



System 800xA PC Toolkit Library for Freelance V6.0-0 Release Notes

System Version 6.0

Power and productivity
for a better world™



NOTICE

This document contains information about one or more ABB products and may include a description of or a reference to one or more standards that may be generally relevant to the ABB products. The presence of any such description of a standard or reference to a standard is not a representation that all of the ABB products referenced in this document support all of the features of the described or referenced standard. In order to determine the specific features supported by a particular ABB product, the reader should consult the product specifications for the particular ABB product.

ABB may have one or more patents or pending patent applications protecting the intellectual property in the ABB products described in this document.

The information in this document is subject to change without notice and should not be construed as a commitment by ABB. ABB assumes no responsibility for any errors that may appear in this document.

In no event shall ABB be liable for direct, indirect, special, incidental or consequential damages of any nature or kind arising from the use of this document, nor shall ABB be liable for incidental or consequential damages arising from use of any software or hardware described in this document.

This document and parts thereof must not be reproduced or copied without written permission from ABB, and the contents thereof must not be imparted to a third party nor used for any unauthorized purpose.

The software described in this document is furnished under a license and may be used, copied, or disclosed only in accordance with the terms of such license.

TRADEMARKS

All rights to copyrights, registered trademarks, and trademarks reside with their respective owners.

Copyright © 2016 by ABB.

All rights reserved.

Document number: 3BDA033526-600

Table of Content:

1. Release Notes	4
1.1 General	4
1.2 Safety Notices	4
1.3 Use of Caution, Information, and Tip Icons.....	5
2. Functionality	6
2.1 The PC Toolkit Library for Freelance comprises.....	6
2.2 Following optional software packages are available	6
2.3 Versioning	6
2.4 Conditions, Restrictions and Remarks.....	7
2.5 Related Documents.....	8
3. Product support.....	9
3.1 New Features.....	9
3.2 Fixed Problems	9
3.3 Known Problems	10
3.4 Technical Support	11
3.5 How to obtain	11
3.6 Deliverables	11

1. Release Notes

1.1 General



Any security measures described in this document, for example, for user access, password security, network security, firewalls, virus protection, and so on, 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 document describes the functionality introduced for the PC Toolkit Library for Freelance Version V6.0-0. It also enumerates known problems encountered in the final testing of this product release and identifies workarounds that help overcome the problem. The document contains additional notes that may be valuable to the customers and service personnel working with the product. This document replaces the existing release notes for the prior release and is included on the product media. Known Problems are divided into categories by individual Functional Area or product.

1.2 Safety Notices

This product is designed to be connected to and to communicate information and data via a network interface. It is the reader's sole responsibility to provide and continuously ensure a secure connection between the product and the reader's network or any other network (as the case may be). The reader shall establish and maintain any appropriate measures (such as but not limited to the installation of firewalls, application of authentication measures, encryption of data, installation of anti-virus programs, etc) to protect the product, the network, its system and the interface against any kind of security breaches, unauthorized access, interference, intrusion, leakage and/or theft of data or information. ABB is not liable for damages and/or losses related to such security breaches, any unauthorized access, interference, intrusion, leakage and/or theft of data or information. Refer also to standard document System 800xA 6.0 Administration and Security. Document Number 3BSE037410-600.

Install the software within the design limitations as described in the installation and upgrade instructions. This software is designed to operate within the specifications of the 800xA. Do not install this software to systems that exceed these limits.

These Release Notes are written only for qualified persons and are not intended to be a substitute for adequate training and experience in the safety procedures for installation and operation of this software. Personnel working with this software must also exhibit common sense and good judgment regarding potential hazards for themselves and other personnel in the area. Should clarification or additional information be required, refer the matter to your ABB sales representative and/or local representative.

File these Release Notes with other instruction books, drawings, and descriptive data of the 800xA. Keep these release notes available for the installation, operation and maintenance of this equipment. Use of these release notes will facilitate proper operation and maintenance of the 800xA and its software and prolong its useful life. All information contained in release notes are based on the latest product information available at the time of printing. The right is reserved to make changes at any time without notice.

1.3 Use of Caution, Information, and Tip Icons

This publication includes **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:



Caution icon indicates important information or warning related to the concept discussed in the text. It might indicate the presence of a hazard which 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 **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, comply fully with all **Caution** notices.

2. Functionality

The PC Toolkit Library for Freelance is a system extension for System 800xA. It extends the standard 800xA software with display libraries for the process industries (Chemical, Oil and Gas). It consists of a Basic set and one or more additional optional packages. The basic set is mandatory. It includes a standardized ready-to-use workplace, engineering tools and graphic elements for setting up process graphics. The PC Toolkit Library for Melody/AC870P is harmonized with faceplates and graphic elements for Freelance/AC800F and AC800M to the greatest extend.

