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### Index
About This User Manual

Any security measures described in this User Manual, for example, for user access, password security, network security, firewalls, virus protection, etc., represent possible steps that a user of an 800xA System 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 800xA System.

This User Manual describes how to use the System 800xA Device Library Wizard in detail.

This instruction is intended for system engineers and application engineers. It describes the usage of the Device Library Wizard.

The user of this document must be a confident computer user and familiar with software installation. A basic knowledge of the Industrial IT System architecture and in particular the intended fieldbus protocol helps when using this tool.

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.

Feature Pack

The Feature Pack content (including text, tables, and figures) included in this User Manual is distinguished from the existing content using the following two separators:
Feature Pack Functionality

<Feature Pack Content>

Feature Pack functionality included in an existing table is indicated using a table footnote (*):

*Feature Pack Functionality

Feature Pack functionality in an existing figure is indicated using callouts.

Unless noted, all other information in this User Manual applies to 800xA Systems with or without a Feature Pack installed.

**Warning, Caution, Information, and Tip Icons**

This User Manual 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.

## Terminology

The following is a list of terms associated with this product that you should be familiar with. The list contains terms and abbreviations that are unique to ABB or have a usage or definition that is different from standard industry usage.

<table>
<thead>
<tr>
<th>Term/Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspect Objects</td>
<td>ABB technology for representing real world objects in data models, containing all the necessary information for design, engineering, operation, and maintenance. Object data is grouped into aspects, each representing certain characteristics of an object. There are several ways of presenting aspect object data.</td>
</tr>
<tr>
<td>Aspect Object Type</td>
<td>Defines certain characteristics that are shared between several object instances, such as a basic set of common aspects. This makes it possible to create and efficiently re-use standardized solutions to frequently recurring problems. For example, rather than building an object from scratch for every valve in a plant, you can define a set of valve types, and then create all valve objects of these instances.</td>
</tr>
<tr>
<td>Asset Monitor</td>
<td>Application responsible for retrieving data from, and interacting with, multiple data servers, OLE for Process Control ® (OPC®) servers, etc.). It analyzes the data and when necessary, issues an Asset Condition Document (ACD) and notifies the process portal of the detected condition.</td>
</tr>
<tr>
<td>Device Type Manager (DTM)</td>
<td>Software component (device driver) for configuring, diagnosing, forcing, and displaying the measured variables, etc. of a field device. It is familiar with the way the device works and supplies device-specific documentation.</td>
</tr>
</tbody>
</table>
## Terminology

### Device Description Language (DDL)
Interpretable language for the formal description of device parameters.

### DLW
Device Library Wizard, comprises of:
- **DLW Server** is the Primary Aspect Servers where the Device Types are installed or restored.
- **DLW Client** is the System 800xA Node where the Device Types are distributed for installation.

### Data Execution Prevention (DEP)
Is a primary operating system that prevent memory based cyber attacks.
The DEP settings in system level are turned on by default to enhance the system security.

### Fieldbus Builder PROFIBUS/HART (FBB PH)
ABB aspect system for fieldbus and DTM management, implementing a Frame Application according to specification FDT 1.2.

### Fieldbus Builder FF (FBB FF)
The 800xA system extension that owns and stores all FOUNDATION Fieldbus relevant data and the business logic belonging to it. The FBB FF exposes its objects through an automation interface.

### Field Device Tool (FDT)
The FDT concept describes the interface between a Frame Application and the device-specific software (DTM) of the device manufacturer. It enables devices produced by different manufacturers and different fieldbuses to be integrated in a single system. Currently supporting fieldbus protocols for PROFIBUS and HART.

### FOUNDATION Fieldbus (FF)
Bi-directional communications protocol used for communications among field instrumentation and control systems.

### Highway Addressable Remote Transducer (HART)
Digital communication protocol developed for applications in industrial process control.

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<td>instrumentation and control systems.</td>
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<tr>
<td>Highway Addressable Remote</td>
<td>Digital communication protocol developed for applications in industrial</td>
</tr>
<tr>
<td>Remote Transducer (HART)</td>
<td>process control.</td>
</tr>
</tbody>
</table>
### High Speed Ethernet (HSE)
High Speed Ethernet (HSE) is the Fieldbus Foundation’s backbone network typically running at, but not being limited to 100 Mbit/second.

### HSE Subnet
HSE Subnets are IP networks. They are permitted to contain bridges, but not routers. The HSE Subnet is used to qualify the Link Id. The combination of the HSE Subnet and the Link Id is unique across all HSE Subnets of a system. An HSE subnet consists of one or more HSE devices connected through Ethernet. HSE devices on a subnet may be interconnected with standard switches. Multiple HSE subnets may be interconnected using standard routers.

### OLE for Process Control (OPC)
Standardized interface between client and server applications for data exchange based on the Microsoft basic technologies COM/DCOM, not restricted by computer capacity. The advantage of OPC is that field devices and applications from different manufacturers can now communicate with each other without special modifications having to be made.

### System Extension
A solution or product developed with the Aspect Integrator Platform might typically contain several aspect systems, services, object types, and aspect objects. The System Extension mechanism enables a whole set of corresponding definition files to be read in at once. It makes it easy to load complex add-on solutions as options.

### View
Aspects can be presented in a number of ways depending on the task performed e.g. viewing or configuration. Each presentation form is called a view.

### Windows
Windows are the graphical presentation of a software tool. Each window interacts as graphical user interface to allow configuration, parametrization and functions.
Related Documentation

The following table contains a list of related documentation.

<table>
<thead>
<tr>
<th>Title</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>System 800xA 6.0 Release Notes New Functions and Known Problems</td>
<td>This document describes the New functions and known problems of Device Library Wizard, PROFIBUS &amp; HART, and FOUNDATION Fieldbus.</td>
</tr>
<tr>
<td>System 800xA Device Management FOUNDATION Fieldbus Configuration, 3BDD012902*</td>
<td>This manual describes the configuration and commissioning for the FOUNDATION Fieldbus Device Integration (Fieldbus Builder FF, OPC-Server FF and Device Integration Library).</td>
</tr>
<tr>
<td>System 800xA Device Management PROFIBUS &amp; HART, Configuration, 3BDD011934*</td>
<td>This manual describes the configuration for PROFIBUS &amp; HART Devices (Fieldbus Builder PROFIBUS/HART, OPC-Server, DTM and Device Types Objects in 800xA).</td>
</tr>
</tbody>
</table>
Section 1 Introduction

ABB provides a continuously increasing set of Device Types for FOUNDATION Fieldbus, HART and PROFIBUS protocol in the form of single Device Type files, for easy management of fieldbus devices into the 800xA System.

