

Connected Components Workbench Release Notes

March 2019

These release notes apply to Connected Components Workbench™ version 12.00 software.

Use Connected Components Workbench software to configure controllers and devices, develop programs for your control system, and design HMI screens.

These release notes summarize the new features, known anomalies, and functional changes in this release.

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System requirements

The following sections list the required hardware and software to run Connected Components Workbench version 12.00 software.

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 7 with Service Pack 1 (32-bit and 64-bit)
-
- | | |
|-------------------|---|
| Important: | Attempting to install Connected Components Workbench on a computer running Windows 7 without Service Pack 1 or later will fail. |
|-------------------|---|
-
- Windows 8.1 (32-bit and 64-bit) - requires .NET Framework 3.5 SP1 to be installed
 - Windows Server® 2008 R2 with Service Pack 1
 - Windows Server 2012 - 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 10 (32-bit and 64-bit) - requires .NET Framework 3.5 SP1 to be installed

Connected Components Workbench software has dependencies upon 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 v4.03 (CPR 9 SR 11)
- FactoryTalk Diagnostics v6.10 (CPR 9 SR 11)
- Rockwell Automation® USBCIP Driver Package (x86) 3.18
- Rockwell Automation Driver Package (x64) v2.03
- RSLinx® Classic v4.10 (CPR 9 SR 11)
- MicroLogix to Micro800 Conversion Tool 5.00
- FactoryTalk Updater v1.00
- Microsoft® .NET Framework 4.5.1
 - .NET Framework 4.5 Multi-Targeting Pack
 - .NET Framework 4.5 SDK
 - .NET Framework 4.5.1 Multi-Targeting Pack
 - .NET Framework 4.5.1 Multi-Targeting Pack (ENU)
 - .NET Framework 4.5.1 SDK
- Microsoft® .NET Framework 4.6.2
- 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 12.02
- Microsoft System CLR Types for SQL Server 2014 (x86 & x64) 12.0.2

Important: Uninstalling the Connected Components Workbench software does not remove these components. After verifying that other software is not relying on them, they can be removed manually.

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System features

Connected Components Workbench version 12.00 software has the following new and enhanced features:

New features

The following new features are introduced in this release:

Workbench features

- New Devices
 - Micro870 controller with 110 V AC inputs, 2080-LC70-24AWB.
 - Spectrum Controls 2080-SDMEMRTC-SC plug-in for Micro830, Micro850, and Micro870 controllers. Adds microSD card support for memory backup and restore, data log and recipe.
 - Bulletin 193-E200-PCM Electronic Overload Relay for advanced motor protection for standalone applications. Configured over USB.
- Supports FactoryTalk Linx as an alternative communication software. Allows a communication software selection between RSLinx Classic and FactoryTalk Linx. A separate installation of FactoryTalk Linx is needed before using this feature.
- Trending for PowerFlex Drive parameters and Micro800 global and local variables
A new Trends tab is added to the Project Organizer to capture, view and analyze real-time and sampled data.

Micro800 features

- Micro800 Simulator
Provides a software application Micro800 Simulator to emulate the behavior of a Micro850 48-point controller. It allows experimentation and debugging of application code in a controlled environment.
Micro800 Simulator is supported in both Standard and Developer Editions, but Standard Edition simulator can only stay in run mode for a limited time for demo purposes. Developer Edition can stay in run mode for 24 hours to provide a full development and debugging environment.

Software requirements:

- RSLinx Classic with **Accept UDP Message on Ethernet ports** disabled.
- If installed, FactoryTalk Linx must be version 6.10 or later with **Listen on EtherNet/IP encapsulation ports** disabled.

If the ports are not disabled, then the controller will fault with 0xF002 fault code immediately after powering on. Refer to Micro800 Simulator Help for details.

To work with Simulator, the PanelView 800 terminals should be at revision 5.012 or later.

- For Micro870 controllers, supports configuring the scan interval for slower modules, such as analog modules. By optimizing the scan interval, the program cycle time will be faster.
- Additional Micro800 instructions are supported:
 - SCL - similar to Logix function block diagram SCL instruction for scaling inputs with alarm indicators if out of range.
 - COM_IO_WDOG - used in multi-controller applications. This instruction will watchdog external communications writing or reading controller digital I/O variables and declare an error if communication times out.
 - AFI - similar to Logix Always False ladder diagram instruction. Can be used while debugging to disable a branch or rung of logic without having to permanently delete the branch or rung.
 - NOP - similar to Logix No Operation ladder diagram instruction. Can be used as a placeholder for future edits or to help document the program.

- Modbus TCP server enable/disabled

Provides option to determine whether to enable Modbus TCP Server. The server state is disabled by default for newly created projects. Go to Controller tree > Ethernet > Modbus TCP to enable the server if needed.

