



# **Control4 Operating System (OS) Release Version 2.8.0 Release Notes**

# Control4 Operating System Release Notes

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Control4, a leading provider of the operating system for the smart home, delivers intelligent control of consumer electronics products, appliances and networking systems through an easy-to-use and intuitive software interface. Founded in 2003, the company delivers affordable automation and control of lighting, music, video, HVAC, security, and energy management systems to the broad market through more than 1,600 custom integrators, retail outlets, and distributors in over 65 countries. Control4 is the platform of choice for major consumer electronics companies, hotels, businesses and utilities that require an intelligent, open and affordable control solution. For more information visit [www.control4.com](http://www.control4.com).

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## 1. Introduction

This Control4® Operating System 2.8.0 (OS 2.8.0) release is a major milestone release with many new features to explore. We have refined the Security experience to match our Lighting and Comfort user interface changes made in previous releases. To offer convenient, remote (and local) access to the full, enhanced Security experience, the Locks interface is now also available on the Control4 apps for iOS and Android allowing for greater access to managing and securing your home.

Wait until you see how we reimagined the My Movies and Channels experiences with a crisp, modern look. We mirrored these changes on the Listen experience to give a fresh, clean look and feel to My Music and Stations. You can also now connect and stream from your mobile devices over AirPlay® without having to add additional hardware to your system. This is accomplished by a unique new driver called ShairBridge.

The newly shipping T3 touch screens were not forgotten, either. We added the ability to create and configure custom wallpapers and configure several new types of screen savers. New dealer tools—such as the ability to backup and restore your project from the cloud, a new agent to automatically backup to the cloud, a UI Configuration agent to streamline new touch screen deployment, and more—make your time more productive than ever.

As with each release, we added pertinent maintenance fixes into the release as well as much more. Have fun exploring all the new items coming to you in OS 2.8.0.

## 2. New Security Experience



### 2.1 New Security Panel Experience in Navigators

For systems that are using the drivers written to the new interface mentioned above, a completely redesigned Navigator Security Experience will be available. This interface is much more user friendly and aligns nicely with the new thermostat and pools/spa experiences. New features include the ability

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to easily change system partitions without having to change rooms, a new zones page that allows you to see all zones in a partition and their states, the ability to bind relays/PGMs to corresponding zones so that you can trigger actions based on an open zone (e.g. if a gate zone shows the gate is open, by just pressing the gate zone, it can trigger the corresponding gate relay, closing the gate, and resolving the open zone), and a new security history page that reads historical incidents from the new History agent allows users to see multiple incidents together and see the context of events. For example, a legacy driver can show a motion sensor is triggered in the living room on the Navigators. With a new driver designed for the History agent, a user will be able to see that the motion in the living room was preceded by glass breaking in the cellar, motion in the backyard, and a tripwire detector triggered on the back fence.

OS 2.8.0 Navigators will also continue to support legacy drivers (those using the older proxy interface). The user experience for those drivers will be the older keypad-looking interface.

## 2.2 New Security System Drivers

With this release, Control4 has significantly improved the support for security system drivers, including new and improved security proxies, a new security system driver template, and sample drivers. Using these tools, Control4 has also created several new security system drivers including Interlogix Concord 4, DSC PowerSeries IT230 and PowerSeriesNEO TL280, and Honeywell Vista. Several third-party driver developers are also preparing drivers using this new interface to be delivered in the OS 2.8.0 timeframe.

Systems running on OS 2.8.0 will continue to support drivers that use the older proxy interface, so there should be no issues leaving existing drivers in projects when updating to OS 2.8.0.

## 2.3 Mobile Locks Experience

In OS 2.7.0, Control4 shipped the new T3 generation touch screens. On these touch screens a new locks management experience was introduced, allowing customers to manage the user accounts/codes on all of their locks with unprecedented ease. In OS 2.8.0, this new experience has been extended to mobile devices including iOS phones and tablets, as well as Android phones and tablets. Now, from anywhere in the world, a home owner can manage the codes of the locks in their homes from their mobile devices. This should greatly ease managing homes, vacation homes, rental homes, and businesses.

## 3. New Watch Experience

### 3.1 My Movies

The experience for watching locally-stored movies has greatly improved in OS 2.8.0 with a completely updated, Media Service Proxy (MSP)-based UI and support for high-resolution cover art. New features include an improved movie cover art grid view, a new movie details page, and enhanced search functionality.

High-resolution cover art can be added either through a Gracenote lookup/scanning process or by manually uploading graphics within Composer. To update the cover art of pre-OS 2.8.0 movie libraries to high-resolution cover art, you will need to select the "Replace Saved Image with Lookup Image" checkbox on the Media Scanning Options page in Composer. Otherwise, Composer will use existing

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cover art stored in the media database and will display it on the new My Movies UI. Additionally, media lookup of MKV video files is now an option on the Media Scanning Options page.

### 3.2 Channels

The experience for browsing favorite TV channels has been upgraded in OS 2.8.0, featuring a beautiful new, MSP-based UI and improved channel icons. In addition to higher-quality icons, you will find that when doing a local channel lookup in Composer, search results will return icons for more channels than ever before. Please note that the improved lookup capability is applicable only to US locations in this release. As an alternative, higher-quality channel icons can be manually added for each channel within Composer, regardless of location. To update the channel icons of pre-OS 2.8.0 projects to the higher-quality icons, it will require that you delete all existing channels and perform a new channel lookup. Otherwise, Composer will use existing channel icons stored in the media database which will be displayed on the new Channels UI.

## 4. New Listen Experience

### 4.1 My Music

Much like My Movies, the experience for listening to locally stored music collections has taken a big leap forward in OS 2.8.0. My Music includes a gorgeous, new UI with an album grid view featuring high-resolution cover art. Additional features include the ability to toggle between grid and list view when sorting through your albums, a new album details page, and enhanced search functionality.