They are available in System 800xA Media and ABB SolutionsBank for all supported fieldbus protocols.

The Device Library Wizard is a tool that is used for adding these separately delivered Device Types to the Device Integration Libraries of an 800xA System.

The Device Library Wizard in 800xA System Version 6.0 supports the following system environments and fieldbus protocols:

- 800xA with AC 800M
  - PROFIBUS DP, PROFIBUS PA, FOUNDATION Fieldbus, and HART.
Device types for the 800xA System environment are available in System 800xA Media and ABB SolutionsBank for all supported fieldbus protocols in the form of Device Type files. This section describes a common workflow for working with Device Types in the Device Library Wizard for 800xA System. The following is a general workflow to handle Device Types in 800xA System:

The Device Library Wizard first requires Installation of Device Types in primary aspect server, and those installed Device Types gets distributed to Device Library Wizard clients. The extraction option in Device Library Wizard client is disabled.

- **Step 1:** Install Device Library Wizard and perform the required settings as mentioned in *System 800xA Post Installation (3BUA000156)*.

- **Step 2:** Check the availability of the required Device Types in System 800xA Media. Additionally a set of released Device Types are available in ABB SolutionsBank.

- **Step 3:** In Primary Aspect Server, extract the Device Type files using the Device Library Wizard.

- **Step 4:** Read the corresponding Device Type release notes for details and limitations. Release Notes are provided together with the Device Type file or can be downloaded from ABB SolutionsBank publications.

- **Step 5:** In Primary Aspect Servers, install the required Device Types to the 800xA System.

- **Step 6:** In client nodes, launch the Device Library Wizard. Connect Node to Primary Aspect server with primary IP Address then click on Synchronize option. The Device Types installed in the Primary Aspect Server will be distributed to the client nodes.

If the Device Library Wizard is already launched in the client nodes, click **Synchronize Device Types**, to copy all the Device Types from the Primary Aspect Server to the respective client nodes.
• **Step 7:** Install the required Device Types in the client nodes.

• **Step 8:** Perform fieldbus protocol specific post-installation actions, if included in the Device Type release notes or the specific system release note.
Step 1: Device Library Wizard Installation and Settings

Installation

The Device Library Wizard setup consists of the following two components.

- **Device Library Wizard - Client**
  The client program is installed on every 800xA System node. It provides a graphical user interface for synchronization of Device Types available in the Primary Aspect Server and installation of Device Types.

- **Device Library Wizard - Server**
  The Device Library Wizard server interacts as a service on the 800xA System server node and must be installed only on Primary Aspect Server. It provides history information to the Device Library Wizard - Client.

The Device Library Wizard software installs windows services. In a multi-node environment these services communicate over the ethernet connection. If the firewall is enabled, then, the port number must be released for data synchronization between client and server component of Device Library Wizard.

For more details, refer to Section 24 of System 800xA Post Installation (3BUA000156*).

Pre-Selection of the system environment

During the first start of the Device Library Wizard, the Device Library Wizard automatically pre-selects the installed system environment. If there is no supported system installed, then an error message appears. After clicking **OK**, the Device Library Wizard stops working.

![Figure 1. Device Library Wizard Startup Failed](image-url)
Device Library Wizard Administration

The Device Library Wizard (DLW) requires special system environment pre-configuration. This is mandatory before performing further steps.

Open the Device Library Wizard client to automatically connect and synchronize with the server. The **Connect Client** option is used only if the client fails to connect to the server automatically.

Incorrect IP address during System Planning/Configuration or a Network disconnection could be the reason for DLW Client not connected to the DLW Server.

It is only possible to work with Device Types using the Device Library Wizard after successfully completing the **Connect Client** configuration.

The following steps on the 800xA System node is performed only if the Device Library Wizard client is not connected to the Device Library Wizard Server automatically.

1. To open the Device Library Wizard, click **ABB Start Menu > ABB Industrial IT 800xA > Device Mgmt > ABB Device Library Wizard**.

   Acknowledge the **User Account Control** window when the Device Library Wizard tool is opened.

![Device Library Wizard Select Type of Configuration](image)

*Figure 2. Device Library Wizard Select Type of Configuration*
2. When the Device Library Wizard opens, select **Device Library Wizard Administration** and then click **Next** to see the Administration Action window.

![Device Library Wizard Select Administration Action](image)

*Figure 3. Device Library Wizard Select Administration Action*

The current system node must be connected to the Server Node where the Device Library Wizard Server is installed.

If the Device Library Wizard server is located on the same system node, the client automatically connects to the server. If the client gets disconnected or if the client and server are installed on different nodes, only then the action **Connect Client** must be performed.
3. Select **Connect Client** and click **Next** to get the following window.

![Device Library Wizard Connect Client](image.png)

Figure 4. Device Library Wizard Connect Client

4. Enter or **Browse** and select the Primary IP address of Primary Aspect Server where the Device Library Wizard server is installed.
5. The action to perform is shown in the **Selection Summary** in the logger area.

![Selection Summary](image)

*Figure 5. Device Library Wizard Selection Summary*

6. Click **Finish** to confirm the Device Library Wizard server settings.
7. The entry in the logger area, **Configuring settings is completed!** indicates the successful connection to the server.

![Device Library Wizard Wizard Server Settings Complete](image)

**Figure 6. Device Library Wizard Server Settings Complete**

8. Click **Main Menu** to navigate back to the Device Library Wizard main window.

The Device Library Wizard generates a log file. To view the contents of the log file click **View Log** in the Device Library Wizard window. The path to the log file is; `<Installation path>\ABB Industrial IT\Engineer IT\ABB Device Integration Library\DLW.log`.

9. Click **Exit** to close Device Library Wizard or continue the workflow.
Step 2: Obtain Device Types

ABB provides a continuously increasing portfolio of system tested and certified ABB and third party Device Types. They are available in System 800xA Media or from ABB SolutionsBank.

In Device Library Wizard Server

Download from the SolutionsBank
1. Login to ABB SolutionsBank.
2. Open Downloads > Downloads Explorer.
3. Browse
   - Control Products and Systems / 800xA / Device Management - FOUNDATION Fieldbus / Device Library - <category>
     for FOUNDATION Fieldbus Device Types or
   - Control Products and Systems / 800xA / Device Management - HART / Device Library - <category>
     for HART Device Types or
   - Control Products and Systems / 800xA / Device Management - PROFIBUS / Device Library - <category>
     for PROFIBUS Device Types

and download the required Device Type files to your local machine.

