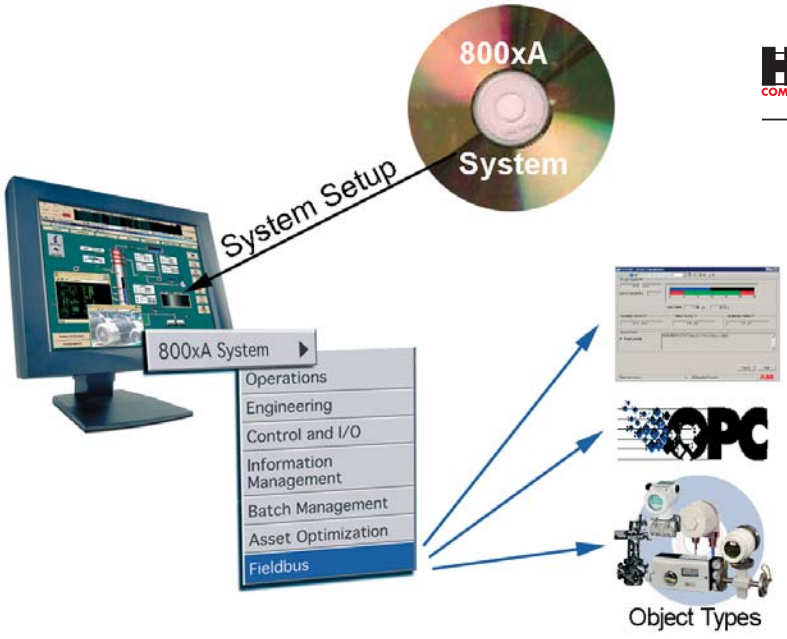
Industrial^{IT} System 800xA
Device Management Library

FieldIT

Data Sheet



HART Device Library

PROFIBUS Device Library

FOUNDATION Fieldbus Device Library

Although today's fieldbus technologies have extended the control system architecture to the device level, many system designs still require significant integration effort to access an individual device's advanced features and functions. This is not the case with System 800xA. System 800xA minimizes this effort by providing Fieldbus topology design and field device configuration, commissioning, diagnostics, and maintenance as an integrated part of the control system environment.

System 800xA Device Integration packages for HART, Foundation Fieldbus and PROFIBUS provide the necessary components required to manage a field device in the 800xA system environment, including:

- comprehensive device libraries,
- fieldbus management tools, and
- fieldbus OPC servers.

The device libraries, as described within this data sheet, contain a large portfolio of System 800xA tested ABB and third party devices. This provides a wide variety of benefits for those involved in field device integration.

Device vendors are assured that their devices and related software components operate properly with the 800xA System over the entire lifecycle. The system user will benefit from reduced engineering time, reduced commissioning time and reduced maintenance costs. ABB will benefit in reduction of engineering and troubleshooting effort. The result will be more effective use of fieldbus technology.

Furthermore, ABB adds value to the Foundation Fieldbus, Profibus and HART libraries by including asset management components as a standard feature. This allows the end user to identify maintenance issues before failure occurs, diagnose problem root causes, and offer corrective recommendations.

Device Libraries are the Key Element

The device libraries contain a large portfolio of System 800xA tested and certified ABB and third party device objects, minimizing the effort of integration for 800xA system users. Each device is represented in the library by a device type object. ABB's Device Integration Center (DIC) creates these objects and enriches them with all aspects for efficient device management over the entire life cycle, from the design phase to operation and maintenance. These aspects are described in Figure 2 and include support for functions such as:

- Configuration/parameterization
- Commissioning
- Diagnostics
- Asset monitoring
- Maintenance management (CMMS connectivity; CMMS = Computerized Maintenance Management System)
- Calibration management
- Monitoring and operation of device functions
- Device documentation access

