Level Pressure Flow Temperature Liquid Analysis Registration Systems Components Services Solutions

Process automation engineering tools

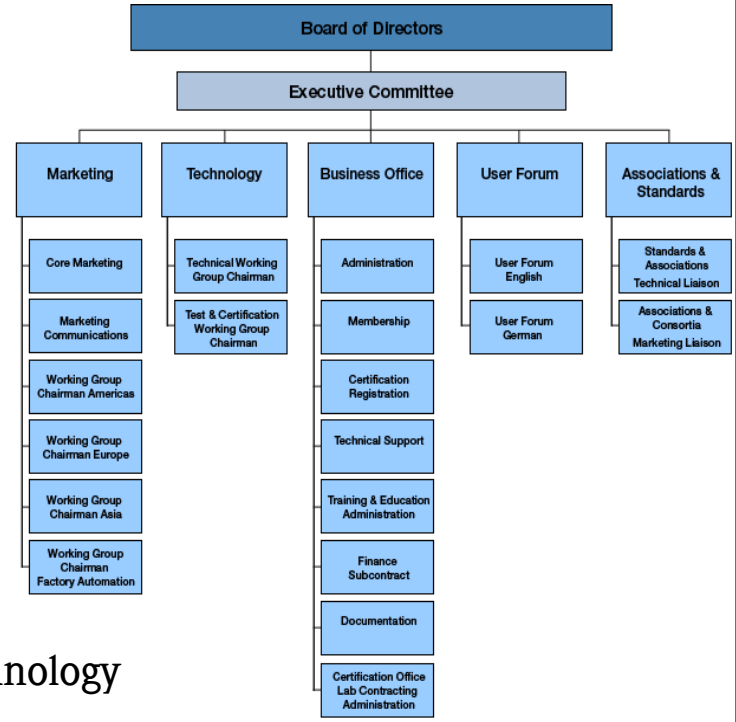
…device configuration using FDT/DTM

PROFIBUS & PROFINET
User Conference 2010
June 29/30 2010 Stratford on Avon United Kingdom

Endress+Hauser
People for Process Automation

The FDT Group

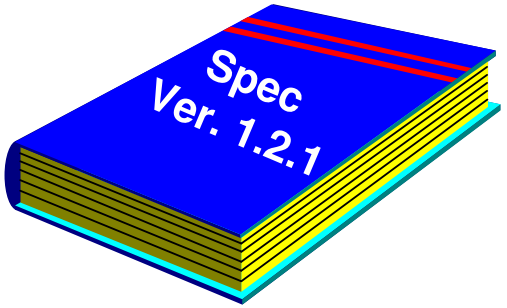
- The FDT Group formed in 2003
  - open
  - independent
  - non-profit
  - association of 61 international companies
- Owner of the FDT Technology
- Responsible for maintenance, further development, and promotion of FDT Technology
- Responsible for certification and compliance testing of FDT products
- Dedicated to establishing and maintaining FDT Technology as an international standard with broad acceptance within the automation industry
- Open to all companies that wish to participate



www.fdtgroup.org

FDT Group members

What is FDT/DTM?

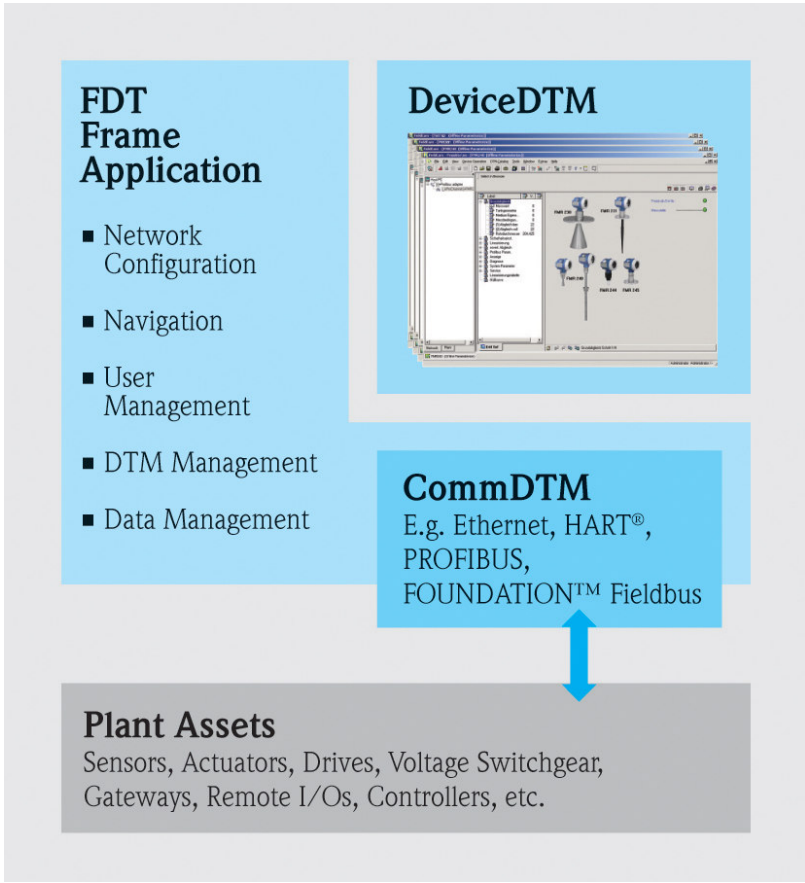


- FDT = Field Device Tool (frame application)
  - Follows a published standard specification
- DTM = Device Type Manager (device driver)
  - Compatible with any FDT frame application

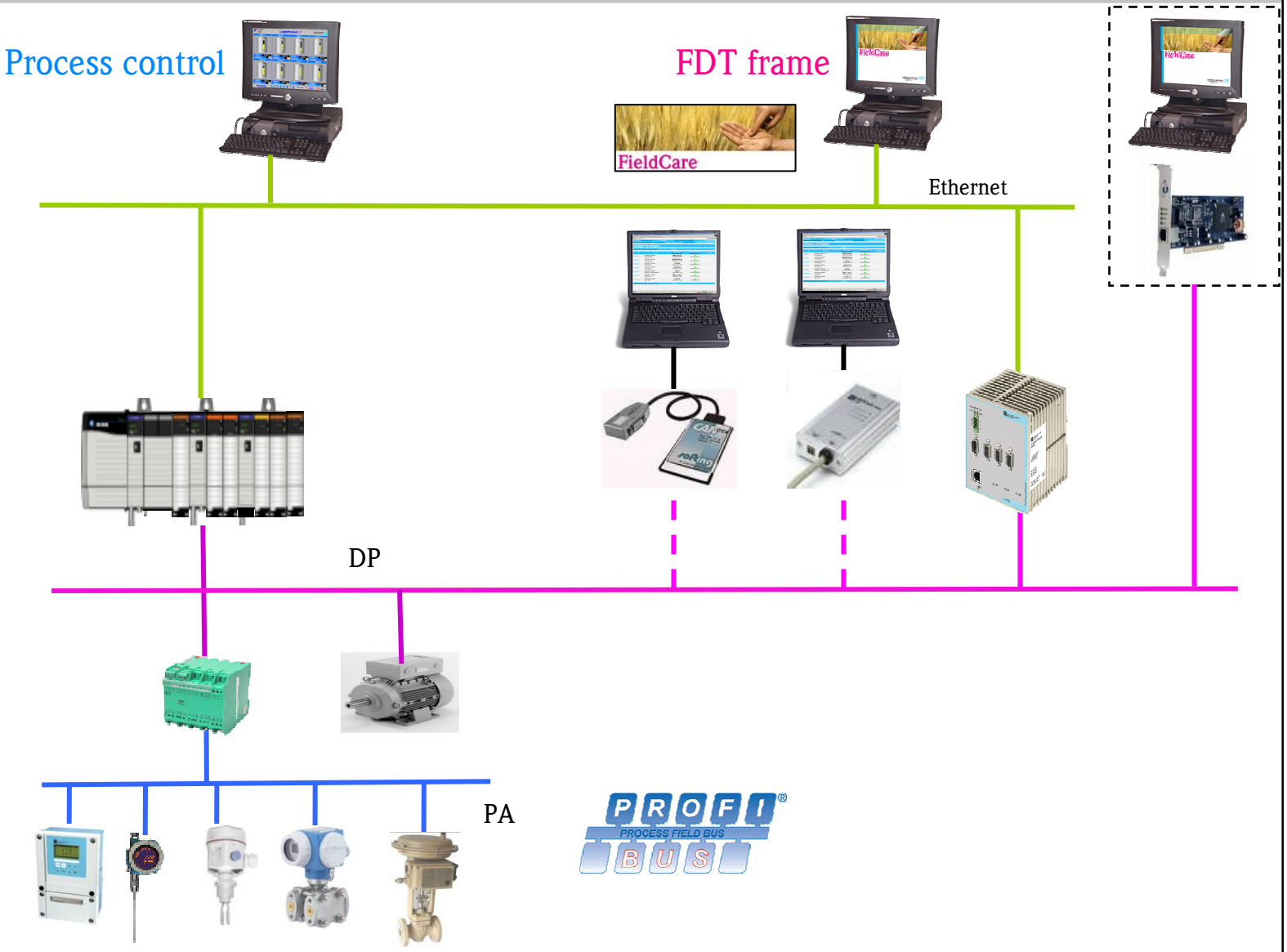
What is FDT/DTM?

