Field Information Manager
Product Guide
FIM VERSION 2.2

Field Information Manager
Product Guide
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# Table of Contents

1 About This User Manual
   1.1 General ............................................................................................................... 7
   1.2 User Manual Conventions ................................................................................. 7
   1.3 Warning, Caution, Information, and Tip Icons ................................................. 7

2 Terminology

3 Introduction
   3.1 Key Benefits ...................................................................................................... 11
   3.2 Product Features ............................................................................................... 12
      3.2.1 Basic Concept .......................................................................................... 12
      3.2.2 Device Management .............................................................................. 12
      3.2.3 Device Package Handling .................................................................... 13
      3.2.4 Additional value added Features ......................................................... 13
   3.3 Operating System Requirements ...................................................................... 14
   3.4 Connectivities ................................................................................................... 14
      3.4.1 Local Connectivities ............................................................................. 14
      3.4.2 Remote Connectivities ....................................................................... 15
      3.4.3 ABB Ability™ Support ....................................................................... 16

4 Functional Description
   4.1 Basic Concept ................................................................................................... 17
      4.1.1 Navigation ............................................................................................... 17
      4.1.2 Device Representation .......................................................................... 18
      4.1.3 Communication Server Handling ..................................................... 19
      4.1.4 Bulk Operations .................................................................................... 19
      4.1.5 Project Management .......................................................................... 19
      4.1.6 Tag Mapping ......................................................................................... 20
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1.7</td>
<td>Language Support</td>
<td>20</td>
</tr>
<tr>
<td>4.1.8</td>
<td>User Management</td>
<td>20</td>
</tr>
<tr>
<td>4.2</td>
<td>Device Management</td>
<td>21</td>
</tr>
<tr>
<td>4.2.1</td>
<td>Topology and Configurations View</td>
<td>21</td>
</tr>
<tr>
<td>4.2.2</td>
<td>Device Identification and Scanning</td>
<td>21</td>
</tr>
<tr>
<td>4.2.3</td>
<td>Device Views</td>
<td>21</td>
</tr>
<tr>
<td>4.2.4</td>
<td>Upload and Download of Offline Datasets</td>
<td>21</td>
</tr>
<tr>
<td>4.2.5</td>
<td>Templates</td>
<td>22</td>
</tr>
<tr>
<td>4.2.6</td>
<td>Comparison of Datasets</td>
<td>22</td>
</tr>
<tr>
<td>4.2.7</td>
<td>Import of Device Engineering Data</td>
<td>22</td>
</tr>
<tr>
<td>4.3</td>
<td>Device Package Handling</td>
<td>23</td>
</tr>
<tr>
<td>4.3.1</td>
<td>Device Catalog</td>
<td>23</td>
</tr>
<tr>
<td>4.3.2</td>
<td>Device Package and Package Assignment</td>
<td>23</td>
</tr>
<tr>
<td>4.3.3</td>
<td>HART Generic Device Package</td>
<td>23</td>
</tr>
<tr>
<td>4.3.4</td>
<td>Device Integration by GSDML</td>
<td>23</td>
</tr>
<tr>
<td>4.3.5</td>
<td>ABB Repository</td>
<td>23</td>
</tr>
<tr>
<td>4.3.6</td>
<td>FieldComm Group Repository</td>
<td>24</td>
</tr>
<tr>
<td>4.3.7</td>
<td>Offline Repository</td>
<td>24</td>
</tr>
<tr>
<td>4.3.8</td>
<td>Common Names</td>
<td>24</td>
</tr>
<tr>
<td>4.4</td>
<td>Dashboard</td>
<td>25</td>
</tr>
<tr>
<td>4.5</td>
<td>Loop Check</td>
<td>25</td>
</tr>
<tr>
<td>5</td>
<td>Editions and Ordering</td>
<td>27</td>
</tr>
<tr>
<td>5.1</td>
<td>Tags</td>
<td>27</td>
</tr>
<tr>
<td>5.2</td>
<td>Editions</td>
<td>28</td>
</tr>
<tr>
<td>5.3</td>
<td>License Handling</td>
<td>29</td>
</tr>
</tbody>
</table>
1 About This User Manual

1.1 General

Any security measures described in this Release Note, for example, for user access, password security, network security, firewalls, virus protection, etc., represent possible steps that a user of an Field Information Manager may want to consider based on a risk assessment for a particular application and installation. This risk assessment, as well as the proper implementation, configuration, installation, operation, administration, and maintenance of all relevant security related equipment, software, and procedures, are the responsibility of the user of the Field Information Manager.

