Connected Components Workbench® Release Notes (Release 7.00)

September 2014

Contents

Support Information

For technical information and assistance about Connected Components Workbench (CCW):

Support phone: +1-440-646-3434
Website: http://www.rockwellautomation.com/support

For information about additional support options you can access from the **Help** menu, see Helpful Resources.

New Features and Enhancements

Workbench – Automated Update Notification

Using Current Updates Monitor (if enabled), an automatic notification will occur when a new Connected Components Workbench release is available. Automatic update is not supported so you must either download or order a DVD upon receiving the notification.

Workbench – Sample Code and Projects Folder

As part of the installation, essential Rockwell Automation and partner developed sample projects, sample code, and User Defined Function Blocks (UDFBs) are installed into a public folder. No need to download from the sample code website. To access the folder, use the **Help** menu and select **Sample Code > Local Folder**.

Micro800™ and PanelView Component - Usability Enhancements

This release includes the following usability enhancements.

Interface Element	Description of Updates Since Previous Release
Windows and dialog boxes	
Upload/Download Icons	The Micro800 Upload/Download icons are now consistent with other devices. Up arrow indicates upload and down arrow indicates download.
Project Organizer	Programs can be dragged and dropped within the Project Organizer to change their execution order. The following items have been added to the right-click menu: • Connect • Diagnose • Secure • Variable Export / Import • Data Protection • Document Generator (print) The icons for the Programs and User-Defined Function Block groups have been updated. An Interrupt icon is now shown when an interrupt is assigned to a program.
Device Menu	Connected Components Workbench now has a context-sensitive Device menu for accessing commonly used functionality. The Device menu contains the following items: • Build • Connect • Download • Upload • Diagnose • Secure • Change Controller • Import • Export • Data Protection • Document Generator (print)
Download	Downloading the project to the controller will automatically Build if the project has changed since the last Download. When downloading the project to a Micro820, Micro830, or Micro850 controller, a new **Download Confirmation** dialog appears, asking if you wish to Download or Download with Project Values. See the **Data Upload / Download** feature below for more information.
Variable Grid	The Attribute column has been hidden by default. It can be shown by right-clicking on the header and selecting **Show Column** > **Attribute**. When viewing variables in Debug mode using a Micro820, Micro830, or Micro850 controller, the Initial Value column is moved left so that it is next to the Physical Value column. When viewing variables in Offline mode using a Micro820, Micro830, or Micro850 controller, a new column, Project Value, has been added. See the **Data Upload / Download** feature below for more information.

Micro800 Controller Configuration pages	The Micro800 Controller Configuration page additions, changes and removals:
	• General
	• Memory page now with enhanced memory diagnostics on instruction and data usage
	• LCD Module
	• Startup, includes Diagnose button
	  • Startup/Faults, removed
	• Serial Port, includes Diagnose button for CIP and Modbus RTU **Driver** selections
	• Ethernet, includes Port Settings and Diagnose button
	  • Port Settings, removed
	  • Internet Protocol, removed
	  • Port Diagnostics, removed
	• Real Time Clock
	• Date and Time, removed
	• Memory Card, includes Diagnose button
	• Plug-in Modules - 2080-MEMBAK-RTC
	• Plug-in Modules - 2080-SERIALISOL

Ladder Diagram Editor	• Horizontal space optimized by making labels hidden by default and moved above the comment • Improved readability by removing the color gradient background • More flexibility in customizing the rung's visual properties. Right clicking rung provides an easy way to reset back to defaults.
Function Block Editor	Function Blocks can be aligned to one another at their top, bottom, left, and right edges, as well as aligned with their vertical (center) and horizontal (middle) axes. The background grid has been removed.
PanelView Components DesignStation	The PVc Help is now part of the Connected Components Workbench Help.

Micro800™- Data Protection

Data Protection for Micro830 and Micro850 controllers allows you to create a list of user-defined global variables whose logical values are not overwritten when restoring a controller project from a memory module. Key process variables can be preserved even if a new project is restored into the controller.

To configure Data Protection

- From the **Project Organizer**, right-click the Micro800 controller and select **Data Protection**.
- Add the global variables to the list using the **Data Protection** dialog box.

Micro800™ - Retained Timer Instruction

Function Block	Description
RTO	The RTO function block is a retentive timer. It increases an internal timer when its input is active, but does not reset its internal timer when its input changes to inactive.

Micro800™- Data Upload / Download

When working with a Micro820, Micro830, or Micro850 controller, you can set Project Values for all global and local variables. When uploading, Project Values are automatically updated with the current Logical Values for the variables and can be saved permanently if project is saved. When downloading, Project Values can be chosen to initialize the logical values of the variables. Project Values can also be manually edited in the project.

Project Values are similar to Initial Values when downloading except that Initial Values must be manually entered in the project.

A new **Download Confirmation** dialog appears during the Download process, asking if you wish to Download or Download with Project Values.

- Selecting **Download** initializes variables with Initial Values.
- Selecting **Download with Project Values** initializes variables with Project Values. If both Project Value and Initial Value exist for a variable, then Initial Value has precedence.

Micro800™- Variable Export / Import

Global and local variables can now be exported to and imported from Microsoft Excel spreadsheets. This is an easy way to edit a large number of variables or transfer variables between multiple projects. Because of the formatting requirements for importing variables from an Excel spreadsheet, it is recommended to export variables to Excel first and then edit the Excel file, rather than creating variables from a blank spreadsheet.

The **Export Variables Only** checkbox has been removed from the **Import Export** dialog box. Variables can only be exported to compressed files as part of a controller, program, or user-defined function block. Variables that were exported to compressed files using a previous version of Connected Components Workbench can be imported using the **Import Export** dialog box.

To view the Variable Export/Import dialog box for global variables

- In the **Project Organizer**, right-click the controller, then click **Variable Export/Import**.

To view the Variable Export/Import dialog box for local variables

- In the **Project Organizer**, right-click a program or user-defined function block, then click **Variable Export/Import**.

Micro800™ - Network Diagnostics

Connected Components Workbench (CCW) provides diagnostics for network connectivity, controller startup settings, controller faults, and controller projects stored in memory.