FDT/DTM

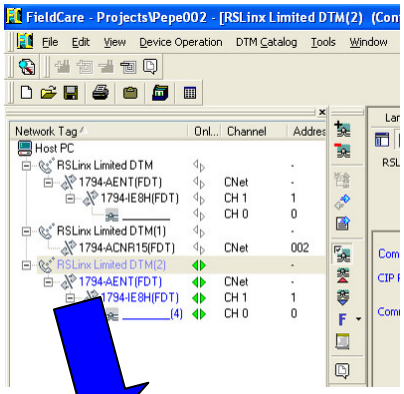
- Open standardised technology independent of device or system supplier
- Independent of device type sensor, actuator, remote I/O, drives, etc.
- Full support of installed base
- Full device functionality
- Independent of communication protocol Ethernet, HART, PROFIBUS, Foundation Fieldbus, etc.
- Vertical integration by nested communication



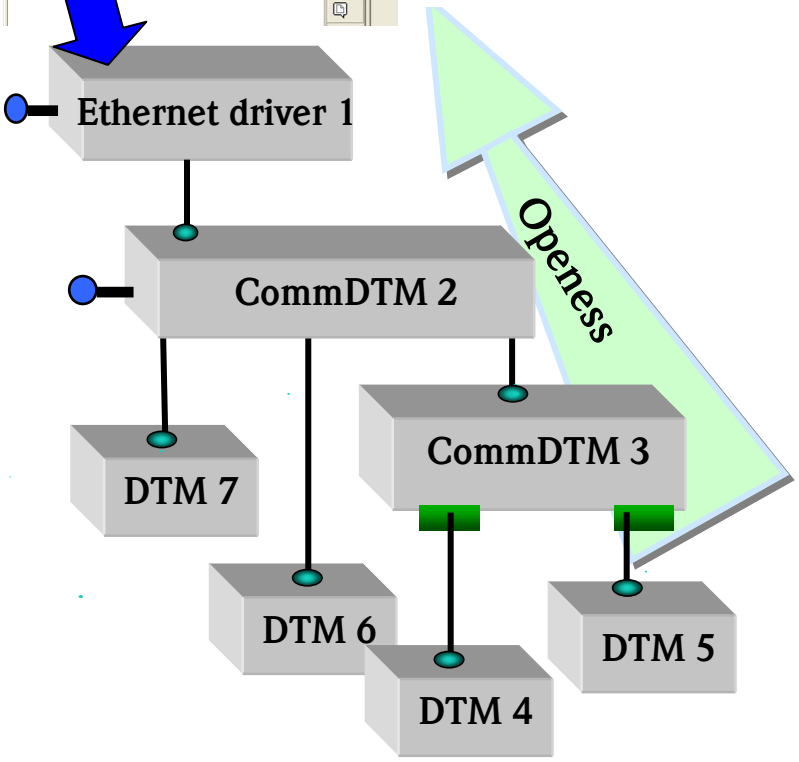
Connection options – Profibus

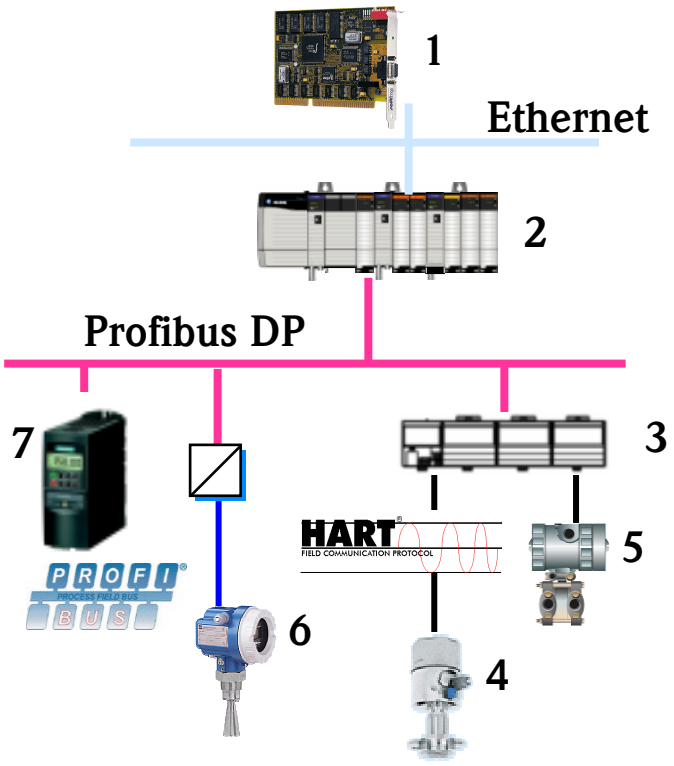


How does FDT/DTM technology work?



