

FDT Group and EDDL Cooperation Team Reach Agreement to Develop Unified Solution for Device Integration

Hanover, Germany (17 April, 2007) - The EDDL Cooperation Team (ECT) and the FDT Group announced today that they have reached agreement to combine efforts and work toward a unified solution for device integration that is compatible with both technologies. This would satisfy one of the most frequent customer requests.

The representatives of the FDT Group and ECT have seized this historic opportunity for cooperation and will develop a common technology to benefit both users and manufacturers. As part of this agreement, the FDT Group will join the ECT as its newest member. FDT and ECT representatives agree to work together to finalize this solution and achieve a common framework that meets the requirements of all parties. Future developments will use a subset of the OPC UA technology¹ within a client-server architecture. In addition, both parties have agreed to incorporate the advantages of FDT and EDDL technologies.

“This new cooperation follows our targets of openness and freedom of choice for the benefit of end users and is strongly supported by our members,” says Flavio Tolfo, managing director of the FDT Group. He continues, “After much discussion, we reached commitment to work together and protect the investment of each technology for the

benefit of end users. The FDT Group is looking forward to bringing to bear its broad experience of integrating software applications in conjunction with device descriptions by joining the EDDL Cooperation Team to solve end user needs.”



*Front Row: Hans Georg Kumpfmüller (Siemens), Ron Helson (HCF), Flavio Tolfo (FDT Group), Martin Zielinski (Emerson), Dieter Schaudel (Endress+Hauser)
Back Row: Edgar Kuester (PNO), Klaus-Peter Lindner (Endress+Hauser), Richard Timoney (FF), Thomas Burke (OPCF), Achim Laubenstein (ABB)
Not Shown: Hartmut Wuttig (ABB), Hartmut Walraff (Invensys)*

Hans-Georg Kumpfmüller, chairman of the ECT adds: "This agreement, once brought into reality, is a major step forward for device integration in several areas. It eliminates double efforts for customers and vendors, and preserves backward compatibility and operating system independence. It is based on the upcoming OPC UA technology, providing EDDL based integration with the possibility for integrating software applications for highly complex requirements. Our agreement is the natural technical evolution based on the most up to date,

¹ OPC UA (Unified Architecture) is a technology of the OPC Foundation

open, and flexible technologies. The ECT welcomes the FDT Group as a new member to shape the future.”

FDT Group AISBL™: The FDT Group AISBL is a non-profit corporation consisting of over 57 leading worldwide companies active in process and factory automation. The major purpose of the FDT Group is to provide an open and non proprietary interface for the integration of field devices with engineering, automation and asset management systems. In this environment, end users, manufacturers, universities and research organizations are working together to develop the technology, provide development tools, support and training, coordinate field trials and demonstrations, and enable product interoperability.

EDDL Cooperation Team: In 2003, the three leading field device foundations (Fieldbus Foundation, HART Communication Foundation and PROFIBUS Nutzerorganisation) signed a cooperative agreement to develop a common specification for graphical visualization and persistent data storage enabled by Electronic Device Description Language. All three of the organizations utilize EDDs for parameterization and description of their devices. In 2004, OPC joined the cooperation team. With EDDL™, an established IEC standard, it made sense for the OPC specification to base their data structure on that same standard and work with the organizations to develop a standard interface to the Unified Architecture. The four organizations signed an agreement in 2004 to cooperate in the development of that interface. The Steering Committee is comprised of the presidents of each foundation plus one representative from each organization’s membership. The organizations will rotate the chairmanship of the committee from year to year. Currently, the HART Communication Foundation member representative, Hans Georg Kumpfmüller, is chairman of the committee.

FDT Group and ECT Press Event: Hannover Fair 2007 Questions and Answers

1. Why did the ECT and FDT Group decide to work together even though each claims to have the better solution for device integration?

Currently, there exist two technologies which are offered to end users. On the one hand they overlap to some extent, on the other hand they have a different scope of application. Unfortunately, existing market dynamics forces users in some cases to choose one of these two and offers no migration path from one to the other. Because this approach is unacceptable for end users, there is a need for a single unified solution. Additionally, manufacturers are currently investing in parallel development efforts to support two technologies. For these reasons, we decided to join efforts and develop a common Future Device Integration (FDI) architecture.

2. Is there already a solution for the common device integration visible?

There is not yet a solution for a common approach. There exist ideas and concepts that have to be discussed in the technical teams, who will then have to define the architecture for a common device integration solution based on use case requirements. A white paper published by itm describes a device integration concept that combines the advantages of EDDL with those of FDT, i.e. it makes use of a textual description for basic integration and allows for advanced application needs to use software based integration

3. What is the goal of this new agreement?

Our goal is to develop a unified path forward for device integration that is based on use case requirements, incorporates the best aspects of each technology and eliminates redundancies where they may exist.