High-resolution cover art can be added either through a Gracenote lookup/scanning process or by manually uploading graphics within Composer. To update the cover art of pre-OS 2.8.0 music libraries to high-resolution cover art, you will need to select the "Replace Saved Image with Lookup Image" checkbox on the Media Scanning Options page in Composer. Otherwise, Composer will use existing cover art stored in the media database and will display it on the new My Music UI. Additionally, media lookup of AIFF and OGG audio files are now listed as options on the Media Scanning Options page.

### 4.2 ShairBridge

ShairBridge is Control4's new software-based implementation of AirPlay, allowing AirPlay-enabled devices to stream audio to a Control4 system. Multiple instances of the driver (up to 20) can be added to a project and will almost immediately show up as available AirPlay endpoints on AirPlay-enabled devices. Similar to the Wireless Music Bridge, each instance of the ShairBridge driver can be set up to automatically turn on an audio zone or group of zones when audio is streamed to an AirPlay endpoint.

**Important:** ShairBridge will only work with an HC-800 as the primary controller. An HC-250 or HC-1000 as the primary controller is *not* supported. ShairBridge audio can, however, be streamed to secondary controllers and speaker points serving as audio end-points when an HC-800 is the primary controller. The maximum number of *simultaneous* ShairBridge/Airplay streams (AirPlay-enabled device streaming to a ShairBridge/Airplay end point) should not exceed 8. In addition, the maximum number of ShairBridge/Airplay audio outputs is limited by the number of physical outputs available on Control4 audio end points (controllers and speaker points) in the system.

**Special note regarding Airplay streaming with iOS 9 devices:** In iOS 9, significant changes were made to the Airplay protocol, which has disabled the display of cover art and metadata on Control4 navigators when using ShairBridge. When an Airplay stream is initiated using iOS 9, all navigators will display "Now Streaming" and default cover art (music note). All other functionality (audio streaming,

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transport controls, etc.) is still completely functional. Control4 is investigating the issue with the goal of restoring metadata and cover art from iOS 9 devices.

### 4.3 Stations

Similar to Channels, the experience for browsing radio stations has also improved in OS 2.8.0 with a beautiful new, MSP-based UI. Stations are sorted by Station Name, Source, and Genre and can be toggled between grid and list view. Station icons available through the lookup process have not changed in OS 2.8.0. If updating a pre-OS 2.8.0 project to OS 2.8.0, any station icons stored in the media database of the project will be displayed in the new Stations UI.

### 4.4 Native Streaming Service Drivers

Control4 is excited to announce the availability of three new media service proxy drivers—Pandora, TIDAL, and Deezer. All three run natively on Control4 systems and do *not* require integration with external hardware! Each driver can be added to an OS 2.8.0 project by searching the Online Database within Composer Pro.

#### 4.4.1 Pandora

The top streaming audio service Control4 customers have been asking for is now available! Pandora now runs natively on Control4 systems with no external hardware required. This brand new implementation of Pandora features a custom UI, built exclusively for the best Pandora experience. Adding Pandora in new projects based on OS 2.8.0 is simple—just add the Pandora driver to the project and log in to a valid Pandora account.

Multiple Pandora drivers can be added to support multiple streams. Generally each driver will have its own account. However, a single account can be used in multiple drivers. **Only one stream is allowed per driver.** If the driver is playing in a zone and the driver is accessed from a room not in the zone, the room will be automatically added to the zone. This enforces the one stream per driver rule.

New Pandora accounts can be set up at <http://www.pandora.com/account/register>.

**Note:** Pandora is only supported on systems with OS 2.8.0 or greater installed.

#### 4.4.2 TIDAL

By using lossless FLAC streaming (full CD quality with no compression), the new TIDAL service and MSP driver deliver a high-fidelity audio experience to Control4 customers. This driver features a completely new UI designed for a simple user experience. Adding TIDAL to a Control4 system is simple—add the new TIDAL MSP driver to a project and log in with a valid TIDAL account. New TIDAL accounts can be set up at <http://tidal.com/us/try-now>.

**Note:** For best performance, OS 2.7.0 or greater is recommended for this driver.

#### 4.4.3 Deezer

Another service often requested by Control4 customers, Deezer delivers an extensive library of music from all over the world, showcasing the latest artists and hits, as well as suggested, personalized content based on listening history. This driver also features a new MSP-based UI, designed for a fun audio browsing experience. To add Deezer to a Control4 system, add the driver to a project and log in with a valid Deezer account.

**Note:** Availability of *new* Deezer accounts is currently limited in the US due to Deezer exclusive agreements with Sonos, Bose, and Cricket. Active Deezer accounts *can* be used with this driver for full access to Deezer through Control4. For best performance, OS 2.7.0 or greater is recommended for this driver.

## 4.5 Advanced Audio

### 4.5.1 Advanced Audio Now Default

Advanced Audio is Control4's latest audio (Digital Media) platform, providing superior quality, lower latencies, and support for future audio features. In OS 2.8.0, Advanced Audio is enabled by default, with a few stipulations. If audio inputs or outputs from HC-200, HC-300, HC-500 Controllers or Speaker Points (unless in Local Amp & Advanced Audio Modes) are bound in the project, Digital Media will instead default to Legacy Audio Mode. Legacy Audio Mode will provide the same level of audio performance that was available pre-OS 2.8.0/Advanced Audio.

Digital Media properties can be viewed by selecting the System Design Tab, then the Digital Media icon in the system tree pane within Composer Pro.

### 4.5.2 Advanced Audio and Speaker Point

In order to enable Advanced Audio when a Speaker Point is part of a project, two Speaker Point settings (located on the Speaker Point properties screen) will need to be selected—Local Amp Mode and Advanced Audio Mode.

