# Controller Configuration Tool (CCT) Installation Instructions

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Application					
ontrol Logic					
Network Inputs 🔺	Setpoint/Miscellaneous A	State Generation 🔺	Output Control 🗢	Network Outputs 🔺	
AUTOCAL-C	Autocalibrate Now LV	Water System Flush Pass Through	Box Heating LV	CLG-REQ SRC	
FLUSHPOS	Minimum Flow Determination	PID Tuning Reset	Damper Control Status LV	PRESS-REQ SRC	
HT0-EN	Occupancy Mode Determination	Autocalibration Sequence v50	Damper Output LV		
HTG-MAXELOW	Pressure Request Determination	Balancer Override SD	Heating Percent Cmd LV		
Inputs 🔺	Supply Area LV	Box Flow Test	Proportional Box Heating Control v51	Outputs +	
DA-VP	Supply Damper Stroke Time	Unit Enable Determination	Supply Damper Control v51	DPR-0	
ZN-SP	Supply Flow Calculation	Single Duct VAV Damper Override Check	= Supply Flow Setpoint Control HFR	HTG-O	
ZN-T	Supply Pickup Gain I V	Box Heat Override Check	Zone Heating Control Status I V	CC-MODE	
	Temperature Request Determination	Box Heating isAvailable Pass Through			
Miscellaneous 🔺	WarmunCooldawn Determination	System Mode Determination		Miscellaneous 🔺	
DPR-%		aystern mode Determination		PARAM-DPR-MINP	
DPR-POS	ZN-1 Setpoint Determination	warmupCooldown Sequencing		PARAM-DPR-ST	
HT0-%		Unoccupied Sequencing (VAV)			
	1	Orcunied Zone Sequencing (VEVA HER			
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F-10		Parameters			
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East         Item           Setpoint/Miscellaneous         East           Minimum Flow Determination         CLOWN+MINELOW           CLOUNNELOW         CLOUNNECOW           TTG-MINELOW         MINELOWCO2-MINELOW           MINELOWCO2-PB         MINELOWCO2-PB           MINELOWCO2-SP         OCC-LEVEL           WU-MINELOW         VU-MINELOW	200.0 0.0 ct 0.0 ct 200.0 400.0 700.0 0.0 200.0 200.0	Parameters Default Value	Coolidown Min Flow Cooling Min Flow Unocc Cooling Min Flow Heating Min Flow Proportional Band Selpoint Occupancy Level Warmup Min Flow	Standard Name	
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Building Technologies & Solutions www.johnsoncontrols.com 2019-09-27 LIT-12011529

Release 13.1



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## Document introduction

Use this document to install or upgrade Controller Configuration Tool (CCT) software and field controller package files.

To order CCT software, specify the part number TL-CCT-0.

- **i** Note:
  - If you have *Metasys*<sup>®</sup> CCT or *Facility Explorer*<sup>™</sup> Programmable Configuration Tool (FX-PCT) Release 10.2 software or earlier installed on your computer, you must first uninstall it before installing CCT Release 10.3 or later. To determine what release you are using, go to *Help* > *About Tool* in the tool. The release number is displayed next to **Tool Version**.
  - If you have CCT or FX-PCT software at Release 10.3 installed on your computer, you can upgrade directly to CCT Release 13.0 or above.
  - You are required to license both CCT software and field controller package files at Release 13.0 and later. For further information, see Installing and licensing the CCT software.

CCT provides the option to work within and switch between 10.2 and 10.4 release modes. Refer to the *User Interface* section in the *Controller Tool Help (LIT-12011147)* for procedures. You can view Controller Application Files (CAFs) created at an earlier release of CCT or FX-PCT. If you want to edit these files, you need to upgrade them to a available release mode. For information on how to upgrade CAFs, refer to the *Upgrading System Files* section in *Controller Tool Help (LIT-12011147)*.

### Summary of changes

The following information is new or revised at this release:

• Updated desktop operating systems and server operating systems in Supported operating systems.

## **CCT** documentation

The following table lists documents related to CCT.