The **Device** menu has options to diagnose the operation of:

- Controller startup
- Serial port connection
- Ethernet connection
- Memory card
- LCD module
- 2080-SERIALISOL plug-in module
- 2080-MEMBAK-RTC plug-in module

The diagnostics in CCW have been enhanced to include three separate diagnose views:

Diagnose View	Description
Controller	Allows you to compare the configuration settings of the current project and the connected controller, including controller startup, Memory Module, Memory Card and LCD Module.
Fault	Allows you to view the status of the controller, information about any faults that occur and to retrieve a detailed fault log.
Communication	Allows you to display real-time statistics for the controller's Ethernet or Serial ports.

To open the Network Diagnostics

- Open the controller in the Project Organizer
- Connect to the controller
- Click the **Diagnose** button
- Select either **Controller**, **Fault** or **Communication**

The Communication Diagnostics view monitors and displays real-time statistics for the controller's Ethernet or Serial ports:

Communication Method	Statistics Displayed
Ethernet	Ethernet Link Status, Interface Counters, Media Counters
CIP Serial	Diagnostic Counters
Modbus RTU	Link Counters

The CIP Serial and Modbus RTU views will display statistics for either the controller's embedded serial port or for the 2080-SERIALISOL plug-in module.

Micro810 - LCD Variable Display

From the Controller tree of Micro810, click Remote LCD to select program variables that can be monitored from the 2080-LCD main menu. No programming is required.

Micro800™ - Lost Project or PC Replaced

Enhanced support for cases where the original project is lost or the PC has been replaced, and the project is required to be uploaded and then debugged without changing the value of variables. Now you can discover the project from the controller and go directly into debug without having to re-download the project.

Note that when a controller is discovered (or project uploaded), it will automatically update the project with the latest hardware configuration that is detected. If new hardware is detected, any newly generated I/O variables will not be able to be monitored since the I/O variables did not exist in the original project.

440C-CR30 - Enhancements to Workspace

The Guardmaster 440C-CR30 Safety Relay workspace has several new enhancements:

Feature	Description
Backup and Restore	Allows the backup and restore of the CR30's configuration with the 2080-MEMBAK-RTC plug-in module. Plug-in must be inserted into slot 1 while connected to the CR30 in order to access the backup and restore functions.
Function Block Name Change	Allows changing the name of a Safety Monitoring Function (SMF) or Safety Output Function (SOF) block. The feature has built-in name checking to ensure all function block names are valid.
Mute Lamp Safety Output Function	The default assignment for the Mute Lamp Safety Output Function is a single output terminal. The preferred assignment is: • First available multipurpose terminal, 12 -17 (with a configuration type as No PT). First available terminals 18-21 will take second priority (with a configuration default of PT).
Comparison of downloaded/uploaded configuration	After a Download Success, the downloaded CRC and uploaded CRC are displayed for verification purposes.
Password Protection	Prevents unauthorized access and possible tampering with safety relay programs.
Input Filters	Safety Monitoring Functions:

	• Tooltip – Input Filter tooltip for Safety Monitoring Functions. Recommends filters never exceed 250 ms. • Safety Mat - input filter selection limited to a range of 0-8. • Reset – input filter removed. • Restart – input filter removed.
Plug-in Modules	The safety relay supports these additional standard I/O plug-in modules: • 2080-IQ4 plug-in module • 2080-OB4 plug-in module • 2080-OW4I plug-in module
Report Generation	Printing a report is available from the logic editor.

440C-CR30 – SensaGuard Safety Monitoring Function

The SensaGuard non-contact switches provide flexible, programmable safety for personnel and equipment for all safety applications.

The Safety Monitoring Function Block is designed specifically to control the switch and is included in the Toolbox.

System Requirements

Hardware Requirements

To use this release of Connected Components Workbench effectively, your personal computer should meet the following minimum hardware requirements:

Component	Minimum Requirement	Recommended
Processor	Intel Pentium 4 2.8GHz or equivalent	Intel Core i5 2.4GHz or equivalent
RAM memory	2 GB	8 GB or more
Hard disk space	10 GB free	10 GB free or more
Optical drive	DVD-ROM	DVD-ROM
Pointing device	Any Microsoft Windows®-compatible pointing device	Any Microsoft Windows®-compatible pointing device

Operating System Requirements

This release is supported on the following operating systems:

- Microsoft Windows® 7 (32-bit and 64-bit)
- Microsoft Windows® 8 and 8.1 (32-bit and 64-bit)
  Note: Not recommended for use with the Micro810 due to USB Adapter driver. Driver will be updated in Release 8.
- Microsoft Windows 2008® (R2)

Additionally, Internet Explorer, which is installed with the operating system, is required to view the Connected Components Workbench help.

Security Requirements

Connected Components Workbench and its included software 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 to function properly.

For a list of software installed with Connected Components Workbench, see "Components installed with Connected Components Workbench" in Installation and Upgrades.

For a list of services that require network access, as well as detailed information on security concerns, see Knowledgebase Answer 609492 https://rockwellautomation.custhelp.com/app/answers/detail/a_id/609492, "Security considerations when using Rockwell Automation Software Products."

Micro800 Firmware Revision Compatibility

The following table identifies the major firmware revisions that can be used for each of the Micro800 controller types.

Controller Type	Major Firmware Revisions
Micro810	1.xxx, 2.xxx, and 7.xxx
Micro820	6.xxx and 7.xxx
Micro830	1.xxx, 2.xxx, 4.xxx, 6.xxx and 7.xxx
Micro850	2.xxx, 4.xxx, 6.xxx and 7.xxx

To view the latest Micro800 controller firmware information

See *Micro800 Programmable Controllers Release Notes* (2080-RN001_.pdf) located in the following locations:

- Release Notes folder on your installation media, or
- Program Files\Common Files\Rockwell\Help folder after you install Connected Components Workbench.

To obtain the latest drivers and firmware updates

Go to http://www.rockwellautomation.com/rockwellautomation/support

For the latest Rockwell Automation product compatibility information

Connected Components Workbench has been tested to interoperate with most Rockwell Automation software.

For the latest information about software platform support

Go to http://www.rockwellautomation.com/rockwellautomation/support/pcdc.page

For the latest drivers and firmware updates

Go to http://www.rockwellautomation.com/rockwellautomation/support

Rockwell Automation® Software Compatibility

This release has been successfully tested with the Rockwell Automation software products listed in the following table.