System 800xA Media

The Device Types available at the time of the release of 800xA system version, are stored on the System 800xA Media. The Device Type files are separated in the specific folders related to the fieldbus protocol.
In Device Library Wizard Client

After connecting to Device Library Wizard server, there are two ways to get Device Type to client nodes.

- Device types installed in Device Library Wizard server gets automatically copied to client node on invoking the Device Library Wizard.

![Screenshot of Device Library Wizard](image)

*Figure 7. Synchronizing Device Types in Client*

- Using Synchronize option in the Device Library Wizard Administration window (see Figure 8).

Synchronizing Device Types to clients must be started only after Device Types installation is completed in Primary Aspect Server.
Figure 8. Device Type Transfer
Step 3: Extract Device Type Files in Primary Aspect server

Device type files exist as zip files (.zip) or self extracting zip files (.exe) in the Primary Aspect Server. Both file extensions can be handled in parallel by the Device Library Wizard.

The location where Device Type files are stored can be different from the currently used system node. It is **not** required to copy all the Device Type files to local disk.

Extract the Device Type files in the following sequence to the Primary Aspect Server, where the Device Types must be installed and from where the Device Types is distributed to other client nodes. Extract of Device Types is disabled in client nodes.

1. Open the Device Library Wizard:
   - Click **ABB Start Menu > ABB Industrial IT 800xA > Device Mgmt > ABB Device Library Wizard**
2. When the Device Library Wizard opens with main window select **Extract Device Types** and click **Next**.

![Figure 9. Selected Extract Device Types](image-url)
3. Select **Extract Device Types through Manual Selection** and click **Next**. For more information, refer to **Extract Device Types via Manual Selection** on page 66.

![Extract through Manual Selection](image)

*Figure 10. Extract through Manual Selection*

4. Click **Browse** and navigate to the corresponding folder containing the Device Type files of the Device Types.
5. Select the required Device Type files (multiple selection is possible) and click Open.

Figure 11. Selected Device Type Files

The selection is displayed in the Extract Device Types window.
6. Click **Next** to start the extracting operation.

![Device Type Files Selection View](image)

*Figure 12. Device Type Files Selection View*
7. Click **Finish** to complete the extract operation.

![Selection Summary](image)

*Figure 13. Complete the Extract Device Type Operation*
Device type files include the extension _HART, _FF, _DP and _PA in the file name. On this basis the Device Library Wizard extracts the Device Type file and ensures that the Device Types are placed in the appropriate folders.

For FOUNDATION Fieldbus:
<Installation path>\ABB Industrial IT\Engineer IT\ABB Device Integration Library\FF Device Integration Library

For HART:
<Installation path>\ABB Industrial IT\Engineer IT\ABB Device Integration Library\HART Device Integration Library

For PROFIBUS:
<Installation path>\ABB Industrial IT\Engineer IT\ABB Device Integration Library\PROFIBUS Device Integration Library

These paths are fixed (except the installation drive and root path) and cannot be changed by the user.

It is recommended not to delete the Device Types required to synchronize and install from the above paths.

The Synchronization or Copying of each Device types to client nodes is a one time activity. Any modification or deletion of these Device Types will not Synchronize again.
Figure 14 displays the logger area indicating that the operation is successful.

![Selection Summary](image)

**Figure 14. Extraction Successful**

- Extraction process may not be completed due to reasons outside Device Library Wizard's control. For example, user action to terminate the extraction. In this case, Device Library Wizard logger area will still show as extraction completed.

- In such situations extract the Device Types again.

- The extraction of Device Types happens only in Primary Aspect Server. Invoking Device Library Wizard Client or Synchronization option copies the installed Device Types from Primary Aspect Server to client automatically. Installation of the Device Type must be performed in required system node.

8. Repeat **Step 2** to **Step 5** in this chapter for all required Device Types. Select **Main Menu** to navigate directly to the main window. Click **Exit** button to close the program if further operations are not required.
Step 4: Read Release Notes of the Device Types

Each Device Type file includes a release notes for the corresponding Device Type. Refer to the corresponding release notes for detailed information.

The user can directly access the release notes of each extracted Device Type through the Device Library Wizards Device Selection windows, where Device Types are displayed. To open the release note of a particular device, click with the right mouse button on the listed Device Type.

![Figure 15. Release Notes Access from the Device Library Wizard](image)

As an alternative, the release notes are stored in the root folder of the specific Device Type.

Ensure that the folder or files are not modified in the path specified, otherwise synchronization does not work. Once the Object Types are transferred to any client, they cannot be transferred again.

- For FOUNDATION Fieldbus browse to:
  `<Installation path>\ABB Industrial IT\Engineer IT\ABB Device Integration Library\FF Device Integration Library\<Device Type>`

- For HART browse to:
  `<Installation path>\ABB Industrial IT\Engineer IT\ABB Device Integration Library\HART Device Integration Library\<Device Type>`

- For PROFIBUS browse to:
  `<Installation path>\ABB Industrial IT\Engineer IT\ABB Device Integration Library\PROFIBUS Device Integration Library\<Device Type>`
Step 5: Install / Restore Device Types in Primary Aspect Server

Installation of Device Types through Device Library Wizard is possible for different Fieldbus protocols (HART, PROFIBUS, FOUNDATION Fieldbus).

The Device Library Wizard offers the following functionality to add, extend or restore Device Type objects in 800xA System:

- **Install Device Types**
  
  New Device Types can be installed to the 800xA System. If the Device Type has been installed already, it will be re-installed. A windows message may occurs to confirm overwriting the existing Device Type.

  This option must also be performed to install a new minor version of a Device Type, where a previous version has already been installed.

  It is always recommended to install the latest available minor version for the previously installed Device Type in the system.

  For Example: If a 5.0 version Device Type is already installed in the system and a minor version of 5.1 is available, it is always recommended to use the 5.1 version Device Type.

  The latest minor versions can be downloaded from ABB solutions bank. For latest minor versions of the Device Type, refer to the detailed data sheet with the corresponding protocols.

- **Restore Device Types**
  
  The **Restore Device Types** functionality of the Device Library Wizard installs the Device Object type completely again. Any modifications to the Device Object type will be overwritten.