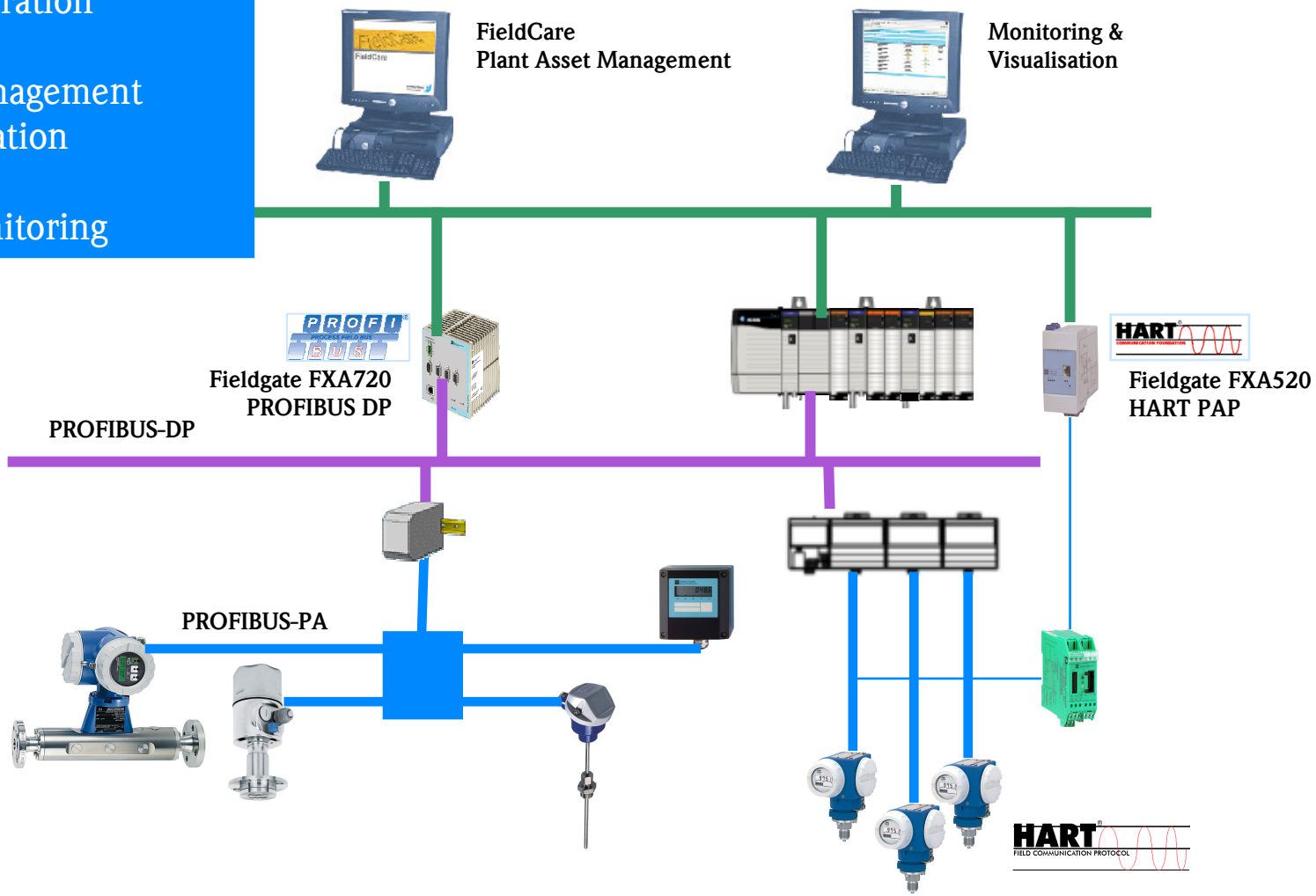
Network topology built up with DTMs





How does FDT/DTM technology work?

- Device configuration
- Up/download
- Document management
- Document creation
- W@M portal
- Condition monitoring



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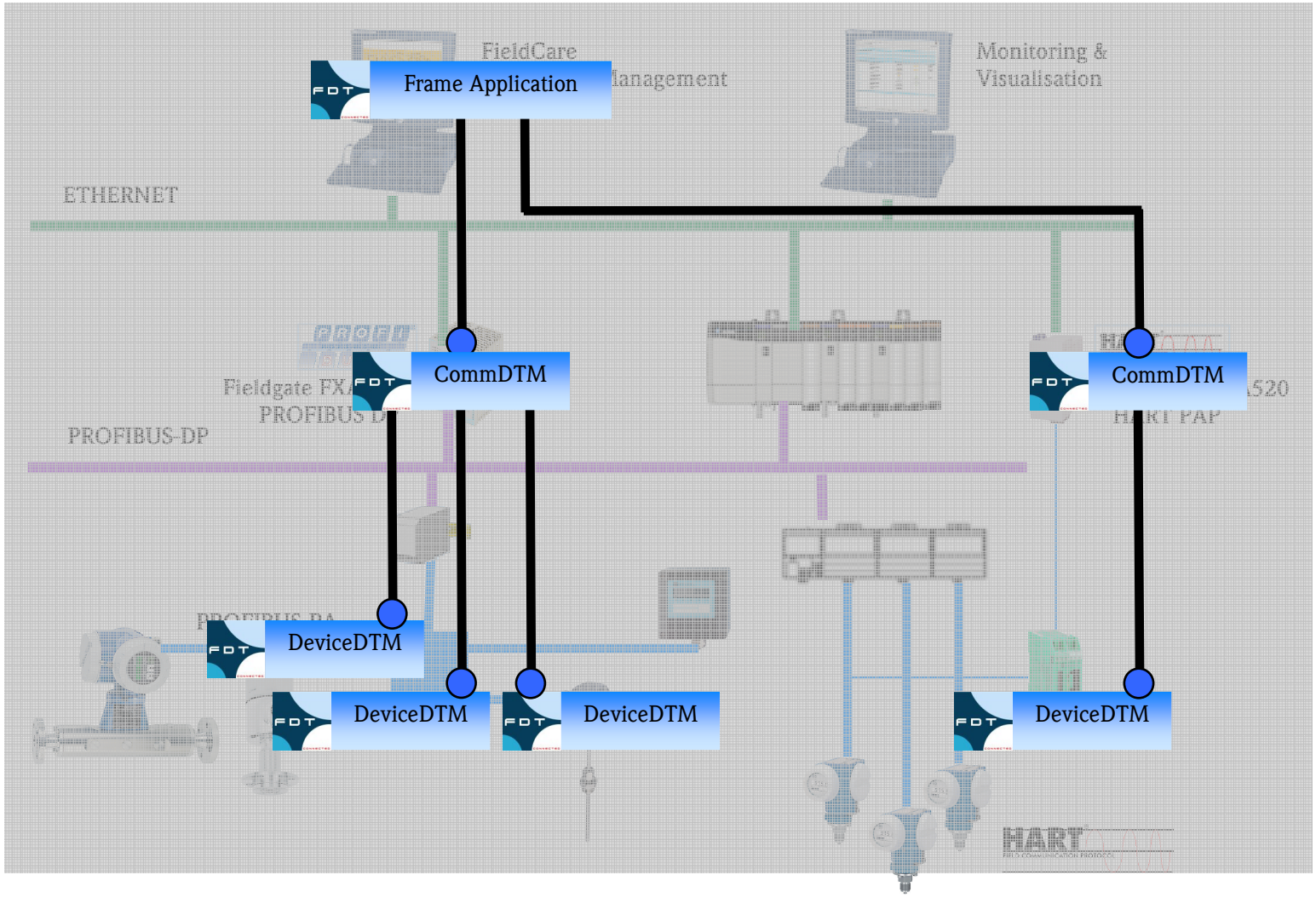

