



BSI Standards Publication

Field device tool (FDT) interface specification

Part 62: Field device tool (FDT) styleguide for common language infrastructure (IEC TR 62453-62:2017)

National foreword

This Published Document is the UK implementation of CLC/TR IEC 62453-62:2019. It is identical to IEC TR 62453-62:2017.

The UK participation in its preparation was entrusted to Technical Committee GEL/65/3, Industrial communications: process measurement and control, including fieldbus.

A list of organizations represented on this committee can be obtained on request to its secretary.

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Published by BSI Standards Limited 2019

ISBN 978 0 539 02870 6

ICS 25.040.40; 35.100.05; 35.110

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This Published Document was published under the authority of the Standards Policy and Strategy Committee on 31 May 2019.

Amendments/corrigenda issued since publication

Date	Text affected
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TECHNICAL REPORT

CLC/TR IEC 62453-62

RAPPORT TECHNIQUE

TECHNISCHER BERICHT

April 2019

ICS 25.040.40; 35.100.05; 35.110

English Version

Field device tool (FDT) interface specification - Part 62: Field
device tool (FDT) styleguide for common language infrastructure
(IEC TR 62453-62:2017)

Spécification des interfaces des outils des dispositifs de
terrain (FDT) - Partie 62: Guide stylistique de l'outil de
dispositif de terrain (FDT) pour l'infrastructure commune de
langage
(IEC TR 62453-62:2017)

Field Device Tool (FDT)-Schnittstellenspezifikation - Teil 62:
Field device tool (FDT) Leitfaden für common language
infrastructure
(IEC TR 62453-62:2017)

This Technical Report was approved by CENELEC on 2019-03-18.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

This document (CLC/TR IEC 62453-62:2019) consists of the text of the IEC TR 62453-62:2017 prepared by 65E: "Devices and integration in enterprise systems", of IEC technical committee 65: "Industrial process measurement, control and automation".

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Annex ZA
(normative)

**Normative references to international publications
with their corresponding European publications**

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NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC TR 62453-42	-	Field device tool (FDT) interface specification – Part 42: Object model integration profile – Common Language Infrastructure	-	-
IEC 62453-1	-	Field device tool (FDT) interface specification - Part 1: Overview and guidance	EN 62453-1	-
IEC 62453-2	-	Field device tool (FDT) interface specification - Part 2: Conceptual and detailed description	EN 62453-2	-

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIELD DEVICE TOOL (FDT) INTERFACE SPECIFICATION –**Part 62: Field device tool (FDT) styleguide
for common language infrastructure**

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.

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 document using a colour printer.

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 fieldbuses 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, fieldbuses, 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).

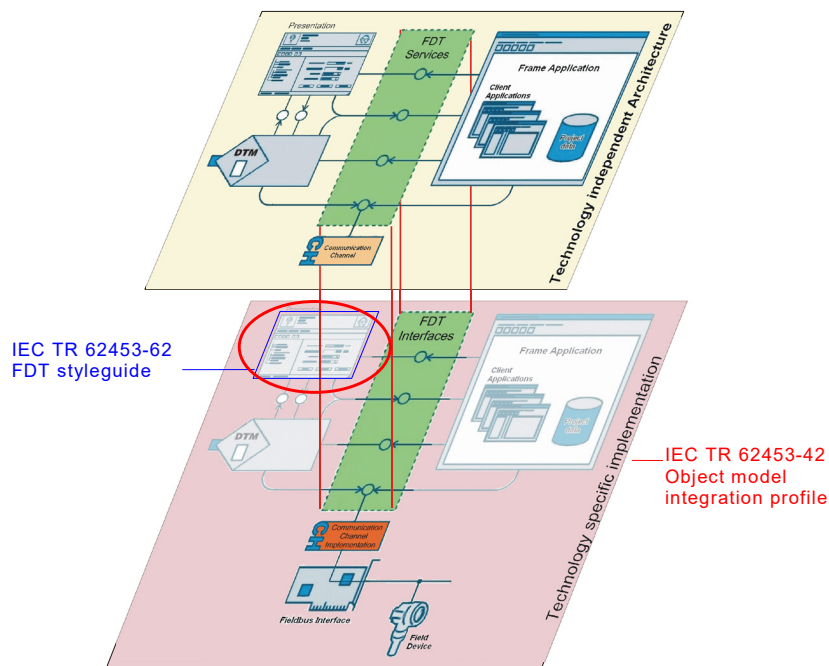


Figure 1 – IEC 62453-62 in IEC 62453 (all parts)

FIELD DEVICE TOOL (FDT) INTERFACE SPECIFICATION –

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

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