

ControlEdge PLC ControlEdge RTU Release 174.1

> ControlEdge Builder Software Installation User's Guide

> > RTDOC-X285-en-174A December 2022

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CONTENTS

Chapter 1 - About this guide	5
Chapter 2 - ControlEdge Builder	7
Overview of ControlEdge Builder	7
Chapter 3 - Before You Begin	8
Hardware Requirements	8
Software Requirements	8
Chapter 4 - Installing ControlEdge Builder	
Chapter 5 - Installing Bulk Configuration	11
Chapter 6 - Installing Firmware Package	12
Chapter 7 - Installing ControlEdge integration service	
Chapter 8 - Post-installation Tasks	
Configuring a Firewall	15
Chapter 9 - Uninstalling ControlEdge Builder	17
Notices	

ABOUT THIS GUIDE

Revision history

Revision	Date	Description
A	December 2022	Initial release of this document

Intended audience

This documentation is intended for the following audience: Users who plan, install, configure, operate, or maintain ControlEdge™ 2020 Controller, ControlEdge 900 Controller and I/O modules running the eCLR (IEC 61131-3) execution environment.

Prerequisite skills

Knowledge of SCADA systems and experience of working in a Microsoft Windows environment are required.

Special terms

The following table describes some commonly used industry-wide and Honeywell-specific terminology:

Terminology	Description
ControlEdge Builder	A integrated configuration tool to design, configure, program and maintain ControlEdge controllers.
Experion [®] PKS	Experion® Process Knowledge System
RTU	Remote Terminal Unit
SCADA	Supervisory Control and Data Acquisition

Related documents

The following list identifies publications that may contain information relevant to the information in this document.

- ControlEdge Builder Software Change Notice
- ControlEdge Builder User's Guide
- ControlEdge PLC and ControlEdge RTU Getting started
- ControlEdge 900 Platform Hardware Planning and Installation Guide
- ControlEdge 2020 Platform Hardware Planning and Installation Guide
- ControlEdge Builder Function and Function Block Configuration Reference
- ControlEdge Builder Protocol Configuration Reference Guide
- ControlEdge PLC and ControlEdge RTU Network and Security Planning Guide
- ControlEdge EtherNet/IP User's Guide
- ControlEdge RTU and PLC DNP3 Device Profile
- ControlEdge Bulk Configuration User's Guide
- ControlEdge PLC PROFINET User's Guide
- ControlEdge RTU Electronic Flow Measurement User's Guide
- Firmware Manager User Guide

2 CONTROLEDGE BUILDER

Overview of ControlEdge Builder

ControlEdge Builder is an integrated configuration tool to design, configure, program and maintain the ControlEge 900 Controller and 2020 Controller when running the eCLR (IEC 61131–3) execution environment. This includes:

- ControlEdge 900 Controller and I/O modules
- ControlEdge 2020 Controllers and expansion I/O modules

ControlEdge Builder is fully compliant to IEC 61131-3, supporting all five programming languages. This includes Sequential Function Chart (SFC), Ladder Diagram (LD), Structured Text (ST), Instruction List (IL), and Function Block Diagram (FBD). ControlEdge Builder also provides the capability to maintain and upgrade controller and I/O firmware as well as online diagnostics.



Hardware Requirements

Item	Specification
Processor	Minimum: Pentium or compatible 2 GHz
	Recommended: Intel® Core™ i5 or equivalent better
System RAM	Minimum: 1 GB
	Recommended: 4 GB
Hard disk	5 GB free memory space
DVD-ROM drive	Required
Graphic Card	DirectX9 compatible graphic adapter
Display color settings	True color (32 bit)
RS232 interface	Optional
Resolution	Recommended: 1280x800 or above
	Optimal: 1920x1080, 1366x768, 1280x1024 and 1280x800

Software Requirements

Item	Specification
Installation Media	ControlEdge Builder Media Kit
Operation system	Windows 10 32-bit or 64-bit (Support Secure Communication)
	Windows Server 2016 Standard Edition 64-bit
Certified antivirus software	McAfee AV + Virus Scan Engine + patch (8.7i + Engine 5400 + Patch3)

ATTENTION: If ControlEdge Builder does not display correctly on your computer, try upgrading the computer's graphic driver to the latest version available.

