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Field device integration (FDI) – Part 2: FDI Client

Intégration des appareils de terrain (FDI) – Partie 2: Client FDI



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Field device integration (FDI) – Part 2: FDI Client

Intégration des appareils de terrain (FDI) – Partie 2: Client FDI

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

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FIELD DEVICE INTEGRATION (FDI) –

Part 2: FDI Client

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This second edition cancels and replaces the first edition published in 2015. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) running UIPs in a sandbox.

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FDIS	Report on voting
65E/759/FDIS	65E/769/RVD

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

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A list of all parts in the IEC 62769 series, published under the general title *Field Device Integration (FDI)*, can be found on the IEC website.

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INTRODUCTION

The IEC 62769 series has the general title *Field Device Integration (FDI)* and the following parts:

– Part 1: Overview
– Part 2: FDI Client
– Part 3: FDI Server
– Part 4: FDI Packages
– Part 5: FDI Information Model
– Part 6: FDI Technology Mapping
– Part 7: FDI Communication Devices
– Part 100: Profiles – Generic Protocol Extensions
– Part 101-1: Profiles – Foundation Fieldbus H1
– Part 101-2: Profiles – Foundation Fieldbus HSE
– Part 103-1: Profiles – PROFIBUS
– Part 103-4: Profiles – PROFINET
– Part 109-1: Profiles – HART and WirelessHART
– Part 115-2: Profiles – Protocol-specific Definitions for Modbus RTU
– Part 150-1: Profiles – ISA 100.11a

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FIELD DEVICE INTEGRATION (FDI) –

Part 2: FDI Client

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1 Scope

This part of IEC 62769 specifies the FDI Client. The overall FDI architecture is illustrated in Figure 1. The architectural components that are within the scope of this document have been highlighted in this figure.

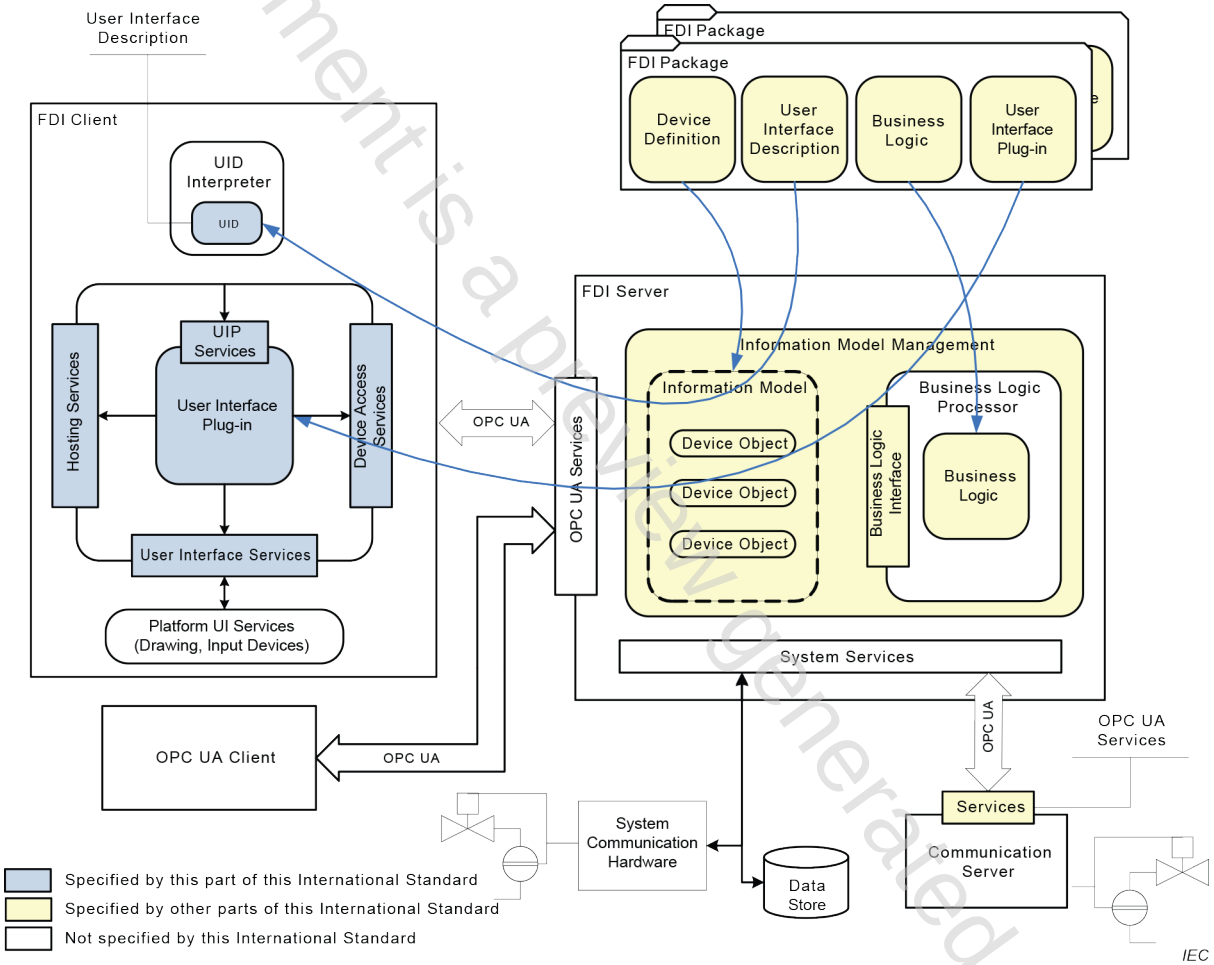


Figure 1 – FDI architecture diagram

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 62443-3-3:2013, *Industrial communication networks – Network and system security – Part 3-3: System security requirements and security levels*

IEC 62769-1, *Field Device Integration (FDI) – Part 1: Overview*

IEC 62769-3, *Field Device Integration (FDI) – Part 3: FDI Server*

IEC 62769-4, *Field Device Integration (FDI) – Part 4: FDI Packages*

IEC 62769-5, *Field Device Integration (FDI) – Part 5: FDI Information Model*

IEC 62769-6, *Field Device Integration (FDI) – Part 6: FDI Technology Mapping*

IEC 62541-3, *OPC Unified Architecture – Part 3: Address Space Model*

IEC 62541-4, *OPC Unified Architecture – Part 4: Services*

ISO/IEC 15948, *Information technology – Computer graphics and image processing – Portable Network Graphics (PNG): Functional specification*

ISO 639, *Codes for the representation of names of languages*

ISO 3166, *Codes for the representation of names of countries and their subdivisions*

IETF RFC 3066, *Tags for the Identification of Languages*

XMLSchema-1, *XML Schema: Structures* (available at http://www.w3.org/TR/xmlschema-1/)

XMLSchema-2, *XML Schema: Datatypes* (available at http://www.w3.org/TR/xmlschema-2/)

3 Terms, definitions, abbreviated terms and conventions

For the purposes of this document, the following terms and definitions 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 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 62769-1 as well as the following apply.

3.1.1 Terms used for Services

3.1.1.1
Locking Services
set of Services through which access to a Device is controlled

3.1.1.2
Device Model Services
sub-set of the Device Access Services through which a UIP can access the information of a Device

3.1.1.3
Direct Access Services
sub-set of the Device Access Services through which a UIP can directly access a Device

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