#### Table 1: CCT Documentation

For Information On	See Document
Features of CCT	Controller Configuration Tool (CCT) Catalog Page (LIT-1900386)
Using the CCT software	Controller Tool Help (LIT-12011147)
Using the <i>Metasys</i> ® System Site Management Portal	Metasys® Site Management Portal Help (LIT-1201793)
Strategies for Replacing Legacy N2 Controllers	Modernization Guide for N2 Controllers - Metasys (LIT-12012005)
Using Software Manager and software licensing	Software Manager Help (LIT-12012389)

## Controller Tool help

The *Controller Tool Help (LIT-12011147)* is the user's guide to the CCT software. Use the Tool to configure, simulate, and commission the following:

- Advanced Application Field Equipment Controllers (FACs)
- Advanced Application Programmable Controllers (PCAs)
- Expansion Input/Output Modules (PCXs)
- Field Equipment Controllers (FECs)
- General Purpose Application Controllers (CGMs)
- General Purpose Programmable Controllers (PCGs)
- Input/Output Modules (IOMs)
- Programmable Variable Air Volume Box Controllers (PCVs)
- SNC Series network engines
- Variable Air Volume Controllers (VAVs)
- Variable Air Volume Modular Assembly Controllers (VMAs)
- Variable Air Volume Terminal Equipment Controllers (CVMs)

The *Controller Tool Help (LIT-12011147)* provides guidance on communication switching, N2 point mapping, and N2 modules for N2 compatible controllers.

## Supported operating systems

The following operating system and SQL Server configurations are supported for CCT.

### Desktop operating systems

- Windows® 10 Pro and Windows 10 Enterprise Editions (version 1809 or later) (64-bit)
- Windows® 8.1 Pro and Windows 8.1 Enterprise Editions with Update (KB2919355) (64-bit)
- Windows® 7 Professional, Enterprise, and Ultimate Editions with SP1 (64-bit)
- Windows® Server® 2016 with Update (KB4489890) (64-bit)
- Windows® Server® 2012 R2 with Update (KB2919355) (64-bit)
- Windows® Server® 2012 with Update (KB3172614) (64-bit)

Server operating systems

• SQL Server 2017 Standard and Express (64-bit)

- SQL Server 2016 Standard and Express SP2 (64-bit)
- SQL Server 2014 Standard and Express SP3 (64-bit)
- SQL Server 2012 Standard and Express SP4 (64-bit)

#### Prerequisites

The following prerequisites are required for installing CCT:

- .NET Framework version 3.5 SP1, 4.0 or 4.6.1
- Private Java Runtime Environment (JRE)
- Adobe Reader® (required for printing in CCT)

## Upgrading CCT and FX-PCT software

#### About this task: Note:

- If you have CCT or FX-PCT Release 10.2 software or earlier installed on your computer, you
  must first uninstall it before installing CCT Release 10.3 or later. To uninstall FX-PCT Release
  10.2 software see Uninstalling FX-PCT Release 10.2 or Earlier Software. To uninstall CCT
  Release 10.2 software see Uninstalling CCT Release 10.2 or Earlier Software.
  - If you have CCT or FX-PCT software at Release 10.3 installed on your computer, you can upgrade directly to CCT Release 13.0 or later. For details on upgrading FX-PCT and CCT Release 10.3 software see Upgrading FX-PCT Release 10.3 Software.
  - CCT provides the option to work within and switch between 10.2 and 10.4 release modes by default. Refer to the *User Interface* section in the *Controller Tool Help (LIT-12011147)* for procedures. CAFs created at an earlier release of CCT or FX-PCT can be viewed only, but can be upgraded to an available release mode if full editing is required. For information on how to upgrade CAFs, refer to the *Upgrading System Files* section in *Controller Tool Help (LIT-12011147)*.

### Uninstalling FX-PCT release 10.2 or earlier software

Perform these steps before installing or upgrading the software to Release 13.1.

