



Production

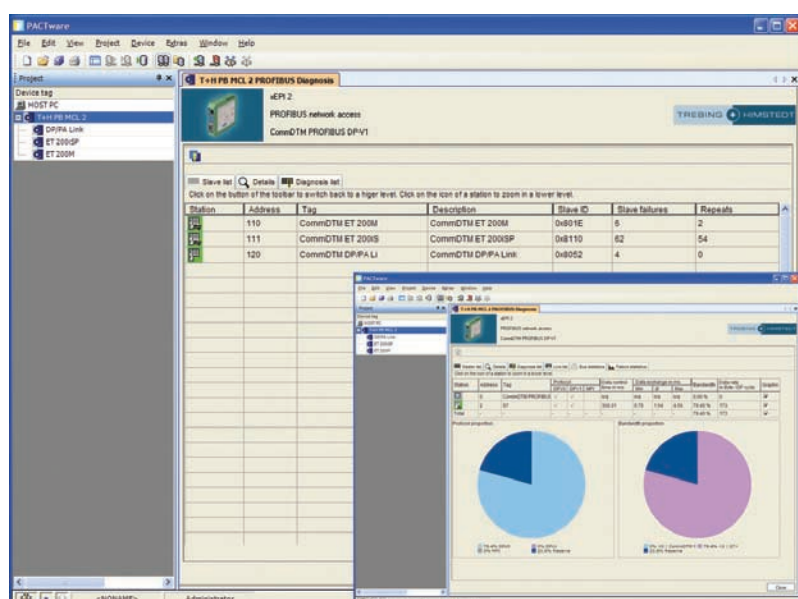


Everything Under Control

Parallel Condition Monitoring of Fieldbus and Field Devices

Saving Time and Money –

At last there is a tool that can monitor field devices and fieldbus at the same time. But why is this good news for the customer? Well, there are several good reasons. For one thing, the Trebing + Himstedt 2-in-1 solution considerably minimizes commissioning and maintenance cost and effort. And the clever solution not only saves time and money but increases plant availability at the same time.



The CommDTM Profibus DP-V1 of the xEPI 2 displays network and station states, supplies statistics on network parameters, and allows identification of critical network stations.

Fault Analysis – In the Past ...

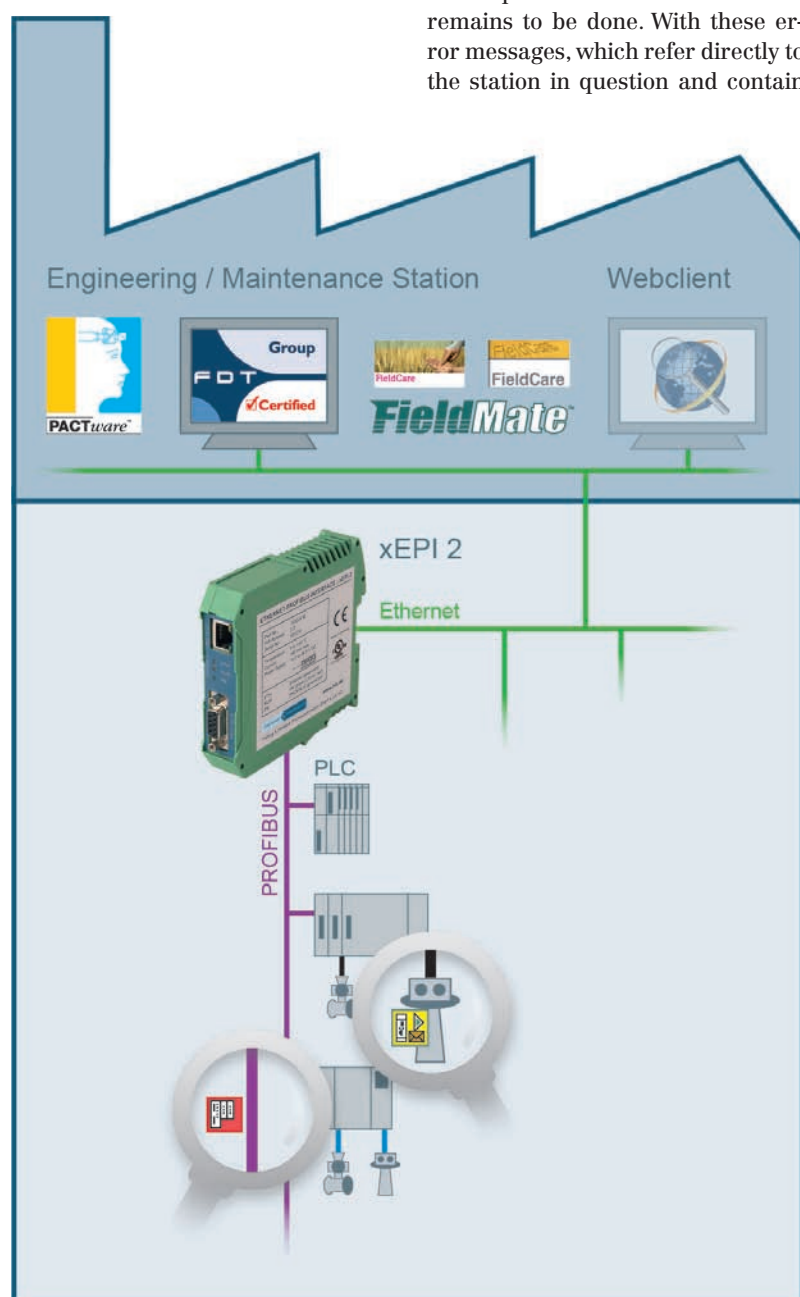
Trebing + Himstedt is well known for its innovative ideas. The latest proof of this is the Schwerin, Germany-based software provider's new generation of the (FDT-based) xEPI 2 diagnostics unit. Because the new CommDTM (Device Type Manager) or device driver for FDT communication has been designed with special features, this solution not only enables manufacturer-independent operation and monitoring of field devices, but also simultaneous, permanent network status scans. With this capacity, the diagnostics unit pioneers parallel condition monitoring of Profibus network and field devices in one single FDT frame application – with huge cost-saving potential. In addition to that, a 2-in-1 solution also means: Only one application instead of two, no constant back-and-forth between two programs, and a uniform "look and feel". Last but not least, for the user this overall concept also means one fewer software tool to install, handle and maintain – because the configuration tool functions as a diagnostics tool as well.