**Local Amp Mode** ensures that the Speaker Point's analog audio input is used for local amplification only and therefore disables any outbound digital media streaming. By itself, Local Amp Mode still functions in Legacy Audio Mode. However, the additional Advanced Audio Mode checkbox will need to be selected for the Speaker Point to be compatible with Advanced Audio.

**Advanced Audio Mode** ensures that the Speaker Point is completely compatible with Advanced Audio and disables inbound digital media streaming.

In summary, the Speaker Point, when in Advanced Audio Mode, will function only as an amplifier for a locally-connected source and will not be able to receive or send digital media streams.

**Note:** Manually starting AudioServer through sysman can result in undesired behaviors. The check boxes in Composer configure the Speaker Point as needed. Any overrides done through sysman will cause problems.

## 5. Touch Screen Components

### 5.1 Wallpapers on T3 Devices

OS 2.8.0 includes 15 new default wallpapers plus the option for dealers to include up to ten custom wallpapers on a per-project basis.

#### 5.1.1 Default Wallpapers

Fifteen new default wallpapers are available for customer and dealers to pick from under Settings > Wallpaper. The wallpapers include a range of different colors, textures, and styles to allow for choice across different décors or needs in a home or business setting.

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New to Composer Pro 2.8.0 is the UI Configuration agent (see below). The UI Configuration agent allows you to apply a wallpaper to all T3 touch screens from within Composer, either locally or remotely. This gives you the convenience to set the wallpaper on all, groups, or individual T3 devices from within Composer rather than needing to walk to each device and pick a wallpaper.

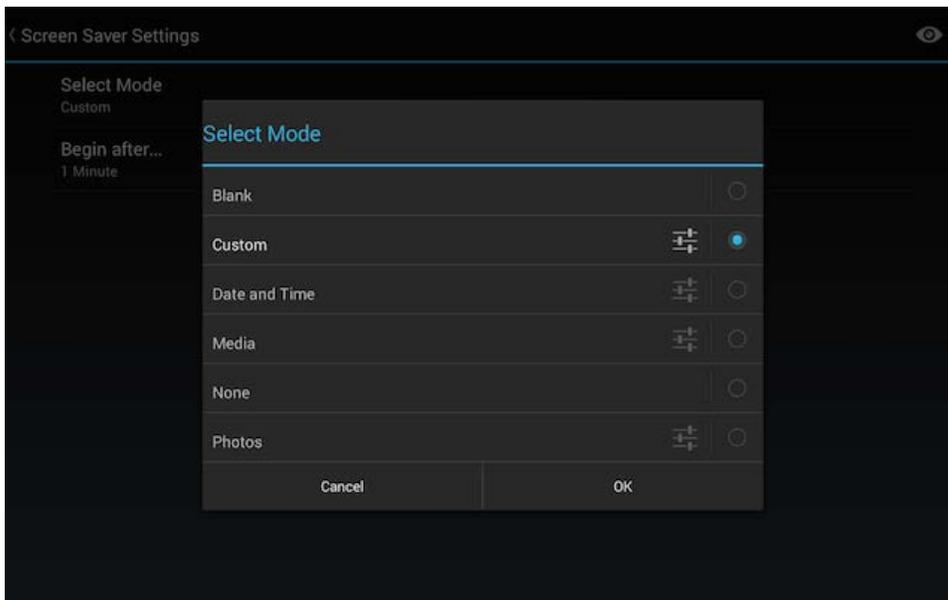
### 5.1.2 Custom Wallpapers (Optional)

OS 2.8.0 includes an option for dealers to add up to ten (10) additional "Custom" wallpapers. This is done inside the UI Configuration agent (see below) from within the Agents section of Composer. After adding custom wallpapers, customers will see both default and custom wallpapers in the same wallpaper picker on the touch screens.

All custom wallpapers should be created to fit the full screen of the T3 devices at a resolution of 1280 pixels wide by 800 pixels high (1280x800) for the best viewing experience. Images that are not created to fit the full screen will be scaled to fit the screen, resulting in trimming and possible unwanted visual artifacts.

**Note:** When custom wallpapers are selected, the Control4 logo in the center of the home page will *not* be shown. Only default wallpapers show with the Control4 logo in the center of the home page.

## 5.2 Screen Savers on T3 Devices



OS 2.8 SCREEN SAVER MODES

OS 2.8.0 includes new screen savers options in addition to the previously available None, Blank, and Date and Time screen savers.

New screen savers include:

### 5.2.1 Current Media Screen Saver

The Media screen saver will present visual information about the audio that is playing in a room, including cover art, track title, album information, and artist. There is an optional preference setting

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with the Media screen saver that can be set to show the Date and Time when there is no current media playing in a room.

### 5.2.2 Photo Screen Saver

The new Photo screen saver provides a way to present photos on T3 devices. As with previous versions of the Control4 OS, the Photo screen saver requires that the Screen Saver agent be added to a project, that a file location for photos is specified, and that photos are added to the Screen Saver in the Media section of Composer. Photos stay in sync across multiple panels in a system and rotate together on a time interval picked by the dealer or customer, just as with previous OS releases on Flash touch screens.