- 1. On the Start menu, click **Control Panel**.
- 2. Click **Programs and Features**.
- 3. In the list of programs, right-click **FX-PCT** and click **Uninstall**. The **Welcome** window appears.
- 4. Click **Next**. The **Uninstall Databases** window appears.
- 5. Click **Next**. The **Remove the Program** window appears.

- 6. Click **Remove**. The **Setup Wizard** uninstalls the program. When finished, the **Setup Wizard Completed** window appears.
- 7. Click **Finish**. At the prompt to restart your computer, choose to restart now or later.

To install CCT Release 13.1, go to Installing and licensing the CCT software.

### Uninstalling CCT release 10.2 or earlier software

Perform these steps before installing or upgrading the software to Release 13.1.

- 1. On the Start menu, click **Control Panel**.
- 2. Click **Programs and Features**.
- 3. In the list of programs, right-click **Metasys CCT 10.2** and click **Uninstall**. The **Welcome** window appears.
- 4. Click **Next**. The **Uninstall CCT Databases** window appears.
- 5. Click **Next**. The **Remove the Program** window appears.
- 6. Click **Remove**. The **Setup Wizard** uninstalls the program. When finished, the **Setup Wizard Completed** window appears.
- 7. Click **Finish**. At the prompt to restart your computer, choose to restart now or later.

To install CCT Release 13.1, go to Installing and licensing the CCT software.

### Upgrading FX-PCT and CCT release 10.3 software

#### About this task:

Perform these steps to upgrade to software Release 13.1.

- 1. Obtain the product installation file.
- 2. Double-click the JohnsonControlsControllerConfigurationTool\_13.1 file. The Johnson Controls Controller Configuration Tool 13.1 Setup window appears.
- 3. If you are using Windows credentials to login to the SQL Server, click **Upgrade**. If you are not using Windows credentials, unselect the **Windows Authentication** check box and click **Upgrade**.
- 4. Click **Finish** when the **Complete!** window appears.

## Installing and licensing the CCT software

### CCT custom installation and licensing

#### About this task:

1. Obtain the product installation file.

- 2. Double-click the JohnsonControlsControllerConfigurationTool\_13.1.exe file. The Controller Configuration Tool 13.1 Setup window appears.
- 3. Click **Custom**. The SQL Server Selection window appears from the **Database** tab.
- 4. If you are using Windows credentials, select the **Windows Authentication** check box. If you are not using Windows credentials, unselect the **Windows Authentication** check box, and enter your SQL username and password.
- **O** Note: When you install CCT on a computer running SQL Server, the startup type of the SQL Server Browser service must be set to **Automatic**. The SQL Server Browser service must be running when you start CCT.
- 5. Click the **General** tab. The **Install Path** window appears.
- 6. To install CCT in the specified destination folder, click **Install**. To install CCT in a different location, click **Browse**, select the location, and then click **Install**. All prerequisite software for CCT and the Software Manager are installed first, then the CCT software is installed. A progress bar window appears.
- 7. Click **Finish** when the **Complete** window appears.
- 8. Obtain field controller packages to install. To import a field controller package, double-click on the package collection file or use the **Package Importer**, located in the Windows **Start** menu. The **Package Importer** displays the message Finished importing when the import is complete.
- 9. To license CCT, run Software Manager from the Windows **Start** menu. Locate CCT in the Software Manager **License Inventory** and then click **Activate New** in the **Choose Action** menu. See *Software Manager Help (LIT-12012389)* for additional details on activating licenses.
- To license field controller packages, run Software Manager from the Windows Start menu. Use the Add License button in Software Manager if the field controller package is not listed in the Software Manager License Inventory. If the field controller package is listed in Software Manager, click Activate New in the Choose Action menu. See Software Manager Help (LIT-12012389) for additional details on activating licenses.
- **i** Note:
  - Unlike CCT software, field controller package files are not automatically added to the Software Manager **License Inventory** when they are installed. Field controller packages are listed in Software Manager only after they have been initially licensed.
  - If you do not license the CCT software after installation, the **Software License Check** appears when you access CCT for the first time. Field controllers without a licensed field controller package are set to **Artificial Field Device** or **Artificial IO Device** in CCT.

