



DEVICE INTEGRATION CENTER, BU CT / IDC

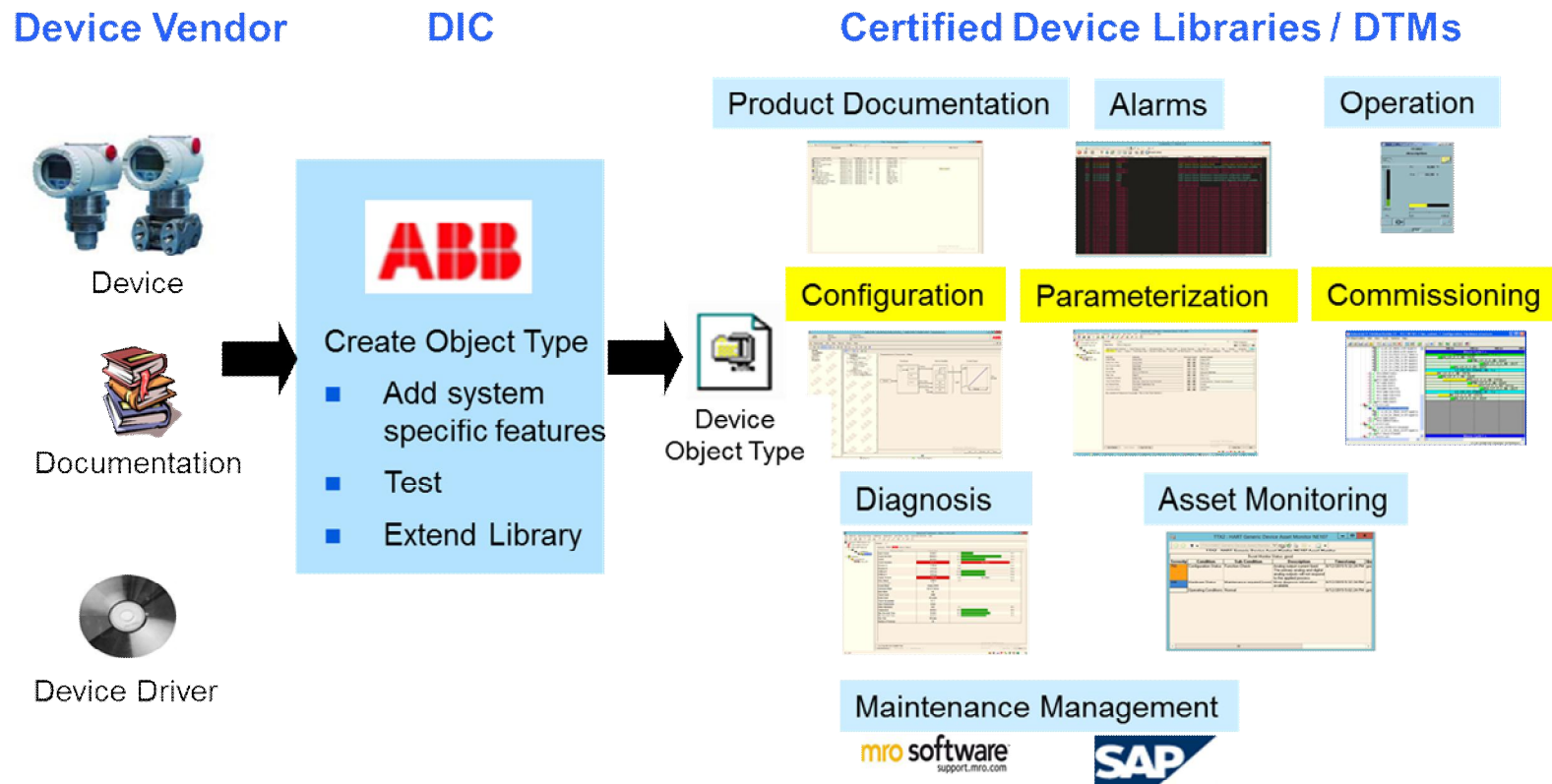
Device Integration Center (DIC)

Introduction.

Jothi Balan, Project Manager

Concept of Device Libraries

Provide a Library of Pre-Configured, Value-added Device representations for ABB Control Systems with Interoperability of the Field Devices proven by Online tests at DIC lab.



For control systems other than 800xA only functionalities highlighted in Yellow color is applicable.

Scope of Device Integration Center

- Integration based on protocols PROFIBUS, HART, Wireless HART and FOUNDATION Fieldbus.
- Integration into ABB Control System families:
 - System 800xA
 - Freelance
 - Symphony Melody, Symphony Plus and Symphony Harmony.

