

## Release Notes

Connected Components Workbench (CCW) Developer Edition single software to program, simulate, configure, and visualize.

Version 13.00.00 (released 3/2021)

Catalog Number Connected Components Workbench - Dev Ed



These release notes describe version information for Connected Components Workbench - Dev Ed, version 13.00.00 (released 3/2021).

## Requirements

This release has the following requirements.

The following are the system requirements for Connected Components Workbench version 13.00.00.

Connected Components Workbench works within the system requirements of all Rockwell Automation® software products. For the latest compatibility information, refer to the [Product Compatibility and Download Center](https://compatibility.rockwellautomation.com/Pages/MultiProductCompareSelections.aspx?crumb=113&versions=59954,57681,56704,55972,55834,55171,55113,54814,54367,54015,52536,52079,51735,51580,50987,50897,50616,50061) (<https://compatibility.rockwellautomation.com/Pages/MultiProductCompareSelections.aspx?crumb=113&versions=59954,57681,56704,55972,55834,55171,55113,54814,54367,54015,52536,52079,51735,51580,50987,50897,50616,50061>).

### Hardware requirements

To use this release of Connected Components Workbench software effectively, your personal computer should meet the following minimum hardware requirements. Using a computer exceeding the recommended characteristics will improve performance.

- Processor: Intel Core i5 Standard Power processor (i5-3xxx) or equivalent recommended. At least 2 processors should be assigned when running Connected Components Workbench in a virtual machine.
- RAM: 8 GB minimum
- Hard disk space: 20 GB free
- Optical drive: DVD-ROM
- Pointing device: Any Windows®-compatible pointing device

### Software requirements

This release is supported on the following operating systems:

- Windows Server® 2012 (64-bit) - requires .NET Framework 3.5 SP1 to be installed
- Windows Server 2012 R2 - requires .NET Framework 3.5 SP1 to be installed
- Windows Server 2016 - requires .NET Framework 3.5 SP1 to be installed
- Windows Server 2019 - requires .NET Framework 3.5 SP1 to be installed
- Windows 10 IoT Enterprise 2016 Long-Term Servicing Branch (LTSB) 64-bit - requires .NET Framework 3.5 SP1 to be installed
- Windows 10 IoT Enterprise 2019 Long-Term Servicing Channel (LTSC) - requires .NET Framework 3.5 SP1 to be installed
- Windows 10 (32-bit and 64-bit)(tested to Version 2004) - requires .NET Framework 3.5 SP1 to be installed

---

**IMPORTANT** Installation failure will occur on systems running on Windows 10 1507 and Windows 10 1511 due to Microsoft .Net Framework 4.8 requirements.

---

Connected Components Workbench software has dependencies on the following software components. These components will be installed with the Connected Components Workbench software if they are not already present and updated if required.

- ControlFLASH 15.01
- FactoryTalk Activation Manager v4.04.14
- FactoryTalk Diagnostics v6.11 (CPR 9 SR 11)
- Rockwell Automation USBCIP Driver Package (x86) 3.18
- Rockwell Automation Driver Package (x64) v2.03
- RSLinx Classic v4.20 (CPR 9 SR 12)
- MicroLogix to Micro800 Conversion Tool 5.1
- FactoryTalk Updater v2.00

- Microsoft .NET Framework 4.8
- Microsoft Help Viewer 2.1
- Visual Studio® 2013 Shell (Isolated)
- MSXML 6.0 Parser and SDK
- OPC® Core Components Redistributable (x86) 3.00 or OPC Core Components Redistributable (x64) 3.00
- Report Viewer 12.0.2402
- Microsoft System CLR Types for SQL Server 2014 (x86 & x64) 12.0.2402

---

**IMPORTANT** Uninstalling Connected Components Workbench software would not remove all these components. It is recommended to verify the respective component dependencies before uninstalling them.