### CCT default installation and licensing

#### About this task:

#### **i** Note:

- The default installation is available if you want to accept all default options. If you want to customize your installation options, see the CCT custom installation and licensing section.
- All prerequisite software for CCT and the Software Manager are installed during the CCT installation process.
- 1. Obtain the product installation file.
- 2. Double-click the JohnsonControlsControllerConfigurationTool\_13.1.exe file. The Johnson Controls Controller Configuration Tool 13.1 Setup window appears.
- 3. Click **Install**. All prerequisite software for CCT and the Software Manager are installed first, then the CCT software is installed.
- 4. Click **Finish** when the **Complete** window appears.
- 5. Obtain field controller packages to install. To import a field controller package, double-click on the package collection file or use the **Package Importer**, located in the Windows **Start** menu. The **Package Importer** displays the message Finished importing when the import is complete.
- 6. To license CCT, run Software Manager from the Windows **Start** menu. Locate CCT in the Software Manager **License Inventory** and then click **Activate New** in the **Choose Action** menu. See *Software Manager Help (LIT-12012389)* for additional details on activating licenses.
- 7. To license field controller packages, run Software Manager from the Windows Start menu. Use the Add License button in Software Manager if the field controller package is not listed in the Software Manager License Inventory. If the field controller package is listed in Software Manager, click Activate New in the Choose Action menu. See Software Manager Help (LIT-12012389) for additional details on activating licenses.
- **i** Note:
  - Unlike CCT software, field controller package files are not automatically added to the Software Manager **License Inventory** when they are installed. Field controller packages are listed in Software Manager only after they have been initially licensed.
  - If you do not license the CCT software after installation, the **Software License Check** appears when you access CCT for the first time. Field controllers without a licensed field controller package are set to **Artificial Field Device** or **Artificial IO Device** in CCT.

## Troubleshooting

Problem	Solution			
	To resolve this issue, follow the below procedures to complete a clean installation:			
	For	CCT:		
	1.	Uninstall the current version of CCT.		
	2.	Back up the data found in the <b>CCT</b> folder:		
		- C:\ProgramData\Johnson Controls\MetasysIII\		
	3.	Delete the <b>CCT</b> folder from the following locations:		
		- C:\Program Files (x86)\Johnson Controls\		
		- C:\ProgramData\Johnson Controls\MetasysIII\		
	4.	Back up the data found in the <b>DataAccess</b> folder:		
		- C:\ProgramData\Johnson Controls\MetasysIII\		
Both FX-PCT and CCT do	5.	Delete the <b>DataAccess</b> folder from the following location:		
when you downgrade		- C:\ProgramData\Johnson Controls\MetasysIII\		
to an earlier version (for	6.	Install the earlier version of CCT.		
Release 10.1 and install Release 10.0 and install	7. Restart your computer. For FX-PCT:			
	1.	Uninstall the current version of FX-PCT.		
	2.	Back up the data found in the <b>PCT</b> folder:		
		- C:\Program Files (x86)\Johnson Controls\		
	3.	Delete the <b>PCT</b> folder from the following location:		
		- C:\Program Files (x86)\Johnson Controls\		
	4.	Back up the data found in the <b>DataAccess</b> folder:		
		- C:\ProgramData\Johnson Controls\MetasysIII\		
	5.	Delete the <b>DataAccess</b> folder from the following location:		
		- C:\ProgramData\Johnson Controls\MetasysIII\		
	6.	Install the earlier version of FX-PCT.		
	7.	Restart your computer.		

## Software terms

Use of the software that is in (or constitutes) this product, or access to the cloud, or hosted services applicable to this product, if any, is subject to applicable terms set forth at <u>www.johnsoncontrols.com/techterms</u>. Your use of this product constitutes an agreement to such terms.

## Product warranty

This product is covered by a limited warranty, details of which can be found at <u>www.johnsoncontrols.com/buildingswarranty</u>.

## Patents

Patents: <u>http://jcipat.com</u>

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