Scope of Device Integration Center

- ∅ Integration requests are received through DIC mail box dic@in.abb.com
- ∅ Integration is bundled into Sprint of 4 weeks duration and based on the priority, intermediate release can be done before the end of particular Sprint.



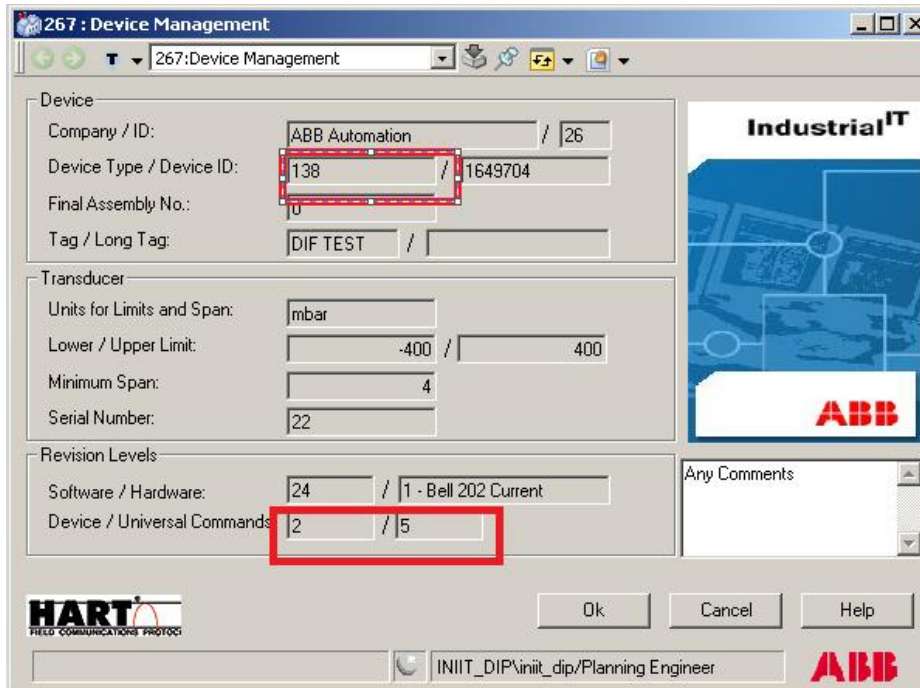
Inputs needed from projects

- Device name and Vendor.
- Fieldbus protocol:
- Device Type ID, Device Revision (for FF and HART)
- PNO ID of device (for Profibus device)
- ABB system and its version:
- Project name, location:
- ABB Automation Sentinel Subscription ID:
- Expected date of delivery of integrated device type:

Procedure to collect the inputs.

HART :

- Collect the inputs from device vendor
(OR)
- Assign basic HART DTM to the channel in which the HART device is connected.
- Perform an upload and access the identification window (refer below)



The screenshot shows the '267: Device Management' window with the following fields and values:

Field	Value
Company / ID:	ABB Automation / 26
Device Type / Device ID:	138 / 1649704
Final Assembly No.:	0
Tag / Long Tag:	DIF TEST /
Units for Limits and Span:	mbar
Lower / Upper Limit:	-400 / 400
Minimum Span:	4
Serial Number:	22
Software / Hardware:	24 / 1 - Bell 202 Current
Device / Universal Commands:	2 / 5

The 'Device Type / Device ID' and 'Device / Universal Commands' fields are highlighted with red boxes. The window also features an 'IndustrialIT' logo, an 'ABB' logo, and a 'HART' logo at the bottom left. The status bar at the bottom shows 'INIIT_DIP\iniit_dip/Planning Engineer' and another 'ABB' logo.

Procedure to collect the inputs.(cond..)

Profibus :

Send the GSD file corresponding to the requested device.

(OR)

Provide below screen shot of CI854 along with device details.

Address <http://172.16.4.100/index.htm>

ABB

Service Diagnosis for CI Modules

[\[Create service file\]](#) [\[Change password\]](#)

Cex slot

Slot 1 CI854

- [SetAddress](#)
- [LiveList](#)
- [CycleTime](#)
- [GeneralStatus](#)
- [MasterSettings](#)
- [SlaveDiagnosis](#)
- [SlaveConfig](#)
- [Slave-I/O](#)
- [FirmwareInfo](#)
- [HardwareInfo](#)
- [Red. Switchover](#)
- [Errormemory](#)
- [Debug...](#)

SlaveDiagnosis CEX Slot1

You can read all Slave Diagnosis Data presently

Enter Station Address for Slave:

Press Read to update the Information

State

Stations state	=	WD_On
Master address	=	1
Ident Number	=	13360 (0x3430)

Procedure to collect the inputs.(cond..)

FF :

- Collect the input from device vendor.