---

### Supported browsers

The following web browsers have been tested and are supported for use with this release:

- Google® Chrome™ browser
- Microsoft® Edge™
- Mozilla® Firefox®

### Security requirements

To help meet secure system design requirements review these publications:

- [Configure System Security Features User Manual](https://literature.rockwellautomation.com/idc/groups/literature/documents/um/secure-um001_-en-p.pdf) (https://literature.rockwellautomation.com/idc/groups/literature/documents/um/secure-um001\_-en-p.pdf) (publication SECURE-UM001)
- [System Security Design Guidelines](https://literature.rockwellautomation.com/idc/groups/literature/documents/rm/secure-rm001_-en-p.pdf) (https://literature.rockwellautomation.com/idc/groups/literature/documents/rm/secure-rm001\_-en-p.pdf) (publication SECURE-RM001)
- [Converged Plantwide Ethernet \(CPwE\) Design and Implementation Guide](https://literature.rockwellautomation.com/idc/groups/literature/documents/td/enet-td001_-en-p.pdf) (https://literature.rockwellautomation.com/idc/groups/literature/documents/td/enet-td001\_-en-p.pdf) (publication ENET-TD001)

## Features

This release includes the following system features.

Connected Components Workbench version 13.00.00 has the following new and enhanced features:

### New features

The following new features are introduced in this release:

- Controller Organizer

The Controller Organizer is a graphical representation of the contents of your project, displaying the project's devices and program elements in an organized tree view, similar to the Studio 5000 Logix Designer environment. Only the Micro800 controller is displayed in this view.

You can do the following in the Controller Organizer:

- Create and use tasks, programs, and routines
- Delete a task, program, or routine
- Add a routine to a program
- Cut, copy, paste, and drag commands
- Add and edit routine logic
- Add and edit project assets

- Product Lifecycle Information and Update

Shows the product lifecycle status of the Micro800 controllers. When the Connected Components Workbench is installed, it will automatically update to the latest lifecycle every 90 days. Users can also update it manually.

- Verify Program

Supports to verify a single program's logic without having to build the whole solution.

- Enhanced Graphical Copy and Paste for Ladder Editor

Ladder logic program and instruction blocks can be copied and pasted from the Connected Components Workbench Ladder Diagram graphical editor and into the Studio 5000 Logix Designer.

- New Data Grid

Adopt an improved and efficient data grid with features like variable filter and quick declaration.

- Run Mode Change Lite

Provides a faster mechanism to modify logics in the controller without switching the controller to Program mode.

- Import/Export of User Defined Data Type

Enable users the ability to easily export their UDT for use into other projects.

#### *PanelView800 DesignStation Features*

- Time Entry datatype support

Prompted input according to Micro800 Time datatype Time datatype.

- Object explorer view

Editing aid to help user manage objects while designing.

- Software support on connectivity to CompactLogix5380 (L306). Terminal support will come in later Firmware minor release 6.012.

#### **Enhanced features**

- Supports to generate documentation for Micro800 Controller projects, including programs, variables, ASCII text, and controller configurations.
- Improve Find function to search for text or string in your project.

#### *PanelView 800 DesignStation*

- Global connection capability on existing system tags.

Animation configuration with enhanced memory tag settings.

- Multi-screen tab support in edit pane.

## Corrected Anomalies in This Release

This release corrects the following anomalies.

The following list identifies the anomalies corrected in Connected Components Workbench version 13.00.00.

- SWAP function in COP instruction works opposite in Micro800 Simulator compared to Micro800 controller. For example, set SINT[0]=A, SINT[1]=B, SINT[2]=C and SINT[3]=D. In Micro800 controller: if I use a COP instruction to copy the four SINTs into one DINT and set swap to FALSE. DINT[0]=ABCD. In Micro800 Simulator: if I use a COP instruction to copy the four SINTs into one DINT and set swap to FALSE. DINT[0]=DCBA. The SWAP bit is working the opposite of what it should in the Micro800 Simulator. First identified in Connected Components Workbench version 12.00.00. [844757]

In this release, this issue is resolved.

- The Retained values of local variables will not update after importing a new Exchange File. For example, in the original project, the Retain values of the variable are all cleared, after importing a new device file with the Retain values selected for the same variables, the Retain values of the variables remain cleared. First identified in Connected Components Workbench version 12.00.00. [184064]

In this release, the retained values of local variables will be automatically updated after importing a new Exchange File.

- 1203-USB drivers are not installed with Connected Components Workbench. First identified in Connected Components Workbench version 12.00.00. [197156]

In this release, 1203-USB drivers are installed with Connected Components Workbench.

- Micro800 Simulator STI interrupt may not execute as configured and may result in a software watchdog timeout. It is not recommended to use STI in Micro800 Simulator. First identified in Connected Components Workbench version 12.00.00. [203868]

In this release, no timeout and fault will occur.