INSTALLING CONTROLEDGE BUILDER

Prerequisites

- The user must log on the computer as an administrator or a member of the Administrator group to install ControlEdge Builder.
- Uninstall the previous version ControlEdge Builder or RTU Builder if it has been installed.
- The user should set the format language, keyboards default input language as English and set the location of English speaking region.

To install ControlEdge Builder

- 1. Insert the ControlEdge Builder Media Kit into the DVD-ROM drive.
- 2. Browse to the folder containing ControlEdge_builder_setup.exe. Double-click this file.
- 3. The Honeywell ControlEdge Builder Setup-Prelaunch Task page appears. If the system does not have DotNet 4.8 installed, it prompts you that DotNet 4.8 is being installed. Once it is completed, a window prompts you to restart the system. Click OK to reboot your computer.
- 4. After the restart, the Honeywell ControlEdge Builder -InstallShield Wizard dialog appears. Click **Next** to continue.
- 5. In the License Agreement page, click I accept the terms in the license agreement and click Next.
- 6. In the **Ready to Install the Program** page, click **Install** to begin the installation.
- 7. The installation is in progress. When the InstallShield Wizard Completed page appears, click Finish.
- 8. A window prompts you to reboot the system, click **Yes** to reboot your computer.

Results

ControlEdge Builder is installed successfully.

5

INSTALLING BULK CONFIGURATION

Prerequisites

- The user must log on the computer as an administrator or a member of the Administrator group to install Bulk Configuration.
- Bulk Configuration can be installed over a previous version without uninstalling it first.
- The user should set the format language, keyboards default input language as English and set the location of English speaking region.

To install Bulk Configuration

- 1. Insert the ControlEdge Builder Media Kit into the DVD-ROM drive.
- Browse to the folder "BulkConfiguration" containing BulkConfiguration.exe. Double-click this file.

The User Account Control dialog appears to ensure that you allow the app to make changes to your device.

- 3. Click Yes. The BulkConfiguration- InstallShield Wizard dialog appears.
- 4. Click Next to continue.
- 5. In the License Agreement page, click I accept the terms in the license agreement and click Next.
- 6. In the Setup Type page, select Complete and click Next.
- 7. In the **Ready to Install the Program** page, click **Install** to begin the installation.
- 8. The installation is in progress. Then in the InstallShield Wizard Completed page that appears, click Finish.

Results

Bulk Configuration is installed successfully.

6

INSTALLING FIRMWARE PACKAGE

Starting with ControlEdge Builder R170, the firmware package is no longer installed along with the installation of ControlEdge Builder. Users must install it separately after installing ControlEdge Builder.

Prerequisites

- The user must log on the computer as an administrator or a member of the Administrator group to install ControlEdge Builder.
- The user should set the format language, keyboards default input language as English and set the location of English speaking region.

To install firmware package

- 1. Insert the ControlEdge Builder Media Kit into the DVD-ROM drive.
- 2. Browse to the folder Firmware and double-click the file ControlEdge_Firmware_Installer.exe.
- 3. The ControlEdge_Firmware_Installer InstallShield Wizard dialog appears. Click Next.
- 4. In License Agreement page, click I accept the terms in the license agreement and click Next.
- 5. In Customer Information page, enter the User Name and Organization. Click Next.
- 6. In Setup Type page, select Complete and click Next.
- 7. In **Ready to Install the Program** page, click **Install** to begin the installation.
- 8. The installation is in progress. When the InstallShield Wizard Completed page appears, click Finish.
- 9. A folder Firmware containing all firmwares appears in the location C:\ProgramData\Honeywell\ControlEdge Builder.

Results

Firmware package is installed successfully.

7

INSTALLING CONTROLEDGE INTEGRATION SERVICE

Starting with Experion R501.1, you can communicate with the following controllers in the Experion PKS system through CDA. You should install and start the ControlEdge integration service on the Experion Server.

- C300
- ACE
- Sim-C300
- Sim-ACE

ATTENTION: It is required to install the ControlEdge integration service on both Experion servers when using Experion Server redundancy, and all Server nodes in the Experion Backup Conotrol Center topology.