At Any Place – From Anywhere

The basis for manufacturer-independent device operation, and thus for central field device management, is the FDT technology. With the Trebing + Himstedt xEPI 2, users can directly access all field devices in their plant or installation via Ethernet, directly from their desks for example, or remotely if necessary. Another bonus of central field device management: Device configurations and specifications are easy to manage and to archive. This in turn considerably facilitates version and driver maintenance in daily plant operations.

One Solution – Double Benefit

In FDT environments, the xEPI 2 functions as a configuration access point and a diagnostics unit at the same time: It not only provides the Ethernet-based access point for central device access, but in parallel collects valuable diagnostic information on network and stations. In its latest version, the CommDTM of the xEPI 2 displays this Profibus diagnostic information in a clearly arranged and structured way in FDT frame applications such as the free Pactware configuration software, as well as in field-level Asset Management tools such as Endress + Hauser FieldCare or Yokogawa FieldMate.



The xEPI 2 provides the central access point via Ethernet while at the same time supplying Profibus diagnostics information through its CommDTM.



xEPI 2 Diagnostics Unit

... And Present

Not so when using the xEPI 2. If any device in the plant fails, the system automatically alerts the user by email. Opening the email, clicking the respective link – that is all that remains to be done. With these error messages, which refer directly to the station in question and contain

information on the cause of fault as well as troubleshooting, staff in charge can decide what to do almost immediately. If a Profibus component is affected, a mechanic can be instructed to exchange the card or controller. In case of device errors, a precise diagnosis of the failure cause is provided. If necessary, a replacement of the device can be ordered. If it is a fieldbus failure, the telegram analysis will help. Whatever the reason, in many cases there will be no need to go down to the plant. And even in those cases where a maintenance worker does have to get on site, he or she knows where to take targeted action when he leaves his desk. And the best thing about it: The entire fault analysis takes just about 20 minutes. The Trebing + Himstedt tool can thus reduce response times by two thirds.

Always One Step Ahead

What do modern maintenance teams expect from monitoring concepts? Monitoring should ensure high plant availability and identify malfunctions before the device fails. Keyword: preventive maintenance. Tools and procedures have to become integrated into existing plant structures, be compatible with existing infrastructures such as Ethernet, and capable to be implemented into established monitoring mechanisms. Furthermore, state-of-the-art monitoring allows selective, targeted fault analysis via central (remote) access and facilitates commissioning.

With the xEPI 2 solution, users can continuously monitor status, failures and diagnostic messages of the single Profibus network stations – either via the diagnostics unit's website or directly in the FDT tool through the CommDTM. Detailed information is displayed down to modular level. A live list of the devices and bus statistics with physical network parameters as well as error statistics to identify critical network stations is a further useful feature.

Valuable Help

And there is more. The additional telegram logger of the intelligent CommDTM (Profibus DP-V1) for xEPI 2 identifies communication errors during field device configuration in a quick and targeted way. The integrated link to the xEPI 2 website allows plant-wide monitoring of all Profibus networks with automatic email notification. In short, innovative tools such as this enable the implementation of time- and cost-saving remote maintenance scenarios and mobile service concepts.

Other features that provide high ease-of-use: engineering data, i.e. tags and descriptions from the FDT frame, can be automatically imported into the xEPI 2 website. The configuration is supported by a wizard. Last but not least, the intelligent tool checks automatically if all installed devices work non-reactively.

Plenty Of Benefits

A parallel, web-based monitoring and operation concept for network and devices has plenty of benefits: The network basically monitors itself and, in case of failures, alerts maintenance staff well in time. In addition, the FDT tool enables central online access to the devices and their configuration. Fault analysis, supplying specific information for troubleshooting within a short time, can be done from the desk or even



Dr. Christine Eckert
Freelance journalist

monitoring effort and maximum convenience.

Dr. Christine Eckert for Trebing + Himstedt

Contact:
Edge-Bert Wache
Trebing + Himstedt Prozessautomation GmbH & Co. KG
Schwerin, Germany
Tel.: +49 385 39572 24
Fax: +49 385 39572 22
ewache@t-h.de
www.t-h.de

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Pepperl+Fuchs GmbH
Lilienthalstraße 200 68307 · Mannheim · Germany
Phone: +49 621 776-1111 · Fax: +49 621 776-271111
E-Mail: pa-info@pepperl-fuchs.com
www.pepperl-fuchs.com

