CAROUSEL DIGITAL SIGNAGE PLAYBOOK

CAROUSEL CLOUD for K-12 EDUCATION

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INTRODUCTION

We know that managing digital signage can be a daunting task, especially when you start scaling to the size and levels of a district-wide roll out. To help assist with that we have put together this playbook of tips, tricks, and strategies to help leverage every ounce of power that Carousel has to offer.

There are 2 major sections: Deployment & Management speaks to getting and keeping Carousel running smoothly from more of a technical perspective. Content speaks to helping to manage your look and message across that network.

If you have any questions or need to talk things through a bit more, please feel free to reach out to us and we will find a time to speak to you, or provide a resource that can assist with that.

We here at Carousel are passionate about digital signage. Our latest labor of love, has been the creation of The Carousel Way. A website designed to help share all of the information we have gathered in 20+ years of our work in. We are adding new topics, articles, tips, tricks, and more every month.

DEPLOYMENT & MANAGEMENT

Initial Deployment

Connecting Apple Players to the Server

The most effective way to deploy Carousel Cloud is using a Mobile Device Management platform, like Jamf Pro, to deploy the Carousel Cloud Player app to Apple devices. The latest information on how to deploy can be found in the [Carousel Powered by Jamf Pro](#) document on our website. It lays out the specifics of everything from creating Pre-Stage Enrollments to building Configuration Profiles.

Here we have outlined the major section on 'purchasing' the free app and deploying it.

Purchase the App for Deployment

Open [Apple School Manager](#), go to the 'Apps and Books' link under 'Content' in the sidebar. Then search for Carousel Cloud Player.
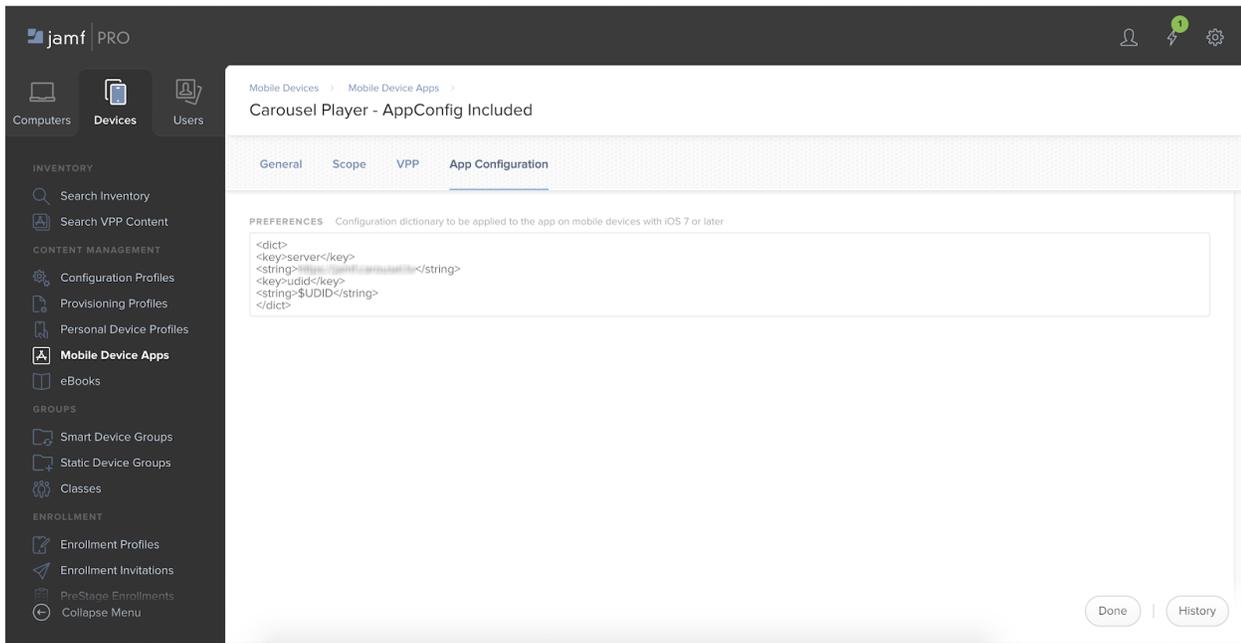
Best practice for purchasing is to acquire 110% coverage for your system. If you are planning to have 50 Apple devices, purchase 55 licenses.