Software	Tested Version
RSLinx® Classic	V3.70.00
ControlFLASH™	V12.00.01

RSLinx Classic Compatibility Requirements

RSLinx Classic v3.70.00, which is included with Connected Components Workbench, is not compatible with the following product versions:

- RSNetWorx v9.00 or earlier.
- DeviceNet Tag Generator v11.0 or earlier.

RSNetWorx Compatibility Requirements

If an incompatible version of RSNetWorx (v9.00 or earlier) is detected during installation, the installation will not continue. You will need to either remove the incompatible version or upgrade RSNetWorx v21.00 or later.

RSNetWorx Compatibility Product Notice

The current version of RSNetWorx v9.00 and Prior Incompatibility with Rockwell Automation Software Products is available from the Rockwell Automation Support Center, as Product Notice ID 56697.

Upgrading RSNetWorx

If you are under a current technical support contract, you may download RSNetWorx v21 from the Rockwell Automation Compatibility and Download Center.

To download RSNetWorx

- Click the Download Software Updates link and enter your Rockwell Automation Member identification.
- Enter your Company Name and the Software Serial Number for your current RSNetWorx.
- Follow the instructions to download and install the updated software product.

If you are not under a current technical support contract, you may purchase an update for RSNetWorx by contact Rockwell Automation sales.

Note: RSNetWorx v21.00 is also available in Studio Professional v21.00.

Working with Projects in Connected Components Workbench

Using existing projects in current release

You can open a project created in a previous release without updating the controller firmware or performing a manual project conversion. However, if you want to use the most current features, you must convert the project using the **Change Controller** feature. If you do not update the controller revision to the latest, new features will not be available. See Convert a project to the current release section in Installation and Upgrades for more information.

Using different account types

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

To change to an administrator account

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

To create a new Guest user account

1. Open the **New User** dialog box:
   - **Microsoft Windows® 7 Professional:** Click **Control Panel > Administrative Tools > Computer Management > Users.**
2. Right-click **Users** and then select **New User.**
3. In the **New User** dialog box, enter the new user name and password and click **Create.**
4. Click **Groups** to display the group types.
5. Double-click the **Guests** group to open the **Guest Properties** dialog box.
6. Click **Add**, and enter the location and name information for the new user you created in previous steps.
7. Click **Check Names** to verify the information is correct.
8. Click **OK** to add the new guest user to the Guest group.
9. Click **OK** to close the dialog box.

Localized versions of Connected Components Workbench

Some features within CCW may only appear in English, even in the localized versions of the software. For example, the DeviceLogix editor, which is used for PowerFlex drives is only available in English.

Installation and Upgrades

Installing Connected Components Workbench

Follow these steps to install Connected Components Workbench.

1. Verify your system meets or exceeds the System Requirements.
2. Download the current version of Connected Components Workbench (Standard or Developer Edition).
3. Launch Setup.exe.
4. Follow the prompts in the Connected Workbench Setup window.
5. (optional) If installing the Developer Edition, enter your serial number into the installer when prompted.

   Note: CCW determines the correct components to upgrade and/or install. If there is a reboot requirement, reboot the operating system so the install can complete successfully.

6. When the installation is complete, click **Finish**.

   Tip: Some Microsoft components may require a restart before the full CCW installation is complete. If Connected Components Workbench does not install completely, restart the computer and then re-install CCW. After the Connected Components Workbench installation completes, the computer background will return to its default setting.

Current Program Updater

In order for the Current Program Updater to work seamlessly, you must invoke the Current Program Updater software at least once after installation and configure it.

Follow these steps to configure the Current Program Updater

If your user account is an administrator account:

1. Close this instance of **Current Program Updater**, right-click the **Current Program Updater** shortcut and choose **Run as administrator**.
2. Run the updater as you normally would and **Current Program Updater** will automatically correct any missing permissions. The next time you run it, you may revert back to running the standard way.

If your user account is a standard account (you will require the assistance of an IT person with administrator login credentials):

1. Close this instance of **Current Program Updater**, right-click the **Current Program Updater** shortcut and choose **Run as administrator**.
2. Have your IT contact enter the administrator password.
3. Run the updater as you normally would and Current Program Updater will automatically correct any missing permissions. The next time you run it, you may revert back to running the standard way.

Note: The **Current Program Updater** only updates permissions on directories of applications that are being updated. This will not affect applications not related to Current Program Updater.

Upgrading to the current release of Connected Components Workbench

Follow these steps to upgrade a previous release of Connected Components Workbench to the current release.

Before you begin

- Record device configuration information related to Modbus mapping, Interrupts, Serial Port settings and Embedded I/O for all existing projects.
- If upgrading from Standard Edition to Developer Edition, have your Developer Edition serial number ready.

To upgrade to the current version of Connected Components Workbench

1. Download the current version of Connected Components Workbench (Standard or Developer Edition).
2. Uninstall the previous version of Connected Components Workbench from your computer.
3. Launch Setup.exe.
4. Follow the prompts in the Connected Components Workbench Setup window.
5. (optional) If installing the Developer Edition, enter your serial number into the installer when prompted.

   Note: Connected Components Workbench determines the correct components to upgrade.

6. Click **Finish** when the upgrade is complete.
7. If you are prompted to select Online or Local Help the first time you launch the Help, select Local.
8. If you want to use the most current features on projects created in previous versions of CCW, follow the steps in Converting an existing project to the current release.

Opening existing projects

An existing project that is converted to the current release, or 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 Connected Components Workbench to continue using the project.

Converting an existing project to the current release

When you open a project that was created in a previous release of Connected Components Workbench, the project database is automatically updated to the current release. However, to use new features associated with the current release, you must use the **Change Controller** feature to update the controller firmware revision. For the specific firmware revisions that can be used for each controller type, see the Micro800 firmware revision compatibility section in System Requirements.

To convert an existing project

1. Open the existing project in the current version of Connected Components Workbench.
2. Recommendation: Record device configuration information related to Modbus mapping, Interrupts, Serial Port settings and Embedded I/O for the project.
3. Use the **Change Controller** feature to update the controller firmware revision.
4. If necessary, manually reconfigure Modbus mapping, Interrupts, Serial Port settings and Embedded I/O for the project.