  A Device Type installed as a new minor version to an existing Device Type will not be identified as a new minor version Device Type on object type level (FF) and instance level (FF, HART, PROFIBUS) in Plant Explorer workplaces.
The **Restore Device Types** function does not include any updates or enhancements of Aspects in the 800xA System environment. To get the new functionality of the latest minor version Device Type in the system, it has to be re-installed through Device Library Wizard **Install Device Types** function.

For PROFIBUS Device Types the restore function must not be used for system upgrade from a previous system version less than 800xA 5.0 onwards. It is mandatory to use instead the **Install Device Types** function described in **Install Device Types** on page 74.

During installation of ABB Instruments Device Types with device specific DTMs, the virus protection tool may indicate that installation is blocked by access protection rule. If this happens, disable the virus protection tool (Example: McAfee before starting Device Type installation again and enable the tool after installation is finished.

To perform the described Device Library Wizard functionality, the installed 800xA System and the required fieldbus protocol must be selected by the user. Follow the instructions to install a Device Type to an 800xA System:

1. To open the Device Library Wizard:
   
   Click **ABB Start Menu > ABB Industrial IT 800xA > Device Mgmt > ABB Device Library Wizard**

   Windows and 800xA System administrator rights are required to execute the Device Library Wizard on the node.
2. In **Device Type Administration**, select **Install Device Types** to install new Device Types or re-install Device Type to the 800xA System. Click **Next**.

![Action Selection Dialog - Device Library Wizard Server](image)

*Figure 16. Action Selection Dialog - Device Library Wizard Server*
3. Select the fieldbus protocol used in the system. The following fieldbus protocols are currently supported, depending on the 800xA System:

- **FOUNDATION Fieldbus** (HSE and H1)
- **HART**
- **PROFIBUS** (PROFIBUS DP and PA)
4. Click **Next** to confirm fieldbus selection.

![Fieldbus Protocol Selection Dialog](image)

**Figure 18. Fieldbus Protocol Selection Dialog**

5. The window lists all the extracted Device Type files of the specific fieldbus protocol except those which have been installed already.

This window shows **Install** and **Restore** tabs representing the available Device Types along with the corresponding **Data Execution Prevention (DEP) Compatible** attribute for installation. And also Device specific release notes can be accessed by right-clicking on the corresponding Device Type name.

- **Install** tab shows the Device Types that will be installed.
- **Restore** tab shows Device Types that are already installed.

To install Device Types to the system, select the checkbox corresponding to the particular Device Type. Enable the checkbox **Select all** to mark all listed Device Types.

The **DEP Compatible** option in the **Select Device Types** window contains **Yes** or **No** attribute. If any non DEP Compatible Device type(s) are selected and
installation is started, a dialog to disable the DEP is displayed (Figure 20). For more information on Data Execution Prevention, refer to System 800xA Administration and Security (3BSE037410*) manual.

![Image of DEP Disable Popup Window](image)

Figure 19. Device Selection Dialogue - Install View

![Image of DEP Disable Popup Window](image)

Figure 20. DEP Disable Popup Window
• If Yes is selected, the DEP is disabled for DTM and Workplace Process, and the selected Non DEP compatible Device Types are installed.

![Selection Summary](image)

**Figure 21. DEP Disable**

• If No is selected, the DEP is not disabled and the selected non DEP compatible Device Types are not installed.

If DEP is already disabled, message is not displayed during installation for Non DEP compatible Device Types.
The following table lists the Icons which show the status of the selected Device Types:

<table>
<thead>
<tr>
<th>Icon</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓</td>
<td>Installation successful</td>
</tr>
<tr>
<td>✓✓</td>
<td>Already installed Device Type</td>
</tr>
<tr>
<td>✗</td>
<td>Installation failed</td>
</tr>
<tr>
<td>!</td>
<td>Installation is not completed</td>
</tr>
</tbody>
</table>
6. Click **Finish** to start the installation of the selected Device Types.

![Selection Summary](image)

*Figure 23. Finish Installation*

Device types already installed in the 800xA System are overwritten. A confirmation of this operation results in overwriting the existing Device Type. In this case user-made modifications at Device Types may be overwritten.

The Selection Summary window also lists the Device Types that are Not Installed.
The status of operation is displayed in the logger area. Wait till installation is completed. Next to the Device Library Wizard window, a status window appears, which gives additional information on the installation process.

![Status Information - ABB Device Library Wizard](image)

**Figure 24. Progress Messages**

During installation of Device Types, additional software may be installed on the node, for example, DTM. Read the release notes of the selected Device Type carefully to know whether license agreements or special settings for this software must be considered.

In case of bulk operation for Device Types, where additional software (Example: DTM) is installed and not controlled by the Device Library Wizard, each single step of DTM installation followed by Device Type installation must be confirmed by the user. The Device Library Wizard will proceed with the next Device Type installation only when confirmed by the user.
If the *Launcher.exe* stops responding, acknowledge the message and continue with the Device Library Wizard installation. However, ensure that the DTM is installed successfully. You can manually reinstall DTM if there was an error during the installation.

Installation issues can stop the operation. In this case error messages are visible in the logger area. Retry the installation or contact your local ABB representative for further assistance.

During Device Type installation product documentation and other software will be copied and installed to the local disk.

Successful installation is indicated with **Installation completed!** entry in the logger area.

![Selection Summary](image)

*Figure 25. Installation Successful*

The Device Library Wizard displays a message indicating successful installation when the installation process finishes, even if the device specific DTMs are not installed completely. Reinstall the Device Type if the DTM installation fails or stops responding.
Device Library Wizard generates a log file. To view the contents of the log file, click View Log in the Device Library Wizard window.

The path to the log file is `<Installation path>\ABB Industrial IT\Engineer IT\ABB Device Integration Library\DLW.log`.

7. To install more Device Types to the 800xA System, click Main Menu and repeat Step 2 to Step 8. If there are no further Device Type installations, click Exit to close the Device Library Wizard.
Step 6: Synchronize / Install / Restore Device Types in Client Nodes

Installation of Device Types through Device Library Wizard is possible for different Fieldbus protocols (HART, PROFIBUS, FOUNDATION Fieldbus).

The Device Library Wizard offers the following functionality to add, synchronize, extend or restore Device Type objects in 800xA System:

- **Synchronize Device Type**
  
  Synchronize Device Type option is only available in client nodes. It synchronizes new Device Types from the Primary Aspect Server to the client. On clicking Synchronize Device Type, all the Device Types that have been installed in the Primary Aspect Server are automatically copied to the respective client nodes. User then selects and installs the required Device Type in each node and a windows message confirms that synchronization is complete for those Device Types.