To install the ControlEdge integration service

- 1. Insert the ControlEdge Builder Media Kit into the DVD-ROM drive.
- 2. Browse to the folder ControlEdgeIntegrationService, and doubleclick the file **ControlEdgeIntegrationService.exe**.
- 3. The ControlEdgeIntegrationService InstallShied Wizard dialog appears. Click Next.
- 4. In the License Agreement page, click I accept the terms in the license agreement and click Next.
- 5. In the ExpAcctSvcLP Login page, enter the Username, Password and Confirm password for the user account that the ControlEdge Integration Service shall log on as. Click Next.

ATTENTION: The user name must be started with ".\". The user should have a "Security level" of at least "Engineer" in the Experion server. See "Configuring system security" in the *Experion Server and Client Configuration Guide* for more information.

- 6. In the **Setup Type** page, select the setup type that best suits your needs. It is recommended to select **Complete**. Click **Next**.
- 7. In the **Ready to Install the Program** page, click **Install** to begin the installation. You can click **Cancel** to abort the installation.
- 8. The installation is in progress.
- 9. The InstallShield Wizard Completed dialog appears. Click Finish.

To check the status of the ControlEdge integration service

- 1. Click Start button of PC, and enter services.msc in the search bar. The Services dialog appears.
- 2. Find Honeywell ControlEdge Integration Service, and ensure the Status is Running. If not, right-click the service and click Start.
- 3. Check the **Startup Type** is **Automatic**. If not, right-click the service and select **Properties**, and then select **Automatic** from the **Startup type** drop-down list.

B POST-INSTALLATION TASKS

Configuring a Firewall

The Windows Firewall running on the ControlEdge Builder computer may prevent the ControlEdge Builder from communicating to the controller. It is recommended to add the ControlEdge Builder as an "allowed program" in the Windows Firewall settings.

To configure the Firewall

- 1. Select Control Panel and find Windows Firewall.
- 2. Click **Allow a program or feature through Windows Firewall** from the left side, the **Allowed Programs** window appears.
- 3. Click Change settings and click Allow another program, the Add a Program window appears.
- 4. Click Browse and select Mwt.exe file. Click Open to add it into Allowed programs and features list.



5. Select appropriate options for **mwt**, and click **OK** to complete the configuration.

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Results

The Firewall is successfully configured and ControlEdge Builder will not be blocked from communication to a controller.

9

UNINSTALLING CONTROLEDGE BUILDER

Prerequisites

- The user must log on the computer as an administrator or a member of the Administrator group to uninstall ControlEdge Builder.
- The user should set the format language, keyboards default input language as English and set the location of English speaking region.
- The user must disconnect with controller and save & close all opened projects.

To uninstall ControlEdge Builder

- 1. In the search box on the taskbar, type **Control Panel** and select it from the results.
- 2. Click Programs > Programs and Features.
- Select Helpfile_ControlEdge Builder and click Uninstall or Uninstall/Change. Then follow the directions on the screen. The Helpfile_ControlEdge Builder uninstalled successfully.

ATTENTION: It is recommended to uninstall the main **ControlEdge Builder** only after uninstalling Helpfile_ ControlEdge Builder.**Helpfile_ControlEdge Builder**.

- 4. Select Honeywell ControlEdge Builder and click Uninstall or Uninstall/Change. Then follow the directions on the screen.
- 5. The Honeywell ControlEdge Builder page appears:
 - Choose Automatically Close applications and attempt to restart them after setup is complete if the user want restart the system immediately, and click Ok.
 - Choose **Do not Close applications** if the user want restart later, and click **Ok**.
- 6. A window prompts you to reboot the system, click **Yes** to reboot your computer.

NOTE: After uninstalling the old ControlEdge Builder, users must reboot the system to install the new ControlEdge Builder.

Results

ControlEdge Builder is uninstalled successfully.

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How to report a security vulnerability

For the purpose of submission, a security vulnerability is defined as a software defect or weakness that can be exploited to reduce the operational or security capabilities of the software.

Honeywell investigates all reports of security vulnerabilities affecting Honeywell products and services.

To report a potential security vulnerability against any Honeywell product, please follow the instructions at:

https://www.honeywell.com/en-us/product-security.

Support

For support, contact your local Honeywell Process Solutions Customer Contact Center (CCC). To find your local CCC visit the website, <u>https://process.honeywell.com/us/en/contact-us</u>.

Training classes

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