Note: Modbus mapping information is stored in the MbSrvConf.XML file located in the CCW project structure: CCW\<projectname>\controller\controller and can be copied from the original project to the newer one.

Removing Connected Components Workbench

Follow these steps to remove Connected Components Workbench only. For other components, remove each component separately ***after*** removing Connected Components Workbench.

1. Uninstall Connected Components Workbench from your computer.
2. Verify Connected Components Workbench does not appear in the list of installed programs.
3. Remove other components as necessary. See Components installed with Connected Components Workbench.

Installing a different language edition of Connected Components Workbench

Follow these steps to install a language edition of Connected Components Workbench that is different from the one currently or previously installed.

To install a different language edition of Connected Components Workbench

Important: Remove CCW before you remove Microsoft Visual Studio Shell or you will not be able to remove CCW.

1. Uninstall the previous language edition of Connected Components Workbench from your computer.
2. Verify Connected Components Workbench does not appear in the list of installed programs.
3. Remove the previous language edition of Microsoft Visual Studio Shell 2008 Service Pack 1.
4. Download the desired language version of Connected Components Workbench (Standard or Developer Edition).
5. Launch **Setup.exe** to begin installing the desired language version of Connected Components Workbench and Microsoft Visual Studio Shell.

6. Follow the prompts in the Connected Components Workbench Setup window.
7. When the installation is complete, click **Finish.**

Upgrading to the latest PanelView Component firmware

PanelView Component DesignStation, which can be used to create, configure, and monitor Graphic Terminal devices, is installed with Connected Components Workbench and can be accessed from the **Project Organizer** after you add a Graphic Terminal device.

An upgrade of your Panel View Component terminal's firmware is not required, but is recommended, and may be needed for newer features. The PanelView Component firmware is located as part of the installation media.

The directory is <Root of the DVD media>\7.00.00-CCW\Firmware\PVC_Firmware

For the absolute latest firmware, you can download the latest PanelView Component firmware from the following location:

http://ab.rockwellautomation.com/Graphic-Terminals/2711C-PanelView-Component-C400-Terminals#/tab6

http://ab.rockwellautomation.com/graphic-terminals/2711p-panelview-plus-6-terminals

Note: This latest firmware v1.80 is required to use new features such as the enhanced Download function, which can be used to download to your PVc terminal from CCW.

Components installed with Connected Components Workbench

The following additional components are installed with Connected Components Workbench Standard and Developer Editions. However, these components will not be removed if you uninstall Connected Components Workbench because other software may be using them.

Type	Includes
Rockwell Automation	• ControlFlash™ 12.00.01 • Rockwell Windows Firewall Configuration Utility 1.00 • Rockwell Automation USB CIP Driver Package (x86) or • Rockwell Automation USB CIP Driver Package (x64) • RSLinx Classic 3.70.00 • Unified Device Configuration v3.10.0 • Current Program Updater
Microsoft .NET Framework	• Microsoft .NET Framework 4 Client Profile • Microsoft .NET Framework 4 Extend
Microsoft Visual Studio 2010 Isolated Shell - ENU	• Microsoft .NET Framework 4 Multi-Targeting Pack • Microsoft SQL Server 2008 R2 Management Objects • Microsoft SQL Server System CLR Types • Microsoft Visual C++ 2008 Redistributable - x86 9.030729 • Microsoft Visual C++ 2010 X86 Runtime - 10.0.40219 • Microsoft Visual Studio 2010 Shell (Isolated) -ENU
Microsoft Visual Studio 2010 SP1	• Microsoft Visual Studio 2010 Tools for Office Runtime (x86) • Microsoft Visual Studio 2010 Service Pack 1
Microsoft - other	• MSXML 4.0 SP2 Parser and SDK • Microsoft Help Viewer 1.1 • Microsoft SQL Server Compact 4.0.8482.1
Other	• OPC Core Components Redistributable (x86) 101.2 or • OPC Core Components Redistributable (x64) 101.2 • Virtual COM Port Device Driver 6.3a • Adobe Reader 11.0

Connected Components Workbench Developer Edition Only	
FactoryTalk	• FactoryTalk Activation Manager v3.60.00 (CPR 9 SR 6) • FactoryTalk Diagnostics v2.60.00 (CPR 9 SR 6)

Helpful Resources

User assistance available in the application

Use the **Help** menu to access online information such as user manuals, user forums, support e-mail, and the Rockwell Automation Knowledgebase.

Click **F1** to open a topic specific to the user interface item you have selected.

Tips:
- If the user interface item does not display a topic, click **Help > Search** and enter a subject in the search box to locate a relevant topic in the help.
- Connected Components Workbench uses local help only. If the Online Help Consent dialog box appears when you press F1, click **No**, and verify the **I want to use local help** option is selected.

Accessing Rockwell Automation support websites

With the exception of manuals, you must register (Become a Member) to access, free of charge, Rockwell Automation support websites. Register at:

http://ab.rockwellautomation.com

Rockwell Automation Knowledgebase

The Rockwell Automation Knowledgebase contains product notices, technotes, and FAQs that you can access after you log into the Knowledgebase.

To access articles from the Rockwell Automation Knowledgebase

1. Go to http://www.rockwellautomation.com/rockwellautomation/knowledgebase.
2. Log in.
3. Enter the article ID (for example: 116930) in the Search box.

Knowledgebase articles

Article	ID number
Micro800 basic FAQ	Answer ID 116930 https://rockwellautomation.custhelp.com/app/answers/detail/a_id/116930
Micro800 extended technical FAQ	Answer ID 1188115 https://rockwellautomation.custhelp.com/app/answers/detail/a_id/118815
Security considerations when using Rockwell Automation Software Products	Answer ID 609492 https://rockwellautomation.custhelp.com/app/answers/detail/a_id/609492
RSNetWorx v11 and Prior Incompatibility with Rockwell Automation Software Products	Product Notice ID 56697 https://rockwellautomation.custhelp.com/app/answers/detail/a_id/566967

Rockwell Automation Literature Library

You can view or download publications from the Rockwell Automation Literature Library, including the following:

- PanelView Component DesignStation Release Notes (2711C-RN010-EN-E)
- Kinetix 3 user manuals
- Kinetix Rotary Motion Specifications
- Safety relay user manual
- Non-English language versions of user manuals

To access manuals from the Rockwell Automation Literature Library

1. Go to http://literature.rockwellautomation.com.
2. Click **Advanced Search.**
3. Enter the product information and other search criteria, and click **Search**.

