field devices and their parameterization that is open for all communication protocols and software environments.



Picture2: PROFIdtm automatically creates a list of devices on the PROFIBUS network, simplifying parameterization of the fieldbus devices.

The central component of the FDT concept is the Device Type Manager (DTM). The field device manufacturer supplies this software with the device. The DTM supplied, captures all of the device's features and algorithms. It contains the user dialogs, does the device configuration and diagnostics, and generates device-specific documentation.

Engineering tools (called FDT Frame Applications) integrate all of the DTMs used in a plant into an FDT frame. Via its standardized FDT interface, the engineering tools use the information and functionality provided within the integrated DTMs.

A communication DTM (CommDTM) provides access to the parameters and data within a field device. The CommDTM is the communication and management tool for a communication module (a fieldbus interface board or gateway, for example). Via its communication channel, it enables any DTM to communicate with its associated device over the fieldbus network. The FDT interface of the CommDTM encapsulates any features specific to the type of fieldbus used (PROFIBUS, FOUNDATION Fieldbus, HART, etc.).

The main advantage of FDT for commissioning and maintaining plants is that the operators can parameterize all devices in a standardized way using just one engineering tool.

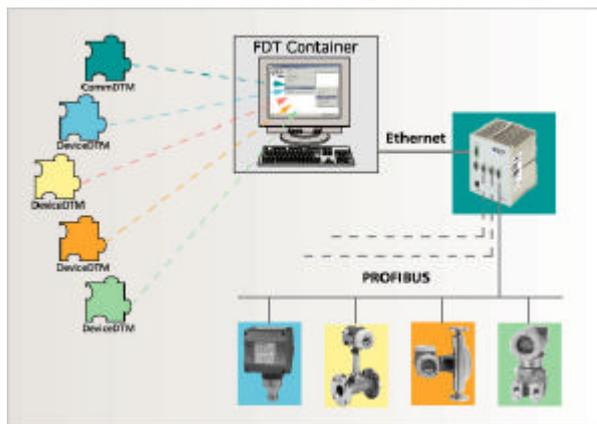
Many well-known device manufacturers like Endress+Hauser, Vega, Pepperl+Fuchs, Wika, Samson, and Foxboro/Invensys already offer parameterization tools using this technology. Recently, the number of users implementing FDT/DTM has increased dramatically due to its simplicity and cost savings.

FG-300 Gateway from SOFTING:

Remote Access via TCP/IP

SOFTING's FG-300 PROFIBUS/Ethernet Gateway can act as the backbone of a centralized configuration, parameterization, and maintenance system by connecting a PC to remote PROFIBUS devices over Ethernet.

SOFTING has built support for FDT technology into the FG-300. With SOFTING's PROFIdtm (PROFIdtm), any field device supplier's device-DTM gets high-performance access to the devices in the PROFIBUS network.



Picture 3: Remote Parameterization via FG-300 and FDT/DTM

By combining the FG-300 with SOFTING's PROFIdtm, operators can now configure, parameterize, and maintain the remote field devices without having to visit the various devices in the plant.



Picture 4: FG-300 PROFIBUS/Ethernet Gateway from SOFTING

Summary:

New FDT technology, combined with remote access via Ethernet, can provide easy, time-saving parameterization of all of the field devices within an entire plant by using one standardized engineering tool from one centralized PC.

An integral part of this concept is SOFTING's FG-300 Gateway that connects this central PC to the field devices remotely via TCP/IP for commissioning and maintenance.

Due to SOFTING's CommDTM the FG-300 is easily integrated into all FDT containers like PACTware, FieldCare, or others.

The benefits are:

- One standardized engineering tool makes parameterization simpler and quicker.

- Centralized management of field devices avoids time and cost-consuming configuration and parameterization in the field, helping a plant more flexible to changes.

More Info and Technical Details:

Please click on:

www.softing.com/en/communications/products/fieldgate.htm