![Figure 26. Synchronize Device Type](image)

**Figure 26. Synchronize Device Type**
• **Install Device Types**
  For installing Device Types in respective client node, follow the similar steps as performed on the Server node. refer to *Step 5: Install / Restore Device Types in Primary Aspect Server* on page 35.

Synchronization steps must be followed in client nodes after installing Device Types in Primary Aspect server.

• **Restore Device Types**
  For restoring Device Types in client node, follow the similar steps as performed on the Server node. refer to *Step 5: Install / Restore Device Types in Primary Aspect Server* on page 35.
Step 7: Post-Installation

Post-Installation has to be done for special adjustments outside ABB responsibility. The corresponding release note of the Device Type lists those special adjustments and settings, if applicable. Post-installation issues have to be carried out to ensure a proper usage of the Device Types in 800xA Systems.

Examples for post-installation issues:

- Special settings for 3rd party software components, for example, Device Type Manager, and so on.
- Including of third party licenses for Device Type Manager.
- Selection or usage of external programs.
Figure 27. Extend Device Types

Select a fieldbus protocol and click Next. A new window appears with a list of Device Type files, which can be extended with new functionality.

In this version of Device Library Wizard, Extend function installs the complete Device Object type again.
Select a fieldbus protocol and click **Next**. A new window appears with a list of Device Type files, which can be deleted.

Ensure not to manually delete the synchronized Device Types from the client machine, as these manually deleted Device Types will not get synchronized again. There will be a permanent loss of the deleted object types because these object types will not be copied to the client machine again.

Device Library Wizard will list PROFIBUS libraries as removable even if the PROFIBUS library is just connected in Control builder and actually not being used.

Actual Delete will not be possible in this case. Disconnect the library first in Control builder and then use Device Library Wizard delete functionality.
Section 3  Detailed Window Description

The Device Library Wizard software is delivered with the System 800xA Media.

The Device Library Wizard setup consists of a client and a server component. The client component needs to be installed on each node in 800xA System and server component needs to be installed only on Primary Aspect Servers.

Install client and server component for a single node environment.

The server program interacts as service on the Primary Aspect Server node without graphical user interfaces (windows) and provides history information to the client component. The client provides the user interfaces (windows) to the user.

This section describes all specific graphical user interfaces (windows), which are available as standard with the Device Library Wizard - Client.

Depending on the status of the listed Device Type one of the following icons may be visible at the Device Type name:

<table>
<thead>
<tr>
<th>Icon</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑</td>
<td>Installation successful</td>
</tr>
<tr>
<td>☑</td>
<td>Already installed Device Type</td>
</tr>
<tr>
<td>☑</td>
<td>Installation failed</td>
</tr>
<tr>
<td>☑</td>
<td>Installation is not completed</td>
</tr>
</tbody>
</table>
Select Type of Configuration (Main Window)

![Select Type of Configuration](image.png)

*Figure 29. Select Type of Configuration*

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Device Library Wizard Administration</td>
<td>This option offers general Device Library Wizard configuration. Configuration settings must be applied in a single node and on all the nodes in a multi-node environment.</td>
</tr>
<tr>
<td>Extract Device Types</td>
<td>Device type files are delivered as packed archive file. This option is available only in Device Library Wizard server and allows the user to extract Device Type files directly to the set path on the hard disk.</td>
</tr>
<tr>
<td>Device Type Administration</td>
<td>This option allows to install extracted Device Types or delete and restore them.</td>
</tr>
</tbody>
</table>
Device Library Wizard Administration

Figure 30. Device Library Wizard Administration Action

Table 2. Device Library Wizard Select Administration Action

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
</table>
| Connect Client     | This action allows the user to connect this computer to the machine where the Device Library Wizard server is installed.  
**NOTE:** Use the Connect Client option only if the client fails to connect to the server automatically using the IP address. |
| Disconnect Client  | This action allows the user to disconnect this computer from the machine where the Device Library Wizard server is installed.                |
Table 2. Device Library Wizard Select Administration Action (Continued)

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Support</td>
<td>This action gives an overview about all supported versions of the installed system in the following summary window.</td>
</tr>
<tr>
<td>Diagnostics</td>
<td>This action enables the ABB support to activate the trace option or view the detailed log file.</td>
</tr>
</tbody>
</table>

The client is automatically connected and synchronized with the server, when you open the Device Library Wizard client. The **Connect Client** option is used only if the client fails to connect to the server automatically. By default, the **Connect Client** option is disabled and the **Disconnect Client** option is enabled for selection.
# Connect Client

![Connect Client Window](image)

**Figure 31. Connect Client - Enter / Browse for the IP Address of the Server Node**

**Table 3. Connect Client**

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Server IP</td>
<td>Enter or Browse for the IP address of the node, where Device Library Wizard - Server is installed. If the client and server component are located on the same node, the name <strong>localhost</strong> can be used. Click <strong>Browse</strong> for easy search functionality. Click <strong>Next</strong> to confirm the input.</td>
</tr>
</tbody>
</table>
Disconnect Client

Figure 32. Disconnect Client

Click **Finish** to disconnect the client from the server. This action follows a summary window.

**Disconnect Client** is required, if the IP address has been changed for the server (for example, after system backup, new projects, etc.). Also, if there is a problem in synchronization of the relevant data. Within this menu there is the possibility to start a new configuration (and synchronization). In this case first disconnect the client and then connect it again.

If the node is disconnected, then the main operation of the Device Library Wizard is disabled.
System Support

![System Support screenshot]

Figure 33. System Support Select the Action to be Performed

Table 4. System Support

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show Supported Systems and Versions</td>
<td>Only the supported versions of the system that is pre-selected or automatically detected during the Device Library Wizard startup are shown in a list.</td>
</tr>
<tr>
<td>Update Device Type List for Filter</td>
<td>This menu allows to load a new Device Type file list into the Device Library Wizard, which contains relevant information for the filter option. Only the latest file can be loaded, older version is rejected.</td>
</tr>
</tbody>
</table>

Update System Version Verification File is not required in this version of Device Library Wizard.
System and Supported Version Information

![System and Supported Version Information](image)

Figure 34. System and Supported Version Information

A window appears on the screen which contains information about all supported versions of the selected system. Click **Back** to change to the previous window, select **Main Menu** to enter the main window or **Exit** to leave the Device Library Wizard.
Update Device Type List

A window appears which allows to browse the latest device data sheet file. Click **Back** to change to the previous window. Select **Exit** to leave the Device Library Wizard.