The classic faceplates set is part of the 800xA standard software package "800xA for Freelance".

2.1 The PC Toolkit Library for Freelance comprises

Package	Description
Base	<ul style="list-style-type: none"> Preconfigured one- and two-screen Operator Workplace Graphic Elements for the majority of the Freelance Function Blocks Free Graphic Elements that allow showing mass data like radar diagram and profiling indication. PC Tools supports configuration by automatically generating. It includes Aspect link, Link Generator and Update Checker Tool

Table 2-1 Contents of the basis software package

2.2 Following optional software packages are available

Packages	Description
HP HMI	Leverages and expands the capabilities of traditional Graphic Elements and Faceplates. It provides technologies to make operator workplace safe and efficient.

Table 2-2 Optional software package

2.3 Versioning

The PC Toolkit Library for Freelance Version 6.0-0 has been released for delivery and plant operation. The above system extension was tested under the system environment 800xA System Version 6.0 with connect to 800xA for Freelance 6.0.0-0.

PC Toolkit Library for Freelance Software Packages	Delivery
ABB PC Graphic Object Types 6.0-0 (Build: 6.0.1.0)	base
ABB PC Tools 6.0-0 (Build: 6.0.1.0)	base
ABB PC Workplace 6.0-0 (Build: 6.0.1.0)	base
ABB PC Setup for Freelance 6.0-0 (Build: 6.0.0.1)	base
ABB PC Setup for Freelance 6.0-0 HP-HMI Add On (Build: 6.0.0.1)	optional

Table 2-3 Released software packages

2.4 Conditions, Restrictions and Remarks

- 800xA for Freelance 6.0.0-0 required
- PC Toolkit Library for Freelance requires the Graphic Editor PG2
- Graphic displays that were created under Visual Basic require migration. This migration tool is part of the 800xA base product. The migration work has to be performed within System 800xA SV5.1 environment.
- The 800xA standard color table has been customized in order to meet requirements of the process industries Oil, Gas and Chemicals for graphic displays.
- Take notice of the Installation and configuration document 3BDA033713-600 when upgrading PC Toolkit Library for Freelance to V6.0-0
- Definition of the decimal placed for numeric values need extra work

Due to a system immanent characteristic the decimal places for numeric graphic elements are calculated by means of the measurement range (MBA / MBE). This and the fact, that for every MBA/MBE a separate OPC group is created, lead to delayed response time. Although the static image is displayed quickly, the life values are shown after a delay. Refer to Release Notes fixed problems ID: F2K-GE-027.

Until Freelance connect software has not changed the characteristic for setting the decimal places the following workaround is given to speed up the graphic displays.

Configuring decimal places using BDM sheet:

- The provided BDM sheet is found in folder C:\Program Files (x86)\ABB Industrial IT\Control IT\ABB PC Setup for Freelance\BDM
- Drag all Freelance Tags into the BDM sheet. Use ALT+F8 to open the macro window and start the marco "CalcFraction". Thus, the fractions are set depending on the measuring range (with the same calculation rule as in the Property Translations aspects).
- After running the BDM macro or writing the values via BDM a manual adjustment of the decimal places is possible directly on the Fraction Definition Aspect of each object.
- If there are project specific graphic elements, all references must be changed from '\$.:Property Translation Extended:NO_OF_DEC1' to '\$.:Fraction Definition:Fraction' and for the object types L.C_CR and L.C_SR the reference '\$.:Property Translation Extended:NO_OF_DEC1_rat' to '\$.:Fraction Definition:Fraction_rat'.

- Display Call-up Time System 800xA (refer to 3BSE041434-600 System 800xA 6.0 System Guide Technical Data and Configuration)

Graphic Displays	Display Call-up Time
Graphic Display with maximum 800 OPC items (100 objects)	<=1 secs ¹
Group Display with 10 faceplates	<=5 secs
Faceplate	<=1 secs
Extended Faceplate	<=2 secs
Trend Display, at first call-up of trend with 10 variables	<=2 secs typical ²
NOTE: 1. Graphic display references are cached after the first call up which makes subsequent display call ups faster. Each display in a system is cached after the first call up which means there is no limitation in the number of cached displays. The performance figure reflects a cached display. 2. When a trend display contains OPC string values (engineering units), the call-up time will depend on the OPC server string handling configuration. With the default configuration the call-up time will typically be higher.	

Table 2-4 Display Call-up Time

2.5 Related Documents

The following documents describe installation, configuration and operation with PC Toolkit Library for Freelance.

