RELEASE NOTES

CP4N Firmware

2.8003.00049 – December 6, 2023

Product or Content Description

Package Update File for the CP4N
Package contents:
Cntrl Eng v2.8003.00049
Updater: 2.8003.00049
Bootloader: 02.019.000
Cab: 1.8003.0044
XIOSDK: 3.8.2
IoTSDK: 1.9.1
CCUI Version: 1.117.893611
IOPVersion: v1.3177.00007
BACnetVersion: 15.1.60
RouterBootVersion: 205
RouterVersion: 2.002.0037 / 3.000.0024
Python: 3.8.2
Mono: 6.12.0.107
.NET: 6.0.24

System Requirements and Dependencies

The CP4N Requires the following:

- SIMPL Windows: v4.200.00 or later
- Crestron Toolbox: v3.1330.0008.0 or later
- Device Database: v200.320.001.00
- Crestron Database: v221.05.001.00

Important Information

From firmware **2.8003.00020** and up, the following has changed:

- Before upgrading a router-based control system to 2.8003.00020, make sure to upgrade it to **2.8001.00098** first. Upgrading to 2.8003.00020 directly could result in the router firmware upgrade failing.
  sftp://ftp.crestron.com/firmware/cp4n/cp4n_2.8001.00098.02.puf

- Any control system that ships with a Rev3 router board must run firmware version 2.8003.00020 or greater and cannot be downgraded to a firmware version below 2.8003.00020.
  Any control system with a Rev2 router board can still be downgraded to a firmware below 2.8003.00020

From firmware **2.8001.00041** and up, the following has changed:

- This firmware enabled IPv6 support for the 4-Series Control Systems. IPv4 networking is still supported with this release.
  IPv6 can be configured from the command line, as well as through the WebUI.
  To use any IPv6 socket communication from SIMPL+ or SIMPL#, your program needs to be compiled with an updated database:
  - Device Database 200.245.001.00
  - Crestron Database 216.05.002.00
  - Include4.dat 2.19.036

  Please see the IP Guidelines for the IT Professional document (Doc. 4579N) and OLH Article 1001836 for additional information on IPv6 networking.

- SNMP cannot be enabled/disabled anymore through **ENABLEFEATURE** but should be enabled/disabled with **SNMP ON/OFF** console command.

- When downgrading from 2.8001.* firmware to 2.7000.* firmware, any SNMP settings that were made while on 2.8001.* firmware will be removed.

From firmware **2.8000.00003** and up, the following has changed:

- Any control system that ships with an upgraded Ethernet PHY card must run firmware version 2.8000.00003 or greater.
  To determine the Ethernet PHY card version on your control system model, navigate to **Status > Device** in the Web UI, expand the **More** Details section, and then note the value listed next to Ethernet PHY. If the value is "Rev2," the control system is running the upgraded Ethernet PHY card and cannot have its firmware downgraded below 2.8000.00003.

Any control system with a “Rev1” version of the PHY can still be downgraded to a firmware below 2.8000.00003

From firmware **2.7000.00031** and up, the following has changed:

- AV Framework is now part of the Control System firmware. It can be enabled through the WebUI under Settings -> AV Framework.
  It is disabled by default and will remain disabled after a firmware upgrade or restore of the Control System. Once you enable AVF, it will remain enabled after a firmware upgrade or restore.
  Once AV Framework is enabled, it will register IPID 03 by default. More IPIDs will be registered when devices get added through the AV Framework configuration pages.

- FIPS mode will not be enabled after upgrading to this firmware. However, once a restore is issued at any point after the upgrade, FIPS mode **will** be enabled.
  It can be turned off with the console command **FIPSMODE OFF.**
  Please read the Security Reference Guide (Doc. 9063A) for more information.

- By fixing an issue with the GetSeries() function in SIMPL+ it now correctly returns ***4*** when used on a 4-Series Control System.
  If there are any SIMPL+ modules in programming that rely on GetSeries() returning ***3*** on a 4-Series Control System, make sure to change them when updating to firmware 2.7000.00031 and up.
  Crestron has identified two Fusion SSI modules that are affected by this and will be releasing an updated version shortly. The two affected modules are:
  - Fusion SSI GUID Updater Helper
  - Fusion SSI System Information

  If you are using any version of these modules, please make sure to update your Crestron Database to version 209.00.002.00 and recompile before loading.