To access the non-English language versions of user manuals

1. Go to http://literature.rockwellautomation.com.
2. Select the language from the **Publication Language** drop-down box (right corner).
3. Enter the full or partial device catalog number in the Search box. For example, enter 2080-LC30 to view Micro830 user manuals.

Important Considerations

IEC-61131 standards

Connected Components Workbench adheres to the IEC-61131 standards for programming. If you do not have previous experience with IEC-style concepts and programming, we recommend you view the "Getting Started with Developing" section in the software help. The topics, which step you through the process of creating a basic sample application, are intended to introduce you to IEC-style programming within the Connected Components Workbench environment.

Programming, configuring and debugging

- Unless specifically stated in user documentation, do ***not*** change attributes in Property dialogs for Micro800 controllers.
- Some features that should be disabled appear available while the debugger is operating. A small subset of these features may cause Connected Components Workbench to close unexpectedly. If you recently started the debugger, ensure you stop it before performing other software operations.
- Connected Components Workbench does not automatically update every instance of a changed UDFB (User-Defined Function Blocks) referenced in an existing program. If you change a UDFB definition, you should update each individual instance of the UDFB. To do so, locate each instance, double-click it, and then build the program.

Uploading, download and building

- When you build a controller project with Connected Components Workbench, all changes are immediately committed to your hard drive or to your designated storage device so you will not be able to undo any changes. To ensure you can return your project to a prior state, save the project using a different name after making changes.
- If the **Upload** or **Download** options are not available in the **Device Configuration** toolbar, select the Micro800 controller from the **Project Organizer**, and then click **Upload** or **Download**. If this does not activate upload/download, rebuild the project by right-clicking the controller in the **Project Organizer** and selecting **Build**.

Resolved Anomalies

This section identifies anomalies that have been resolved since the last release of Connected Components Workbench.

Installation

Connected Components Workbench allows you to install on a Microsoft Windows® operating system using an account that does not have administrator privileges.
These items are created under a Standard User:
OK: C:\Users\ <Current User> \Documents\CCW\Code Snippets
OK: C:\Users\ <Current User >\Documents\CCW\Settings\CCW\CCWSettings.vssettings
OK: C:\Users\ <Current User> \Documents\CCW\Project1 etc.
OK: C:\Users\ <Current User> \Documents\CCW\Templates
OK: C:\Users\ <Current User> \Documents\CHMI_01
Note: It is recommended that Connected Components Workbench is installed on a user account with administrator privileges. [APBC00012930]

Resolved projects, documentation and tools anomalies

If you click a hyperlink on the MSP module page on a computer that does not have IE Explorer installed, Connected Components Workbench will continue to respond and operate normally. [APBC00019002]

If you customize the grid columns in a variable grid and then select **Save as default layout settings**, the settings will be reset after you click **Tools > Import and Export Settings** and select the **No, just reset settings overwriting my current settings** option. [APBC00016798]

The **Tools -> Execution Order** feature is available and works properly on a program that is password protected. [APBC00018113]

Context-sensitive help is available for all elements in the Structured Text editor. [APBC00011459]

If you use the **Document Generator** to create documentation for **Programs** (POU) that contain large Ladder Diagrams, the generated document will correctly display the picture of the Ladder Diagram. [APBC00013865]

Resolved instruction block anomalies

After the Key Read function block is triggered, its output is reset after the rung goes false. You can check the Status bit to verify the output results. [APBC00019913]

The **Enter Password** dialog box no longer appears when you are working on a UDFB even though you did not modify the program. [APBC00018411]

After completing a successful build, a yellow warning icon does not appear on the instruction block. [APBC00007405]

Resolved import and export anomalies

If you import a UDFB while an instance variable structure is being viewed, the instruction values refresh properly within the language editor. [APBC00018349]

Resolved build, debug, download and upload anomalies

You will not experience any intermittent issues related to removing the SD memory card while it is being accessed by the Micro800 controller. [APBC00018115]

If your program calls nested UDFBs, build results appear in the output window when you build the program. [APBC00018116]

If you open a project created in a CCW R2.0 or CCW R4.0, then set the initial value of a UDFB and perform a Refactor operation, you will not receive an error indicating the initial value has an incorrect format. [APBC00017736]

Known Anomalies

This section describes known anomalies in this release and, if needed, provides workarounds.

Installation

If the **My Documents** folder is mapped to a network drive and the user installing Connected Components Workbench does not have full permissions to the network folder the following error might appear: "Error 1325 [FolderName] is not a valid short file name. [APBC00021544]

Connected Components Workbench installs two folders named **CCW** under "**Libraries > Documents**". The duplicate folder name is inaccurate because the folders contain different files. One folder contains saved project files and the other contains **Sample Projec**t files. [APBC00021599]

The first time you launch Connected Components Workbench after installation, if you open two or more instances of CCW at the same time, the following error might occur:
"License is expired; the product has returned to the Free Version." [APBC00020976]
Workaround: When launching Connected Components Workbench for the first time, do not open multiple instances. If this occurs you must uninstall and then re-install Connected Components Workbench.

When starting Connected Components Workbench, it may hang and a stopped working dialog will appear. Occasionally some of the layout settings may be corrupted affecting editing and monitoring variables, because the initiation process was interrupted. Due to performance issues, this occurs mostly on VMware machines or when starting Connected Components Workbench for the first time after installation. [APBC00022659]
Workaround: If this occurs reset the Layout settings in Connected Components Workbench:

- From the **Tools** menu, select **Import and Export settings.**
- Select **Reset all settings**, and click **Next**.
- Click **Finish**.

