



Adding Devices to Crestron Fusion[®] Software

Enterprise Management Platform

Getting Started
Crestron Electronics, Inc.

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Adding Devices to Crestron Fusion Software: Enterprise Management Platform

Introduction

This guide describes how to add a room and an asset with a processor using Crestron Fusion. To perform the following procedures, Crestron Fusion software must be commissioned and the user must possess server access information.

Hardware and Firmware Compatibility

The current devices and firmware versions that are compatible with inbound communications for the Crestron Fusion software (installed on-premises) are shown below.

Hardware and Firmware Compatibility Chart

COMPATIBLE DEVICE	MINIMUM FIRMWARE VERSION
3-Series® processor	Version 1.012.0017
TSW-732 and TSW-752 room scheduling touch panels	Version 2.01.08
AirMedia® presentation gateway device*†	Version 1.2.1
CCS-UC-100 Crestron RL® collaboration system device†	Version 15.14.08
CCS-UC-200 SR and CCS-UC-300 Crestron RL 2 system devices†	All versions
DM-DGE-200-C digital graphics engine	All versions
CCS-UC-1 Crestron Mercury™ conference system	All versions
TSW-560, TSW-760, and TSW-1060 touchscreens	All versions
DMPS3-4K-250-C and DMPS3-4K-350-C presentation systems	All versions

* AirMedia is not recommended for use with Crestron Fusion as there is no SSL encryption available with the device's communication.

† To configure the Crestron RL and Crestron RL 2 with AirMedia devices for Crestron Fusion, refer to the product documentation.

For more information on supported devices and minimum firmware, refer to the Crestron® True Blue Online Help Answer ID: [5618](#).

To add devices to Crestron Fusion using a web configuration, refer to the document references below:

For information on the DM-DGE-200-C, refer to the PinPoint™ UX Software for DM-DGE-200-C Operations Guide (Doc 7899) at www.crestron.com/manuals.

For information on Crestron Mercury (CCS-UC-1), refer to the CCS-UC-1 Supplemental Guide (Doc 7844) at www.crestron.com/manuals.

For information on TSX touchscreens, refer to the Crestron Room Scheduling Panels Operations Guide (Doc 8205) and the TSW-560/TSW-760/TSW-1060: 5", 7", and 10.1" Touch Screens Supplemental Guide (Doc 7927) at www.crestron.com/manuals.

For information on the Crestron RL 2, refer to the CCS-UC-300 Supplemental Guide (Doc 7961) at www.crestron.com/manuals.

Connectivity Requirements

Devices communicating with Crestron Fusion require direct outbound connectivity to the Internet via the following ports:

- The HTTPS Port 443 provides stateless Control Connection to Crestron Fusion SSLencrypted.
- The Secure CIP Port 41796 provides stateful CIP Protocol Connection SSLencrypted.

The path to the Internet for Ports 443 and 41796 needs to be free and unencumbered by other devices such as proxy servers, WAN optimizers, firewalls, etc.

In the process of communicating with the server, the Control Connection is initiated by the device and used only during the following transactions:

- When the device is registered with the server
- When the RVI file (control processors) is transferred for auto-discovery
- When re-registering with the server in case of loss of connection

The CIP Protocol Connection is established by the device as a permanent TCP connection with the server. After the device is registered with the server, the CIP Protocol Connection does the following:

- Exchanges Attributes (Joins) and other stateful information about the device
- Exchanges the XML schedule (scheduling panels)
- Provides heartbeats to keep the connection alive at all times

NOTE: The Crestron AirMedia device uses only Port 41794 for the CIP Protocol Connection, which is not SSL encrypted.

Add Rooms and Assets

Add a Room by Configuring a Processor

To add a room by configuring a processor, do the following:

1. Open the Crestron Toolbox™ console and connect to the control system.
2. Enter a hostname in the following format “HOSTNAME uniqueHostname.” When entering a hostname, set a uniqueHostname for the device that describes its name and room; for example, PRO3Room123.
3. Enter the “CLOUDENABLE ON” command on the Crestron Toolbox console.
4. Enter a URL for the Crestron Fusion server as follows, “CLOUDURL https://*serverHostname*/Fusion/DeviceManager/api/DeviceManager.” The *serverHostname* is the hostname of the Crestron Fusion server that was provided by Crestron. The processor automatically reboots and then connects to the Crestron Fusion server.

