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Standards

Standard Recommendation
S.R CLC/TR 62453-61:2009

Field device tool interface (FDT) specification -- Part 61: Device type manager (DTM) - Styleguide for common object model (IEC/TR 62453 -61:2009 (EQV))

S.R CLC/TR 62453-61:2009

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English version

**Field device tool interface (FDT) specification -
Part 61: Device type manager (DTM) -
Styleguide for common object model
(IEC/TR 62453-61:2009)**

Spécification des interfaces des outils
des dispositifs de terrain (FDT) -
Partie 61: Gestionnaire type
de dispositifs (DMT) -
Guide stylistique
pour le modèle objet commun
(CEI/TR 62453-61:2009)

Field Device Tool (FDT)-
Schnittstellenspezifikation -
Teil 61: Device Type Manager (DTM) -
Leitfaden zur Gestaltung
von Bedienoberflächen
(IEC/TR 62453-61:2009)

This Technical Report was approved by CENELEC on 2009-10-01.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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S.R. CLC/TR 62453-61:2009

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- 2 -

Foreword

The text of document 65E/72/CDV, future edition 1 of IEC/TR 62453-61, prepared by SC 65E, Devices and integration in enterprise systems, of IEC TC 65, Industrial-process measurement, control and automation, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as CLC/TR 62453-61 on 2009-10-01.

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the Technical Report IEC/TR 62453-61:2009 was approved by CENELEC as a Technical Report without any modification.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 62453-1	2009	Field device tool (FDT) interface specification - Part 1: Overview and guidance	EN 62453-1	2009
IEC 62453-2	2009	Field device tool (FDT) interface specification - Part 2: Concepts and detailed description	EN 62453-2	2009
IEC/TR 62453-41	2009	Field device tool (FDT) interface specification - Part 41: Object model integration profile - Common object model	CLC/TR 62453-41	2009
ISO/IEC 19501	2005	Information technology - Open Distributed Processing - Unified Modeling Language (UML)	-	-

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CONTENTS

FOREWORD.....	4
INTRODUCTION.....	6
1 Scope.....	7
2 Normative references	7
3 Terms, definitions, symbols, abbreviated terms and conventions	7
3.1 Terms and definitions	7
3.2 Symbols and abbreviated terms.....	7
3.3 Conventions	8
3.3.1 Data type names and references to data types	8
3.3.2 Vocabulary for requirements	8
3.3.3 Specific formatting.....	8
3.3.4 State machine diagrams	8
4 Principles for designing DTM user interfaces	8
5 Benefits from the FDT user's point of view.....	9
6 Functions of a DTM	11
6.1 General.....	11
6.2 Function "Main operation".....	11
6.3 Functions "Online Parameterize" and "Offline Parameterize"	12
7 DTM user interface.....	12
7.1 Objective.....	12
7.2 General behavior.....	12
7.2.1 General	12
7.2.2 GUI navigation.....	12
7.2.3 GUI resizeability	12
7.2.4 Display of information	12
7.3 Microsoft Active Accessibility.....	13
7.4 Appearance.....	13
7.4.1 General	13
7.4.2 DTM user interface categories	14
7.4.3 DTM user interface areas	15
7.5 Parameter handling	20
7.5.1 Representation within Application Area.....	20
7.5.2 Change of parameter values.....	20
7.5.3 Representation of parameters.....	22
8 Representation of DTM functions.....	24
9 DTM behavior.....	27
9.1 Close of user interface with modified parameter values	27
9.2 Data set	27
9.2.1 Parameter in multiple user interfaces.....	27
9.2.2 Locking mechanism	27
9.3 Online parameterization / data source: device	28
9.4 Offline parameterization / data source: data set.....	28
9.5 Error handling	29
9.6 Communication	29
9.7 Access rights.....	30
9.7.1 FDT actors and parameter classes	30

9.7.2 OEM login	30
9.8 Localization	30
9.9 Documentation	30
9.10 Installation and un-installation	31
Bibliography	33
Figure 1 – Part 61 of the IEC 62453 series	6
Figure 2 – Standard User Interface (SUI)	10
Figure 3 – Advanced User Interface (AUI)	11
Figure 4 – Areas of an SUI	14
Figure 5 – Areas of an AUI	15
Figure 6 – State diagram: Continuous Check	21
Figure 7 – State diagram: One Time Check	22
Figure 8 – Parameter value and associated information	22
Table 1 – Contents of Identification Area	16
Table 2 – Contents of Action Area	17
Table 3 – Contents of Status Bar	18
Table 4 – Possible connection states	18
Table 5 – Possible data source states	19
Table 6 – Possible states of the instance data set	19
Table 7 – Possible device diagnostic states (see [1])	19
Table 8 – Possible states of parameters	23
Table 9 – Display of inadmissible or wrong data	24
Table 10 – Representation of functions	25
Table 11 – Relation between user roles and parameter classes	30
Table 12 – Installation and un-installation	31

INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIELD DEVICE TOOL (FDT) INTERFACE SPECIFICATION –

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

FOREWORD

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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.

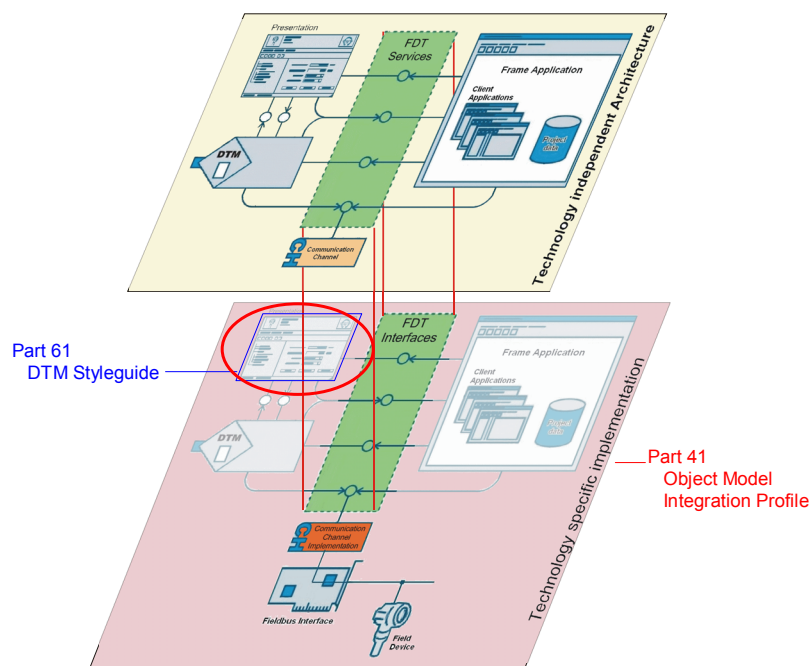


Figure 1 – Part 61 of the IEC 62453 series

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*

3 Terms, definitions, symbols, abbreviated terms and conventions

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 62453-1, IEC 62453-2, IEC/TR 62453-41 and the following apply.

3.1.1

screen reader

software application that provides additional output to users (e.g. text-to-sound, braille)

3.1.2

navigation tree

GUI element, which displays the navigation information by means of a tree (e.g. tree control)

3.2 Symbols and abbreviated terms

For the purposes of this document, the symbols and abbreviations given in IEC 62453-1, IEC 62453-2, IEC/TR 62453-41 and the following apply.

GUI

Graphical User Interface

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