(OR)

- Send the DD or EDD file provided by vendor.

Benefits of Device Integration

- Increased efficiency by pre-configured Object Type
 - Less Engineering Effort
 - Less Commissioning Effort
- The libraries are created and tested Online by experts, thus ensuring the Interoperability
- Generic & Specific Asset Monitors which help the user to diagnose & interpret Device Issues & suggest corrective action are provided
- Device type contains additional features like Alarms & events, diagnostics, Documentation, Connectivity to SAP, Maximo etc...
- Support during system SW and device SW upgrades

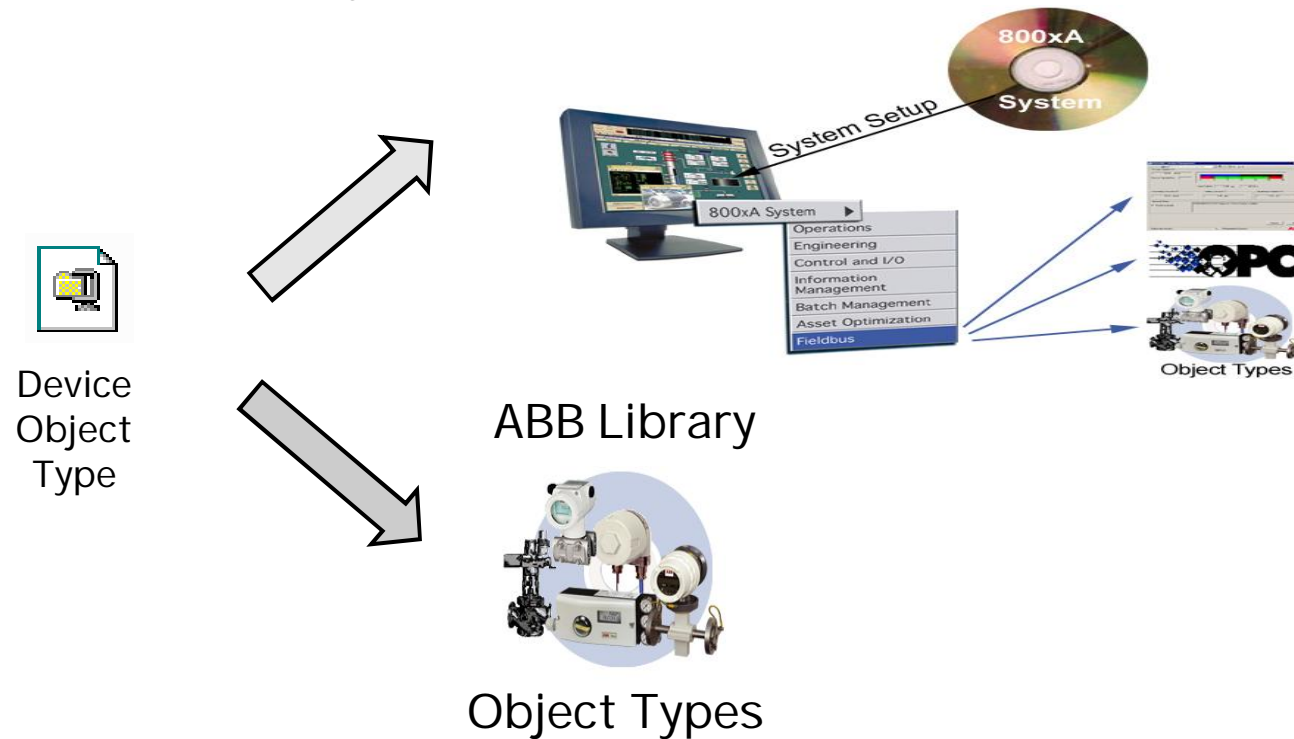
Costs of Integration



- § No Charge for Sentinel subscribers
- § No Charge, if the request is backed by a ABB project
- § Chargeable if the requirements are very specific to a particular project
- § Chargeable if the project wants an out-of-turn expedited delivery

Delivery of Device Libraries (800xA)

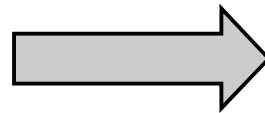
System 800xA Device Libraries DVD



<http://www.abb.com/productguide>

->Control Systems -> 800xA -> 800xA DCS -> Fieldbus protocols-> Device Management <protocol> ->Device Integration ->Software's

Delivery of Device Libraries (Freelance & Symphony+ systems)



<http://www.abb.com/productguide>

->Control Systems -> Freelance -> Fieldbus <protocol> ->Software's

<http://www.abb.com/productguide>

->Control Systems -> Symphony Plus -> Fieldbus ->Software's

Device Integration Contacts

Device Integration Center (DIC);

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