IEC TR 62453-62

Edition 1.0 2017-01

TECHNICAL REPORT

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Field device tool (FDT) interface specification – Part 62: Field device tool (FDT) styleguide for common language infrastructure

IEC TR 62453-62:2017-01 (en)

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ICS 25.040.40; 35.100.05; 35.110

ISBN 978-2-8322-3793-9

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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 8
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
4 Fundamentals of designing DTM user interfaces 8
5 Benefits from the FDT user's point of view 9
6 DTM user interface 10
6.1 Objective 10
6.2 Appearance 10
6.2.1 General 10
6.2.2 DTM user interface categories 10
6.2.3 DTM user interface areas 13
6.3 General behaviour 20
6.3.1 General 20
6.3.2 WPF user interfaces 20
6.3.3 UI navigation 21
6.3.4 UI resize 21
6.3.5 Display of information 21
6.3.6 Use of modal user interfaces 22
7 Parameter handling 22
7.1 Representation within Application Area 22
7.2 Change of parameter values 22
7.2.1 Relation between parameters 22
7.2.2 Block mode 22
7.2.3 Direct Mode 22
7.2.4 Continuous Check and One Time Check 23
7.3 Representation of parameters 24
7.3.1 Parameter value and associated information 24
7.3.2 Parameter value modifications 25
8 Applications of a DTM 25
8.1 General 25
8.2 Application categories 26
8.2.1 Online application/data source: device 26
8.2.2 Offline application/data source: data set 26
8.2.3 Synchronized application/data source: data set and device 26
8.3 User role related default application 27
8.4 Main Operation 27
8.5 Typical workflow 27
8.5.1 General 27

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8.5.2 Parameterize device offline 27
8.5.3 Parameterize device with online connection (synchronized) 29
8.5.4 Parameterize device with online connection (non synchronized) 30
9 DTM behaviour 31
9.1 Close of user interface 31
9.1.1 Close of user interface with modified parameter values 31
9.1.2 Synchronization on close of user interface 32
9.2 Data set 32
9.2.1 Parameter in multiple user interfaces 32
9.2.2 Locking mechanism 32
9.3 Error handling 33
9.4 Localization 33
9.5 Global report information 33
Annex A (normative) Dictionary of standard terms 34
Annex B (normative) Dictionary of standard phrases 37
Bibliography 42

Figure 1 – IEC 62453-62 in IEC 62453 (all parts) 6
Figure 2 – Areas of a Standard user interface 11
Figure 3 – Areas of an Advanced user interface 12
Figure 4 – Areas of a Wizard user interface 13
Figure 5 – Structure of the Identification Area 13
Figure 6 – State diagram: Continuous Check 23
Figure 7 – State diagram: One Time Check 24
Figure 8 – Parameter value and associated information 24
Figure 9 – Parameterize device offline 28
Figure 10 – Parameterize device with offline parameterize and subsequent download 29
Figure 11 – Parameterize device with online connection (synchronized) 30
Figure 12 – Parameterize device with online connection (non synchronized) 31

Table 1 – Contents of Identification Area 14
Table 2 – Toolbar 15
Table 3 – Methods for UI using Block Mode 16
Table 4 – Methods for UI using Direct Mode 17
Table 5 – Wizard actions 17
Table 6 – Contents of Status Bar 18
Table 7 – Possible connection states 18
Table 8 – Possible data source and target states 19
Table 9 – Possible states of the instance data set 19
Table 10 – Possible modification states 20
Table 11 – Possible device diagnostic states (see [1]) 20
Table 12 – Display of inadmissible data 24
Table 13 – Priority of parameter value states 25
Table 14 – Recommended default application 27

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FIELD DEVICE TOOL (FDT) INTERFACE SPECIFICATION –

Part 62: Field device tool (FDT) styleguide for common language infrastructure

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FOREWORD

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IEC TR 62453-62, 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.

The text of this Technical Report is based on the following documents:

Enquiry draft	Report on voting
65E/442/DTR	65E/515/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 document 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 document will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific document. At this date, the document will be

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

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INTRODUCTION

This document 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. This document is a result of an analysis and design process to develop standard interfaces to facilitate the development of components by multiple vendors that 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, fieldbusses, devices and sub-systems are fully integrated 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 62453-62 is aligned in the structure of IEC 62453 (all parts).

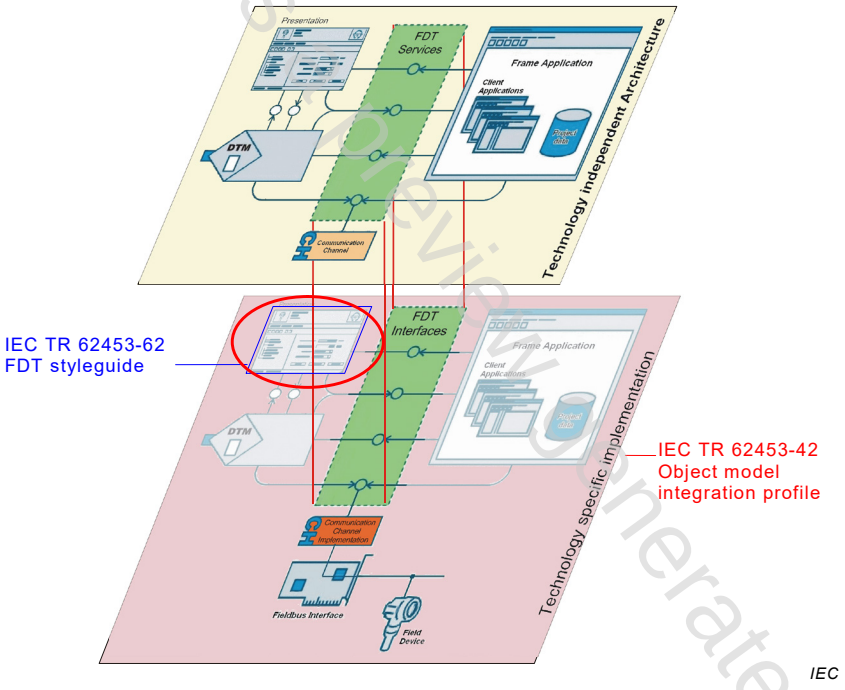

Figure 1 – IEC 62453-62 in IEC 62453 (all parts)

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FIELD DEVICE TOOL (FDT) INTERFACE SPECIFICATION –

Part 62: Field device tool (FDT) styleguide for common language infrastructure

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1 Scope

IEC TR 62453-62, which is a Technical Report, explains the guidelines and rules for the CLI-based implementation of a Device Type Manager (DTM) and parts of a Frame Application with regard to the user interface and its behaviour. These guidelines and rules are part of the FDT specification (IEC TR 62453-42) and are intended to ensure that all users are provided with clear and consistent user interface functions and features across DTMs in a system.

This specification neither contains the FDT specification nor modifies it.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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, *Field device tool (FDT) interface specification – Part 1: Overview and guidance*

IEC 62453-2, *Field device tool (FDT) interface specification – Part 2: Concepts and detailed description*

IEC TR 62453-42, *Field device tool (FDT) interface specification – Part 42: Object model integration profile – Common Language Infrastructure*

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, [7] and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

3.1.1
Application
DTM UI Applications and DTM UI Functions