- Integration of Version 11 Feature Pack and Version 12 Enhanced Graphical Paste for Ladder Editor

- Share Connected Components Workbench logic with Studio 5000 Logix Designer and RSLogix 500

Supports the ability to share ladder logic between Connected Components Workbench and Studio 5000 Logix Designer or RSLogix 500 by doing a copy-and-paste operation in either direction. Enables easy logic transfer from the existing Studio 5000 Logix Designer or RSLogix 500 project to a Connected Components Workbench project, and vice versa.

- Supported logic sharing ways are:

- Copy ladder logic ASCII text from or to Studio 5000 Logix Designer or RSLogix 500.
- Copy ladder logic graphically from Studio 5000 Logix Designer or RSLogix 500 and paste to Connected Components Workbench ladder logic ASCII text.
- Copy ladder logic graphically from Studio 5000 Logix Designer or RSLogix 500 and paste graphically to Connected Components Workbench.

- Theme switching

Allows a theme switching between the IEC 61131-3 theme and the Logix theme for the LD language editor. Flexible themes are allowed to select the instruction name and symbol which makes you feel the most comfortable when programming.

- ASCII text entry

Provides a method to modify the ladder program using ASCII instructions mnemonics instead of using the graphical ladder view in LD language editor workspace.

- Instruction Toolbar

Instruction Toolbar is a tabbed toolbar which shows the instruction elements in tabbed categories with the usage of adding language elements, such as instructions to the LD language editor workspace. It is complementary to the general workbench toolbox.

- Improved view of ladder logic which contains long rungs.

Similar to RSLogix 500 and Studio 5000 Logix Designer, rungs will be right justified individually so that long rungs will not affect viewing of shorter rungs. A new Ladder Diagram Container property **Fit to Window Width** is supported. Newly created programs will default to the recommended values of **Fit to Window Width** to **True** and **Coil Alignment** to **False**.

PanelView 800 DesignStation Features

- Integration of Version 11 Feature Pack
 - Improved controller integration with tag import.
 - All Micro800 variables can be imported with a few steps.
 - All Logix tags (L5X file) can be imported with a few steps.
 - Address column is automatically populated.
 - Improved Multi-language text support.
 - Export and import to excel for easier maintenance.
- New features of Version 12
 - Start an application remotely after download. No need to start the application from terminal.
 - Perform simple object animation by using tags to determine the size and location on the screen.
 - Automatic tag name updates according to the controller tag name.
 - Enable or disable setting to allow user to use an empty password
 - Options to ignore, create or rename duplicate tag when importing UDO.
 - Ability to download, upload, discover application and update firmware via FactoryTalk Linx.

Enhanced features

The following enhanced features are introduced in this release:

Micro800 features

- Data Log and Recipe are available for Micro830, Micro850, and Micro870.
- Data logs and recipes can be exported or imported for Micro820, Micro830, Micro850, and Micro870.
- Options to specify the controller behavior when a hard fault occurs are available. The options allow you to stop the controller or restart the controller.

Installation

- Provides the **FactoryTalk Updater** utility to assist the management of installed Rockwell Automation software by announcing new versions and patch roll-ups.
- Supports Modify and Repair from the Install user interface to change the product installation and to run a repair operation on installed products.

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Anomalies

The following lists identify the anomalies corrected in Connected Components Workbench version 12.00 software and the known anomalies found during testing for this release. You can use the identification information provided in the brackets *[]* to track the anomaly in future releases or if you need assistance from Customer Support with a related issue.

Corrected anomalies

- When using Connected Components Workbench version 11 to upgrade Micro800 firmware to version 12, a crash will occur. *[195109]*

In this release, Micro800 firmware can be updated to version 12.

- If Connected Components Workbench is installed on a selected drive, for example, drive D, when you update or modify the installation, the installation drive will move back to the default drive C, and the original installation in the other drive will not be replaced. *[149535]*

In this release, any changes to the installation will not change the installation drive.

- When selecting a Light Curtains device to add to a project in the Add Device Catalog window, the Light Curtain default version will not show if firstly click on the other devices with a version selecting option. *[80834]*

In this release, the default version will show correctly.

- Guardmaster 440C Safety Relay and 450L Safety Light Curtain shows the incorrect version number in the installation dialog box and **About** dialog box. *[184044]*

In this release, Guardmaster 440C Safety Relay and 450L Safety Light Curtain components show the correct version number.

- All trends will be deleted if a Micro800 Controller change is executed. The original project is backed up before controller change for recovery. *[152732]*

In this release, the trends will not be deleted.

- Project organizer appears to be empty after "Project Save As..." and CCW may crash. *[173613]*

In this release, CCW works well after "Project Save As..."

- When upgrading Connected Components Workbench from version 10 to 11 in a Microsoft Windows 10 system, an error message may appear during upgrading: "Cannot find one or more components. Please reinstall the application." *[80881]*

In this release, this problem does not exist.