- The output of the **PING** console command has changed slightly.
  Output on firmware 2.7000.00031 and up:
  MC4>ping 192.168.1.106
  PING 192.168.1.106 (192.168.1.106) 56(84) bytes of data.
  *64 bytes from 192.168.1.106: **icmp_seq=1** ttl=64 time=0.097 ms*

  On older version, the output will be similar to:
  MC4>ping 192.168.1.106
  PING 192.168.1.106 (192.168.1.106): 56 data bytes
  *64 bytes from 192.168.1.106: **seq=0** ttl=64 time=2.317 ms*

Operational Installation/Upgrade Instructions

When upgrading the recommended upgrade steps are either:

- Use the setup pages at https://<ip address>/setup and use the “Action” menu, “Update Firmware”
- Use Toolbox PUF tool.

Please be aware that you will be asked to create a username and password when you first connect to the device. If you forget the password, a factory reset will be required:

- Press HW-R
- Wait for Acquire LED to turn on
- Press SW-R five (5) times

If the device does not have USB, you have configured it for a static IP address, and you can no longer find it on the network, or you have moved it to a new network, you can temporarily bring it back to DHCP mode with the following sequence:

- Press HW-R
- Wait for Acquire LED to turn on
- Press SW-R three (3) times

Version History

Version 2.8003.00049 December 6, 2023

Changes since last version

New:

- Updated .NET6 runtime to 6.0.24
- Added IPv6 Multicast support for router-based systems.

Resolved bugs:

- Resolved an inconsistency logging the number of failed login attempts.
- Resolved an issue where consecutive restarts of a program could result in the program not stopping cleanly.
- Resolved an issue where WebSocket Token was not always validated properly.
- WebUI would show a firmware upgrade to be successful even though the upgrade was still in progress.
- 8021XPASSWORD console command password was logged in syslog.
- AD login could fail on a router-based system with a Rev3 router.
- Resolved an issue where a mobility project that started with “CWS” would not be able to be downloaded on a mobile device.
- Resolved an issue where the “Save” button on the WebUI would not always update a configuration.
- Resolved an issue where a static DNS address would not always be saved when added through console.
- Resolved an issue where a static IPv6 address could not be removed.

Known issues:

- No reboot message is shown when “Update Now” is selected on the AVF page.

Version 2.8003.00037 October 12, 2023

Changes since last version

New:

- Added support for C# programs targeting .NET6
  NuGet package 2.20 or newer needs to be used.
  Support for remote debugging will be enabled in a future update.
  SIMPL# Libraries targeting .NET6 are not supported in SIMPL+
  .NET Framework 4.7 is still supported.
- Added support to update the AVFramework version using Auto Update.
  Please refer to the documentation for more information.
- Added support for the BACnet Relinquish Default property to be used in C# programs.
- Added support for the Rev3 router board.

Resolved bugs:

- Resolved an issue where a Scheduled Event could be deleted after creating multiple events and rebooting to control system.
- Resolved an issue that would prevent a system in Secondary mode to start its program when the Primary device went offline.
- Resolved an issue that would prevent a program from stopping correctly.
- Resolved an issue where programmatically getting the MAC address would return it in lower case instead of upper case.
- Resolved an issue when disposing Crestron File Transfer Client instances.
- When configuring SNMP through the WebUI, Auditlog would show passwords in cleartext.
- BacnetRemoteStatusList console command would show ONLINE for all remote devices regardless of which adapter was selected.
- Resolved an issue that prevented Toolbox from opening the *Security* dialog in SNMP settings.
- Multi-Factor Authentication in WebUI now correctly handles re-challenge when passcode is wrong.
- AVFramework would show as disabled in the WebUI after a restore even though it was running.
- **IPV6CONFIG** console command did not show lease expiration.
- **Resolved an issue where additional data was prepended to Unicode characters in SIMPL Debugger.**
- **ConvertToAscii symbol would not propagate signals if the input was not UTF16**
- Newly added users would not always show on the Security tab in the WebUI.
- Resolved an issue where UDP communication could be receiving sent packets from itself.
- Resolved an issue where SNMP would not respond to bulk requests.
- Removed expired certificates.