Projects, documentation and tools

The user manual for the Guardmaster_440C_CR30 is available from the **Help > Device Manuals** menu. The manual has not been updated for CCW 7. [APBC00018733]
Workaround: To obtain the latest user manual from the Literature Library, go to http://literature.rockwellautomation.com.
- Additionally, you can click **Help > View Help** and locate the Safety Relay book in the help table of contents.
- Go to http://ab.rockwellautomation.com/Relays-and-Timers/Safety-Relays/Guardmaster-440C-CR30#documentation

If you create a project, leave the project open, switch to a different user, open a new instance of Connected Components Workbench and create another project, you may receive a catalog error and you will not be able to create a new project. [APBC00017014]

If, after you install the English version of CCW, you change the language format text to the Turkish language, you may receive unexpected results including the following:
- Broken help links when you reopen a project.
- Non-English characters that display when you debug your program.
- Inability to use the filter feature in a language editor for certain characters.
- Failed build because the project name or folder contains invalid characters.

[APBC00015798], [APBC00016210], [APBC00015858]

If, while using the English version of CCW, you enter non-English characters in a string variable, the characters may not display properly after you save, close and then reopen the project. [APBC00015937]
Workaround: In your operating system, select the language version of non-Unicode programs that will be used in the **Language for non-Unicode programs**.

If you open multiple projects on a network drive using **File > Recent Projects**, and then exit or close CCW, the application may not close immediately. [APBC00014847]

Content for the instruction block tooltips, and in the **Category** and **Comment** columns of the **Instruction Block Selector** appear in English in the non-English versions of Connected Components Workbench. [APBC00013270] [APBC00012607]

If you add a **Block** element to a **Program** (POU) in the non-English versions of Connected Components Workbench, rename the POU in the **Project Organizer** and then click **Save** or **Build** a "Detected… modification" error may appear. [APBC00013784]
Workaround: Close the error dialog and continue.

The labels for **Browse** and **No header or footer** in the **Document Generator** for the non-English versions of Connected Components Workbench may be truncated. For example, the label 'Durchsuchen' appears as 'Durchsuche'. [APBC00013944]

The **Quick Find** and **Quick Replace** features (Ctrl+F and Ctrl+H) are limited to logic editor. They do not work with devices, global variables or UDFBs. Additionally, **Quick Find** has the following limitations:
- It does not find any items when the **Look In** selection is **Current Project** or **Entire Solution**.
- It may not locate all instruction blocks within all containers in the project.
- It does not find all instances of the same Array element variable in all the programs within a project.

Workaround: To find items in the project, click **Edit > Find and Replace > Quick Find**, and click **Current Document** or **All Open Documents** in the **Look In** drop-down box.
The **Quick Find** and **Quick Replace** features will be enhanced in a future release. [APBC00011079] [APBC00011080] [APBC00011462]

If the appearance settings in your operating system uses a high-contrast color theme, some workspace elements will display incorrectly. For example, ladder rungs and connectors in the program editors, graphics and toolbar in the **Controller Details** view, and the **Device Toolbox**. [APBC00011574] [APBC00011577] [APBC00011578]
Workaround: Do not use a high-contrast color scheme.

If you select **View > Document Overview** while in the Structured Text language editor, the **Document Overview** displays a blank page. [APBC00004685]

Controllers and devices

If the Micro800 controller has 7.0 or pre-6.0 firmware and is password protected by CCW7.0, you cannot connect to the controller with a Connected Components Workbench Version that is 6.0 or lower. Access is denied even when the correct password is provided.
Workaround: Clear the controller's password by CCW7.0.
If the Micro800 controller has 7.0 or pre-6.0 firmware and is password protected by CCW6.0 or lower, you cannot connect to the controller with a Connected Components Workbench Version that is 7.0. Access is denied even when the correct password is provided.
Workaround: Clear the controller's password by CCW6.0 or lower. [APBC00022232]

When you re-launch Connected Components Workbench after an unexpected shutdown, the Micro800 controller might be locked and you will be unable to connect to it from the **Connection Browser**. [APBC00021900]
Workaround: The recommended solution to clear the lock on the controller is to restart Windows and the controller.
The second option is to:
1. Terminate CCW.Shell.exe and RA.CCW.CommServer.exe
2. Shutdown RSLinx and restart RSLinx
3. Restart CCW and try to connect to the controller, the connection may still fail.
4. Restart CCW and RSLinx and try again, the connection should be established.

If you remove all the characters in the **Name** text box in the **Controller Configuration** pane, you might receive the following error message:
"Controller name cannot be empty," even though you may be about to enter a name. [APBC00011369]

When you configure an Event Input Interrupt (EII), you can specify which input to use from the **Configure Event Input Interrupt (EII)** dialog box. You cannot, however, specify the edge triggering type (rising or falling edge) from the same dialog box. [APBC00005579]
Workaround: To specify the EII edge triggering type (rising or falling edge), click **Embedded I/O** in the controller tree and configure the **Properties** in **Input Latch and EII Edge**.

You cannot view or configure parameters for Micro810 LCD modules within Connected Components Workbench. [APBC00005458]
Workaround: To configure LCD module setup parameters:

- Download the program to the controller.
- Configure the setup parameters using the LCD module.
- Upload the program to Connected Components Workbench.
- Save the program.

While in PanelView, if you create decimal values while the regional setting is set to English, and then change the setting to Spanish, the PanelView Component incorrectly displays integer values. [APBC00005484] [APBC00005485]
Workaround: Change the regional settings before making any application changes.

In the **Variable Editor**, when viewing a user-defined function block that contains multiple nested functions or function blocks, the nested variables may not align correctly within the **Logical Value** column. If you hide the Logical Value column and then show the column, it is moved to the rightmost position in the **Variable Editor** and the values for the nested variables may not show in the column. [APBC00014339]

If you create a string array using the **Global Variables** grid, the maximum length is 252 characters. If you create a string array using the **Data Types** grid, the maximum length is 255 characters. [APBC00010227]
Workaround: Make all string arrays 252 characters or less.

The SAFEBOOL data type appears as an option in the Arrays grid, but SAFEBOOL is not supported by Micro800 controllers. [APBC00010414]
Workaround: Do not select SAFEBOOL as a data type.

The maximum number of words for the **MSG_MODBUS ElementCnt** parameter is 123 even though the **LocalAddr** specifies 125 words. If you use a value of 124 or 125 for the **ElementCnt** you will receive an error indicating a bad **MSG** file parameter exists. [APBC00003889]
Workaround: Verify the ElementCnt variable uses a value of 123 words or less.

If you use single quotes in a variable within an array element even when the data type is String, the build may fail. [APBC00011206]
Workaround: Do not use single quotes in array element variables.