1.2 User Manual Conventions

Microsoft Windows conventions are normally used for the standard presentation of material when entering text, key sequences, prompts, messages, menu items, screen elements, etc.

1.3 Warning, Caution, Information, and Tip Icons

This Release Note includes Warning, Caution, and Information where appropriate to point out safety related or other important information. It also includes Tip to point out useful hints to the reader. The corresponding symbols should be interpreted as follows:

- Electrical warning icon indicates the presence of a hazard that could result in *electrical shock*.

- Warning icon indicates the presence of a hazard that could result in *personal injury*.

- Caution icon indicates important information or warning related to the concept discussed in the text. It might indicate the presence of a hazard that could result in *corruption of software or damage to equipment/property*. 
Information icon alerts the reader to pertinent facts and conditions.

Tip icon indicates advice on, for example, how to design your project or how to use a certain function.

Although Warning hazards are related to personal injury, and Caution hazards are associated with equipment or property damage, it should be understood that operation of damaged equipment could, under certain operational conditions, result in degraded process performance leading to personal injury or death. Therefore, fully comply with all Warning and Caution notices.
## 2 Terminology

<table>
<thead>
<tr>
<th>Term/Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABB Repository</td>
<td>An online cloud that contains ABB Device Package, EDDs and other files distributed by ABB. The Field Information Manager is connected to the ABB Repository and has access to the repository content.</td>
</tr>
<tr>
<td>Audit Trail</td>
<td>Tracking of modifications in device parameters and diagnosis.</td>
</tr>
<tr>
<td>Bridge</td>
<td>Communication Server installed as a connectivity service on a network node. Bridges exist for various connectivities (e.g. ABB System 800xA, PROFINET, OPC-UA, etc.) and they enable remote connections of Field Information Manager to the respective network node.</td>
</tr>
<tr>
<td>DD / EDD</td>
<td>Device Descriptions and Electronic Device Descriptions are files that describe the configuration for process field devices.</td>
</tr>
<tr>
<td>Dashboard</td>
<td>Dashboard presenting gathered Audit Trail, Field Device Diagnosis and Field Device Communication State information.</td>
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<tr>
<td>Device Package</td>
<td>FDI Device Packages comprise device descriptions, optionally Programmed User Interface Device Applications and attachments as manuals, certificates, and device specific files as GSD (ML).</td>
</tr>
<tr>
<td>Term/Acronym</td>
<td>Description</td>
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<tr>
<td>FCG Repository</td>
<td>An online cloud that is maintained by the FieldComm Group. The cloud contains FDI Device Package and EDDs. The Field Information Manager is connected to the FCG Repository and has access to the repository content.</td>
</tr>
<tr>
<td>FCI</td>
<td>Field Communication Interface.</td>
</tr>
<tr>
<td>FDI</td>
<td>Field Device Integration is an integration technology for process field devices from the FieldComm Group. Reference: <a href="http://www.fieldcommgroup.org">www.fieldcommgroup.org</a></td>
</tr>
<tr>
<td>FIM</td>
<td>Field Information Manager.</td>
</tr>
<tr>
<td>HART</td>
<td>The HART Communications Protocol (Highway Addressable Remote Transducer) is an early implementation of Fieldbus, a digital industrial automation protocol.</td>
</tr>
<tr>
<td>Loop Check</td>
<td>Verification of signal loop from system through the I/O structure down to the field device and back.</td>
</tr>
<tr>
<td>NAMUR Recommendation</td>
<td>NAMUR Recommendations (NE) prepared by NAMUR (User Association of Automation Technology in Process Industries) explain procedures, provide support material like check lists and define requirements relating to equipment and systems.</td>
</tr>
<tr>
<td>xStream Commissioning App</td>
<td>Application integrated into Field Information Manager for a series of steps organized as a wizard to execute the commissioning and Loop Check of field devices connected to System 800xA Select I/O. Released independently from Field Information Manager.</td>
</tr>
</tbody>
</table>
3 Introduction

3.1 Key Benefits

Field Information Manager, the first FDI-based software for device management, makes the configuration, commissioning, diagnostics and maintenance of fieldbus instruments easier and quicker than ever before.