Known issues:

- Restarting a program that uses HomeKit on a router-based control system could lead to the program stopping, but not starting again.

Version 2.8001.00098 July 28, 2023

Changes since last version

New:

- Updated AVF to version 6.29

Resolved bugs:

- Resolved issue with large CWS requests sometimes leading to an exception.
- Resolved issue where it could take a long time for an IPv6 address to be allocated if there was already an IPv4 address allocated.
- Resolved issue where programmatically getting the MAC address would result in returning an incorrect MAC address.
- Resolved issue where broadcast data would be received twice on a router-based control system.
- UDP communication symbol in SIMPL would not receive any data when IPv6 is enabled.
- Resolved an issue where LAN IP address would be inaccessible when a USB to Ethernet adapter was being used.
- Resolved an issue that could result in CH5 WebUI token validation to fail.

Known issues:

- When configured as a remote ethernet processor to VC-4, the loaded program would not always start when the MIPTable entry goes offline.
- After a restore, the WebUI shows an incorrect status of AVFramework.
- SNMP Agent doesn't respond to bulk requests.
  These issues have been resolved in firmware 2.8003.00037

Version 2.8001.00086 May 18, 2023

Changes since last version

New:

- **Domain-joined authentication.**
  This feature makes the original implementation of active directory user login more secure by restricting login-related interactions to Crestron devices that are known by a domain, and to domains that are known by Crestron devices.
  Please refer to Online Help article 1001858 for more information.
- **Multi-factor authentication**
  This feature allows a Crestron device to require additional information from a user during a login attempt. An example of such additional information is a One-Time Password (OTP). This feature only applies to domain-joined authentication.
  Please refer to Online Help article 1001857 for more information.
- **Backup and restore functionality.**
  This firmware adds support for backing up and restoring device configuration using the **CONFIGUTILS** console command.
  Please refer to Online Help article 1001859 for more information.
- Added **WEBSOCKETTOKEN** console command to generate a non-expiring token to allow a 3rd party device to authorize itself.
- Apple HomeKit can be used on the LAN side or on the Control Subnet side on a router-based Control System. Use the **HKROUTERADVERTISE** console command to select which adapter needs to be used.

Resolved bugs:

- Resolved issue with SIMPL programs not always restarting after crash.
- Additional Daylight-Saving Time fixes for Egypt.
- **NVRAMREBOOT** console command did not show reason for abnormal reboot anymore after performing a user reboot.
- Resolved an issue where using the **Ping** class in C# would result in a timeout.
- Resolved a BACnet issue where not all devices were getting polled and were falling offline.
- Resolved an issue where an IPv6 DNS entry would be deleted after rebooting a router-based control system.
- Resolved an issue where using SQLiteConnection() in SIMPL# would throw a “Method not found” exception.

- Increased max file size in a CWS requests to allow files larger than 1MB to be handled.
- Retrieving the contents of the NVRAM could result in a file with an incorrect size.
- Resolved an issue where disabling DHCP on a USB-Ethernet adapter could result in a loss of communication with the Control System.
- Resolved an issue where user account lockout was not always enforced properly.

Known issues:

- Trying to programmatically get the MAC address will result in returning an incorrect MAC address.
- USB-Ethernet adapters are not supported when using IPv6 on a 4-Series Control System
- Apple HomeKit does not always go into the ready state after reloading a program. Rebooting the Control System recovers Apple HomeKit functionality.

Version 2.8001.00049 March 13, 2023

Changes since last version

New:

- Additional Daylight-Saving Time fixes.
  Please see Online Help article 1001847 for additional information.

Resolved bugs:

- Resolved an issue where a trailing "/" was necessary for a CWS request to not return an error.