- When using the synchronize the module configuration function to sync IO configuration in Micro800 Simulator, the project in the Simulator controller is removed. First identified in Connected Components Workbench version 12.00.00. [31793]

In this release, this problem does not exist.

- Micro870 retained UDFB instances can result in slow performance when editing UDFB local variables. User Defined Function Blocks that have instances declared with the Retained attribute set (i.e. save UDFB local variables upon power down and restore on power up) may result in slow performance when adding, deleting, or modifying UDFB local variables. The

performance degradation is more noticeable when UDFBs are nested (i.e. UDFB calls another UDFB), UDFB has many instances, or many local UDFB variables exist. First identified in Connected Components Workbench version 11.00.00. [73004]

To avoid this problem, uncheck the Retained attribute of the UDFB instances when editing the UDFB local variables. If the UDFB local variables need to be retained, re-check the Retained attribute of the UDFB instances after local variable editing is finished. Due to this anomaly, do not declare more than 128KB of retained variables in your project.

## Known Anomalies in This Release

This release has the following known anomalies.

- The Copy Instruction copies from Source's lowest index to the Destination's highest index irrespective of the Source or Destination offset. (For example, Source – INT\_array[10] = {1,2,3,4,5,6,7,8,9,10} will result with Destination – SINT\_array[10] = {0,0,0,0,,5,4,3,2,1} ). This anomaly is not present when the program is downloaded into a physical Micro800 Controllers, it is only found when used in Micro800 Simulator. This issue is only found when both source and destination are Array type with different data types (For example, Source defined as INT, and Destination defined as SINT). First identified in Connected Components Workbench version 13.00.00. [Jira 1042647]

- After uploading a project with logical values and then going offline, the project values are missing. First identified in Connected Components Workbench version 13.00.00. [Jira 30432]  
To avoid this problem, restart CCW, and then open the local variable window.

Corrected in Connected Components Workbench version 22.00.

- User-Defined Function Blocks(UDFBs) exported with Connected Components Workbench version 4.00.00 or older versions cannot be imported into Connected Components Workbench version 13.00.00.

There are 2 workaround solutions to address this issue:

- Import the old UDFBs into Connected Components Workbench version 5.00.00 and above and export them. (Recommend to use Connected Components Workbench version 12.00.00)
- Download the refreshed samples codes **Connected Components Workbench Sample Code V13.00.00** from the Connected Components Workbench version 13.00.00 download page in [Product Compatibility and Download Center \(PCDC\)](https://compatibility.rockwellautomation.com/Pages/home.aspx) (<https://compatibility.rockwellautomation.com/Pages/home.aspx>). The update of samples codes in Sample Code Library are currently in progress.

- PanelView800 DesignStation  
When 'F1' key is pressed to view Help, the **Help Viewer** is called instead of the new Web Help format. The Help contents of PV800 within Help Viewer are outdated. First identified in Connected Components Workbench version 13.00.00. [Jira 1042593]To view the updated Help content, click **Help** on the toolbar and then select **Connected Components Workbench** to view the latest help content.

- In the **Help Viewer**, the Help contents of the Connected Components Workbench and Micro800 Controller are outdated. First identified in Connected Components Workbench version 13.00.00. [Jira 1041258]  
To view the updated Help content, click **Help** on the toolbar and then select **Connected Components Workbench** to view the latest help content.

## Known Anomalies from Previous Releases

These anomalies are from previous releases but are still known in this release.

- If a string variable's logical value is entered with single quotation marks while monitoring or via communications from a graphic terminal, the value will be considered invalid when offline and cleared when you save the project (for example: Tom's bike). First identified in Connected Components Workbench version 11.01.00. [Jira 30349]  
To avoid this problem, do not use single quotation in string variable values.

- When selecting FactoryTalk Linx as the communication software in ControlFLASH, updating the firmware of Micro810, Micro830, Micro850, and Micro870 controllers will fail when using a 32-bit OS. First identified in Connected Components Workbench version 12.00.00. [Jira 29721]  
To avoid this problem, do one of the following:
  - Change the communication software to RSLinx Classic if you are running a 32-bit OS.

- Change the virtual backplane slots for FactoryTalk Linx to slot 0.