App Configuration tab

In the Carousel Cloud user interface, go to Configure ▸ Players ▸ Player Setup. Click on the corresponding Apple Device. Copy and paste the 'MDM Player Registration Information' from Carousel into Jamf. It will look something like this:

```
<dict>
  <key>server</key>
  <string>https://YOURSERVER.com</string>
  <key>udid</key>
  <string>$UDID</string>
  <key>key</key>
  <string>YOURKEY</string>
</dict>
```

Click 'Save'

Mobile Devices > Mobile Device Apps
Carousel Player - AppConfig Included

General   Scope   VPP   App Configuration

PREFERENCES   Configuration dictionary to be applied to the app on mobile devices with iOS 7 or later

```
<dict>
<key>server</key>
<string>                    </string>
<key>udid</key>
<string>$UDID</string>
</dict>
```

Done | History

Initial Channel

Once a player connects to the Carousel Server it will start showing content. This channel is called the Initial Channel. Until directed otherwise, it will be what the player shows.

For a controlled install, where you know you are only connecting players from a specific location that day, you can set the Initial Channel to be the channel those players should be showing. This will save you from needing to change them later.

For an uncontrolled install, where players at many locations may be connecting at any time, you should choose a generic channel with basic content. Another option is to create a simple channel that shows a message to contact a Carousel Administrator to complete the configuration, such as, "Your player has connected to Carousel Cloud. Please contact District IT/Media with your serial number or device name to complete the player configuration. Have a great day!"

Player Naming & Tagging

When players first connect to the Carousel server they will use their device name or serial number as their name in the Player Dashboard. By clicking on the Edit button (pencil icon) you can change that name.

Best practice is to name the players by their physical location, as their content can change over time and the current channel is listed in another column. For a player located in the Hallway of the Bayside High School an easy name would be "Bayside High School - Hallway" or "BHS - Hallway". By narrowing down from left to right (school - location) players will naturally be grouped in the Player Dashboard.

Players can also be tagged with information beyond what is in their name. These tags are then searchable, when looking at the player list. For example, a player whose monitor is mounted in a 9:16 orientation, in the gymnasium at Valley High School could have the following tags: Vertical, Gymnasium, Valley_High, VHS, High. This allows you to make changes, such as channels, or schedules to all high school gymnasium players.

Channel Schedules

Carousel can send commands to players to have them change channels based on a schedule. This can be a very powerful tool to help present content to your students and staff during different parts of the school day to keep things flowing well, or to other groups after hours.

For example, you may display a common school channel that shows today's events, a student news video, and lunch menu in all common areas and classrooms from 6:00am - 2:00pm. Then, display the extracurricular activities channel from 2:00pm - 5:00pm that shows information about what's going on after school like the school carnival, so students can be prepared and get excited about what's going on outside the classroom. Then from 5:00pm - end of the day show the community education channel with content generated by your community education team.

Setting up schedules is simple. In the Carousel user interface, navigate to Configure ▸ Players ▸ Channel Schedules and create a new schedule. Add an entry, enter in the time you want a channel to start displaying and what time you want it to stop playing, select the days of the week you want this entry to be active, and select the channel you want to display. You can add as many entries as you would like for each channel change on the same schedule.

After you have created your schedule, find the players on the Player Dashboard (see next section for more info on the Player Dashboard) that you want to run this schedule, select them all, and from the Actions menu select Channel. In the pop up, select the schedule you want these players to run on. Note: the Default Channel will show when no other channel is scheduled to display. You do not need to schedule a change back to default channel. It will do this automatically for you after each schedule entry.