ABB's Field Information Manager software employs FDI technology to ensure a high degree of device type compatibility and is equipped with high-performance and innovative graphical user interface that helps technicians & engineers to effectively work with the process instrumentation.

Key features of Field Information Manager:

- Easy & fast configuration, commissioning & diagnostics of HART, PROFIBUS and PROFINET instruments
- Novel concept for ease of use and navigation with touch support
- Support of handheld devices with Windows OS
- Interoperability based on FDI Common Host Components
- Support of Legacy HART devices by DD / EDD files
- Plug and Play for point-to-point diagnostic and maintenance of HART devices supporting NE 107 classification
- Online parameterization of devices with easy navigation via FDI / NE 131 device core parameters
- Offline configuration with device core parameter support as well as device type templates
- Comprehensive device monitoring views to visualize online data with state of the art indicators, gauges and charts
- Efficient commissioning, configuration and maintenance using Compare, Loop Check and Dashboard
3.2 Product Features

3.2.1 Basic Concept
Field Information Manager supports the following features as part of its basic concept:

- Intuitive User Interface for efficient device management
- Device Representation via Device Tiles for quick information and access
- Integration of Communication Servers to support a large number of connectivities
- Bulk operations
- Project management
- Native support of English & German language within FIM
- Further support of other languages within Device Packages
- User Management for configuration of access rights

3.2.2 Device Management
Field Information Manager supports the following features regarding Device Management:

- Topology and Configurations View for easy navigation through topology, devices and datasets
- Scanning of topology for device identification with automatic Device Package assignment
- Device Views for efficient working with device data and switching between multiple devices
- Upload and Download of datasets to allow working with Offline Configurations
- Templates for preconfiguration of datasets before devices are available
- Comparison of datasets to identify differences
- Import of Device Engineering Data for Compare and Loop Check
3.2.3 Device Package Handling
Field Information Manager supports the following features regarding Device Package Handling:

- Device Catalog for management of Device Packages
- Intelligent Device Package handling with automatic assignment and options for manual replacement
- Generic HART Device Package for all HART devices
- Profile package for PROFIBUS
- Integration of devices by GSDML for basic communication and diagnostics
- ABB Repository support
- FieldComm Group Repository Support
- Offline Repository Support to be used in offline environments
- Common Names for assignment of external generic names to specific internal Device Package items

3.2.4 Additional value added Features
Field Information Manager supports the following additional value added features:

- Clear and structured Dashboard presenting gathered Audit Trail, Field Device Diagnosis and Field Device Communication State information
- Audit Trail functionality gathering information about modifications in parameters, diagnosis information and communication states of field devices
- Loop Check for verification of signal loop from system through the I/O structure down to the field device and back
- xStream Commissioning application support for a series of steps organized as a wizard to execute the commissioning and Loop Check of field devices connected to System 800xA Select I/O, resulting in a drastic reduction of effort and error-free loop tests. Released independently from Field Information Manager.
3.3 Operating System Requirements

Operating System Requirements:

• Windows 8.1, Windows 10, 64 Bit.
• Connectivity services are installed normally on Windows Server OS.
  Please find more information about the supported Windows Server versions referring to the System Guide Summary document 3BSE078159
• 10 GB storage space, minimum of 1 Gigabyte RAM

3.4 Connectivities

Field Information Manager supports various connectivities.

3.4.1 Local Connectivities

Local Communication Servers allow connections to devices by using a supported local modem.

HART isHRT FDI Communication Server

The HART isHRT FDI Communication Server allows connections to HART field devices by using a supported local HART modem.