Known anomalies

- Micro870 retained UDFB instances can result in slow performance when editing UDFB local variables. *[73004]*

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.

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.

- 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. *[127499]*

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.
- FactoryTalk Linx cannot recognize the simulated controller 2080-LC50-48QWB-SIM, because the EDS file for this device is not automatically registered. *[161511]*

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**.

- 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). *[147684]*

To avoid this problem, do not use single quotation in string variable values.

- 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. *[184064]*

To avoid this problem, reopen the project and then the Retain values will be updated.

- When upgrading Connected Components Workbench Standard Edition version 11 to Developer Edition version 12 in the silent install mode, the installation will stop in the middle of the process. *[192859]*

To avoid this problem, upgrade to Standard Edition version 12, and then to Developer Edition version 12.

- 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. *[29399]*

To avoid this problem, make sure the free space of drive C is at least 2GB.

- 1203-USB drivers are not installed with Connected Components Workbench. *[197156]*
To avoid this problem, manually install 1203-USB drivers by running 12.00.00-CCW\Setup\CCWDrivers\1203-USB Installer.msi.
- Trends cannot work if the Unified Device Configuration option is not installed. *[204278]*
To avoid this problem, ensure the checkbox for Unified Device Configuration is selected during installation.
- 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 *[203860]*
- 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. *[203868]*

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Functional changes

Connected Components Workbench version 12.00 software has the following changes in functionality since the last release:

Workbench

- Upgrading older projects to current release backup

When opening a project file from an earlier version, older project will be backed up before upgrading to the latest project version. Backed up version can still be opened by the earlier version of software.

Micro800

- Optional download of source code to controller

Provides option to not download the source code to the controller for faster build and download and to prevent unwanted upload of the source code. Go to Controller tree > General > Download Source Code to change. Newly created projects will default to Yes.

Warning: If source code download is set to No, software cannot go online with the controller unless the originally downloaded project is already open. Upload and Discover will not be possible.

- Additional reserved words

Due to the addition of new instructions (SCL, NOP, AFI, COM_IO_WDOG) and the Logix Theme, additional reserved words have been added. Projects created with earlier versions of the software may no longer build. For example, AVERAGE is now a reserved word due to the addition of the Logix instruction name AVERAGE.

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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 12.00 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	Silent Install, install runs in a quiet mode without any user interface. 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. This parameter is required if /QS is not specified.
/QS	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. 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. This parameter is required if /Q is not specified.
/IAcceptAllLicenseTerms	Acknowledges acceptance of the license terms. This parameter is required for /Q or /QS parameters.
/AutoRestart	Automatically restarts the computer after the installation is complete. Used when a restart is required to complete the installation. 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.
/Record	Records the installation options chosen to a recording file. This parameter is optional.
/Playback	Plays back a recording file to specify the installation options. This parameter is optional.
/Repair	Runs a repair operation on the installed products. This parameter is optional.
/Uninstall	Uninstalls the product. This parameter is optional.
/SetupLanguage="value"	Specifies which language will be displayed during install process. The value must be the one of the following: <ul style="list-style-type: none"> • ENU • CHS • DEU • ESP • FRA • ITA • JPN • KOR • PTB This parameter is optional. If this parameter is not used, the default language is the current user or operating system user interface language.
/Product="value"	Specifies which sub-products will be installed. Only required if sub-products are included with the install package. If the software does not include sub-products this parameter is not available.

Parameter	Description
/ProductLanguage="value"	<p>Specifies the language version of the software being installed. The value must be the one of the following:</p> <ul style="list-style-type: none"> • ENU • CHS • DEU • ESP • FRA • ITA • JPN • KOR • PTB <p>This parameter is optional. If this parameter is not used, the default language is the same as the setup language. If the software does not support multiple languages this parameter is not available.</p>
/InstallLocation="value" Or /InstallDrive="value"	<p>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.</p>
/IgnoreWarning	<p>Specifies that the setup ignores warnings and continues. This parameter is optional. If it is not specified, the setup exits when a warning occurs.</p>
/SerialNumber="value"	<p>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.</p>
/ProductKey="value"	<p>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.</p>
/Version="value"	<p>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.</p>

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 `.ccswln` for user-created projects.

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

```
c:\Users\\Documents\CCW\
```

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 [Security considerations when using Rockwell Automation Software Products](#) (Knowledgebase Answer ID 609492).

For a list of TCP/UDP ports used by Rockwell Automation products, see [TCP/UDP Ports Used by Rockwell Automation Products](#) (Knowledgebase Answer ID 898270).

View Connected Components Workbench 12.00 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
1. 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 10.0 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](#) web page > **Find Download**.

Downloading sample code and Device Manuals

If upgrading Connected Components Workbench from earlier version to 11.00 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](#) 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.

See also

[System requirements](#)

[System features](#)

[Anomalies](#)

[Functional changes](#)

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