The allocated memory for a Micro800 controller is not retained on the Memory configuration page after a Controller Change or Export/Import project. [APBC00021196]

The allocated memory value is not retained when you upload. [APBC00021722]

Data types and variables

User-defined global variables with data types BYTE, WORD, LWORD, and DWORD might display as USINT, UINT, ULINT, and UDINT data types on LCD displays for Micro800 controllers. [APBC00020820]

If you use constant values in arithmetic expressions unexpected build errors may occur for the following data types:

- DWORD
- LWORD
- INT
- SINT
- UDINT
- ULINT

[APBC00021989]
Workaround: To avoid unexpected build errors use Variables with initial values instead of constant values in arithmetic expressions. For example: DWORD data length is 0 to 4294967295.

- The arithmetic expression **4294967295 + 0** results in an inaccurate build error.
- The arithmetic expression **4294967295 + any Variable with initial value 0** does not cause a build error.

Include Logical value upon backup and restore' functionality does not restore the logical value for the following system variables:

- _SYSVA_KVBCERR
- _SYSVA_TCYCYCTIME
- _SYSVA_TCYWDG

[APBC00021350] [APBC00021351]

If you attempt to copy and paste a variable that uses an initial value from one open session of Connected Components Workbench to another open session, you may receive an error message similar to one of the following, and the paste operation will not be successful.

- "Warning: The variable you are pasting having the data type 'aa' is non-existent in the current project. Therefore, the variable shall be created as an undefined type.
- The importation of the symbol Controller.Micro850.Micro850.Prog1.v1 was unable to set the field TextInitialValue (1.65) -> Exception Message: The value does not match the format of the data type."

When you copy and paste from one project to another project, CCW may not copy all the properties of the object. If the new project does not have all the property objects defined, such as a data type, errors may occur. [APBC00018350]
Workaround: Copy all data type definitions to the project before you copy the variable.

If you monitor a variable with an array data type, the variable may display WAIT for its value. [APBC00018556]
Workaround: Use the variable view to monitor the values for the array.

In this release, some of the vendor specific instruction blocks and other program elements have not been identified as reserved words. When you name a variable, CCW may allow you to name a variable the same as an instruction block even though it should not be allowed. When you attempt to build a program with duplicate names, the error message will identify the instruction name as the problem rather than the user variable. [APBC00017881]

If you name a variable the same as an existing program name, you will receive an error when you attempt to build the project. You can disregard the error message as a program and a variable can use the same name since they are different object types. Duplicate names in this situation will not prevent the project from building. [APBC00018410]

If you attempt to set the **Logical Value** for a sub-element of a data type that contains a nested array/structure, you may need to click more than once to enable the selection. [APBC00017133]

Instruction blocks

If you use the **Search** option to search and replace content in user-defined function block code, the replace process continues without stopping. [APBC00020636]
Workaround: To stop the continuous **Search and Replace** process, restart Connected Components Workbench.

If you assign variables to the **COP** instruction block instance and start debugging, the **Scr** and **Dest** input values do not update. They incorrectly display as WAIT. [APBC00014533]
Workaround: To debug the COP instruction block instance and view the **Scr** and **Dest** input values as they update, do not assign a variables to the **COP** inputs.

If you import a user-defined function block into a password-protected program that already contains an instance of the same UDFB, you will not be prompted to enter the program password even though the UDFB instance in the program will be replaced by the newly imported UDFB instance. [APBC00018245]

If you rename a user-defined function block instance that is referenced in a program and then build the controller project, the following error message appears:
"A function, function block, or operator is not defined".
UDFB instances must have the same definition to successfully build the controller project. [APBC00016939]
Workaround: Open the program and reselect the UDFB.

In a Function Block Diagram program, if you connect the output of an ANY_TO_WORD operator to the input of a UDFB, the compiler will display a false positive error that the data types do not match. [APBC00005062]
Workaround: Use an intermediary variable to transfer a value between the instructions.

After building a program that uses an ANY_TO_WORD, ANY_TO_DWORD, or ANY_TO_LWORD operator that does not have the correct data type defined for the output variable, you might receive the following error message:
"Expecting a UINT type variable," even though the output parameters all use a WORD data type. [APBC00007106]
Note: The error message should state that a WORD type variable is expected.

Programs

In Connected Components Workbench R6 and R7, Defined Word, **Const0** is incompatible with all data types on compare instructions. [APBC00022224]

Ladder Diagram programs, if you assign variables by name to an instruction but the variables do not exist yet, a yellow triangle appears as expected. When you create the global or local variables and build the program the build succeeds. However, the yellow triangle remains in the instruction until you re-assign the variables to the instruction in the Ladder Diagram program. [APBC00019976]

If you use a Remote Desktop Connection to access a CCW program, the font for some of the comments in the program may change and be difficult to read. [APBC00017812]
Workaround: Double-click the comment to restore the original font.

When the Recipe function block continuously writes recipe data files to the Recipe sub-folder, the number of files created may exceed the maximum allowed limit of 50 files.
Workaround: See the Micro820 controller user manual for more information about maximum limits. The manual is available from **Help > User Manuals > Controllers > Micro820**. [APBC00017884]

If you use the AWT command to send characters when the RX (receive) buffer is empty, the characters will not be sent. [APBC00017012]

Import and export

If you import a file containing Toolbox settings using the **Import and Export Setting Wizard** and the project contains an LD program, the LD Toolbox may not show its controls after the import. Instead, the LD Toolbox will show the text, "There are no usable controls in this group. Drag an item onto this text to add it to the toolbox." [APBC00020531]
Workaround: Right-click the Toolbox and select "Reset Toolbox".

In the **Import and Export Setting Wizard**, if you reset all settings and select the option, **No, just reset settings, overwriting my current settings**, some items may not appear in the **File** and **Help** menus as expected. [APBC00015185]
Workaround: If this happens follow these steps:
1. Save your project.
2. Close, and reopen Connected Components Workbench to display all the menu items.