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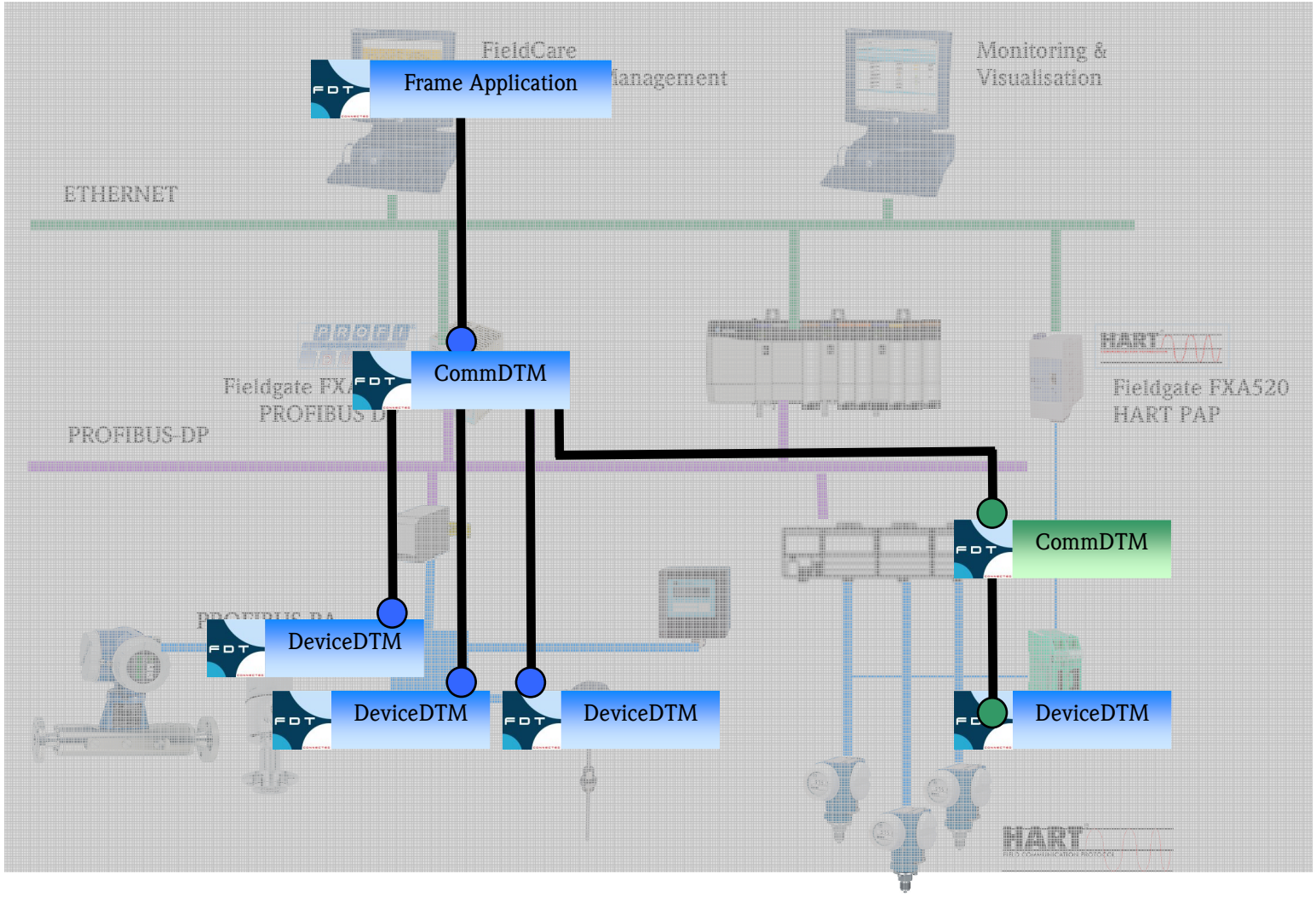

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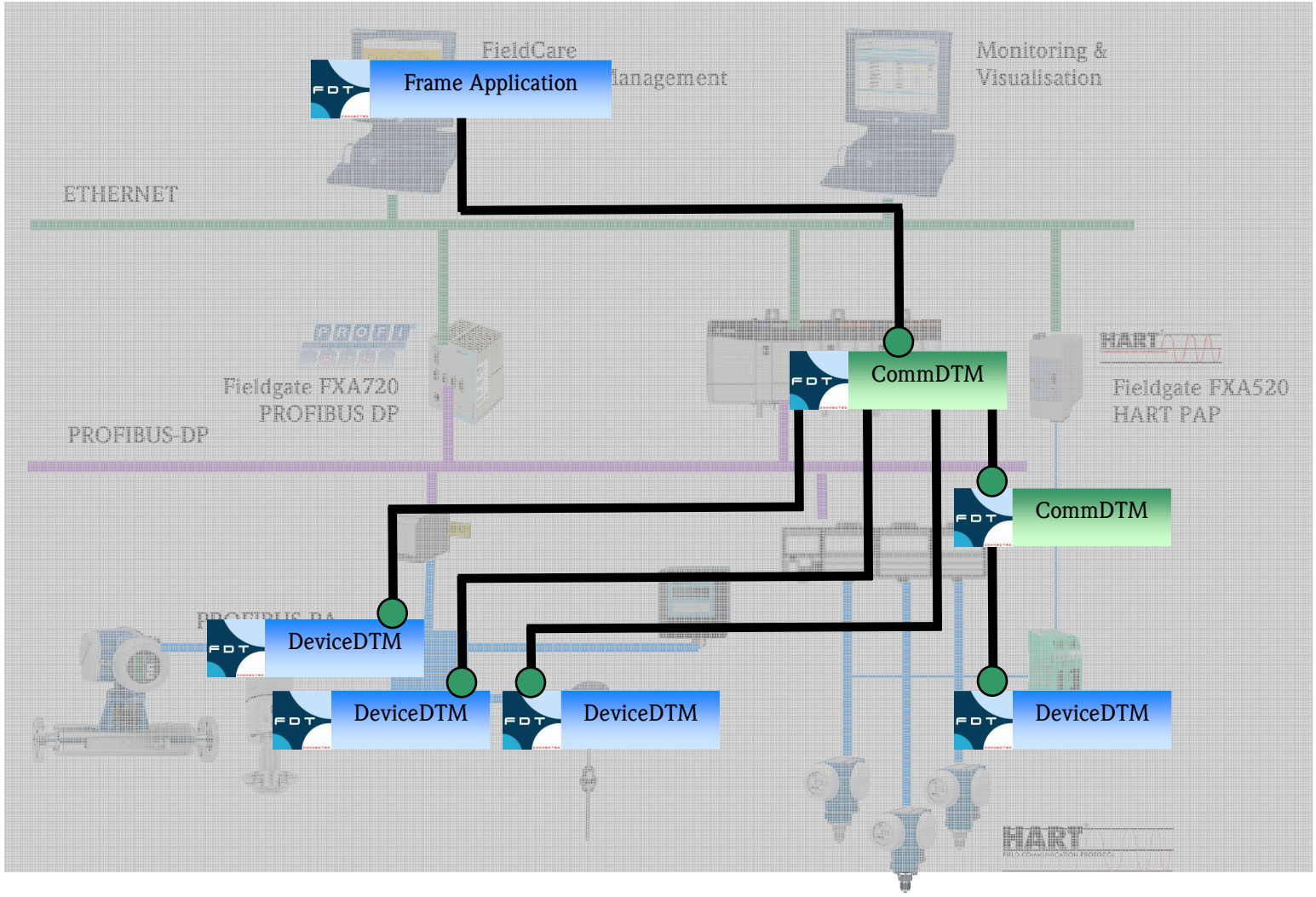
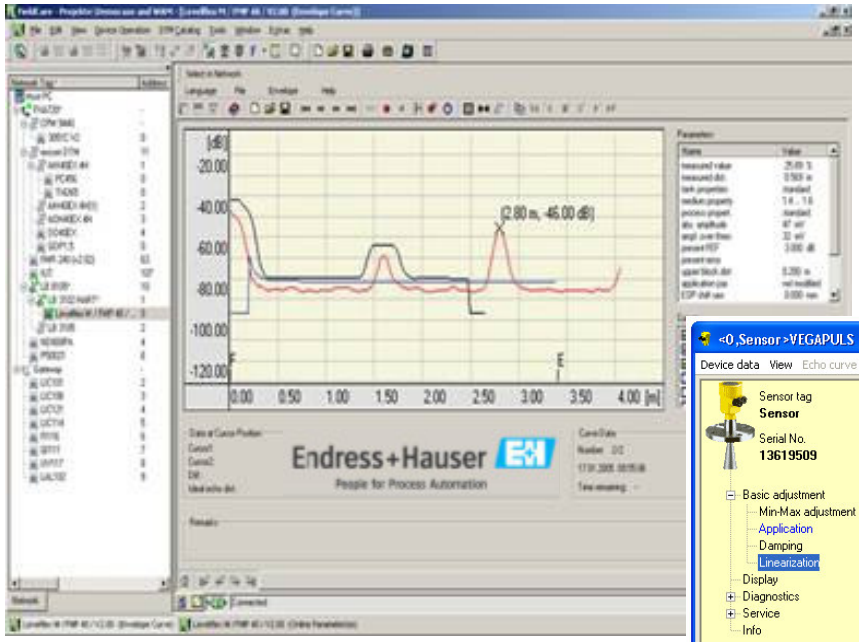
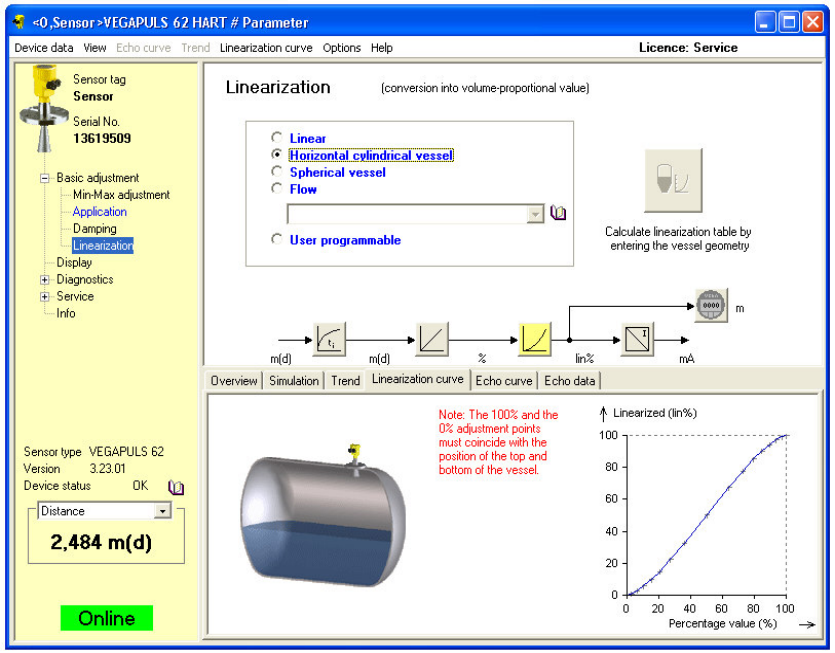