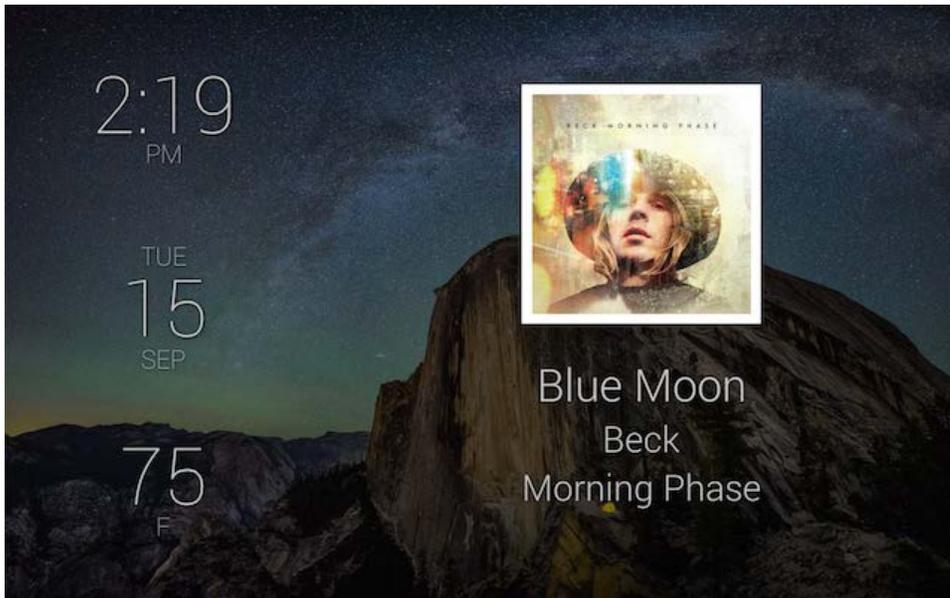
A new preference setting is available to the Photo screen saver on T3 devices. This preference allows you to fit images to fill the full screen on the T3 device or display the image at its normal ratio with letter or pillar boxing around the image.

**Note:** For projects that already have the Screen Saver agent and photos in a project, the T3 devices will automatically leverage the previous work when choosing the Photo screen saver.

### 5.2.3 Custom Screen Saver

The new Custom screen saver is similar to what was offered on Flash touch screens, but with a new style and layouts. The Custom screen saver allows the dealer or customer to create a screen saver that displays one or more of the following options:

- Time—the current time
- Date—the current date
- Temperature—the current outside temperature (requires setting the location in a project with Composer)
- Media—when audio is playing, the cover art, title, album, and artist information is presented.
- Photo—a background image from the collection of photos added using the Screen Saver agent. Please note, that the image will be slightly darkened by the system so other information from the Custom screen saver settings is visible on top of the photo.



CUSTOM SCREEN SAVER WITH ALL OPTIONS CONFIGURED

## 6. Intercom Changes

### 6.1 Group Calls

In the previous release, an intercom call to a group behaved differently, depending on the type of touch screens in the project. In this release, group calls will always function the same, regardless of which touch screens are being used.

When the user presses a group button on the intercom page, all of the touch screens in the group—that don't have the "Do Not Disturb" or "Monitor Mode" properties enabled—will immediately answer the call and begin broadcasting audio.

### 6.2 Door Station Call Enhancements

The 'Broadcast Call' option for the Control4 Door Station has been discontinued and replaced with what was previously known as the 'Forking Call' option. The 'Forking Call' option has been renamed to 'Group Call'. Any door station that was using the 'Forking Call' or 'Broadcast Call' options will now use the 'Group Call' option.

It is no longer necessary to use an alternate camera when using the 'Group Call' option for the Control4 Door Station in order to see video preview on a T3 touch screen. Video preview on T3 touch screens will work using the camera of the Control4 Door Station. Alternate cameras can still be used if desired.

## 6.3 Incoming Call Notifications

Incoming call notification support has been added for all touch screens. When a touch screen is in a call, the user will be notified of a second incoming call, and will have the option to ignore or answer it. For incoming door station calls, answering will cause the video preview to be displayed, and then the option is given again to answer or ignore the door station call. When an incoming call is answered, the first call is ended.

## 6.4 Third-party SIP Phone Support

It is recommended that customers use the Bria SIP phone application for OS 2.8.0, because it is now supported for both iOS and Android devices. Groundwire does not support multi-cast calls, which is the type of call that Control4 Door Stations make in this release. SIP phone applications must support multi-cast in order to receive calls from the Control4 Door Station. Calls from supported third-party door stations, and device-to-device calls from Control4 touch screens can still be received by Groundwire.

## 7. Lighting Changes

### 7.1 Panelized Interlock Feature

A new interlock feature has been added to the Panelized Relay Module to improve compatibility with dual-relay blind motors. This allows you to configure pairs of channels in interlocking mode so that both channels cannot be on at the same time, preventing accidental motor damage. To configure the Relay Module, press and hold channels 1 and 8 at the same time. You will see all channel LEDs light up. A green LED indicates that the channel is in normal individual mode. Flashing yellow LEDs indicate that the two channels are in interlock mode. To change the mode, just click the Channel button for one of the channels. Note that you cannot pair any two random channels together. Interlocking will only work on adjacent channels in odd/even pairs, i.e. 1:2, 3:4, 5:6, and 7:8. To exit the setup, press and hold the Module Override button.

### 7.2 Arc-Fault Changes

Changes have been made to the Dimmer Module firmware to help prevent nuisance tripping with arc-fault breakers. These include:

- Minimum click ramp rate of 250ms (with dimmable load). This minimum ramp rate is enforced in the firmware and in Composer.
- Upon a power cycle, channels on the module that were previously on will turn back on in a slightly staggered manner and use the defined click ramp rate rather than all channels instantly turning on.
- Upon binding the module to the module driver, any necessary auto detects will be slightly staggered.

### 7.3 MOSFET Fault

To prevent damage to connected loads, the Dimmer Module now detects if a MOSFET on one channel is damaged. If so, it opens the air-gap relay for that set of four channels (i.e. 1-4 or 5-8). In a MOSFET fault state, the LED for the damaged channel will be flashing red and the LEDs for other three channels on the same air-gap relay will be solid red. To clear the fault, remove power from the

module, disconnect the load wire from the damaged channel, and then repower the module. The module should be RMA'd but can continue operating with no load connected to the damaged channel until a replacement can be installed.