Version 2.8001.00041 February 14, 2023

Changes since last version

New:

- IPv6 support. Please read the "Important Information" section for more information about IPv6 support with this firmware version
- SFTP/SSH/WebUI sessions have additional limits regarding concurrent sessions in order to prevent potential DoS attack. (NDM-000200, WSR-000001)
- Added the ability to select the network adapter to bind the webserver to with the **WEBSERVER ADAPTER** console command.
- Added the ability to limit the total number of user session for the webserver with the **WEBSERVER TOTALUSERSESSIONS** console command.
- The device can now be configured such that local password changes require a minimum number of positions in which characters are changed. (NDM-000329).
  This can be enabled or disabled using a new flag **-CHANGE** associated with the **SETPAsswordrule**/**GETPAsswordrule** command.
- Daylight Savings Time (DST) no longer observed in most of Mexico's time zones.
  Please see https://www.timeanddate.com/time/change/mexico for more information.

Resolved bugs:

- When using a TCP/IP Server in SIMPL Windows, a FIN/ACK was not always sent when closing the socket.
- Resolved an issue where a SIMPL+ process could crash and would not get restarted.
- Resolved an issue where the Control System was not sending a time sync to a connected device.
- Removing IPIDs from IPTable through WebUI would not always work properly.
- Rebooting Control System directly after using CrestronDataStoreStatic.Flush() would not store data properly.
- IPID description field in WebUI would always be empty
- IPTable port values for UDP communication incorrect in WebUI
- Resolved an issue that would show “AutoUpdate file for read, error 13” in error log.
- Resolved an issue with Crestron SNMP OIDs.
- IGMP Join/Leave messages would not be sent on the Control Subnet when enabling/disabling a UDP socket.
- Resolved an issue where the CWS server would send an incorrect HTTP 301 redirect after successfully logging in.
- When loading programs from the WebUI, the IPTable would get loaded even when “Do not copy IP Table” was checked.
- When FIPS mode is enabled, weak SSL/TLS Key Exchange was allowed on port 41796
- NVRAM data gets corrupted when downloaded if the data is larger than 2048 bytes.
- CP4N would show incorrect MAC address when using **VER** console command.
- Removed expired certificates.

Known Issues:

- Webserver Management port and Secure Webport can be set to the same port.
- **ADDPORTMAP** console command does not support IPV6 addresses.
- IPV6 Ethernet information gets appended to the PRO4 front-panel.
- When changing Master IPTable through the WebUI, there is a small change the control system will revert to regular operation. Changing Master IPTable through console is not affected.
- SNMP supports one SNMP trap per SNMP OID.

Version 2.8000.00010 August 10, 2022

Changes since last version

Resolved bugs:

- Sustained SNMP polling could result in the control system running out of memory.
- Cleaned up output of **VER -V** in console

Known Issues:

- When changing Master IPTable through the WebUI, there is a small chance the control system will revert to regular operation. Changing Master IPTable through console is not affected.

Version 2.8000.00003 June 21, 2022

Changes since last version

Notes:

- Please read the "Important Information" section for more information about this firmware update

New:

- WebUI now shows the Ethernet PHY version under **Status > Device**
- Output of **VER -V** console command now shows the Ethernet PHY version.
- Removed expired certificates.

Version 2.7000.00083 May 11, 2022

Changes since last version

New:

- AV Framework upgraded to 6.19
- Upgraded IoT SDK to 1.8.0

Resolved bugs:

- Changing DHCP mode to off before setting a static IP address resulted in DHCP remaining on after reboot.
- Improved stability with sustained HTML5 Web Xpanel connections.
- Improved performance with large number of HTML5 Web XPanels connecting.
- CWS route without name property would return *500 Internal Server* error.
- AD authentication could take 40+ seconds when using AD server with a .local domain.
- **NVRAMGET** console command would get the entire NVRAM instead of only contents of NVRAM.
- Resolved issue with sending/retrieving NVRAM through Toolbox.
- **MYCRESTRON** console command no longer times out.
- Remote Ethernet Processing without SETCSAUTHENTICATION configured on the remote device would not reconnect if the parent device rebooted or program reloaded.
- AppWatchdog errors will be ignored when S#Pro debugging is enabled.

