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Field device tool (FDT) interface specification – Part 61: Device Type Manager (DTM) Styleguide for common object model

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIELD DEVICE TOOL (FDT) INTERFACE SPECIFICATION –

Part 61: Device Type Manager (DTM) Styleguide for common object model

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IEC/TR 62453-61, which is a technical report, has been prepared by subcommittee 65E: Devices and integration in enterprise systems, of IEC technical committee 65: Industrial-process measurement, control and automation:

This part, in conjunction with the other parts of the first edition of the IEC 62453 series cancels and replaces IEC/PAS 62453-1, IEC/PAS 62453-2, IEC/PAS 62453-3, IEC/PAS 62453-4 and IEC/PAS 62453-5 published in 2006, and constitutes a technical revision.

The text of this technical report is based on the following documents:

Enquiry draft	Report on voting
65E/72/DTR	65E/121/RVC

Full information on the voting for the approval of this technical report can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The list of all parts of the IEC 62453 series, under the general title *Field Device Tool (FDT) interface specification*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

IMPORTANT – The "colour inside" logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this publication using a colour printer.

INTRODUCTION

This technical report is a user interface design specification for developers of FDT (Field Device Tool) components for Function Control and Data Access within a Client/Server architecture. The technical report is a result of an analysis and design process to develop standard interfaces to facilitate the development of components by multiple vendors that shall interoperate seamlessly.

A device-specific software component, called DTM (Device Type Manager), is supplied by the field device manufacturer with its device. The DTM is integrated into engineering tools via the FDT interfaces defined in this specification. The approach to integration is in general open for all kinds of fieldbusses and thus meets the requirements for integrating different kinds of devices into heterogeneous control systems.

To ensure the consistent management of a plant-wide control and automation technology, it is necessary to fully integrate fieldbusses, devices and sub-systems as a seamless part of a wide range of automation tasks covering the whole automation life-cycle. This integration also requires a consistent look and feel of device specific components.

Figure 1 shows how IEC/TR 62453-61 is aligned in the structure of the IEC 62453 series.

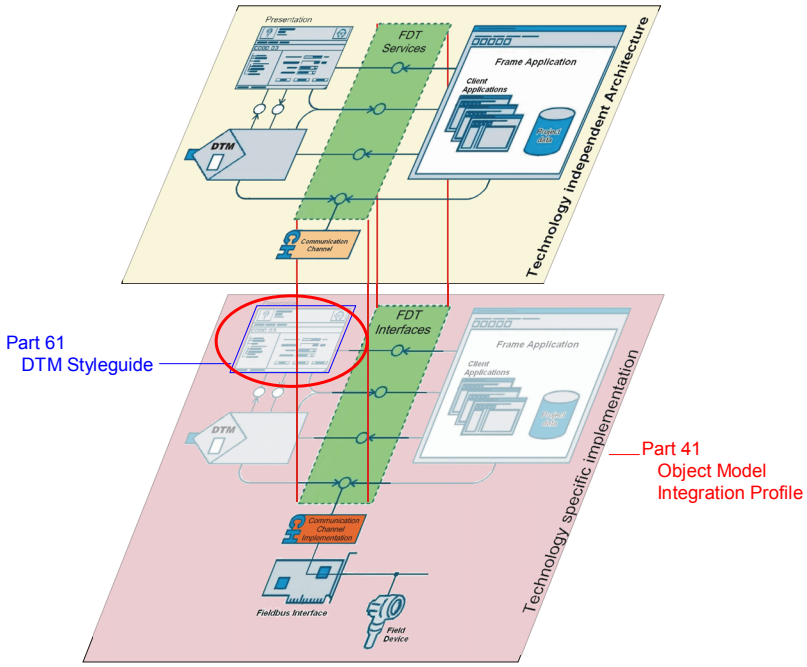


Figure 1 – Part 61 of the IEC 62453 series

FIELD DEVICE TOOL (FDT) INTERFACE SPECIFICATION –

Part 61: Device Type Manager (DTM) Styleguide for common object model

1 Scope

IEC/TR 62453-61, which is a technical report, explains the guidelines and rules for the implementation of a Device Type Manager (DTM) with regard to the user interface and its functions. These guidelines and rules are part of the FDT specification and are intended to ensure that all users are provided with clear and consistent user interface functions and features across DTM devices in a system.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 62453-1:2009, *Field Device Tool (FDT) interface specification – Part 1: Overview and guidance*

IEC 62453-2:2009, *Field Device Tool (FDT) interface specification – Part 2: Concepts and detailed description*

IEC/TR 62453-41:2009, *Field Device Tool (FDT) interface specification – Part 41: Object model integration profile – Common object model*

ISO/IEC 19501:2005, *Information technology – Open Distributed Processing – Unified Modeling Language (UML)* Version 1.4.2