If, while importing variables into a password-protected POU, you click **Cancel** in the **Enter Password** dialog box, the import will be canceled, which is expected behavior. However, you still may receive an Import was successful message in the output window, which is incorrect. [APBC00016089]

If you try to Import a Micro800 program that contains a password and the program is not compatible with the version of Connect Components Workbench that you are using, the **Password required** dialog box appears. After you enter the password, the **Unable to start importing** dialog appears. [APBC00014022]

If you import a POU that contains an instruction that is not supported in the target Micro800 project, you will receive an error when you build the project, which is expected behavior. However, if you double-click the error item, it will not navigate to the error location in the project. [APBC00014443]

If you import a UDFB program into a project that contains a user-defined data structure or array with the same name as the UDFB, the project build will fail, which is expected behavior. However, the error message may indicate a FB symbol duplication error, which is incorrect. [APBC00015612]

Build, debug, download and upload

If you enter Debug mode after running Connected Components Workbench for an extended period of time, a red X may appear in the language editor, and you may receive the following error message:
“CCW.shell has encountered a problem. We apologize for the inconvenience. Please tell ISaGRAF about this problem” [APBC00018407]
Workaround: If this occurs, close the language editor, verify you are in Debug mode, and then reopen the language editor.
Note: Any message that identifies ISaGRAF as a contact should actually identify Rockwell Automation as the contact. See Support Information for contact information

If you attempt to build a project that has an invalid Motion Engine Execution Time, you will receive a build error, which is expected behavior. If you then delete the Motion Axis without first correcting the Engine Execution Time and build the project again, the build will still fail. **Note:** When you enter an invalid value, the field is outlined in red indicating an error. [APBC00011576]
Workaround: Follow these steps to resolve the error:
1. Add an Axis, and enter a valid Motion Engine Execution Time.
2. Save the project.
3. Delete the Axis and then save the project again.
4. Re-build the project.

If you change the interrupt assigned to a program, Connected Components Workbench does not calculate a new CRC for the program. When you attempt to debug a program where only the interrupt has changed, Connected Components Workbench displays a project contents mismatch error instead of a CRC mismatch error. [APBC00021071]

Complex variables, function blocks and instructions that contain members with initial values do not download their logical values to the controller. The following instructions contain read-only initial values and are affected by this anomaly:

- AWA
- AWT
- COP
- HSC
- IPIDCONTROLLER
- MSG_CIPGENERIC
- MSG_CIPSYMBOLIC
- MSG_MODBUS
- MSG_MODBUS2
- PLUGIN_READ
- PLUGIN_WRITE

[APBC00021172] [APBC00021254]

Instructions with a USINT input parameters have the following issues:

- Debugging these instructions: the USINT input parameters show WAIT.
- Uploading data values: warning message shows for instructions with USINT inputs and their logical values fail to upload.

The following instructions have USINT input parameters:

- MSG_CIPGENERIC
- MSG_CIPSYMBOLIC
- PLUGIN_READ
- PLUGIN_WRITE
- DLG
- MUX4B
- MUX8B
- RCP
- MC_AbortTrigger
- MC_TouchProbe

[APBC00022484]

If you download a project to a controller, then upload the project to a computer where the date and time is prior to the date and time on the first computer, the second computer cannot Debug or Download to the controller. [APBC00021719]

Workaround: Follow one of the following steps to resolve the error:

- Set the date and time of the second computer to be equal to or later than the first computer.
- On the first computer, export the project to a compressed file, then import the project on the second computer.

Restore from memory and Load always functionality are contradictory. When a controller in Connected Components Workbench is not password protected and Memory module is password protected, the Restore from Memory Module' button is unavailable because of a password mismatch. However, if you power cycle the controller and Load always is enabled for the controller, the program is transferred to the controller. [APBC00021421]

Application Notes

Repairing Visual Studio Service Pack 1

If Connected Components Workbench is installed on a computer on which Visual Studio 2010 Service Pack 1 was previously installed, you may receive an error message when you start Connected Components Workbench. If this occurs, follow these steps:

1. Close all Visual Studio products.
2. Install Visual Studio 2010 Service Pack 1.
3. If the Setup starts in Maintenance mode, select **Repair**.

Maximum number of parameters for a UDFB

If the project contains a UDFB with too many total parameters, you might receive a build error even though the total number of input and output parameters seems within range. This can happen because the UDFB local variables are included in the total. Limit the total number of parameters for each UDFB to a total of 128.

Modifying existing UDFBs

Connected Components Workbench does not automatically update the instances of the modified UDFBs referenced in existing programs. To update every instance of the UDFB, search for it and update each one manually.

MOV instruction and Assignment operator

The MOV instruction displays in the Instruction Selector when it is launched from a LD POU or a FBD POU, but it does not display in a ST POU. ST programs use the "=" assignment operator instead of the MOV function. [APBC00014308]

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 the Ethernet/IP Driver

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, you will need to install the Ethernet Devices driver which requires manually entering the IP address of the device.

To add the Ethernet driver to connect to a device

Follow these steps to add the Ethernet Devices driver.

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.

   Note: If connecting using CAT5-style cabling, be sure to select the correct port (it may not be the Windows default).

5. For each device enter the IP address under Host Name. Click **Add New** as necessary. Click **OK** and **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.
9. Click **OK.**

Accessing projects remotely

If you create or open projects on a remote mapped drive, or on a network PC Sharename, you may receive any of the following Catalog errors unless you configure remote access for the computer:

- IDF Catalog Error
- Failed to find or create a project for the device
- The catalog failed to match the selection to a provider

To access CCW projects on a network PC Sharename

If you are using a network PC Share name, establish a Full Trust relationship with the PC and the shared location. For detailed information, see Microsoft KB article:

http://support.microsoft.com/kb/320268/

To establish a trust relationship (excerpt from the KB article)

Use the following command shell (Start Menu/Run cmd) command to establish the needed trust relationship:

drive_letter:\WINDOWS\Microsoft.NET\Framework\v2.0.50727\caspol.exe -m -ag 1 -url "file:///\\network_pc_name\share_name*" FullTrust -exclusive on

For example:

C:\WINDOWS\Microsoft.NET\Framework\v2.0.50727\caspol.exe -m -ag 1 -url "file:///\\devlabpc\CCWInstall*" FullTrust -exclusive on

Connected Components Workbench sample projects

This release includes several Micro800 controller sample projects that are installed with Connected Components Workbench in one of the following folders.

\Users\current user\Documents\CCW\Sample Projects

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 with a Window 7 guest, 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 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 autoconnect 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.