Version 2.7000.00052 February 28, 2022
Changes since last version

New:

- AV Framework upgraded to 6.17

Resolved bugs:

- Secure WebSocket on port 49200 was offering TLS1.0
- IPTable gets cleared after removing a program and a reboot.
- Unable to report status of multicast support for ethernet adapters from S#Pro.
- Improved CWS performance and stability when under a heavy load.
- Improved stability when querying non-existing entries in the registry.
- Updated 802.1x Domain configuration error message in WebUI.
- Password confirmation would not always show after a restore when creating first-time user.
- CH5 Web XPanel didn't always update properly when multiple connections were made from different browsers.
- BACNet not sending read request after write was completed successfully.
- MyCrestron configuration file could be obtained through Toolbox File Manager
- System time changed to current time with SNTP disabled.
- Removed erroneous "Error Retrieving from Router. Router may not be ready yet" messages from log
- Appwatchdog was not able to recover from Watchdog crash.
- Updated PING console command help response.
- Removed "OFF" from help as a valid option for the SSL console command.

Known Issues:

- Python: UID limited to 128 characters
- Cannot add multiple SNTP servers

Version 2.7000.00040 January 7, 2022
Changes since last version

New:

- AV Framework upgraded to 6.16

Resolved bugs:

- Resolved an issue where EISC communications would fail to come online
- Resolved an issue with the WAVEDUMP command
- Improved HomeKit reconnection mechanism
- BACNet HBVO and HMVO remote value not setting correctly
- Remote Ethernet Processing between 4-Series and 3-Series would intermittently fail when SETCSAUTHENTICATION was set.
- Buffer overflow in WebUI HTTP server causing it to not respond for 30+ seconds
- TLSCIPHER and CIPCIPHER do not allow non-STRONG setting
- Sending invalid command to Console symbol stops it from functioning
- DHCPOPT command was ignored on router-based processors
- MYCRESTRON console command password was logged in AuditLog
- ROUTEADD would not persist across reboot.
- AutoUpdate plugin default URL changed to HTTPS
- User console command would not autocomplete with AppID suffix
- Erroneous RQIF_IssueGetCommand message no longer printed to log
- After many program restarts, SIMPL+ process could crash needing a reboot to recover.

Known Issues:

- Python: UID limited to 128 characters
- 802.1x doesn’t work on USB to Ethernet interface
- SNTP doesn’t sync from secondary server

Version 2.7000.00031 November 19, 2021
Changes since last version

New:

- AV Framework part of Control System firmware.
- Fusion HTML5 XPanel support.
- Python script support. Go to https://developer.crestron.com/ for more information.
- Added FIPS (Federal Information Processing Standards) mode. A restore must be done to enable FIPS.
- Ability to enable/disable secure WebSocket with SECUREWEBSOCKETPORT ON/OFF.
- Added **PROXY** command, to have (S)CIP connections go through a proxy server. Connections to local control systems can be excluded with the EXCLUDELOCAL parameter**.**
- Added **PROXYALLOW** command to allow proxy server to do DNS resolution for external sites.

Resolved bugs:

- Stopping a program with a number of SCIP devices connected could lead to a reboot of the control system.
- After a prolonged period, SCIP connection can drop and cause a processor reboot.
- SIMPL+ GetSeries() incorrectly returned **3** instead of **4**. (See “Important Information” above.)
- Pinging a device from a C# program would always return TtlExpired.
- Additional USB-Ethernet improvements
- SNMP Interface collection was not populated.
- Unable to add multiple SNMP managers to the same community.
- BPDU Frames on Control Subnet would pass through to LAN.
- Not all properties of CrestronEthernetHelper would output correct values.
- SHOWLICENSEABLE would not always show correct licensable applications.
- Unable to copy current files to backup folder when loading between RM and Internal
- DHCPOPT console command marked the wrong option as default in help response.
- **CLOUDPROXYURL** command doesn’t accept password that contains “@”
- While adding NTP Servers through WebUI, Port and Key field always showed NaN.
- UDPServer will not send packets to join multicast group on router-based products

Known Issues:

- HomeKit doesn’t function properly due to an updated SDK.
  This will be fixed in an upcoming release.