Supported HART modems. Field Information Manager (FIM) contains the Thorsis HART modem driver and is already prepared to support ABB / Thorsis HART modems listed below:

• ABB NDA121-NX USB (Ex ia)
• ABB NHA121-NO USB
• Thorsis isHRT USB
• Thorsis isHRT USBEx
• Thorsis H@RT BluePack
PROFIBUS isPro FDI Communication Server
The PROFIBUS isPro FDI Communication Server allows connections to PROFIBUS devices by using a supported local PROFIBUS modem.

- For connectivity to I/O system components, the required Device Packages are mandatory. For more information, please refer to 2PAA113895 Field Information Manager Release Notes.

Supported PROFIBUS modems. Field Information Manager (FIM) contains modem drivers and is already prepared to support PROFIBUS modems listed below:

- Thorsis isPro USBx12
- Thorsis isPro USBv4

UMC USB Serial Communication Server
The UMC USB Serial Communication Servers allows connections to UMC field devices using a supported local UMC modem.

3.4.2 Remote Connectivities
Remote Communication Servers allow connections to decentralized network architectures.

ABB FIM Bridge 800xA
The Field Information Manager supports a connection to ABB Ability™ System 800xA by using the FIM Bridge 800xA.

- For connectivity to I/O system components, the required Device Packages are mandatory. For more information, please refer to 2PAA113895 Field Information Manager Release Notes.

ABB FIM Bridge PROFINET
Field Information Manager supports connections to PROFINET devices by using the FIM Bridge PROFINET.

ABB FIM Bridge OPC-UA
Field Information Manager supports connections to OPC-UA devices by using the FIM Bridge OPC-UA.
Thorsis isNet Pro FDI Communication Server

Field Information Manager supports connections to PROFIBUS devices by using the Thorsis isNet Pro FDI Communication Server.

Supported PROFIBUS Gateways. The Thorsis isNet Pro FDI Communication Server supports the PROFIBUS Gateways listed below:

- Thorsis isNet DP - PROFIBUS DP Ethernet Gateway with Thorsis isNet Lite - Ethernet Communication Module

Thorsis isNet HART FDI Communication Server

Field Information Manager supports connections to HART field devices by using the Thorsis isNet HART FDI Communication Server.

Supported HART Gateways. The Thorsis isNet HART FDI Communication Server supports the HART Gateways listed below:

- Thorsis isNet H@RT - HART Ethernet Gateway with Thorsis isNet Lite - Ethernet Communication Module

Thorsis HART-IP FDI Communication Server

Field Information Manager supports connections to HART-IP servers by using the generic Thorsis isNet HART-IP FDI Communication Server. The HART-IP servers then allow connections to (wireless) HART field devices.

3.4.3 ABB Ability™ Support

The Field Information Manager contains a OPC-UA server that is supporting ABB Ability™. Please get in contact with your local ABB service partner for more information.
4 Functional Description

4.1 Basic Concept

4.1.1 Navigation

Field Information Manager provides an intuitive User Interface for efficient device management.

1. Tools Menu button
2. Top menu, consisting of links to add a new Communication Server and maximize/minimize the Topology Tree
3. Communication Server Tile
4. Context Menu, available with a click on [...] icon of the Device Tile
5. Easy Access Wizard
6. Device Tile representing a field device
7. Info Center
8. User settings information

The progress of started activities is documented within the Info Center. Favorites and other frequently used elements are available in the Easy Access Wizard. Further help via tooltips is provided by using the Tooltip-Picker.

For working with devices with a touchscreen, Field Information Manager provides a mode for optimized touch handling.

### 4.1.2 Device Representation

A physical field device is represented as a graphical object called **Device Tile**. The most left side of the Device Tile shows the parent information, like the COM port that is used by the HART modem or the channel number if connected to an IO board.

![Device Tile with COM information](image)

Right beside the channel information the device status is shown indicating how the connection to the device behaves.

![Device Tile with status](image)

The device views and device functions are available on a Context Menu which will appear after a click on the Device Tile menu button.

![Context Menu](image)

The Device Tile object contains a preview functionality that provides access to the current open views which are belonging to the Device Tile. As soon as a view is open, the Device Tile object contains an icon to the right showing that open views exist. The user can click on that icon and gets access to the preview area.
4.1.3 Communication Server Handling

Field Information Manager supports the concept of Communication Servers to allow connectivities to supported systems or devices.

