EDDL Cooperation Team

Field Device Integration (FDI) Project

ACHEMA 2009
FDI Project Briefing – ACHEMA 2009

- Single solution for integration of field devices into host systems
- Combines strengths of EDDL and Device Type Manager (DTM)
- Open specification that will be an international Standard
- Technology direction agreed by major suppliers
- Use cases agreed by major end users
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- Host system independent
- Platform and operating system independent
- Provides access to the full capability of the field device
- Supports FOUNDATION™, HART®, PROFIBUS® & PROFINET®
- Adoptable to support other fieldbus communication technologies
- Based on OPC UA client/server specifications & information model
- Specifications independently validated by the ECT organizations
- Provides backward compatibility with existing EDD’s & DTM’s
- Provides conformance test requirements to assure compliance
- Provides guidelines for field device and system developers
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- Input from AIDA, NAMUR, WIB and PNO on use case development
- Use cases based on plant life-cycle model
- Requirements derived from use cases
- System architecture derived from requirements

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System Architecture

Server → OPC UA → Client

FOUNDATION™, HART®, PROFIBUS, PROFINET

Device Package
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Device Package

- Device Definition
  - Mandatory
  - Based on IEC 61804-3 EDDL

- Business Logic
  - Optional
  - Based on IEC 62453 FDT

- User Interface Description
  - Optional
  - Based on IEC 62541 OPC UA

- User Interface Plug-in
  - Optional
  - Based on IEC 62541 OPC UA

Interpreted on Server
Interpreted on Client
Runs on Client
User Interface Description
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User Interface Plug-In
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- FDI Project approved: 1Q 2007
- FDI Project technical team kickoff meeting: 2Q 2007
- Use case review with NAMUR and WIB: 4Q 2007
- Use cases and requirements approved: 2Q 2008
- System Architecture: 3Q 2008
- Technology criteria: 4Q 2008
- Technology selection: 1Q 2009
- Draft functional specifications: 1Q 2009
- Begin specification validation: 2Q 2009
- Draft technical specifications: 3Q 2009
- Final specifications: 1Q 2010
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ECT and FDT Group agree to develop FDI Project ✓

Mar 2007

Top level use cases ✓

Technological design team kick off meeting ✓

Dec 2007

System Architecture ✓

Use cases validated by end users ✓

Dec 2008

Architecture and functional specification development ✓

Dec 2009

Final Specifications

Architecture validated by end users ✓

May 2009

Use cases validated by end users ✓