Category	Document	Description
Operation	3BDA033438-600	Manual for Operators
Installation and Configuration	3BDA033713-600	PC Toolkit for Freelance – Installation and Configuration
Engineering	3BDA035390-600 3BDA035391-600 3BDA035392-600 3BDA035393-600 3BDA035394-600 3BDA035395-600 3BDA035396-600 3BDA035397-600 3BDA035398-600 3BDA033478-600	HMI_Analog function blocks HMI_Binary function blocks HMI_Monitoring function blocks HMI_Closed Loop Control function blocks HMI_Open Loop Control function block HMI_Constant function blocks HMI_Variables HMI_Batch function block HMI_Sequence Control function block HMI_Graphic Properties

Table 2-5 Related Documentation

3. Product support

3.1 New Features

Category	Description	Remarks
Gen	800xA for Freelance 6.0.0-0 supported	

Table 3-1 New Features

3.2 Fixed Problems

The table below lists the problems corrected in this Temporary Correction and briefly explains the fix or workaround for each problem.

Issue ID	Correction or Fix
When PC Toolkit library is installed on 800xA for Freelance 5.1.0-2, there are two instances of property translation aspects available for these object types after installation. <i>ID: F2K-GE-015</i>	Also part of V5.1-1TC1
When PC Toolkit for Freelance library is installed on a Connectivity Server with 800xA for Freelance 5.1.0-2, the alarm aspects are duplicated. <i>ID: F2K-GE-017</i>	Also part of V5.1-1TC1
Long display call up times when HPHMI Alarm Indication Graphic Elements are used. <i>ID: F2K-GE-025</i>	Also part of V5.1-1TC2 Functionality without TC2: The object PC Customizations was the place to set up the alarm indication properties <i>HPHMI Alarm Control Show Clear</i> and <i>HPHMI Alarm Control MaxPrio</i> . (Object: Library Structure > Preferences & Customizations > PC Customizations, Aspect: HPHMI Settings) Functionality with TC2: The Graphic Element for the HPHMI Alarm indication is now referencing the object PC HPHMI Alarm Indication Settings. In order to set up the behavior of the Alarm Indication Graphic Element edit the Expression Variables <i>LimitPriorities</i> , <i>MaxPriority</i> and <i>ShowClearIndication</i> of the Generic Element. (Object: Graphics Structure > Graphics Tools > PC High Performance HMI Elements > PC HP HMI Alarm Indication Settings, Aspect: PC HP HMI Alarm Indication Settings).

Issue ID	Correction or Fix
	As of 5.1-2 Changing these settings are also available by the 800xA Graphics Settings Editor tool, which is available via the "800xA Graphics Settings Editor" windows application aspect at the root object.
After update to 5.1 FP4 RevD (or 5.1 Rev D) all classic graphics became inoperable if in one or more GE's the property StatusIndWidth is set to 0 <i>ID: F2K-GE-026</i>	Fixed also with PCGraphicElementsLib 1-0-1 TC1

Table 3-2 Fixed Problems

3.3 Known Problems

Description	Remarks
The decimal places for numeric graphic elements are calculated by means of the measurement range (MBA / MBE). This and the fact, that for every MBA/MBE a separate OPC group is created, lead to delayed response time. The static image is displayed quickly, but the life values are shown after a delay. <i>ID: F2K-GE-027</i>	Fixed with workaround After loading of the system extension the number of decimal places for each object must be defined. Refer to section 2.4
PC Link Creator is not opening <i>ID: F2k-FP-028</i>	Open Functional structure → Root → PC Faceplate Link Creator as windows application located in "C:\Program Files\ABB Industrial IT\Control IT\ABB PC Tools\bin\PCFaceplateLinkCreator.exe"
L_CU: HPHMI Faceplate: Deviation limits (DH/DHH/DL/DLL) on the bar graph are shown as deviation from the process value (PV). It should be the deviation from the set point (SP). <i>ID: F2K-FP-029</i>	Will be fixed in next revision

Table 3-3 Known Problems

3.4 Technical Support

Contact ABB technical support at tech-support-system-solution@de.abb.com or your local ABB representative for assistance in problem reporting.

3.5 How to obtain

Product Marketing/ TechSalesSupport and Order placement: DEATG/C;
<mailto:tech-support-system-solution@de.abb.com> , Phone +49 (0)69 7930 4410

License cost is outlined in the Price List 3BDA033517K_PriceBook_SystemSolutions

3.6 Deliverables

CD-Rom or DVD Medium with PC Toolkit Library for Freelance and product documentation in English.



3BDA033526-600 Germany 2016-01-07

Copyright © 2016 by ABB. All Rights Reserved

® Registered Trademark of ABB.

™ Trademark of ABB.

BU Oil, Gas and Chemicals

Frankfurt, Germany

www.abb.com/Chemicals