Each Communication Server can be configured individually and appears as a Device Tile within the Topology Tree. The Hardware Scan functionality is available as an option in the Device Tile Context Menu.

4.1.4 Bulk Operations

Field Information Manager supports several kind of bulk operations, like uploading the device configurations from several devices in bulk, or removing several Device Packages in bulk.

The Configurations View and the Device Catalog support bulk operations, i.e. multiple elements can be selected to start an operation.

Each started bulk operation is documented in the Info Center.

4.1.5 Project Management

Field Information Manager supports Project Management to save all the contained offline datasets, the offline templates and the content of the Topology View and tree.

The Device Catalog with Device Packages, Fimlets and EDD files, is used by all projects which are available on the Field Information Manager client, but is also saved in the project file (.fimprj) as soon as a project is exported.
With a Field Information Manager project you can:

- Continue work on a project at a later time
- Switch between projects if you are working on several systems with the same FIM computer client
- Share the project with others and move it to another computer
- Create project templates with general settings, Device Packages and template datasets, and share the templates with others

### 4.1.6 Tag Mapping

Field Information Manager supports different names for Tag Mapping to identify a field device.

The following names are available:

- Device Tag: The identifier name that exists in the parameter set of the physical device
- Device Name: The name of the Device Tile object in FIM
- Offline Dataset Tag: The identifier name that exists in the parameter set of the offline database

Each project can select either the TAG, LONG TAG, or MESSAGE parameter as the Tag identifier.

### 4.1.7 Language Support

Field Information Manager supports different languages, with English and German language for the complete software being part of the FIM installation automatically.

Other supported languages can be installed using Language Packs. The released Language Packs are available via [http://www.abb.com/fieldinfo](http://www.abb.com/fieldinfo).

Device views are based on the Device Package information and if it does not contain the selected language, then the default language (English) is used for the device views.

### 4.1.8 User Management

User Management allows the configuration of access rights for specific users in order to only allow certain actions in Field Information Manager.
A user is identified by the combination of the domain/workgroup/node name and the user name and can have one of the following user roles:

- Basic Access: No functionality within FIM besides basic options.
- Read-Only Access: All Read-Only operations within FIM are allowed, but it is not possible to change information in field devices or settings.
- Write Access: All Write operations within FIM are allowed, but it is not possible to work on global administrative settings.
- Full Access: All operations within FIM are possible.

4.2 Device Management

4.2.1 Topology and Configurations View

Field Information Manager provides the following views for Device Management:

- Topology View: Navigation through the physical/logical network structure to access devices displayed as tree objects.
- Configurations View: Detailed grid to access all available configurations, like device dataset configurations, offline dataset configurations and templates.

4.2.2 Device Identification and Scanning

The Topology View allows scanning to detect and identify devices, which are then added automatically to the topology.

4.2.3 Device Views

Field Information Manager supports Device Views for physically connected devices or for offline device datasets.

All open Device Views appear in the Device Bar for quick access. It is also possible to have a Multiple Device View displaying several views on one screen.

4.2.4 Upload and Download of Offline Datasets

Field Information Manager provides a database that stores the device configurations in offline datasets, which can be edited even without a connection to the device. Offline datasets can be created by reading from a device and if changed, they can be sent to the device.
4.2.5 Templates

Field Information Manager supports device configuration templates that are used to prepare other datasets with the template content. Templates can be exported and imported.

4.2.6 Comparison of Datasets

Field Information Manager allows to compare the following datasets:

- The offline and online datasets of a field device.
- The online datasets of different field devices.
- The offline datasets of different field devices or templates.

4.2.7 Import of Device Engineering Data

Field Information Manager supports the import of Device Engineering Data, which contains values of dedicated parameters or settings for one or more field devices.

Device Engineering Data is defined as a comma separated list (CSV file format) and allows the following use cases:

- Comparison between imported parameters from Device Engineering Data with the parameters of connected field devices.
- Preconfiguration of channel settings for Loop Check.
4.3 Device Package Handling

4.3.1 Device Catalog

Field Information Manager provides a Device Catalog for management of Device Packages and fm8 EDD files, including import of new Device Packages. Each Device Package is represented as a Device Package Tile object.