- If the free space of the default installation drive C is less than 2GB, Connected Components Workbench cannot be installed even when installing to an alternative drive. First identified in Connected Components Workbench version 12.00.00. [Jira 31698]  
To avoid this problem, make sure the free space of drive C is at least 2GB.

- When programming with Micro800 Simulator, selecting STRING as the data type for the input variable in ANY\_TO\_DATE function block will cause incorrect conversion. First identified in Connected Components Workbench version 12.00.00. [Jira 31696]  
To avoid this problem, avoid using STRING as the input data type.

- FactoryTalk Linx cannot recognize the simulated controller 2080-LC50-48QWB-SIM, because the EDS file for this device is not automatically registered. First identified in Connected Components Workbench version 12.00.00. [Jira 30103]  
To avoid this problem, you can manually register the EDS file. Browse to the controller in **Connection Browser**, right-click the controller and select **EDS Upload**.

- Trends cannot work if the Unified Device Configuration option is not installed. First identified in Connected Components Workbench version 12.00.00. [Jira 31697]  
To avoid this problem, ensure the checkbox for Unified Device Configuration is selected during installation.

## Functional Changes

This release has the following functional changes from the previous release.

Connected Components Workbench version 13.00.00 has the following changes in functionality since the last release:

### Workbench

- Undo button

Due to the limitation of the new data grid, the undo function will clear its steps in some specific workflows thus disabling user from utilizing the feature. These specific workflows have the same prior steps when user is editing in a variable grid (Global/Local), and follow by:

- Proceeding to create a user-defined array or structure in the **Data Type** window.
- Proceeding to edit the **Local Variable** grid of the **User-Defined Function Block (UDFB)**, with the prerequisite that this **UDFB** was referenced in this **POU**.
- Proceeding to edit the **Local Variable** grid of any **POU** and open the **POU** of this variable pane to add an instruction and edit variable from the **Variable Selector**.

- Find and replace

Replace function is not supported in this release. Find function adopts a new interface with new options.

- Build

The build function has two underlying functionalities-a full build and an incremental build. These functions are carried out automatically according to the state of the build. The first time the project is build, a full build will be carried out and there may result in some warnings in the output window. When the same project is build again, it will be an incremental build and the warning signs will not be shown. Such incremental build will result in a shorter build time.

To have a full build, click on **Clean** and then **Build**.

## Application Notes

This release has the following application notes.

The following are the application notes for Connected Components Workbench version 13.00.00.

### Restarts during install of Connected Components Workbench software

Some Microsoft components may require a restart before the full Connected Components Workbench software installation is complete. If the Connected Components Workbench software does not install completely, restart the computer, the Connected Components Workbench software automatically continues installing.

### Install of Connected Components Workbench version 13.00.00 software

If you have a previous version of Connected Components Workbench software installed, it is recommended to:

- Backup your projects in case you need to revert to an earlier version of Connected Components Workbench software.
- Uninstall the previous version of Connected Components Workbench software from your computer.

*To install the Connected Components Workbench software:*

1. Download the current version of Connected Components Workbench software (Standard or Developer Edition).
2. Launch Setup.exe.
3. You must manually install .NET Framework 3.5 SP1 if you are using Windows 8.1, Windows 10, Windows Server 2012, Windows Server 2012 R2, or Windows Server 2016.
4. On the Connected Components Workbench **Setup** dialog box, select the products which you want to install, or specify a different drive where you want to install the software, and then click **Next**. By default all products are selected and installed with the Connected Components Workbench software. To remove a product or language from the current installation, clear the check box.
5. (optional) If installing the Developer Edition, enter the product serial number when prompted, and click **Install**.
6. On the **End-User License Agreements** dialog box, read the agreements, and click **Accept all** to continue the installation, or click **Decline** to return to the previous page.
7. (optional) If there are multiple Ethernet adapters in the computer, select one as the default from the popup window. Silent install mode will not provide the selection during installing, configure it in RSLinx Classic after installation completes.
8. When prompted to restart your computer during the installation, click **Restart now** to restart your computer and continue the installation, or **Restart later** to suspend and exit the installation.
9. On the **That's it!** dialog box, click **Close** to exit the installation. Meanwhile, you can also:
  - Click **Installation Summary** to see the installation details.
  - Click **Register for updates** to learn how to receive email updates about product patches.
  - Click **Download it free** to install Adobe Acrobat Reader.
10. The Connected Components Workbench installation is complete.