## 8. Thermostat Changes

### 8.1 Progressive Recovery

If you have progressive recovery enabled (installer menu 26) the equipment will turn on before the next scheduled event so the space reaches the desired temperature at the start of the next event.

### 8.2 Offline Schedule

Offline schedule is a feature that if for any reason the C4-THERM can no longer communicate to Director the schedule will continue to run as normal until communication is restored.

## 9. Composer Changes

### 9.1 Cloud Storage

Control4 now provides cloud storage for customer and dealer accounts via [customer.control4.com](http://customer.control4.com). A current 4Sight subscription is required to utilize cloud storage. Control4 allows storage of up to ten project backups. When the agent or Composer creates a new backup, and the new backup causes more than ten to be stored, the oldest backup is automatically deleted. Depending on how often backups are scheduled, there can be from ten days of backups or as long as ten weeks.

Cloud storage requires a valid 4Sight license to configure and perform backups. If a 4Sight license expires, no further backups will be performed, but the existing backups stored on the Control4 cloud will not be deleted.

### 9.2 Cloud Backup from Composer

When creating a backup to the cloud using Composer Pro or Composer HE, the user will select **File | Backup to Cloud...** When backing up a project using Composer Pro or Composer HE, all project backup files are first saved on the local hard drive. The Composer user will specify the local filename for the project and the backup options. After the local backup has been created, it is then automatically copied to the cloud storage location for the customer account. Some characters which are supported in the filename of the operating system cannot be used in cloud storage. For best results use only basic ASCII characters, excluding symbols and punctuation, for filenames that will be stored in cloud storage.

### 9.3 Automatic Project Backup via Backup Agent

The Backup agent is automatically added to all new or updated projects. The Backup agent allows creating a scheduled backup of the project that is automatically uploaded to Control4 cloud storage.

We recommend performing an automatic backup once per week on a day and at a time when the homeowner will not be inconvenienced by using the bandwidth to upload the file. We also recommend keeping the automatic backup small and constrained to only the critical data to facilitate a controller

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replacement or critical recovery. For this reason, screen saver images cannot be included in the automatic backup. Screen saver images are not usually stored on the controller.

The Backup agent UI includes a “Save and Back Up Now” feature that will create and upload the project backup with the current agent settings. This is a convenient way to make a quick backup to test connectivity or following critical changes.

Backup agent supports two programming events, one for a backup successfully created (Backup Created) and one for when a backup fails (Backup Failed). A variable (LAST\_MESSAGE) is useful to include in a notification or e-mail attached to these events. This variable contains the success or error message, such as failure if the 4Sight license has expired.

To restore a backup created by the Backup agent, use the Cloud Management features in Composer.

Backup files created in the backup agent use more aggressive compression than Composer backups and are therefore often smaller in size.

### 9.4 Cloud Backup using Composer Express

Composer Express allows the Installer to configure the Backup agent for scheduled backups. It also allows an immediate backup to be performed.

### 9.5 Cloud Management from Composer

The interface for viewing project backups that are stored in the cloud is included within Composer Pro and Composer HE. There is not currently a web interface for viewing these projects.

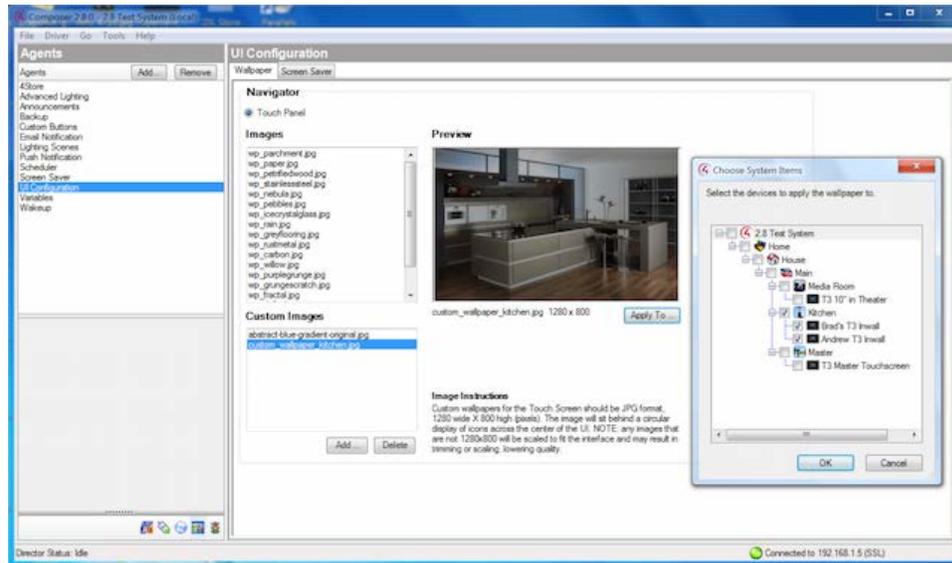
The Composer Pro user will default to the currently registered account. However, all of the Dealer's customer accounts can be accessed through this interface, including the dealer account itself. The dealer account is at the head of the list.

**Note:** Currently, in OS 2.8.0, the ability to access and manage cloud backups are restricted to the account with which you are logged in. This means that dealer accounts will only be able to see and manage cloud backups for individual customer accounts that are associated to that dealer account. If you have a sub-dealer account associated to that same dealer account, you will not be able to see and manage the cloud backups for the customer accounts associated with that sub-dealer account while you are logged in as that dealer. You will need to be logged in with the sub-dealer account to manage those backups associated with the sub-dealer. We plan on enhancing this in a future web services release.

### 9.6 UI Configuration Agent

The UI Configuration agent provides dealers with one-stop UI to update all wallpapers and/or screen savers on the new T3 touch screens and tablet top devices. This alleviates the need to walk to each panel to set the wallpaper or screen saver. It also allow dealers to update these settings from a remote location.