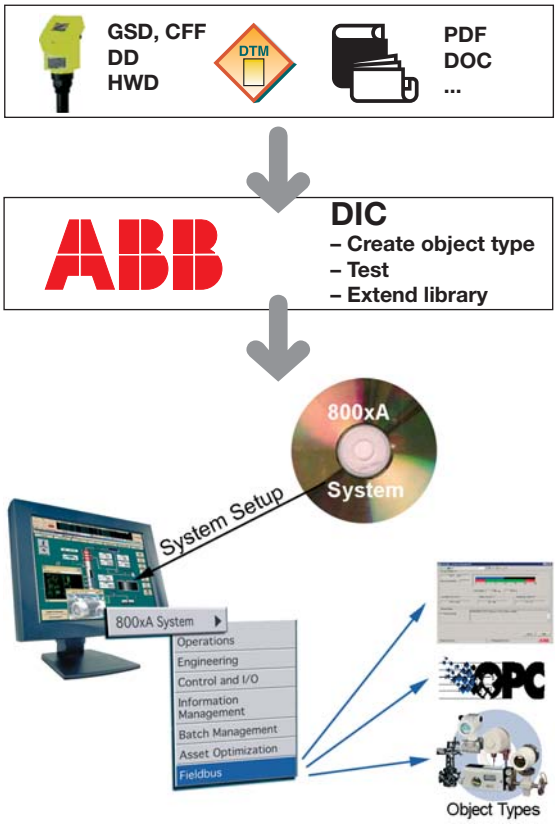


Figure 3: Enhancing Device libraries with new devices

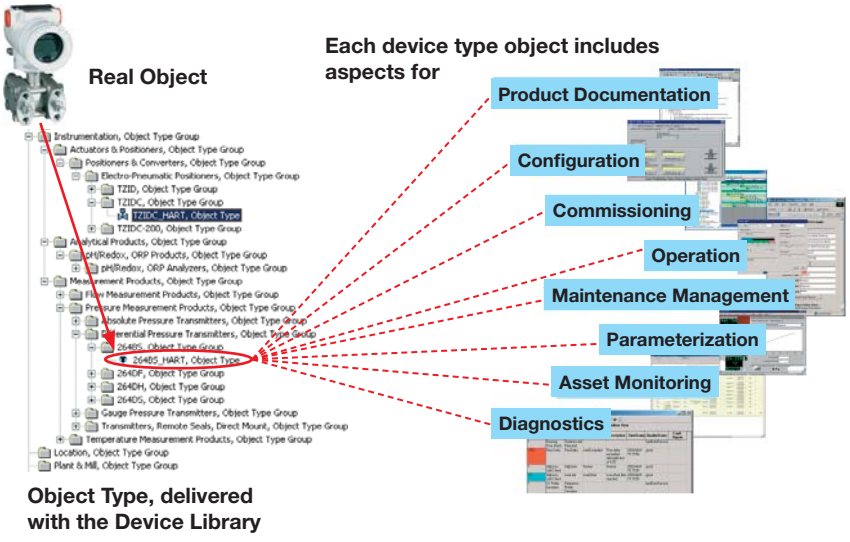


Figure 2: Device type object and related aspects

The device libraries are extended continuously with new device types. Driven through market requirements individual device types are added to the existing libraries for the three major protocols HART, Foundation Fieldbus or PROFIBUS. To assure interoperability of the system with the device and the related components, the new device type object is tested against the real device.

The interoperability of the devices and their related software components are tested in the context of the ABB 800xA systems. The test covers the device behavior in the system from a user's point of view, such as upload, download, access rights, parametrizing, forcing, observation, engineering workflow. The tests are performed offline as well as online with the real device connected to the system.

When all tests are passed successfully, the enhanced device library and the related fieldbus components will be updated to reflect device additions. This new library will be released and made available in the ABB Library and at ABB Solutionsbank. It will also be packaged with new versions of the Device Integration Packages.

The currently available device types are listed on ABB's web site:
http://www.abb.com/controlsystems *

As stated previously, the Device Integration Center will continuously integrate additional devices. Thus, the device libraries will continue to expand and over time will cover most available devices.

For any further questions regarding the device integration process, please contact the Device Integration Center directly:
E-mail: **dic@in.abb.com**

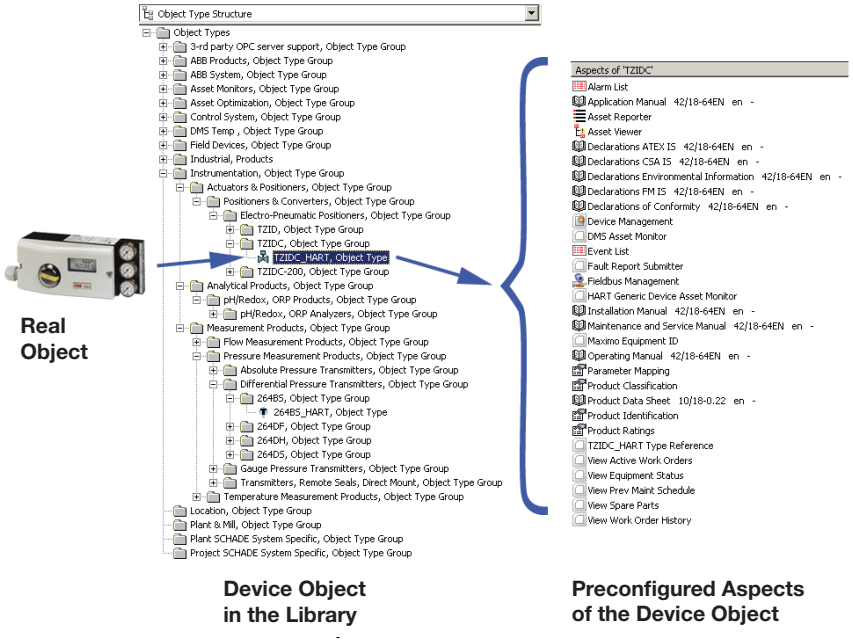


Figure 4: Device type object and related aspects

*) The online version of this document directly guides you to the corresponding web page. Otherwise, please select **System 800xA**, **Device Management** and then **Device Integration Center** on the Control Systems homepage.

Automation Technologies
Västerås, Sweden
Phone: +46 (0) 21 34 20 00
Fax: +46 (0) 21 13 78 45
www.abb.com/controlsystems
e-mail: processautomation@se.abb.com

Automation Technologies
Wickliffe, Ohio, USA
Phone: +1 440 585 8500
Fax: +1 440 585 8756
www.abb.com/controlsystems
email: industrialitsolutions@us.abb.com

Automation Technologies
Mannheim, Germany
Phone: +49 (0)1805 26 67 76
Fax: +49 (0) 1805 77 63 29
www.abb.de/controlsystems
email: marketing.control-products@de.abb.com

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