Select **Next** to upload the Device Type list. A message appears on the screen to indicate the update success. In case of an old Device Type list, the actual list can be downloaded from the ABB SolutionsBank.

Update Device Type List is not required for normal operation of Device Library Wizard. It must be done only if instructed to do so by ABB Support Center.
Diagnostics

Figure 36. Diagnostics

A window appears which enables the trace report or view the detailed log file. This mask is present to help the ABB service to solve any problems with the system. Click **Back** to return to the previous window. Select **Main Menu** to open the main window or **Exit** to leave the Device Library Wizard.

These diagnostic Log files can be collected through Diagnostic Collection Tool. Device Library Wizard provides plug-in for this operation. Refer to Section 4, Diagnostic Collection Tool in *System 800xA Tools (2PAA101888*)*. 
Figure 37. DCT
Device Library Wizard provides the following log files:

**DLW.log**

This file provides information about object type installations and can be found in following path:

<Installation path>\ABB Industrial IT\Engineer IT\ABB Device Integration Library\

**L4Support.log**

This file provides more detailed information about object type installations and can be found in following path:

<Installation path>\ABB Industrial IT\Engineer IT\ABB Device Integration Library\

**DLW_Trace.log**

This file is generated when trace report option is enabled as shown in Figure 36. It contains detailed information of the actions performed by Device Library Wizard. Enable this option while performing system upgrade or restore activities. This option provides vital informations related to the problems occurring during upgrade or restore. This file can be found directly under root drive (Example: C\).
Extract Device Types

Figure 38. Extract Device Types - Device Library Wizard Server

Table 5. Extract Device Types Actions - Device Library Wizard Server

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extract Device Types via Manual Selection</td>
<td>Browse and select manually the required Device Type files</td>
</tr>
<tr>
<td>Extract Device Types via Filter Option</td>
<td>Allows to use a filter to search for the required Device Type files</td>
</tr>
</tbody>
</table>
Extract Device Types via Manual Selection

Figure 39. Extract Device Types Selection Summary
Extract Device Types via Filter Option

Figure 40. Extract Device Types via Filter Options

In the input field, type the root path where the Device Type files are located or click **Browse** to select the path and then click **Next** to proceed.
Select Filter Options

Table 6. Filter Options

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
<td>Select the category depending of the device protocol</td>
</tr>
<tr>
<td>Vendor</td>
<td>Select the vendor depending of the device protocol</td>
</tr>
<tr>
<td>Device Type</td>
<td>Select the Device Type depending of the device protocol</td>
</tr>
<tr>
<td><strong>FUNCTIONALITY</strong></td>
<td></td>
</tr>
<tr>
<td>Asset Monitor</td>
<td>Asset Monitors can be used in connection with asset optimization only.</td>
</tr>
<tr>
<td></td>
<td>None to disable the asset monitor filter.</td>
</tr>
<tr>
<td></td>
<td>All, for Device Types with specific and basic asset monitors.</td>
</tr>
<tr>
<td></td>
<td>Basic, for Device Types with only basic asset monitors.</td>
</tr>
<tr>
<td></td>
<td>Specific, for Device Types with only specific Device Type asset monitor.</td>
</tr>
</tbody>
</table>
### Table 6. Filter Options (Continued)

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMMS</td>
<td>Select:&lt;br&gt;None to disable the CMMS filter.&lt;br&gt;All, for Device Types with Maximo and SAP CMMS.&lt;br&gt;Maximo, for Device Types with only Maximo CMMS.&lt;br&gt;SAP, for Device Types with only SAP Device Type CMMS.&lt;br&gt;Note: In this release filter, selection based on SAP or Maximo alone does not work. Since, all the Device Types support both connectivities, use filter selection 'All'.</td>
</tr>
<tr>
<td>DTM</td>
<td>Select:&lt;br&gt;None to disable the DTM filter.&lt;br&gt;All, for Device Types with basic, DD/EDD, Based, and specific DTM.&lt;br&gt;Basic, for Device Types with only basic DTM.&lt;br&gt;DD/EDD, for Device Types with only DD/EDD DTM.&lt;br&gt;Based for Device Types with only Based DTM.&lt;br&gt;Specific, for Device Types with only specific Device Type DTM.</td>
</tr>
<tr>
<td>FOUNDATION FIELDBUS Device Type</td>
<td>This radio button enables the filter options for the FOUNDATION FIELDBUS protocol.</td>
</tr>
<tr>
<td>Device Type Id</td>
<td>Device type ID specifies unique identifier for the particular Device Type, which is given by the Fieldbus FOUNDATION.</td>
</tr>
<tr>
<td>Device Rev.</td>
<td>Select specific firmware version.</td>
</tr>
<tr>
<td>DD Rev.</td>
<td>A Device Description (DD) provides an extended description of each object in the Virtual Field Device (VFD), and includes information needed for a control system or host to understand the meaning of data in the VFD.</td>
</tr>
<tr>
<td>PROFIBUS Device Type</td>
<td>This radio button enables the filter options for the PROFIBUS protocol.</td>
</tr>
<tr>
<td>PNO Id</td>
<td>PNO ID specifies unique identifier for the particular Device Type, which is given by the PROFIBUS International Organization.</td>
</tr>
</tbody>
</table>
**Table 6. Filter Options (Continued)**

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSD Rev.</td>
<td>Select specific version of a GSD file.</td>
</tr>
<tr>
<td>Protocol (DP/PA)</td>
<td>Device type supporting either PROFIBUS DP or PROFIBUS PA protocol can be selected.</td>
</tr>
<tr>
<td>HART Device Type</td>
<td>This radio button enables the filter options for the HART protocol.</td>
</tr>
<tr>
<td>Device Id</td>
<td>Device ID specifies unique identifier for the particular Device Type, which is given by the HART Communication Foundation.</td>
</tr>
<tr>
<td>Vendor Id</td>
<td>Vendor ID specifies unique identifier for the particular device vendor, which is given by the HART Communication Foundation.</td>
</tr>
<tr>
<td>Device Rev.</td>
<td>Select specific firmware version.</td>
</tr>
</tbody>
</table>

After configuration of the filter, click **Next** to confirm. The Device Library Wizard displays a list of all Device Types fitting to the filter as shown in **Figure 41**.
Extract Device Types via Filter Options Summary