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UI CONFIGURATION AGENT

By adding the UI Configuration agent to a project, you can choose a wallpaper and apply the wallpaper to all T3 devices in a system using an "Apply To..." model. In addition, you can also set the screen saver settings for all T3 panels in the house using the same "Apply To..." model as wallpapers.

The UI Configuration agent also allows dealers to add up to ten (10) custom wallpapers. These custom wallpapers can be applied to T3 devices using the UI Configuration agent. These wallpapers will also be available for customers to pick from using the T3 Wallpaper picker interface.

### 9.7 System Manager Access from Composer's Connect To: Interface

When Composer Pro starts up, it presents an interface to allow the Installer to connect to a virtual, local, or remote system. For convenience, we have added a link to start System Manager to this same interface. This allows for easier access to System Manager when performing an installation or troubleshooting.

### 9.8 Composer Help | Chat with Support

The Composer user, when on site or in need of assistance, can select **Help | Chat with Support** to initiate a chat session with Control4's Technical Support team.

### 9.9 Advanced Lighting Scene Agent Enhancements

Added new "Get Light Levels" feature that sets the "Level" value for each light in the scene to the current light level. This works the same as the "Learn" feature that is available when editing lighting scenes from a Navigator UI. This makes it easy to create a scene based on current light levels.

Added gridlines to make it easier to see and maneuver through the scene.

## 9.10 Engraving Enhancements

Engraving report has been greatly improved, changing from the old tabular style to a new graphical style. Engraving is now represented on a 1:1 scaled image of the keypad itself in the appropriate color. Additionally, icons are now shown as they would actually appear on the engraved button rather than as “<icon 16>”. The new report should make it much easier to review the engraving with a customer. Additionally, the keypad images from the report can be cut out and taped to the wall next to the actual keypad while waiting for the engraving to be installed.

When exporting an engraving order, it is now possible to select which devices to include in the engraving order.

Thumbs Up and Thumbs Down icons have been added.

When configuring keypads, a new “Copy name to engraving” button makes it easy to copy the information from the button name field to the engraving field.

It is now possible to paste text into the engraving field. Previously this was prevented to ensure that non-engravable items did not get included in engraving orders. When pasting text, Composer now checks the pasted text to ensure that it can be engraved using our engraving font.

## 10. Composer Express changes

### 10.1 Composer Express – Customer Accounts Page

More details about the customer account are now shown in the initial customer list. You can now see which customers have registered controllers and what OS version is installed.

You can now search for accounts using Last Name, Email, Account Name or MAC Address of controller.

We also added the ability to extend a customer’s 4Sight license by applying multiple licenses.

### 10.2 Composer Express – Networks Page

A new Networks Page (accessible from Project > Settings > Networks) makes it easy to configure all of the network settings on the controller. This includes Ethernet, WiFi and ZigBee Networks.

### 10.3 Composer Express – Design Page

The Composer Express Design page enhanced the Local and Online driver search by adding a Category selector (similar to driver search in Composer Pro). Limits the results to devices in a specific category, for example, all DVD players or all Motion Sensors.

### 10.4 Composer Express – Digital Media

Added support for setting the properties of the Digital Media driver.

Added support for setting the properties of the Network File Storage driver including discovery of networked media shares.

**Note:** Composer Media Edition or Composer Home Edition should be used by Installer or Customer to manage locally stored digital music, playlists, favorite channels, and movie databases.

## 11. Web Services Changes

### 11.1 Change account names from web services

Along with OS 2.8.0, Web Services continue to add requested features to my.control4.com. Web Services 2.15, which is available now, allows dealers and technical support personnel to change the account name for their customers. Just navigate to the Customer Support menu and perform a customer Account Search. Accounts that are associated with the dealer account will be editable by clicking on the pencil button.

## 12. Life Cycle and Maintenance Changes

There are no new life cycle changes between OS 2.7.0 and OS 2.8.0.

## 13. Updated Firmware

The table below lists any firmware that has received an update with OS 2.8.0. If the firmware has not been updated in this release, then it isn't on this list.

Control4 Devices	Firmware Version
C4-THERM	4.1.22
Panelized Lighting	03.24.73
Range Extender v3	4.0.12
SR-250	03.26.17
SR-260	2.1.68

## 14. Upgrading to OS 2.8.0

There were some major changes in OS 2.6.0 that still apply with OS 2.8.0. They will require careful consideration if you are not already on OS 2.6.0 or higher. These changes include some life cycle changes, removal of legacy software, and the splitting of mobile apps into two separate applications: one for supporting legacy installations, and one to move forward with the new installation requirements.

### 14.1 T3 Touch Screens

Downloading the update image to T3 touch screens can take many minutes depending on Internet bandwidth and network connectivity. The Downloading Files status bar may seem to stall on 0 of 1 for a long period of time but in reality it is downloading the update image for T3 touch screens. This image is a very large single package. *It is important to let Update Manager complete both the download and update processes.*

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If the update was interrupted during the download process, we have seen instances where further update attempts may fail on that package. A reboot of the primary controller should work around that issue.

### 14.2 Update Recommendations for Existing Systems

**IMPORTANT!** (1) The OS 2.8.0 release utilizes ZigBee Pro for ZigBee RF communications. Controllers and ZigBee firmware devices upgraded to OS 2.1 or later cannot be downgraded to Release 1.7.4 or prior versions.

(2) The 2.8.0 release inherits the same life cycle policy as previous releases. The last major hardware life cycle change occurred during the OS 2.6.0 time frame. There are no new hardware life cycle changes in OS 2.8.0. For a current list of products and lifecycles, see <http://dealer.control4.com/dealer/support/product-lifecycle>.