Version 2.6000.00026 August 17, 2021
Changes since last version

Resolved bugs:

- Setting a static IP address on USB Ethernet adapter resulted in unstable processor.
- Secondary \User folder was being created after updating to 2.6000.00020
- Not possible to add multiple SNMP managers on the same community where both have read/write access.
- Fixed an issue with authentication and HTTPS client.
- Router based control systems exposing additional MAC to LAN side.
- Cleared some erroneous error messages from the log.

Known Issues:

- Changing SNTP settings from WebUI can take a long time.
- When using HYDROGENPROXYURL to connect to XiO Cloud, you cannot load control system programs from the cloud.

Version 2.6000.00020 June 16, 2021

Changes since last version

New:

- Added Mono version to **VER -V** output as well as WebUI.
- Added Subject Alternative Name option to **CREATECSR** command. Values with spaces need to be enclosed in quotes.
- Added support for XIO Cloud proxy with **HYDROGENPROXYURL** command.
- FlashPolicyServer disabled. Use **CORE3XPANELWEB** to enable if necessary.

Resolved bugs:

- Not all 802.1x settings reset after a restore.
- Valid 802.1x domain triggers an error when setting through WebUI.
- Unable to upload *.pem*, *.der* and *.p12* certificates through WebUI.
- Loading HTML5 XPanel does not prompt for credentials after a reboot.
- Watchdog does not always restart Logic app after crash.
- User/group deleted from console does not reflect in WebUI until after reboot.
- Outbound communications on USB Ethernet LAN not working.
- Added check to prevent USB Ethernet to be set with invalid (0.0.0.0) IP address.
- “Invalid Static DNS address” error when changing network settings through WebUI.
- Console symbol hangs after sending specific characters.
- LogicEngine crashes when progcomments console command is written to audit log.
- Programs hangs when using progcomments if “Fusion SSI New or Old program” is present.
- Invalid public key is not rejected when added to user.
- Exception when accessing certificate store through S#Pro program.
- Unable to stop D3Pro program after reloading to the same slot.
- Resolved issue where ancillary devices are not showing up in XiO Cloud after network outage on control processor.
- Unable to start S#Pro program with spaces in the name.
- Router based CS: **IPCONFIG** displays improper data.
- Router based CS: Port map not being removed from WebUI.
- Logging into WebUI with invalid credentials does not show blocked message.

Version 2.5001.00006 March 16, 2021

Changes since last version

New:

- Added support to report Crestron Driver status to XiO Cloud.

Resolved bugs:

- Resolved issue where CrestronAuthentication.Authentication.GetGroups wouldn't return all groups.
- Resolved issue where CWS would return HTTP code 403 when HTTP OPTIONS was used.
- Resolved issue with 802.1X.
- Resolved issue where RESTORE would delete contents on RM2.

Version 2.5000.00014 January 5, 2021

Changes since last version

New:

- Added support for HTML XPanel.
- BTL Certification for BACnet stack.
- Added support for passwords with spaces.

Resolved bugs:

- Improved reconnection logic for XiO Cloud.
- Resolved issue where the Put method of HttpsClient.DispatchAsync() didn't return the correct response code.
- Resolved issue generating RVI files.
- Resolved console issue with regard to debugging SIMPL Windows programs.
- Improved message when PUF for other control system is attempted to being loaded.
- Resolved issue where some console commands caused additional prompts.
- Resolved Audit Log issues for parameters with spaces.
- Resolved issue where log was not persisted through reboots.
- Resolved issue where an rmlog folder wasn't created automatically.

Version 2.4617.00032 October 30, 2020

Changes since last version

Resolved bugs:

- Resolved issue with COM port.
- Security update for infiNET EX protocols.
- Resolved issues with IOP Communications at startup.
- Resolved output issue with SNTP command.
- Removed extraneous error messages in the log.