Example 1: Radar Level Transmitter

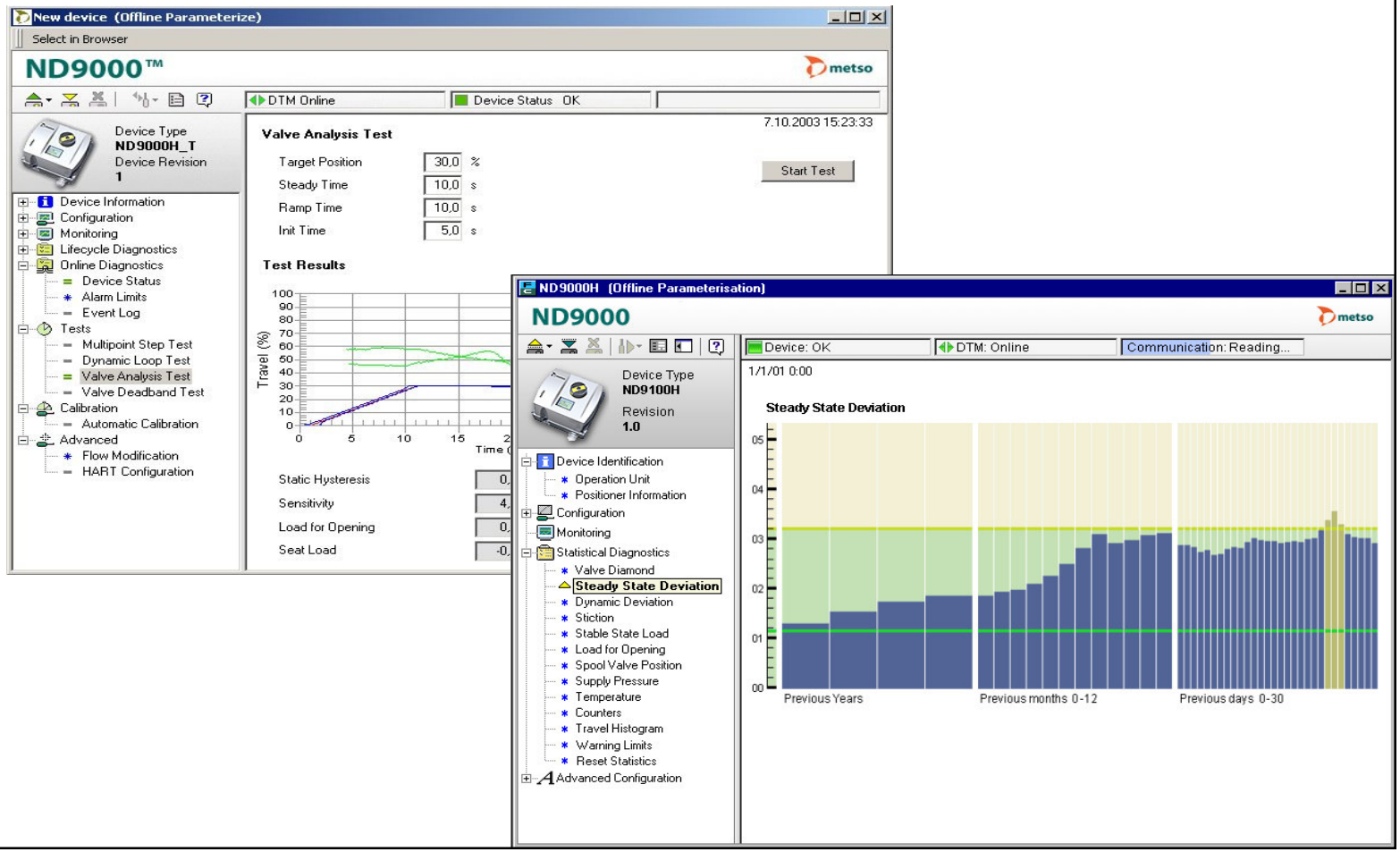
- DTM used for device configuration and advance instrument diagnostics
- DTM used for configuration of linearization