*To upgrade an existing installation:*

1. Stop your current version of Connected Components Workbench.
2. Perform the installation steps in the order presented on the screen.
3. Modify the products you want to install or uninstall.
  - Clear the product you want to uninstall. By default, the products are selected if they have been installed.
  - Select the product you want to install.
4. Click **Install**.
5. Restart your computer to complete the update.

### FactoryTalk Updater

The FactoryTalk Updater utility is installed with Rockwell Automation software products. It assists management of installed Rockwell Automation software by announcing new versions and patch roll-ups. Registering for updates is not required to receive announcements from the FactoryTalk Updater.

System logs and some application data are stored in this folder:

C:\Users\Public\Documents\Rockwell\Updater\Data

The logs and application data can be helpful when contacting Rockwell Automation Technical Support. System logs are automatically deleted after 90 days.



Tip: To receive notifications of new versions and patch roll-ups, the FactoryTalk Updater utility requires access to the **Download Center** web service. Verify that the firewall does not block access to this URL:

<https://api.rockwellautomation.com/es-be-pcdc-vpcprod/>

### Unattended or silent install

Use command-line parameters to perform an unattended or silent installation of the software.

### Installation Command-line parameters

The following table identifies the installation command-line parameters. Command-line parameters are case-insensitive. However, if a specified value includes a space, be sure to enclose the value in quotation marks (for example, "value with spaces").

Parameter	Description
/?	Displays the usage options for installation parameters.

/Q	<p>Silent Install, install runs in a quiet mode without any user interface.</p> <p>This parameter is recommended when deploying the software installation using an IT tool or script, and don't expect any error or restart messages. When using this parameter, check the error codes, and respond as needed. For example, if the installation returns error code 1641, then the IT tool or script should restart the computer and relaunch the installation after restart.</p> <p>This parameter is required if /QS is not specified.</p>
/QS	<p>Unattended Install, install runs in a quiet simple mode and shows progress through the UI, it does not accept any input but still shows error or restart messages.</p> <p>When using this parameter, the installation will stop and display a prompt if there are error or restart messages. For example, if an immediate restart is required to complete the install, a restart message will be displayed to confirm the restart. Installation resumes automatically from the point of interruption after restart.</p> <p>This parameter is required if /Q is not specified.</p>
/IAcceptAllLicenseTerms	<p>Acknowledges acceptance of the license terms.</p> <p>This parameter is required for /Q or /QS parameters.</p>
/AutoRestart	<p>Automatically restarts the computer after the installation is complete. Used when a restart is required to complete the installation.</p> <p>This parameter is optional. If this parameter is not used silent install (/Q) will return either error code 1641 or 3010 if a restart is required, and unattended install (/QS) will result in a confirmation prompt that must be agreed to before the installation is completed.</p>
/Record	<p>Records the installation options chosen to a recording file.</p> <p>This parameter is optional.</p>
/Playback	<p>Plays back a recording file to specify the installation options.</p> <p>This parameter is optional.</p>
/Repair	<p>Runs a repair operation on the installed products.</p> <p>This parameter is optional.</p>
/Uninstall	<p>Uninstalls the product.</p> <p>This parameter is optional.</p>
/SetupLanguage="value"	<p>Specifies which language will be displayed during install process.</p> <p>The value must be the one of the following:</p> <ul style="list-style-type: none"> <li>• ENU</li> <li>• CHS</li> <li>• DEU</li> <li>• ESP</li> <li>• FRA</li> <li>• ITA</li> <li>• JPN</li> <li>• KOR</li> <li>• PTB</li> </ul> <p>This parameter is optional. If this parameter is not used, the default language is the current user or operating system user interface language.</p>
/Product="value"	<p>Specifies which sub-products will be installed.</p> <p>Only required if sub-products are included with the install package.</p> <p>If the software does not include sub-products this parameter is not available.</p>
/ProductLanguage="value"	<p>Specifies the language version of the software being installed.</p> <p>The value must be one of the following:</p> <ul style="list-style-type: none"> <li>• ENU</li> <li>• CHS</li> <li>• DEU</li> <li>• ESP</li> <li>• FRA</li> <li>• ITA</li> <li>• PTB</li> </ul> <p>This parameter is optional. If this parameter is not used, the default language is the same as the setup language.</p> <p>If the software does not support multiple languages this parameter is not available.</p>