Player Management

Player Dashboard

All the players that have connected to the Carousel Server will be available in the Player Dashboard, until they are manually deleted.

The list of players can be sorted by any of the columns. By default the list will show the players in order of status, with disconnected players at the top (as these are generally players you are having issues with).
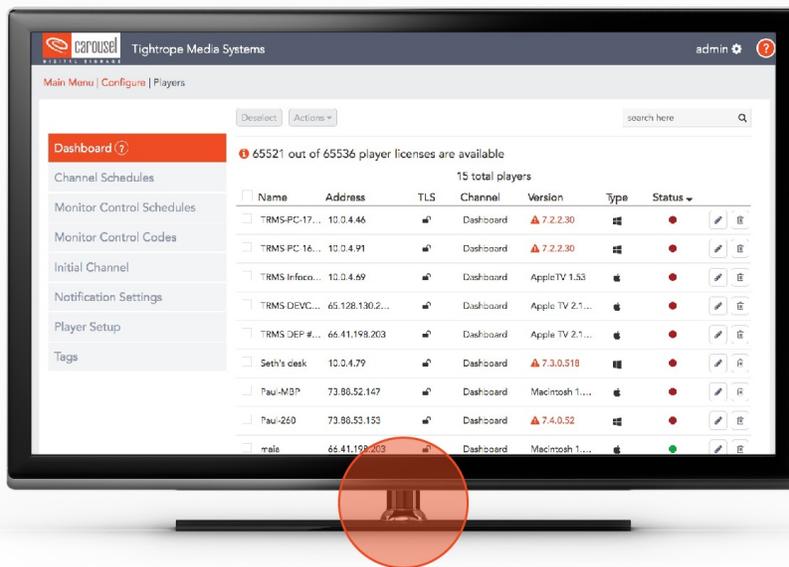
Player Dashboard

Notifications

Carousel can send emails to notify persons about players that are offline. There are 2 parts to this process.
1. Delay Timer
   The amount of time a player needs to be offline before an email is sent.
2. Email Addresses
   Who should be sent the email about the player being offline. Depending on your preference you can put in a single address that would forward to a group as defined in your mail system, or you can put in multiple addresses to be notified directly from Carousel.

Player Control from the Server

The Player Dashboard allows you to make configuration changes to players either one-by-one by clicking the Edit button (pencil icon), or by selecting multiple players and using the Actions menu.

In many cases, you may want to filter the list of players using the tags applied previously. Simply type the term/tag you want to find in the search bar in the top right corner. The list of Players will filter as you type.

Then use the checkboxes in front of each player to select the ones you want to affect. If you click the top checkbox you will select all the filtered players shown. You can only see and affect 25 players at a time.

From the Actions menu you can then perform the following tasks:
- Delete
  Remove those players from the list and free up those license slots
- Channel
  Change the default channel shown on the players, or apply a new channel schedule to change to specific channels of content at specific times.
- Player Tags
  Apply additional tags to the players.

CONTENT

Layout & Design

For enterprise deployments the goal is to utilize the least number of layouts possible while still achieving the desired design aesthetic. Standardized zone sizes within channels will also allow your organization to leverage image and video content more broadly while maintaining proper aspect ratios and resolution.

Layout - The arrangement of zones

Design - The look and feel of the channel

Content Types

Carousel offers four basic content types:

Templates

This is the bread and butter of Carousel. By using templates, you give your users a place from which to start thus helping them build momentum.

Templates also provide you the ability to more closely control your branding. Templates can be preset to use your fonts, your colors, your layouts. You can even pre-load specific wording or use the default text to give your users more direction. Such as, "Type your summary here. It should only be one or two sentences.".

Templates can be built to have layouts allowing for text, images, and even videos to be placed side-by-side on the same bulletin.

Images

The simplest form of bulletin in Carousel. With image bulletins in Carousel you are filling the entire zone with a single visual.

Not only can this be used for large pictures you want to feature, but can also be used for items you or others are building outside of Carousel in other programs such as Photoshop or InDesign.