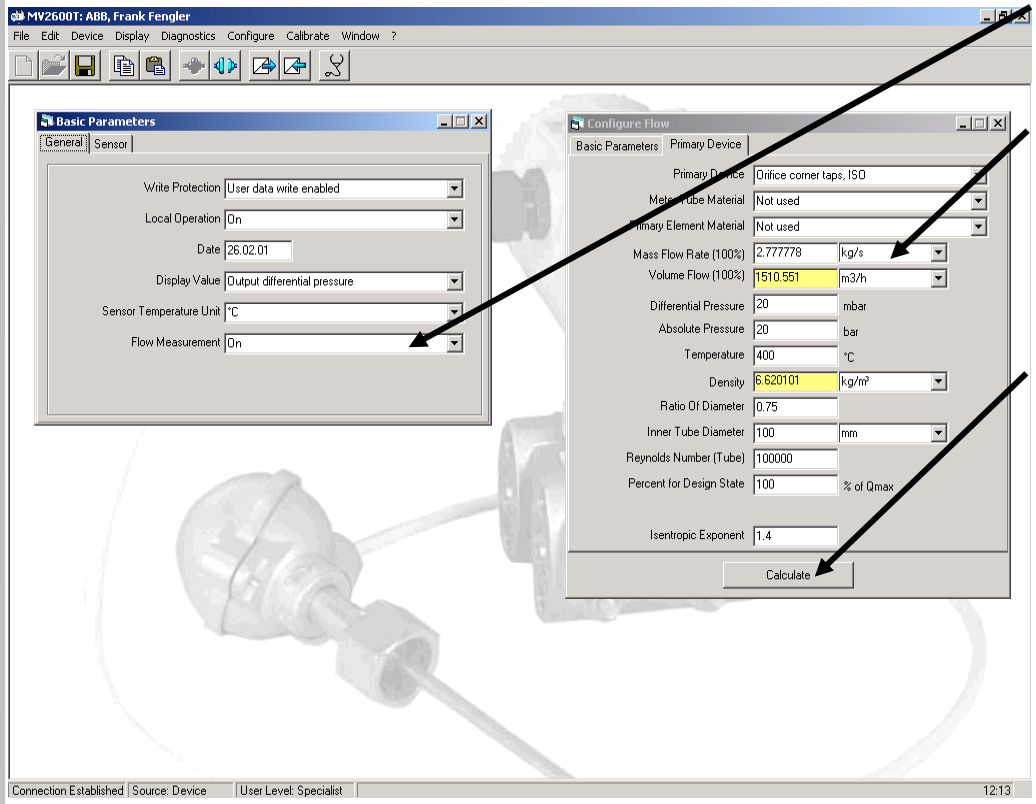
Example 2: Valve Positioner

- DTM enables advanced valve diagnostics
- Control valve diagnostics enables better decisions for shut down planning



Example 3: Multivariable Transmitter

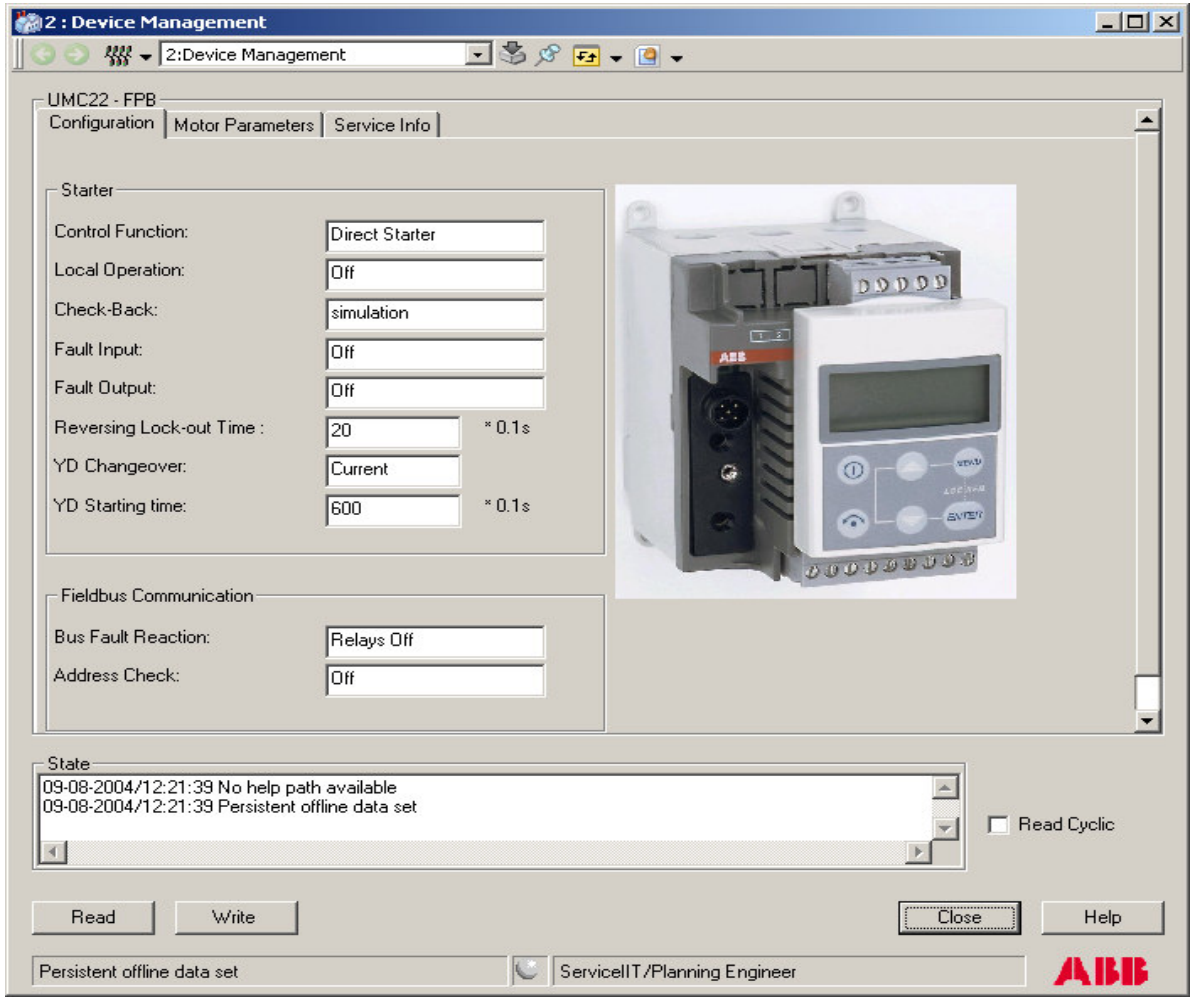
- DTM used to calculate coefficients for dp flow transmitter