/InstallLocation="value"  Or  /InstallDrive="value"	Specifies the install location or install drive respectively.  This parameter is optional. If this parameter is not used, the default install location is "C:\Program Files (x86)\Rockwell Software".  Some software restricts the installer to only change the drive the software is installed on. Use /? to determine which parameter is supported.
/IgnoreWarning	Specifies that the setup ignores warnings and continues.  This parameter is optional. If it is not specified, the setup exits when a warning occurs.
/SerialNumber="value"	Specifies the serial number of the software being installed. This is used to activate the software during installation.  This parameter is optional. If it is not specified the software must be activated manually after installation if activation is required.  Some software does not require activation. If activation is not required this parameter is not available.
/ProductKey="value"	Specifies the product key used to get activation keys during installation.  This parameter is optional. If it is not specified the software must be activated manually after installation if activation is required.  Some software does not require activation. If activation is not required this parameter is not available.
/Version="value"	Specifies the version of the software to activate which corresponds to the product version associated with the SerialNumber and ProductKey.  This parameter is optional. If it is not specified the installer will use the most recent product version available.  Some software does not require activation. If activation is not required this parameter is not available.

### Examples

The following examples show how to use the installation commands.

- To install the software with no user interface using the default settings during the installation process. (Silent install)  
Setup.exe /Q /IAcceptAllLicenseTerms
- To install the Chinese language version of the software on the D: drive and display the progress, error, or complete messages during installation and restart the computer if necessary. (Unattended install)  
Setup.exe /QS /IAcceptAllLicenseTerms /AutoRestart /SetupLanguage=CHS /InstallDrive=D:

### Error codes

The following table identifies the error codes that can be returned by an installation.

Error Code	Value	Description
ERROR_SUCCESS	0	The installation completed successfully.
ERROR_INVALID_PARAMETER	87	One of the parameters was invalid.
ERROR_INSTALL_USEREXIT	1602	The installation was cancelled by the user.
ERROR_INSTALL_FAILURE	1603	A fatal error occurred during installation.
ERROR_BAD_CONFIGURATION	1610	The configuration data for this product is corrupt. Contact your support personnel.
ERROR_REBOOT_CONTINUE	1641	A reboot is required to continue to installation.
ERROR_SUCCESS_REBOOT_REQUIRED	3010	A restart is required to complete the installation. After restart the product is successfully installed.
ERROR_REBOOT_PENDING	3012	A restart is pending and is required before the installation can continue.
ERROR_SUCCESS_NOT_APPLICABLE	3013	The installation cannot proceed because the products are already installed.

### VeriSign Universal Root Certification Authority certificate

If the VeriSign Universal Root Certification Authority certificate does not exist on the local computer, the certificate is installed while installing Rockwell Automation software. Use Microsoft Management Console (MMC) to view the certificate in **Console Root > Certificates (Local Computer) > Trusted Root Certification Authorities > Certificates**.

### Convert an existing project to the current release



To use the most current features on projects created in previous versions of Connected Components Workbench software, convert the project to the current release by opening the project in the latest Connected Components Workbench software. This will automatically convert the project's databases to the current release.

An existing project that is converted to the current release, opened and saved in the current release, or downloaded to a Micro800 controller cannot be opened in a previous release. If a project is shared, all users must upgrade to the current release of the Connected Components Workbench software to continue using the project.

When you open a project created in a previous release of the Connected Components Workbench software, the project database automatically updates to the current release, which allows access to the latest Connected Components Workbench features. However, to use new device specific features in the current release, you may also need to use the device's upgrade feature to upgrade the device. For example, for Micro800 use the **Change Controller** feature to update the controller firmware revision to the latest revision to make use of newly added instructions.

### User account types for Connected Components Workbench software

When you create new projects or open existing projects, we recommend you do not use the default Guest user account, and that you use the same type of account you used when you installed the Connected Components Workbench software. That is, if you were logged in under an administrator account when you installed the Connected Components Workbench software, you should log in with an account that has administrator privileges when you use the Connected Components Workbench software.

To change to an administrator account:

1. Navigate to: **\\Program Files > Rockwell Automation > Connected Components Workbench.**
2. Right-click **CCW.Shell.exe**, select **Run as**, select **Administrator user**.
3. Click **OK**.

### File Extensions and locations

Connected Components Workbench software creates and uses the file extension .ccwsln for user-created projects.