4. What is the scope of the joint technical development that you announced today?

Today we announced our intention to work together on a unified solution for device integration. This architecture will be developed with the following guidelines:

- a client server architecture
- platform and operating system independent
- host system independent
- compatible with existing EDDL and DTM based device descriptions
- applicable to any field device communication technologies
- applicable for hierarchical and heterogeneous network topologies
- an open specification and become an international standard

5. How will the project be organized? How will it be staffed?

The FDT Group will join the ECT and become part of its steering committee. A joint working team will be responsible for the technical development.

6. What is the timing for implementation?

The technical work team shall meet shortly and detail the scope of work, resource requirements and a product roadmap. Our intention is to proceed as fast as possible and our first milestone is to have draft specifications and prototypes in place no later than the end of 2008.

7. What will happen with the installed base of existing EDD's and DTM's?

It is the individual responsibility of the ECT and the FDT Group to develop migration strategies for their installed base using the common FDI. The intent is to ensure backward compatibility with existing EDD's and DTM's.

8. Will this specification become an international standard?

It is our intent that the FDI model is an open specification and an international IEC standard.

9. What about the requirements in Factory Automation?

FDT covers applications in factory automation and process automation. EDDL is used mainly in process automation and for some device descriptions in the factory automation market. It is the intent to develop FDI in a way that it could be used for factory automation devices.

10. What will be the impact on current developments? Will current projects be delayed?

This common development is an addition to existing technology development and standardization efforts that each organization has planned and budgeted. Current projects will continue in concert with this development effort.

11. Who will own the specification and who will be responsible for its maintenance and development?

In future the FDI model specification will be owned collectively by all members of the ECT. When it becomes an international standard, the technology will be available under the rules of IEC. The ECT will be responsible for its maintenance and development.

12. How will you position this announcement in the market? Will you market it jointly?

Our intent is to jointly announce this agreement to the market. For now, the ECT, along with the FDT Group, will begin to highlight the benefits of an FDI model through their marketing channels. For the future, we will develop together a common set of supporting communication material that promotes the benefits of the unified solution.

13. Is there an existing framework for the FDI model?

The final FDI architecture will be developed by a joint technical team. The basis for this solution is the concept from the German based institute itm as outlined in its White Paper v 1.1 as well as the FDT and EDDL specifications.

14. Will the common FDI be operating system independent?

Yes, one of the primary goals of the solution will be to ensure the FDI model is operating system and host system independent.

15. When will a specification be available?

Our plan is to have a specification completed by the end of 2008.

16. What are the next steps?

The technical team will work out a detailed solution based on common use cases and common requirements and will develop the technical specification based on these use cases and requirements.

17. Which protocols will the common FDI cover?

The FDI model shall be applicable to any field device communication technology; e.g. HART, PROFIBUS, FF, PROFINET, etc. The architecture will be available for adoption by other fieldbuses.

18. How can it be made sure that Host and Device suppliers will comply with the new specification?

Conformance tests will assure that components or files are developed according to the FDI model.

19. It looks like FDI works like a printer driver in Windows. Is that a good analogy?

A better analogy would be to say that FDI should work like web pages using a web browser on Internet.

20. Can FDI be used to provide externally accessible information, or does it only display values on the screen?

FDI will support both. The host can use the information about the data to present the data as well as making it available through to other applications, for example through an OPC-UA server.

21. Is FDI only intended to display data in computer workstations or will it support handheld communicators as well?

FDI is intended to be platform independent supporting software and sophisticated device management systems on Windows workstations as well as embedded devices such as handheld field communicators. Data servers such as for OPC will also utilize FDI to build name space etc. Thus FDI will provide a single universal solution.

22. FDI will only work for simple instruments like temperature transmitters, showing diagnostics as brief text messages, right?

There will be no draw back!! FDI is intended to apply to simple as well as sophisticated devices including, for example, valve positioners or multivariable transmitters.

23. How will future versions of Windows and its regular service packs affect the compatibility of FDI?

FDI is will be platform independent, e.g. independent of a computer hardware or operating system. Therefore the technology will not be affected by changes in operating systems. The investment in the system is protected.

24. Do I need to complement FDI with FDT/DTM and EDDL?

No. FDI will handle all aspects of the device and system life cycle from configuration and commissioning to advanced diagnostics and performance analysis. FDI will be compatible with existing FDT/DTM and EDDL installations.

25. Devices from different vendors should be displayed consistently. Does FDI technology help to ensure that?

Yes. FDI gives the device vendor complete freedom to define the *content* on device pages to give access to all device functionality. The *style* (look & feel) will come from the host while the device vendor will have the freedom to write applications for specific functionality.

26. Over the life time of the system there will be many versions of devices used as failed devices are replaced. How does FDI prevent conflicts between different versions of a device?

One of the major requirements to FDI is that the addition of a new device or version shall not remove or overwrite existing device descriptions or software components. A new version shall not conflict with an old.

27. Will FDI meet the requirements of NAMUR NE 105?

Sure, this is a must. It is of course the major interest of the involved organizations to meet the requirements of a group of important customers.