Videos

Another simple bulletin format is the full zone video. Similar to images, videos allow for the visual to move and provide audio if there are speakers at the displays.

Both images and videos can be a great way to leverage marketing materials you already have at your disposal with minimal work in Carousel.

Dynamic Content

The most powerful content in Carousel is content you don't have to update. Dynamic sources can help provide that service.

Here Carousel can leverage other resources to pull items in. Some of the most common examples are headlines from a public webpage, calendar of events for athletics, gymnasium schedules, and even the weather can be a great little addition for those who don't have windows immediately available to them.

Alerts

Alerts give you the ability to override the scheduled content to display a message on the entire screen of your display. This is a powerful and useful tool to keep your campus in the know when you conduct safety drills and quickly and easily inform students and staff during safety incidents. They can display lock down procedures on every screen or inform people where to go for a fire drill. When an alert is published either by a user or by a 3rd party integration, it will display within seconds on all of the screens subscribed to the alert zone it is published in.

Not only are alerts useful for emergencies, but they can be used for anything else you want to display full screen for a time like early dismissals or reminding your students and staff that they need to be in the gymnasium at 2:00pm for an assembly.

From a technical perspective, a Full Screen Alert zone is simply another bulletin zone that plays over the channel a display is showing, so you can add as many alerts as you want to an alert zone and they will cycle through just like a regular zone on a channel.

Alert zones are subscribed to by channels and you can subscribe to as many alert zones as needed. Set your alert zone subscriptions in Configure ▸ Channels. Edit the desired channel and navigate to the Settings tab. You can then order the alert zones in priority from top to bottom. Meaning if an alert from the top priority comes on it will override any other alerts that are displayed on the screens.

Bulletin Tags

Carousel allows you to tag bulletin content you are creating. This is similar to the tagging that can be applied to Players.

Bulletin Tags are searchable keywords attached to a bulletin. When managing large lists of bulletins you can use the tags to narrow your focus to just a few items. The search function of the Manage Bulletins list searches the names of the bulletins as well as the tags, so there is no need to duplicate information from one to the other.

Some examples of Bulletins Tags could be lunch menus, spirit week, sports, audience, or keywords from within the copy of the bulletin itself.
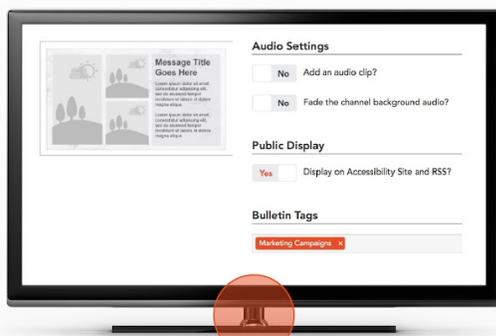
Bulletin Tags

Zone Tags

Zone Tags

Zone Tags serve two main purposes. The first is to allow you to filter the list of zones you are selecting from when you need to change zones in the web user interface.

The second purpose is for user permissions. Users can be given rights to zones with certain tags applied to them. So as new zones are added all users accounts do not need to be updated. As long as the new zones have previously used tags applied to them users will automatically have access granted.

The most logical way to tag zones are in a hierarchy. For example using the names of a given zone's district, state, branch, location, and use. This would allow for users to be given access at any of the levels across the board.

Linked Bulletins

Linked Bulletins allow you to take a piece of content that has been created and then copy it into multiple zones while still retaining the ability to modify that content. When the content is edited, Carousel will prompt the user if the linked copies should also be updated with the changes. We have seen this used most commonly where marketing personnel design a bulletin for a new initiative and place linked versions in other local zones so it intermingles with local content. Note: Admins or users with admin rights to the All Zones tag are the only users who can create and modify linked bulletins.

User Account Management

As we have discussed, users can be given permissions to groups of zones using Zone Tags. This is in addition to being given rights to individual zones. All of these rights are additive. So while a user might have a few small rights to a broad number of zones, they can also be given some deeper rights to a small subset of those zones as well without trouble.