(3) OS 2.8.0 is a complete system software release. All supported Control4 devices will receive new software or firmware. The update process will affect all devices in the Control4 system.

#### 14.2.1 ZigBee Pro

Control4 has been utilizing ZigBee Pro for ZigBee RF communications since the release of OS 1.8 in August 2009. With the introduction of OS 2.6.0, you no longer have the ability to upgrade Embernet-based devices, and will continue to be the case in subsequent releases. If you have Embernet-based ZigBee devices in inventory or taken from another system, they must be installed on an OS 2.5.x system and have their firmware updated to ZigBee Pro prior to being installed on an OS 2.8.0 system.

#### 14.2.2 Software License

In conjunction with the OS 2.0 release, Control4 introduced a Software License. All new controller hardware product purchases include a Software License. This same license applies to OS 2.8.0. Customers who have systems purchased prior to OS 2.0 can purchase a software license for OS 2.8.0.

- The Software License is an electronic license purchased by the Control4 Dealer using their my.control4.com dealer account credentials or through the standard purchase order process.
- A dealer must purchase and assign a license to the customer's Control4 account (to which the system is registered) to upgrade prior-version systems to OS 2.8.0. If an upgrade is to be performed immediately after adding a license, the dealer should perform a "Check In" using Composer Pro (Tools > Account Services).
- Customers who have previously updated their systems to any OS 2.x version will have the needed license to update to OS 2.8.0.
- Control4 provides a no-charge OS 2.x license for controllers shipped on/after December 23, 2009. No paperwork or manual approval is required to receive the no-charge upgrade. To receive the no-charge upgrade, the eligible controller must be the Primary Controller for the Control4 system. During the upgrade process, Update Manager will check the MAC address of the primary controller. If it is in the Control4 list of controllers shipped on/after December 23, 2009, the upgrade will proceed without requiring a software license.

## 14.3 Quick Reference to the OS 2.8.0 and Later Upgrade Process

### 14.3.1 Pre-work Prior to Arrival at the Customer's Location

Ensure that **Composer Pro for OS 2.8.0 and later** has been installed and activated on the installer's laptop or PC. Internet connectivity is required for activation for first-time installations.

1. **Internet connectivity is required on the premises for upgrading from OS 2.2.x to OS 2.8.0 and later.** After the Primary Controller has been updated to OS 2.8.0, the USB Install for OS 2.8.0 can be used to update the remainder of the devices on the system. Ensure that Internet connectivity is available or plan for temporary Internet connectivity during the time the upgrade is performed. You can then upgrade the system to OS 2.8.0.
2. **If a software license is needed, use your dealer account** on my.control4.com to assign the license to the customer's account.
3. **If updating from Release 1.7.4, 1.8.2, or a prior version,** you must first upgrade them to 2.2.x before they will be allowed to upgrade to OS 2.8.0

### 14.3.2 Upon Arrival at the Customer's Location

1. Connect to the Control4 system using the appropriate version of Composer Pro for the system that is currently running.
  - a. Ensure that all IP and ZigBee devices have been identified and are online.
  - b. Ensure that all system programming is working as it should prior to beginning the update.
  - c. **Make a backup of the Control4 system in Composer Pro prior to beginning the update.** This backup should be named so that you can find it later if needed.
2. (Optional) Make sure that the customer's media collection is backed up. Whether the media is stored on a Control4 controller hard drive, a USB drive, or a network-attached storage device, it is subject to loss if the storage device fails. Control4 doesn't provide backup solutions for data storage, but recommends that you ensure that customers use a backup solution.
3. Connect to the Control4 system using Composer Pro 2.8.0 (or later) to initiate the upgrade to OS 2.8.0 or later, and then use Update Manager to begin the update process.
4. At the conclusion of the update, reboot the PC running Composer Pro to ensure that the Samba mounts to the controllers are current.
5. **Back up the project.** After completing the update, make a backup file of the Composer Pro project. Give it a name that distinguishes it from the pre-upgrade backup. If you ever need to restore this system, having a current backup will save you a lot of time and effort.

## 14.4 Residential Software Product Releases

Control4 Software Releases (from Inception)		
Release 1.x.x		
Wednesday, July 06, 2005	1.0.203.8	Initial Release
Friday, September 02, 2005	1.1.2.2	Maintenance Release
Friday, October 14, 2005	1.2.0.90	Maintenance Release

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<b>Control4 Software Releases (from Inception)</b>		
Thursday, November 03, 2005	1.2.2.6	Maintenance Release
Sunday, December 28, 2005	1.2.3.43	WiFi Support
Monday, March 06, 2006	1.2.4.48	Maintenance Release
Thursday, March 23, 2006	1.2.4.50	Maintenance Release
Tuesday, May 30, 2006	1.2.5.28	Thermostat and Outlet Modules Support
<b>Release 1.3.x</b>		
Thursday, September 07, 2006	1.3.0	Initial Release
Monday, October 16, 2006	1.3.0.351	
Wednesday, December 20, 2006	1.3.1.114	Initial Release
Friday, January 12, 2007	1.3.1.116	
Wednesday, March 07, 2007	1.3.1.120	Daylight Savings Time Change
Tuesday, March 20, 2007	1.3.1.122	
Monday, July 23, 2007	1.3.2.228	Initial Release
Friday, August 03, 2007	1.3.2.230	Maintenance Release—Updating firmware on Amp, Switch, etc.
Thursday, August 23, 2007	1.3.2.234	Maintenance Release—Various fixes, including NAS on HC-300.
Wednesday, October 31, 2007	1.3.2.298	Support for Amplifier V3 Release
Thursday, November 15, 2007	1.3.2.318	Support for HC-1000 Release
Tuesday, February 26, 2008	1.3.2.438	Support for HC-500 Release
Wednesday, April 30, 2008	1.3.2.442	Maintenance Release—Disable Onboard Serial Port on HC-300/HC-500.
Wednesday, June 11, 2008	1.3.2.442	HC300 VBUS Change to Kernel.
<b>Release 1.6.x</b>		
Tuesday, July 29, 2008	1.6.0.486	Initial Release
Wednesday, Sept 17, 2008	1.6.0.512	Maintenance Release, SR-250
<b>Release 1.7.x</b>		