Version 2.4617.00020 October 12, 2020

Changes since last version

Resolved bugs:

- Resolved issue with Websocket class implementation, where internal buffer could overflow. This caused interoperability issues with Sonos firmware upgrade.
- Resolved issue where serial joins on SNMP symbol would show part of previous values.
- Resolved compatibility issue with Josh.ai modules.
- Resolved access to folders by user program
- Added **TOP** command.
- Added support for **SNMPALLOWALL.**
- Improved **TASKSTAT** command.
- Resolved issue where program wouldn't have access to everything in the user folder.
- Resolved Remote Syslog issues.
- Resolved several SNMP issues.
- Resolved BACnet issues.
- Resolved RMLOG issues.
- Resolved issue where 802.1x wouldn't work correctly with static IP addresses.
- Created new temp directory for user programs.
- Resolved issue where when USERPAGEAUTH was on, the user wasn't redirected properly after authentication.
- Removed extraneous Ethernet error messages from log.

Version 2.4508.00035 August 23, 2020

Changes since last version

New:

- Added support for Mobile Room Control via Crestron ONE™ app. Crestron ONE app allows you to connect and control a Crestron programmed smart room from a personal mobile device.
    - Supported System Requirements
        - 60-Series Firmware (minimum version tsw-xx60_3.000.0014.001)
            - Models: versions that include Bluetooth, excludes the models with "-NC" in the product name as these do not include Bluetooth
        - 4-Series Control Processors (minimum version 2.4508.00035)
            - Models: CP4, MC4, CP4N, DIN-AP4, RMC4
        - After the free 60-day trial period expires on control processor, a Mobility License is required and applied to the control processor to enable Mobile Room Control functionality.
            - Trial period is included within firmware, no trial license is required. To activate the 60-day trial period, follow the instructions within the "Programming Guide: Crestron ONE™ App" under the Resources section of the Crestron ONE Product Page

Resolved bugs:

- Resolved an issue where power cycling AppleTV would cause user program losing AppleTV target.
- Resolved an issue where USB HID devices behaved differently on a 4-Series than they did on a 3-Series.
- Added full support for USB-Ethernet adapter.

Version 2.4508.00032 August 13, 2020

Changes since last version

Resolved bugs:

- Turned Cross-Site Request Forgery protection on by default.
- Improved security of setup pages.
- Resolved issue where IP Table status on XiO Cloud didn't match local setup pages.
- Removed superfluous error messages.
- Resolved issue where UCMD for a program without a UCMD symbol would cause console to hang, and SSH session to force close.
- Added feedback to command that reboot, before closing console connection.
- **WEBINIT** is now available to user accounts with PROGRAMMER level access.
- **AUTONEG** changes now require reboot.
- Improved Remote Syslog behavior.
- Incorrect login attempts over the USB port do not result in account blockage.
- Fixed **KILLPROG** command.

Version 2.4508.00010 June 11, 2020

Changes since last version

Resolved bugs:

- Removed unnecessary messages at bootup.
- Fixed help text on several commands.
- Resolved several HomeKit issues.
- Resolved issue where messages directed only at Remote Syslog were being logged locally.
- Resolved issue where **KILLPROG** would leave behind some settings.
- Added audit logs to FTP folder structure.
- Improved stability of IOP communications
- Several BACnet stack improvements.

Version 2.4474.00017 April 30, 2020

Changes since last version

Resolved bugs:

- Resolved issue with 4-Series as an ethernet slave.
- Resolved issue with 4-Series webserver not serving up generic files.
- Resolved issues with Remote Syslog connection stability.
- Resolved several setup web page user experience issues.

Version 2.000.0039 March 12, 2020

Changes since last version

Required update

- Stability updates
- Support Project and Program load via Crestron XiO Cloud

Version 2.000.0035 February 11, 2020

- Initial Release

Known Issues

- Setup webpages sometimes do not auto-refresh, and a manual refresh is required.

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