SAML Single Sign on (SSO)

Carousel Cloud has the ability to integrate with Google GSuite along with others so your users don't need to remember another username and password. When set up, users will be able to use their Google email credentials to log into Carousel and manage content. Even when SSO is set up, you can still use the Carousel user management within the app to create accounts for users if you desire. This could be useful for granting students temporary access to create content, but not having to make them a member of your GSuite account. Instructions for setting up SSO with GSuite can be found in our Knowledge Base under [Setting Up Single Sign On with G Suite in Carousel Cloud](#).

Roles

Carousel uses Roles to group rights together. When creating Roles you should build them for groups. These could be groups such as Administrative, Boosters, Teachers or Students. They could also be for content groups like Standard Users, Enhanced Users, Limited Access Users.

The Roles should only contain what you want everyone in the group to be able to do. Even if the users will all be performing these tasks in different places.

When assigning Roles to users, you can not only limit what a user can do, but where they can do it. You can assign a user a role for a single zone, for example. Or assign them a role for only zones with a zone tag of Bayside if you only want them to be able to see and work on zones that display at Bayside. This allows for the user interface to be less confusing by removing all the things they don't have access

to from the user interface. It will also be used to keep each school from accessing each other's content.

Access Rights

Some of the more common access rights that are dealt with in Carousel are:
- Auto Approve Bulletins
  By default users will have to have their bulletins approved by another user (more details below). This simply bypasses that and pushes their content out by the schedule with no other intervention.
- Create - Template/Upload/Dynamic/Interactive Bulletins
  These options allow users to use those specific bulletin types. If users should not be creating those types, don't give them the rights so they won't even see those options.
- Manage Zone Bulletins
  Users with this option will be able to manage (edit, delete, move, etc.) all the bulletins in the zone. Normally they will only have access to their own bulletins.
- Manage Approve Bulletins
  This gives the user the right to approve bulletins for display in a zone, as talked about with Auto Approve.
- Setup Global System Configuration
  This is the single most powerful right in Carousel. It gives the user access to the Configuration area of Carousel to create and manage zones, channels, and players. To be clear there are no limitations within the Configuration area, either you see it and can manipulate all of it, or you don't even see it at all, so this should only be given to a small group of users or only to the system administrator.

For example, you may create a Carousel Role called "Student"that you assign to only students. This role may only include the Create - Uploaded right. This would result in any user assigned the "Student"role to only have the ability to upload image and video bulletins to a specific zone or a set of zones. Because you didn't include the Auto Approve Bulletins right in this role, any bulletin uploaded by a user would be submitted for approval before it would display on the screens.

Another example may be creating a Carousel Role called "Teachers" that you assign to teachers. This role may include Create - Uploaded, Create - Template, Auto Approve Bulletins, Manage - Zone Bulletins, and Manage - Approve Bulletins. This would give the teachers more control. They would be able to create bulletins that are uploaded images and videos, but could also choose to create a bulletin from the set group of templates for that zone. They would be able to edit, delete, and move all the bulletins in that zone around and could approve bulletins that are awaiting approval.

If there is a specific scenario for a user type that you would like advice on, we would be happy to assist you in setting that up.

RESOURCES

Carousel Support is always available via email at support@carouselsignage.com.

As always, please reach out to us if you have any questions, or are running into any issues. Below are some links to keep handy.

- Carousel Help Site
  The '?' in the top-right corner of every page of the Carousel user interface.
- Carousel Digital Signage Website
  https://www.carouselsignage.com/
- The Carousel Way
  https://www.thecarouselway.com/
- Carousel Searchable Knowledge Base
  https://support.carouselsignage.com/hc/en-us
- Carousel Cloud Change Log
  https://www.carouselsignage.com/support/product-updates
- Carousel Academy Training Packages
  https://www.carouselsignage.com/cloud/training-packages
- Carousel Product Update Videos
  https://www.carouselsignage.com/blog/video