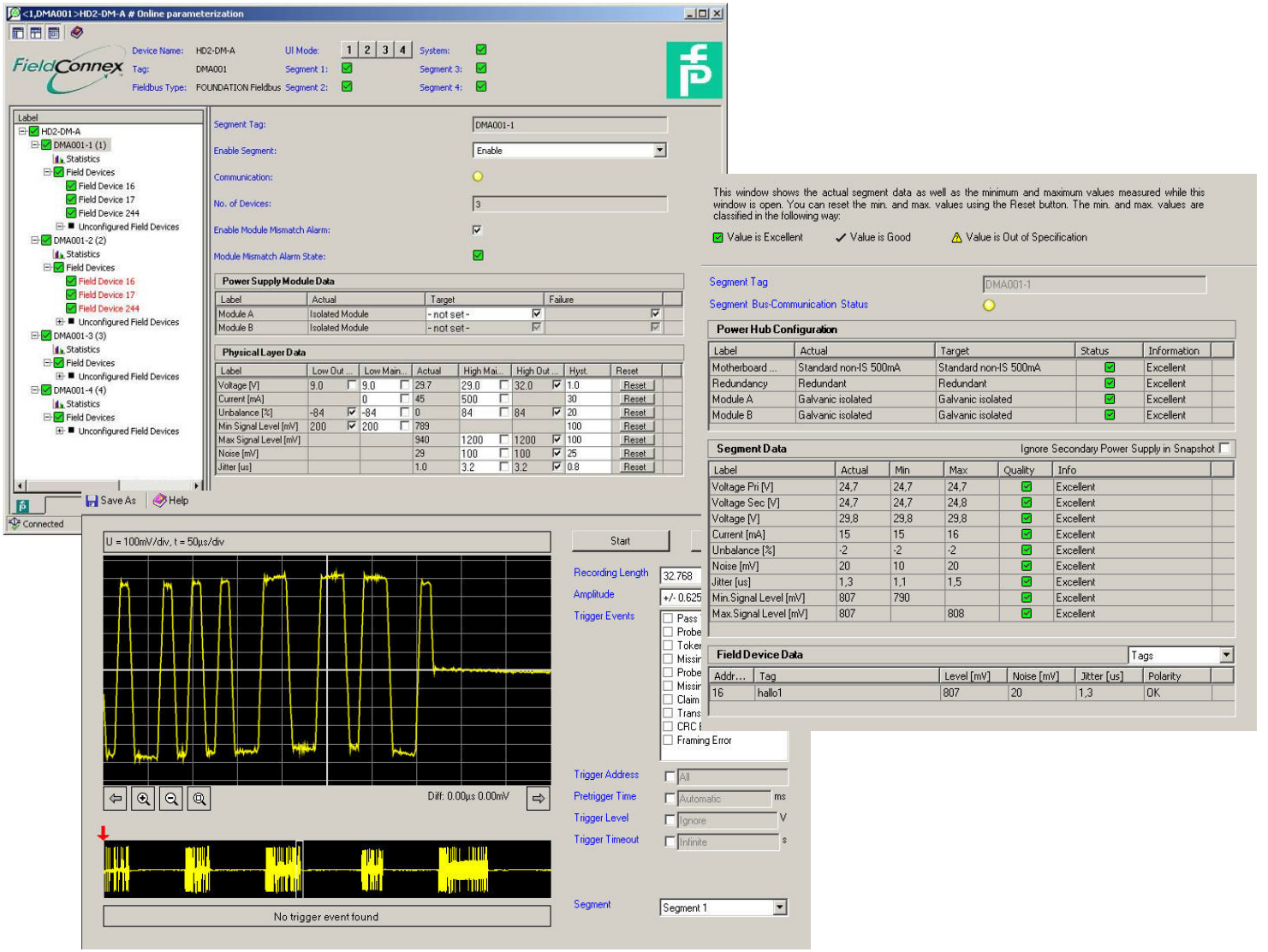
- Switch Flow Measurement “On”
- The calculation values of the Primary Device entered here are the basis for the flow calculation
- Calculate and you get special parameters as result.
- Download parameters in device.

Example 4: Universal Motor Controller

- DTM used to configure motor controller an display diagnostic information



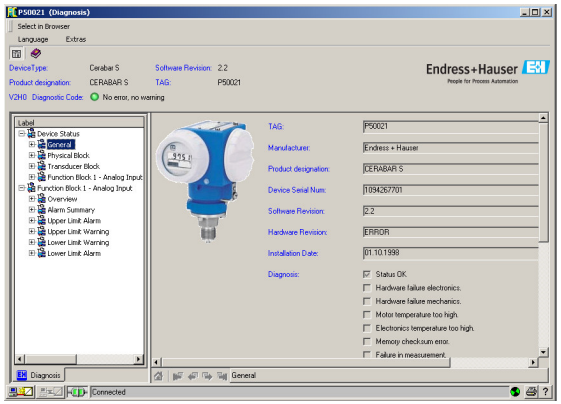
Example 5: Segment Coupler

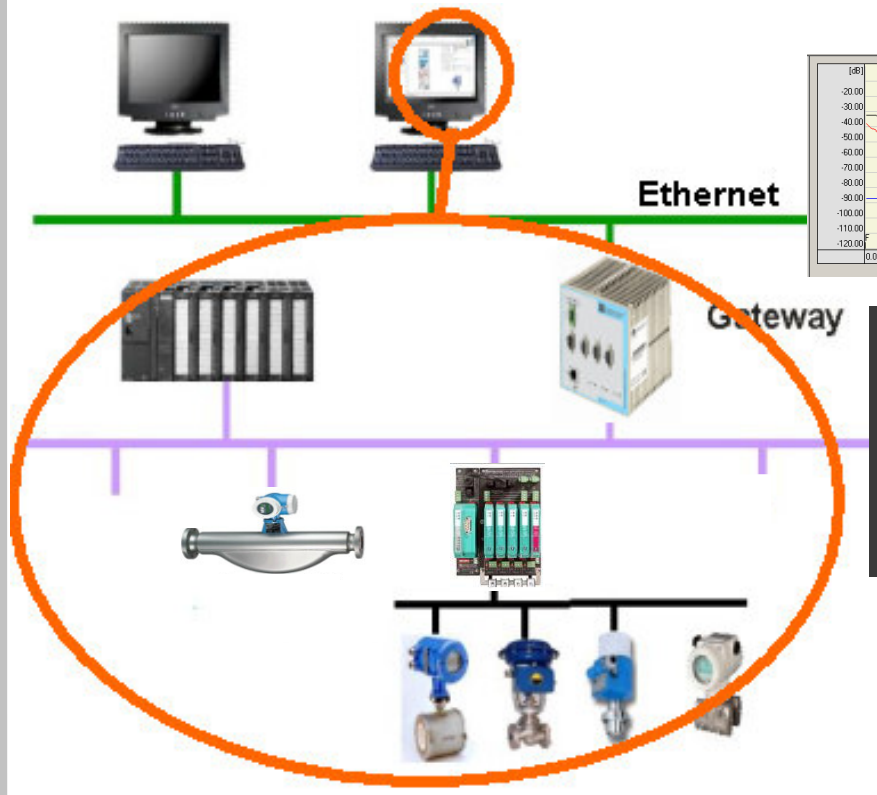


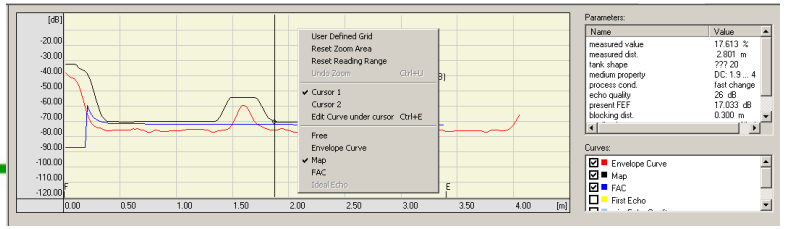
FDT frame -FieldCare

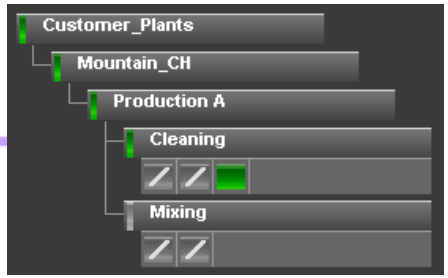
Plant asset management tool

- Multivendor device configuration
- iDTM for HART & FF (Profibus in 2010)
- Reports and document management
- Supplied with CommDTM's
- Links to Web enabled Asset Management