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<b>Control4 Software Releases (from Inception)</b>		
Monday, December 01, 2008	1.7.0.348	Initial Release
Monday, December 29, 2008	1.7.1.290	Dock for iPod Release
Monday, March 30, 2009	1.7.2.160	Remove Polling; HC-1000v2, ELV Dimmer, 7" Portable Touch Screen
Wednesday, April 29, 2009	1.7.3.20	7" Portable Touch Screen Release
Tuesday, September 29, 2009	1.7.3.68	Maintenance Release—Audio priority and 7" Touch Screen
Monday, December 14, 2009	1.7.4.36	Maintenance Release—On-Screen focus and Zones improvements
<b>Release 1.8.x</b>		
Monday, August 31, 2009	1.8.0.44415	Initial Release
Monday, November 16, 2009	1.8.2.56194	Initial Release—multiple ZigBee Servers and Security changes
Wednesday, March 17, 2010	1.8.2.66691	Maintenance Release—Thermostat and B&D Lock
<b>Release 2.0.x</b>		
Tuesday, June 29, 2010	2.0.0.80198	Initial Release
Wednesday, August 18, 2010	2.0.1.86265	Maintenance Release—HC-200B/HC-300C
Tuesday, September 7, 2010	2.0.2.88485	Maintenance Release—7" IE Touch Screen
Tuesday, October 19, 2010	2.0.4.92890	Maintenance Release—Fix snmpd/crond lockup
Tuesday, December 14, 2010	2.0.5.99233	Maintenance Release—HC-200B as primary controller
Wednesday, January 19, 2011	2.0.6.102864	Maintenance Release—5" In-Wall Touch Screen
<b>Release 2.1.x</b>		
Tuesday, June 7, 2011	2.1.0.126418	Initial Release
Tuesday, August 30, 2011	2.1.1.135702	Maintenance Release—Fix Flash Navigator lockups.
<b>Release 2.2.x</b>		

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## Control4 Operating System Release Notes

<b>Control4 Software Releases (from Inception)</b>		
Tuesday, January 31, 2012	2.2.0.158343	Initial Release—HC-800 and 7" Portable Touch Screen with Camera
Wednesday, April 18, 2012	2.2.1.171726	Maintenance Release—HC-250
Monday, June 25, 2012	2.2.2.184775	Maintenance Release—7" In-Wall Touch Screen with Camera, Door Station – Exterior
Wednesday, October 3, 2012	2.2.4.200568	Maintenance Release—Sony STR receiver, Door Station – Interior driver
<b>Release 2.3.0</b>		
Wednesday, December 12, 2012	2.3.0.210826-res	Initial Release—New agents, new Lighting UI, SDDP, new MyHome device management in licensing.
<b>Release 2.4.0</b>		
Wednesday, April 10, 2013	2.4.0.227470-res	Initial Release—Anywhere Access, TuneIn, Remote Recharging Station, and software improvements.
<b>Release 2.5.x</b>		
Thursday, June 6, 2013	2.5.0.235326-res	Initial Release—Next generation of lighting products, new line of Panelized Lighting products, and Wireless Music Bridge.
Thursday, August 8, 2013	2.5.1.242407-res	Maintenance Release—Configurable Decora Wired Keypad, Bus Ethernet Gateway, 48V Bus Power Supply; bug fixes.
Thursday, September 19, 2013	2.5.2.247182-res	Maintenance Release—Audio Matrix Switch, 8x8 HDMI Matrix Switch, 100 Series Power Amplifiers, bug fixes.
Wednesday, February 26, 2014	2.5.3.429171-res	Maintenance Release—Camera proxy, integrity detection & repair tool, WMA support, bug fixes.
<b>Release 2.6.x</b>		
Wednesday, September 10, 2014	2.6.0.455411-res	Initial Release— MSP and Pool UI, parity features, composer express, composer search/filter tools, dry input contact, new 48v power supply life cycle changes, bug fixes.

## Control4 Operating System Release Notes

Control4 Software Releases (from Inception)		
<b>Release 2.7.x</b>		
Tuesday, March 24, 2015	2.7.0.505218-res	Initial Release – Touch Screens, Thermostat v2 (C4-THERM) and Thermostat UI, SR-260, Composer Tools, Mobile Changes
Tuesday May 5, 2015	2.7.1.506055-res	Maintenance Release – Defect fixes and new manufacturing image for T3 in-wall touch screens.
Thursday June 25, 2015	2.7.2.507543-res	Maintenance Release – Defect fixes and T3 7" Tabletop.
<b>Release 2.8.x</b>		
Wednesday, October 14, 2015	2.8.0.512161-res	Initial Release – Security, My Music, Movies, Channels, Cloud Backup, T3 Wallpaper & Screensaver, and defect fixes.

## 15. Technical Support Contact Information

If you encounter any issues during or following the update, or if you have any questions, please contact Control4 Technical Support for assistance.

**Phone:** 1-888-400-4072

**Email:** [support@control4.com](mailto:support@control4.com)

For more information about the new features and capabilities of OS 2.8.0 or later, visit <http://dealer.control4.com/dealer/training>.

## 16. Legal Notice

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## Control4 Operating System Release Notes

system setup is unique and customized to a specific customer's needs. It is the Dealer's responsibility to make sure the system is compatible before making any changes and installing any updates. In addition, it is the Dealers responsibility to get the customer's permission before accessing the customer's system and making any changes or installing any updates.