By default, the product-managed files are saved to:

c:\Users\<user>\Documents\CCW\<Project#\<project#\>.ccwsln

### Connecting to a Micro800 controller on a virtual machine

If you install RSLinx Classic on a virtual machine (for example, VMware®), make sure to disable RSLinx Classic on the host computer before you plug the USB cable that is attached to your Micro800 controller into the host computer. If you ignore this step, the host computer will obtain the driver for the Micro800 controller, and the virtual machine may not be able to detect the Micro800 controller.

### Connecting to a Device using Ethernet

Using the default EtherNet/IP driver to connect to a device

If you use Ethernet instead of a USB to connect to the controller, the Ethernet/IP driver is installed by default in RSLinx and you can connect to devices which are on the same subnet as the PC. If a DHCP server is available, in most cases your computer and the device (such as, Micro850 controller which defaults to DHCP) will be assigned IP addresses that will allow them to communicate using this Ethernet/IP driver. The Ethernet/IP driver will browse for all devices on the subnet.

In cases where the device is not on the same subnet as the PC or you do not wish to view all devices on the subnet, it is recommended to install the Ethernet Devices driver which requires manually entering the IP address of the device.

To add the Ethernet Devices driver to connect to a device

Note: Be sure to select the correct port (it may not be the Windows default).

1. Click **Communications > Configure** to open the **Configure Drivers** dialog box.
2. In **Available Driver Types**, select **Ethernet Devices**.
3. Click **Add New**, and type a name for the driver or accept the default name.
4. If prompted, enter the Ethernet adapter selection. Be sure to select the correct port (it may not be the Windows default).
5. For each device enter the IP address (or Host Name if DNS is supported) under Host Name. It is recommended to append ":EIP" to the IP address for better performance by avoiding the older CSPv4 port 2222. Click **Add New** as necessary. Click **OK**, then **Close** when finished.
6. For the device, click **Connect** to open the **Connection Browser**.
7. Expand the Ethernet Devices driver you previously added.
8. Select the controller that you want to connect to from your project and then click **OK**.

### Security considerations

Connected Components Workbench software and its included software components require running system services and network access to communicate with controllers, drives, graphic terminals, and other devices. You may need to enable system services or configure firewall rules in order for Connected Components Workbench software to function properly. However, Connected Components Workbench software does not require endpoint firewall rules because it is not a server product that allows remote clients.

For a list of services that require network access, as well as detailed information on security concerns, see Knowledgebase Document ID: [PN826 - Security considerations when using Rockwell Automation Software Products](https://rockwellautomation.custhelp.com/app/answers/answer_view/a_id/609492) ([https://rockwellautomation.custhelp.com/app/answers/answer\\_view/a\\_id/609492](https://rockwellautomation.custhelp.com/app/answers/answer_view/a_id/609492)).

For a list of TCP/UDP ports used by Rockwell Automation products, see Knowledgebase Document ID: [BF7490 - TCP/UDP Ports Used by Rockwell Automation Products](https://rockwellautomation.custhelp.com/app/answers/answer_view/a_id/898270/loc/en_US) ([https://rockwellautomation.custhelp.com/app/answers/answer\\_view/a\\_id/898270/loc/en\\_US](https://rockwellautomation.custhelp.com/app/answers/answer_view/a_id/898270/loc/en_US)).

### View Connected Components Workbench 13.00.00 Help with Help Viewer 2.1

The Help Viewer 2.1 Filter is designed to keep the search list compact and manageable. Titles appear in the filtered table of contents (TOC) list only if they contain the root of the term used in the filter and the empty TOC levels are collapsed with an ellipsis (...).

For example, if you specify "troubleshooting" as a filter, only titles that contain "troubleshoot" or "troubleshooting" appear. Nodes whose titles do not contain the term are collapsed to a single node with an ellipsis (...).

In the filtered TOC you can do the following:

- Mouse over an ellipsis (...) in the filtered TOC to show the corresponding topic title in a popup window.
- Close the Filter to show the unfiltered TOC.

### Internet Explorer security settings

Internet Explorer® high security settings can prevent some help features from working as expected.

- For PCs running Windows operating systems, change the Internet zone security level to Medium.
- For PCs running Windows Server 2008 and Windows Server 2012, you might need to adjust the browser security settings.