Please find the set of ABB Device Packages by using this link:

4.3.2 Device Package and Package Assignment

FDI Device Packages or EDD files in fm8 format are required to establish a connection to a device. Field Information Manager uses the best available package automatically for new identified devices, but the user can replace the package to another one if needed.

4.3.3 HART Generic Device Package

Field Information Manager includes the Generic Device Package by default, supporting HART Universal- and Common Practice Commands. The package is prepared to be used for each HART device which is available on the market. However, when available, a Device Package supplied by the instrumentation vendor should be used.

4.3.4 Device Integration by GSDML

Field Information Manager supports the integration of devices by GSDML instead of using an FDI package.

Information provided by the used GSDML (like diagnostic bits) is exposed through the OPC-UA server of Field Information Manager.

4.3.5 ABB Repository

The ABB Repository is a cloud-based storage, which contains ABB FDI Device Packages, EDDs and definition files for ABB communication hardware. If an internet connection is available, then Field Information Manager checks the ABB Repository for updated contents when the application starts.

All FDI Device Packages of the ABB Repository are listed in the Device Catalog. In order to use the FDI Device Packages from the ABB Repository, the user has to download the package in the Device Catalog.
4.3.6 FieldComm Group Repository

The FieldComm Group Repository (FCG Repository) is a cloud-based storage, which contains FDI Device Packages and other files for communication hardware of various manufacturers.

The FCG Repository is a licensed feature and can be used like the ABB Repository.

4.3.7 Offline Repository

The Offline Repository can be used to create an offline collection of FDI Device Packages, EDDs and definition files for communication hardware.

Field Information Manager offers a guided mode to create an Offline Repository via the Device Catalog, with all cloud-based Repositories serving as input for selecting the required Device Packages. After creation, the new Offline Repository is stored in a local file for further use, e.g. to move it to another machine which has no connection to the cloud-based Repositories.

Via Repository Management in Field Information Manager, the user can manage Online and Offline Repositories.

4.3.8 Common Names

Common Names are used to assign external generic names to internal Device Package items with specific names. After successful assignment, the respective Device Package items can also be accessed via their Common Names for further use.

The configuration of Common Names for a Device Package can be exported and imported via the Device Catalog.
4.4 Dashboard

FIM provides an overview of field device information in the form of a Dashboard. The Dashboard displays the following information:

- Modified device parameters through online EDD menus
- Modified device parameters using a download
- Change in device diagnosis information
- Change in device communication state
- Messages entered by the user

Information can be displayed for a dedicated device, a user-selected list of devices, or all devices contained in a project.

Dashboard diagrams can be opened in a detailed view within the same window, a new window, or in a splitted window.

4.5 Loop Check

Field Information Manager supports Loop Check of channels and connected field devices in conjunction with ABB Ability™ System 800xA.

It can be started for a dedicated channel, a user-selected list of channels, or all channels contained in a project.

The Loop Check view provides an overview about the status of displayed channels, while the detailed grid can be filtered and used to select and configure channels for Loop Check. A preconfiguration of channel settings can also be derived from imported Device Engineering Data.

Loop Check in Field Information Manager supports the following functionality:

- 5-/9-Point Test Routine: Validation of complete signal range
- Check of Underrange and Overrange: Validation of values below and above the defined signal range
- Check of Alarm Limits: Validation of Alarm Limits as defined in Engineering Data

After execution, details about the Loop Check can be displayed for each channel.

The results of the Loop Check can be exported to CSV and PDF file format for further use.

The Audit Trail diagram of the Dashboard includes each executed Loop Check for a channel with a connected field device.
5 Editions and Ordering

5.1 Tags

The Tag count includes all field device "online" datasets and all "offline" configuration datasets. A field device, that consists out of a "online" and "offline" configuration is counted as 1 Tag. Templates are not counted as Tags.

Each FIM license contains a number of Tags per default. The Tag number can be increased if necessary, which is dependent on the used FIM Edition.