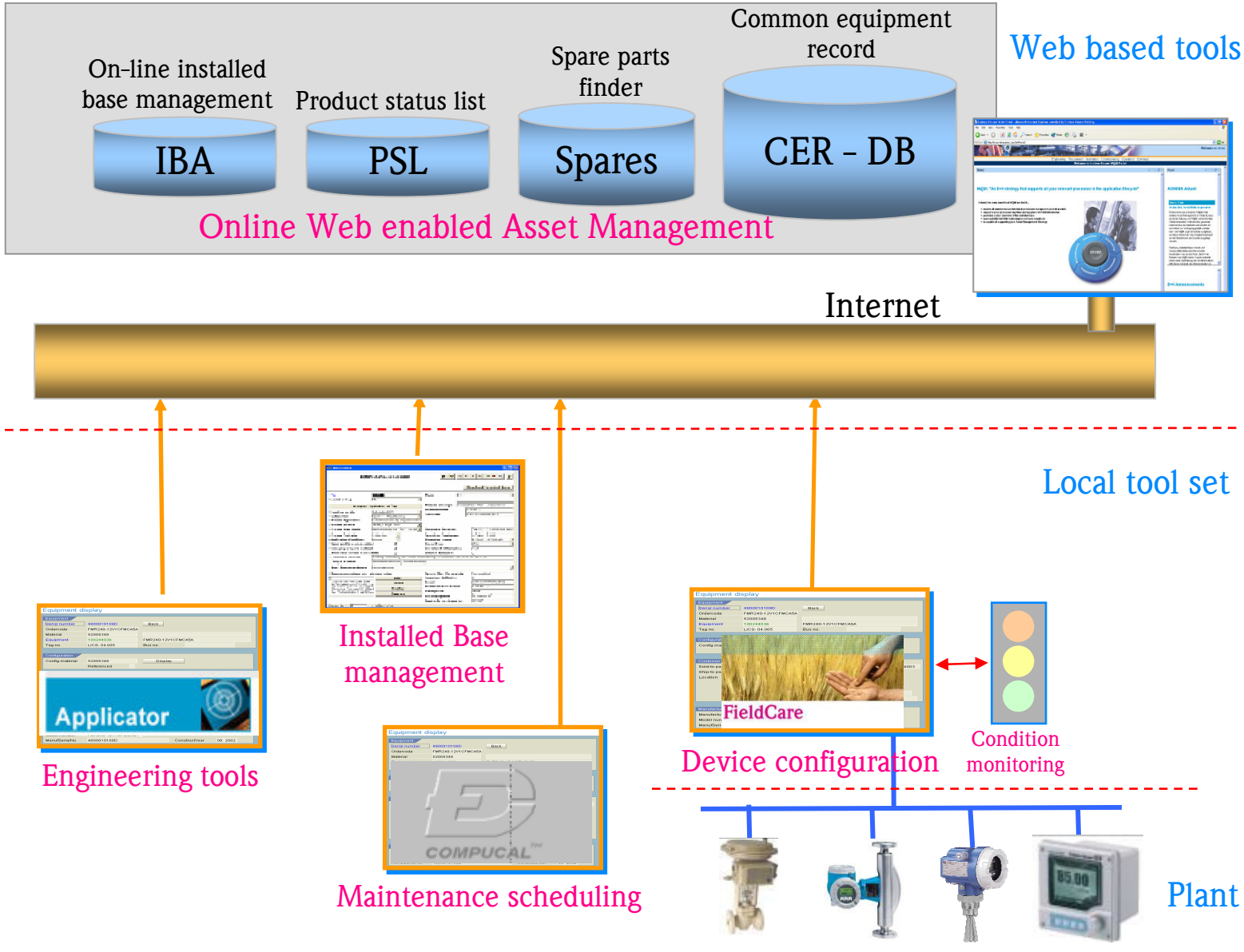




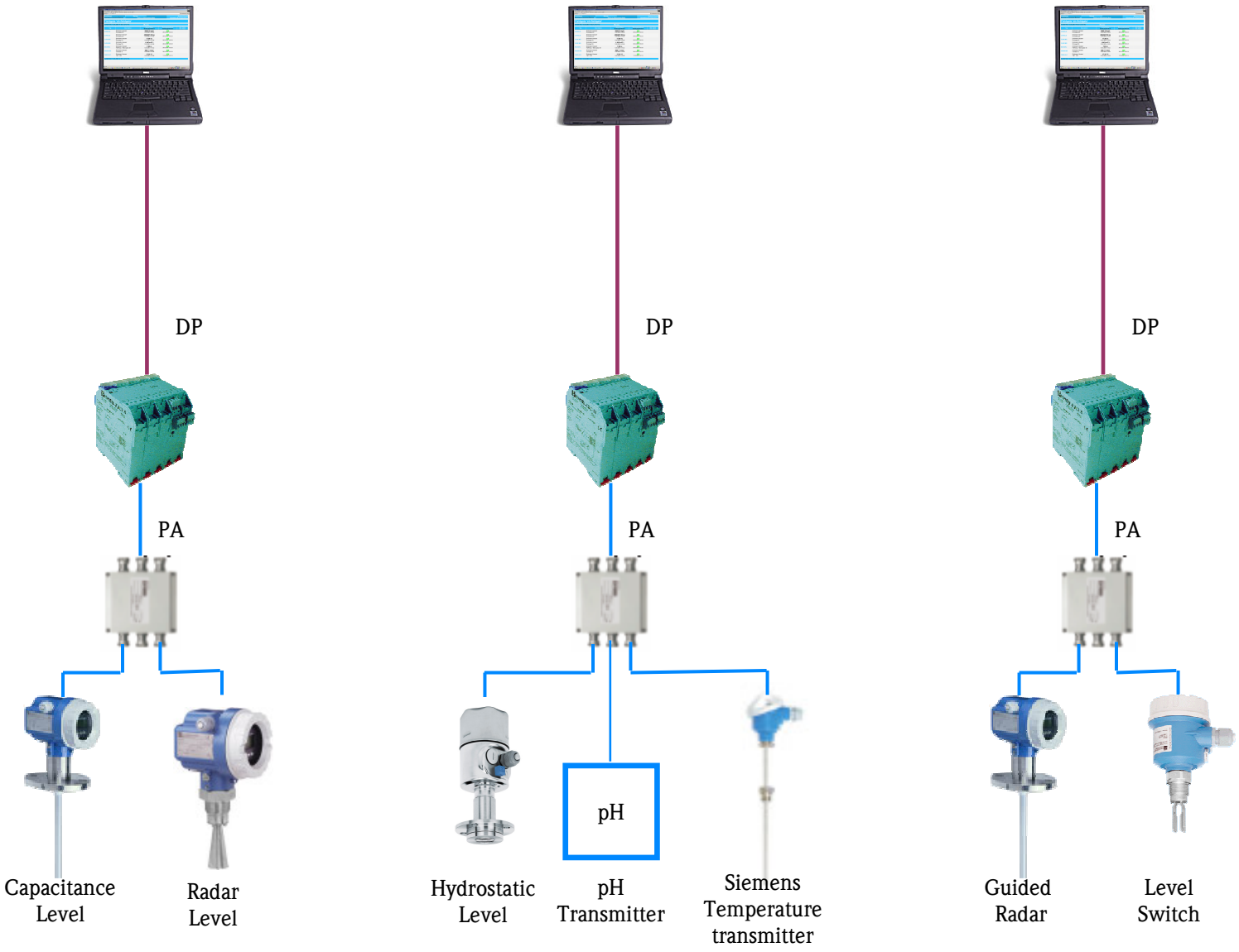




Life cycle management tools



FDT/DTM – Hands on



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