To view Connected Components Workbench Help in Help Viewer 2.1

1. Open Internet Explorer.
2. On the **Tools** menu, click **Internet Options**, then click the **Security** tab.
3. Select the **Internet** zone, then click **Custom level** and change the following settings:
  - Enable MIME Sniffing – set to Enable
  - Active scripting – set to Enable
4. After changing the Internet Explorer security settings, open Connected Components Workbench and verify the help displays in Help Viewer 2.1.

### VMware compatibility

Compatibility with VMware has not been formally tested, but it has been used extensively with Connected Components Workbench.

- If you experience poor performance using VMware, you may need to upgrade VMware or run Connected Components Workbench on the host operating system. Connected Components Workbench and other software may try to access the networks, to ensure optimal system performance, you may need to disable network adapters.
- If you use Connected Components Workbench software with VMware, you may have to manually connect USB devices. When a virtual machine is running, its window is the active window and a USB device is plugged into the host computer, the device automatically connects to the guest instead of the host. This autoconnect feature can be disabled in the USB Controller panel of the virtual machine settings editor (VM > Settings). If all of the virtual machine's USB ports are already occupied when it is trying to connect automatically to a new device, a dialog box gives you a choice: you can either disconnect one of the existing USB devices to free its port or ignore the new device, allowing the device to connect to the host.

### Manually connecting a virtual machine to a USB device

- Choose **VM > Removable Devices** to connect specific USB devices to your virtual machine. If the physical USB devices are connected to the host computer through a hub, the virtual machine sees only the USB devices, not the hub.
- There is a menu item for each of the USB ports. Move the mouse over one of these items to see a cascading menu of devices that are plugged into your host computer and available for use. To connect a device to the virtual machine, click its name.
- If a device is already connected to that port, click the name of a new device to release the first device and connect the new one.
- To release a connected device, click None on the cascading menu for the port to which it is connected.
- If you physically plug a new device into the host computer and the auto connect feature does not connect it to a virtual machine, the device is initially connected to the host. Its name is also added to the **VM > Removable Devices** menu so you can connect it to the virtual machine manually.

### Downloading available firmware

The only firmware files installed with Connected Components Workbench 10.00.00 and later are the two most recent firmware versions for the Micro800 controllers. Additional firmware files (.dmk) are available for download from the [Rockwell Automation Compatibility and Downloads](http://compatibility.rockwellautomation.com/Pages/home.aspx) (<http://compatibility.rockwellautomation.com/Pages/home.aspx>) web page > **Find Download**.

### Downloading sample code and Device Manuals

If upgrading Connected Components Workbench from earlier version to 11.00.00 or later, the Sample Code and Device Manuals of the earlier version should be downloaded manually. The latest Sample Code and Device Manuals are available for download from the [Rockwell Automation Compatibility and Downloads](http://compatibility.rockwellautomation.com/Pages/home.aspx) (<http://compatibility.rockwellautomation.com/Pages/home.aspx>) web page > **Find Download**. It is recommended to install the same Device Manuals version as CCW version.

**Activation and grace period**

If the Connected Components Workbench Developer Edition is unable to connect to the FactoryTalk Activation server, it enters a seven-day grace period. Once the grace period expires, Connected Components Workbench will run as Standard Edition .

**Installing language package**

If a German or Italian Connected Components Workbench version is installed in Windows 8 or Windows Server 2012 and later with different language version, install the German or Italian Language Pack on your operating system.

**Spectrum Controls module configuration tool**

For the Spectrum Controls module configuration tool, it is installed to 'C:\Program Files (x86)\Rockwell Automation\CCW\SpectrumTool\ModuleConfigConverter.exe'. This launch path can be configured as part of the module's profile.

Rockwell Automation recognizes that some of the terms that are currently used in our industry and in this publication are not in alignment with the movement toward inclusive language in technology. We are proactively collaborating with industry peers to find alternatives to such terms and making changes to our products and content. Please excuse the use of such terms in our content while we implement these changes.

Copyright © 2024 Rockwell Automation, Inc. All rights reserved.

Rockwell Automation, Allen-Bradley, and FactoryTalk are trademarks of Rockwell Automation, Inc.

To view a complete list of Rockwell Automation trademarks please click here. (<https://www.rockwellautomation.com/en-us/company/about-us/legal-notices/trademarks.html>)

Trademarks not belonging to Rockwell Automation are property of their respective companies.