Field Information Manager Editions:

• Device Window "Free" Edition
  – No license required
  – 1 Tag supported
  – Option to upgrade to other editions

• Handheld Edition
  – License required
  – 100 Tags supported per default
  – Option to increase Tag number

• Device Management Edition
  – License required
  – Maximum of 5000 Tags supported
  – Higher Tag count possible through TSA
5.2 Editions

Depending on the selected edition, Field Information Manager supports different functionalities.

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</tr>
</thead>
<tbody>
<tr>
<td>Maximum number of Tags</td>
<td>1</td>
<td>100 (option to increase)</td>
<td>5000</td>
</tr>
<tr>
<td>English and German tool language</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Other tool languages (based on language pack availability)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Backup / restore of tool configuration</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>User Management</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>ABB Repository (ABB device packages in the cloud)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>FieldComm Group (FCG) Repository – Access to all 3rd party device drivers</td>
<td>✓</td>
<td>✓ (Licensed Feature)</td>
<td>✓ (Licensed Feature)</td>
</tr>
<tr>
<td>Offline Repository - Use repositories in offline environments</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Integration of Devices by GSDML - Enables connection to Profinet devices to check diagnostic data*</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Common Names - Allows mapping of external generic names to internal Device Package items</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Import of Device Engineering Data</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Offline device configuration</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Device type template support</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Import / export device configuration as file</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Exporting device configuration for documentation in PDF files</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Project Management: Switch between projects for working on several systems with the same FIM computer client.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Bulk device configuration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loop Check</td>
<td>✓</td>
<td>✓ (Licensed Feature)</td>
<td></td>
</tr>
<tr>
<td>xStream Commissioning application support</td>
<td>✓</td>
<td>✓ (Licensed Feature)</td>
<td></td>
</tr>
</tbody>
</table>

*requires FIM Bridge PROFINET

Figure 5.1: FIM Edition Matrix (Features)
## 5.3 License Handling

Field Information Manager is installed automatically as a software containing all available functionalities, independant of the used edition.

Without an active license, the Device Window Edition is active after installation. The edition is free of charge and mainly used to get started.

Any other edition of FIM requires a valid license file to be enabled. Please find more information about the different license options on [http://www.abb.com/fieldinfo](http://www.abb.com/fieldinfo)

### Supported Connectivities

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HART / PROFIBUS modem support</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>ABB FIM Bridge PROFINET - Enables connectivity to PROFINET Devices</td>
<td>➡</td>
<td>➡</td>
<td>➡</td>
</tr>
<tr>
<td>Thorsis isNet Pro FDI Communication Server - Enables connectivity to PROFIBUS IO &amp; Devices through Thorsis isNet gateway</td>
<td>➡</td>
<td>➡</td>
<td>➡</td>
</tr>
<tr>
<td>Thorsis isNet HART FDI Communication Server - Enables connectivity to HART Devices through Thorsis isNet HART Ethernet Gateway isNet H@rt4 / isNet H@rt8 and isNet H@rt8+AI</td>
<td>➡</td>
<td>➡</td>
<td>➡</td>
</tr>
<tr>
<td>Thorsis HART-IP FDI Communication Server - Enables connectivity to Field Devices via HART-IP Gateways</td>
<td>➡</td>
<td>➡</td>
<td>➡</td>
</tr>
<tr>
<td>ABB FIM Bridge OPC-UA - Enables connectivity to OPC-UA Devices</td>
<td>➡</td>
<td>(Licensed Feature)</td>
<td>(Licensed Feature)</td>
</tr>
<tr>
<td>ABB FIM Bridge 800xA - Enables connectivity to HART &amp; PROFIBUS &amp; PROFINET Devices connected to System 800xA Hardware</td>
<td></td>
<td></td>
<td>(Licensed Feature)</td>
</tr>
<tr>
<td>ABB Ability™ Connect - Exposes information of devices connected to FIM through OPC-UA interface to the ABB Ability™ platform</td>
<td></td>
<td></td>
<td>[] (option)</td>
</tr>
</tbody>
</table>

*Figure 5.2: FIM Edition Matrix (Connectivities)*