NOTE: DNS resolution must be configured for the device’s Ethernet interface, and the device must be able to make an Internet connection via the port.

5. Enter the “CLOUDSTATUS” command to verify the device is registered with the Crestron Fusion server.
6. Enter the “FITCSTATUS” command to verify the device is connected to the Crestron Fusion server and online.
7. Confirm that one or more auto-discovered Room Name(s) configured for the processor program(s) appears in the Discovered Objects Node in the Crestron Fusion Setup Web Client. If not, click another Node, and then go back to the Discovered Objects Node to refresh the list.
8. Drag the Room to the appropriate Node in the tree to activate communications with the processor.
9. Check if the room was already created before the processor was discovered, the auto-discovered Symbols (from the room in the Root Node) need to be moved into the existing room as follows:
 - a. Open the Node tree so the target room (created previously) is displayed.
 - b. Click the auto-discovered Room to display its Symbol(s) to the target, and drag each symbol to the appropriate existing target room.
 - c. Delete the room from the Room Node when all symbols have been removed from the auto-discovered room.

Add a Scheduling Panel Asset by Configuring a Processor

To add a scheduling panel asset by configuring a processor, do the following:

1. Open the Crestron Toolbox software and connect to the control system.
2. Enter a hostname in the following format “HOSTNAME *uniqueHostname*.” When entering a hostname, set a *uniqueHostname* for the device that describes its name and room; for example, TSS752Room123.
3. Enter a URL for the Crestron Fusion server as follows, “CLOUDURL *https://serverHostname/Fusion/DeviceManager/api/DeviceManager*.” The *serverHostname* is the hostname of the Crestron Fusion server that is provided by Crestron.
4. Enter the “CLOUDENABLE ON” command on the Crestron Toolbox console.
5. Reboot the device. After the device reboots, it connects to the Crestron Fusion server. The device displays “Retrieving Room Details.”

NOTE: DNS resolution must be configured for the device’s Ethernet interface and the device must be able to make an Internet connection via the port.

6. Open the Crestron Fusion Setup Web client.
7. Confirm that the Scheduling Panel is listed in the Root Node under its *uniqueHostname*. If not, click another Node, and then click the Root Node to refresh the list.
8. Drag the device to the appropriate room to activate communications with the device.

NOTE: For the scheduling panel to operate properly, the room must be configured with a scheduling provider.

9. Select the Asset, and then click **Edit**.
10. Confirm that the driver type, make, and model are the appropriate selections for the Asset and the Out of the Box Functionality (OOTBF) version. Make changes, if necessary.
11. Click **Save & Close** to save changes. Click **Close** if no changes were made.

NOTE: In Crestron Fusion, scheduling panels are automatically discovered as inactive Assets using a default driver under the Root Node. Move the scheduling panels to the appropriate destination room in the tree to activate, and update the driver according to the Out of the Box Functionality (OOTBF) version.

If using the same OOTBF version for all inbound panels, contact the Crestron Fusion Support Group (FSG) at 855-754-5962 for help with setting up the appropriate default driver.

For More Information

For more information on these and other procedures in Crestron Fusion, consult the embedded help. To access the online help, refer to the steps below.

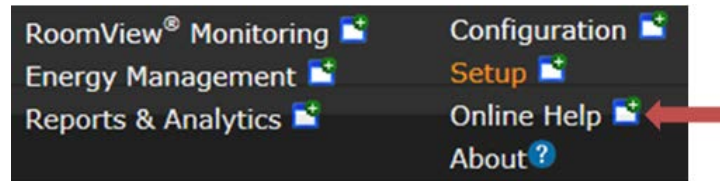
1. From the Crestron Fusion header tab, click **Open**.

Crestron Fusion Header Tab



2. From the pull-down tab, click **Online Help** to open the Crestron Fusion online help.

Pull-Down Tab



Further Inquiries

To locate specific information or resolve questions after reviewing this guide, contact Crestron's True Blue Online Help at www.crestron.com/onlinehelp. First-time users need to establish a user account to benefit from all features.

For information on Crestron Fusion, contact FSG at 855-754-5962 or e-mail fsg@crestron.com.

Crestron Electronics, Inc.
15 Volvo Drive, Rockleigh, NJ 07647
Tel: 888.CRESTRON
Fax: 201.767.7576
www.crestron.com



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