Figure 42. Extract Device Types via Filter Options Summary

Table 7. Filtered List

<table>
<thead>
<tr>
<th>Tab</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extract</td>
<td>In this list, all Device Types available in the pre-selected location of the root path is shown. The Device Types are checkmarked for extraction. Click <strong>Next</strong> to extract all selected Device Types.</td>
</tr>
<tr>
<td>Missing</td>
<td>Only Device Types released for the system environment but not included in the pre-selected location of all Device Type files, are listed here. The Device Types are not selectable.</td>
</tr>
</tbody>
</table>
Device Type Administration

Figure 43. Device Type Administration - Device Library Wizard Server

Table 8. Device Type Administration Actions - Device Library Wizard Server

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Install Device Types</td>
<td>Installs the selected Device Types on this system node.</td>
</tr>
<tr>
<td>Extend Device Types</td>
<td>Extend the installed Device Types with additional functionality installed and supported by the system.</td>
</tr>
</tbody>
</table>
### Table 8. Device Type Administration Actions (Continued) - Device Library Wizard Server

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delete Device Types</td>
<td>Delete Device Types from the ABB Industrial IT system (Aspect Directory).</td>
</tr>
<tr>
<td>System Restore Wizard</td>
<td>Allows installing of all missing Device Type that are not included in the system backup.</td>
</tr>
<tr>
<td></td>
<td>These Device Types are available in the restore tab of Install/Restore in Primary Aspect Server. After restoration, these Device Types are available for synchronization in Device Library Wizard clients.</td>
</tr>
<tr>
<td></td>
<td>System Restore wizard is enabled only in Device Library Wizard server and those Device Types that are restored and installed in server will gets transferred to client nodes.</td>
</tr>
</tbody>
</table>
Install Device Types

Figure 44. Install Device Types
Search For Device Types

Figure 45. Search for Device Types

Table 9. Filter Options

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
<td>Select the category depending of the device protocol</td>
</tr>
<tr>
<td>Vendor</td>
<td>Select the vendor depending of the device protocol</td>
</tr>
<tr>
<td>Device Type</td>
<td>Select the Device Type depending of the device protocol</td>
</tr>
<tr>
<td>FUNCTIONALITY</td>
<td></td>
</tr>
<tr>
<td>Asset Monitor</td>
<td>Asset Monitors can be used in connection with asset optimization only.</td>
</tr>
<tr>
<td></td>
<td>• None to disable the asset monitor filter.</td>
</tr>
<tr>
<td></td>
<td>• All, for Device Types with specific and basic asset monitors</td>
</tr>
<tr>
<td></td>
<td>• Basic, for Device Types with only basic asset monitors.</td>
</tr>
<tr>
<td></td>
<td>• Specific, for Device Types with only specific Device Type asset monitor.</td>
</tr>
</tbody>
</table>
Table 9. Filter Options (Continued)

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMMS</td>
<td>Select:</td>
</tr>
<tr>
<td></td>
<td>• None to disable the CMMS filter.</td>
</tr>
<tr>
<td></td>
<td>• All, for Device Types with Maximo and SAP CMMS.</td>
</tr>
<tr>
<td></td>
<td>• Maximo, for Device Types with only Maximo CMMS.</td>
</tr>
<tr>
<td></td>
<td>• SAP, for Device Types with only SAP Device Type CMMS.</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong>: In this release filter, selection based on SAP or Maximo alone does not work. Since, all the Device Types support both connectivities, use filter selection 'All'.</td>
</tr>
<tr>
<td>DTM</td>
<td>Select:</td>
</tr>
<tr>
<td></td>
<td>• None to disable the DTM filter.</td>
</tr>
<tr>
<td></td>
<td>• All, for Device Types with basic, DD/EDD, Based, and specific DTM.</td>
</tr>
<tr>
<td></td>
<td>• Basic, for Device Types with only basic DTM.</td>
</tr>
<tr>
<td></td>
<td>• DD/EDD, for Device Types with only DD/EDD DTM.</td>
</tr>
<tr>
<td></td>
<td>• Based for Device Types with only Based DTM.</td>
</tr>
<tr>
<td></td>
<td>• Specific, for Device Types with only specific Device Type DTM.</td>
</tr>
</tbody>
</table>

**FOUNDATION FIELD BUS Device Type**
This radio button enables the filter options for the FOUNDATION FIELD BUS protocol.

| Device Type Id | Device type ID specifies unique identifier for the particular Device Type, which is given by the Fieldbus FOUNDATION. |
| Device Rev.    | Select specific firmware version. |
| DD Rev.        | A Device Description (DD) provides an extended description of each object in the Virtual Field Device (VFD), and includes information needed for a control system or host to understand the meaning of data in the VFD. |

**PROFIBUS Device Type**
This radio button enables the filter options for the PROFIBUS protocol.

| PNO Id         | PNO ID specifies unique identifier for the particular Device Type, which is given by the PROFIBUS International Organization. |
| GSD Rev.       | Select specific version of a GSD file. |
| Protocol (DP/PA)| Device type supporting either PROFIBUS DP or PROFIBUS PA protocol can be selected. |
Table 9. Filter Options (Continued)

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HART Device Type</td>
<td>This radio button enables the filter options for the HART protocol.</td>
</tr>
<tr>
<td>Device Id</td>
<td>Device ID specifies unique identifier for the particular Device Type, which is given by the HART Communication Foundation.</td>
</tr>
<tr>
<td>Vendor Id</td>
<td>Vendor ID specifies unique identifier for the particular device vendor, which is given by the HART Communication Foundation.</td>
</tr>
<tr>
<td>Device Rev.</td>
<td>Select specific firmware version.</td>
</tr>
</tbody>
</table>

After configuration of the filter and confirmation by clicking **Next**, the Device Library Wizard displays a list of all Device Types fits to the filter. The list is displayed in the following window.
Select Device Types

Figure 46. Search for Device Types Summary Window

Table 10. Filtered List

<table>
<thead>
<tr>
<th>Tab</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Install</td>
<td>Here the Device Types already extracted to the hard disk (and not installed on the node) are shown. All devices depending from the selected filter option are listed. The Device Types can be directly check marked for installation. By clicking <strong>Next</strong> all selected Device Types will be installed</td>
</tr>
<tr>
<td>Missing</td>
<td>If missing Device Types are displayed here, download them from the ABB SolutionsBank.</td>
</tr>
</tbody>
</table>

To install Device Types, the required check box next to the Device Type name has to be selected. To select all visible Device Types, the check box **Select All** is enabled.
To deselect all Device Types, disable the Select All check box.

Each Device Type, which was installed appears in the Restore tab, when the Install Device Type action is performed next time. If a new minor version of a Device Type is installed, only the highest version is visible on the Restore tab.

If a Device Type is deleted, it appears on the Install tab again.

If the selected Device Type is Non Data Execution Prevention Compatible, a message is displayed to disable or enable DEP. For more information refer to item 5 in Step 5: Install / Restore Device Types in Primary Aspect Server on page 39.

Extend Device Types

![Extend Device Types](image)

*Figure 47. Extend Device Types*
Select a fieldbus protocol and click **Next**. A new window appears on the screen which displays Device Type files, which can be extended with new functionality.

In this version of Device Library Wizard, Extend function installs the complete Device Object type again.

**Device Types List to Extend**

![Device Types List to Extend](image)

**Figure 48. Device Types - List to Extend**

**Table 11. Extend Device Types - Tabs**

<table>
<thead>
<tr>
<th>Tab</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extend</td>
<td>Contains Device Type files, which can be extended.</td>
</tr>
<tr>
<td>Not Extendable</td>
<td>Contains Device Types, which can not be extended (e.g. the Device Type does not support further features).</td>
</tr>
</tbody>
</table>
Delete Device Types

Select a fieldbus protocol and click Next. A new window appears on the screen which displays Device Type files, which can be deleted. The next figure shows an example for HART Device Types.
List of Device Types to Delete

Figure 50. List of Device Types to Delete

This picture shows the Device Library Wizard with the selected Device Type to delete. In the background, the same Device Type is shown in the Object Type Structure of the engineering workplace.

Table 12. Delete Device Types - Tabs

<table>
<thead>
<tr>
<th>Tab</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delete</td>
<td>Contains Device Types, which can be deleted because they are not instantiated in the system. Device types, which are only located in the Object Type Structure (and Library Structure), are listed here. The delete operation removes the Device Type from the Object Type Structure and the Aspect Directory (Device Library Wizard Server).</td>
</tr>
<tr>
<td>Instantiated</td>
<td>Contains Device Types, which can not be deleted because they are used in the Control Structure, Functional Structure or Asset Structure.</td>
</tr>
</tbody>
</table>

Select the Device Type to delete and click Next.
System Restore Wizard(1)

System Restore option is available only in Primary Aspect Server.

Use this functionality when 800xA system is backed-up from a previous version or same version and restored in current 800xA system version. Refer to *System 800xA Upgrade (3BSE036342*) for more details.

![System Restore Wizard](image)

*Figure 51. System Restore Wizard*

If no upgrade was performed or no system restore was executed, select **Back** or **Exit** to stop this workflow.

If there is an update or system restore, select the appropriate option and click **Next** to enter the following window.
System Restore Wizard(2)

Use **Back** or **Exit** button to stop this workflow.

After selecting an option and clicking **Next**, the Device Library Wizard starts to check for required Device Types automatically. This allows to re-install third party software like Device Type Manager (DTM), documentation and asset monitor application related to the specific Device Type on the hard disk. This is mainly required, if the ABB Industrial IT System is backup with ABB internal system tools, which can not include those software to the backup file. If the ABB Industrial IT System is restored, the third party software must be re-installed on all node’s using Device Types. The System Restore Wizard function through Device Library Wizard
Section 3  Detailed Window Description

Enter Path to Device Types

prevents an installation of system related files already included in the system backup. Click Next to enter the path to the Device Types in the following window.

The Device Type installed after system restoration in Primary Aspect Server gets copied into the client nodes using the Synchronize options. For more information refer Step 6: Synchronize / Install / Restore Device Types in Client Nodes on page 47. These Device Types are available in the restore tab of Install / Restore window of Client window (see Figure 19)

Enter Path to Device Types

![Figure 53. Enter Path to Device Types](image)

Click Next to get a list of all Device Types which needs to be extracted shown in the following window.
Device Types to Extract in Device Library Wizard Server

Figure 54. Device Types to Extract

If there are Device Types listed in the tab Missing, download the missing Device Types from the ABB SolutionsBank. If there are no missing Device Types click Next to get the following summary window.
Device Types to be Extracted Summary

Click **Next** to extract the listed Device Types. After all Device Types are extracted a list of all Device Types, which needs to be installed appears in a new window like shown in the next figure.

![Selection Summary](image)

Figure 55. Device Types to be Extracted Summary

There may be some Object types that are either created by customer or latest Device Types downloaded from SolutionsBank, but not available in System 800xA Media. For these type of Device Types, Device Library Wizard will prepare a list as shown in Figure 55. Install these Device Types manually.
Re-Install of Device Types

If the selected Device Type is Non Data Execution Prevention Compatible, a message is displayed to disable or enable DEP. For more information refer to item 5 in Step 5: Install / Restore Device Types in Primary Aspect Server on page 39.

Click **Next** to get a summary window of all Device Types which is installed.

*Figure 56. Re-Install of Device Types*
Selection Summary

Click **Finish** to start the installation process. Each Device Type must be confirmed before installing by clicking **OK** (see next figure). Every Device Type that was installed appears in a list that shows the installation status of the process for each Device Type. An example is shown in the next figure.
Figure 58. Acknowledge for each Device Type to be Installed
Synchronize Device Types

Figure 59. Synchronize Device Type - Device Library Wizard Client

Table 13. Device Type Administration Actions - Client

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Restore Wizard</td>
<td>System Restore wizard is disabled in Device Library Wizard client node.</td>
</tr>
<tr>
<td>Synchronize Device Types</td>
<td>Selecting this option automatically copies all the Device Types installed in the Primary Aspect Server into the respective client nodes.</td>
</tr>
</tbody>
</table>
Revision History

This section provides information on the revision history of this User Manual.
The following table lists the revision history of this User Manual.

<table>
<thead>
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<th>Revision Index</th>
<th>Description</th>
<th>Date</th>
</tr>
</thead>
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<tr>
<td>-</td>
<td>Published for System 800xA 6.0</td>
<td>December 2014</td>
</tr>
<tr>
<td>A</td>
<td>Published for System 800xA 6.0.1</td>
<td>October 2015</td>
</tr>
</tbody>
</table>

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The following table shows the updates made in this User Manual for 800xA 6.0.1.

<table>
<thead>
<tr>
<th>Updated Section/Sub-section</th>
<th>Description of Update</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 2 - Getting Started</td>
<td>Explanation for DLW Client not connected to the DLW Server is added as an information note.</td>
</tr>
</tbody>
</table>
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