



IOT DIGITAL SIGNAGE

Quick Start Guide

ABSTRACT

Remotely create, send, and display messages to televisions or other HDMI supported gadgets anywhere within your enterprise Wi-Fi network. Scheduling, targeting and managing your Playlists on your gadget kiosks are made easy.

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DOCUMENT HISTORY

Date	Version	Particulars
02/26/2018	1.0	Created quick start guide
03/23/2018	1.1	Changed content as per the new user interface

1. Introduction

This is a quick start guide used to develop a digital signage content management application with customer interaction. A smart Digital Signage Stick (OEM) communicates with platform and the signage content is displayed remotely from the content manager application. The digital signage content is controlled and monitored centrally by the content manager application.

Digital signage are displays which use technologies such as LCD, LED and projection to display content such as digital images, videos, streaming media, web pages, weather data, restaurant menu, or text. They can be found in public spaces, transportation systems, stadiums, retail stores, hotels, restaurants, corporate buildings and so on to provide outdoor advertising.

1.1.Purpose of this document

The purpose of this document is to help you to remotely create, send, and display messages on televisions or other HDMI capable displays anywhere in your enterprise wi-fi network. The application provides basic interfaces to Create, Schedule, Target, Manage, and Publish the content on your device kiosks.

1.2.Definitions and Abbreviations

Terms	Definitions
Devices	Devices are HDMI IoT sticks, which are plugged into components such as monitors, projectors or televisions, positioned at places that display Content within a Playlist.
Device Group	Device Group is a group of devices that are categorized in two levels, Parent Group and Sub Group.
Content	Content is your message or information on billboards which is displayed on Devices positioned at places within a Playlist.
Playlist	A Playlist is a group with one or more Devices at each location, which displays one or more Content on Devices.
Admin	Admin is used to customize settings for the users and assign roles.
Reports	A consolidated information of all components.
HDMI	High Definition Multimedia Interface

1.3.Sign-in

Navigate to <http://signagedemo4.azurewebsites.net/> and sign in. Enter the following credentials:

1. Username: **Demo**
2. Password: **Demo**
3. Click **Next**.

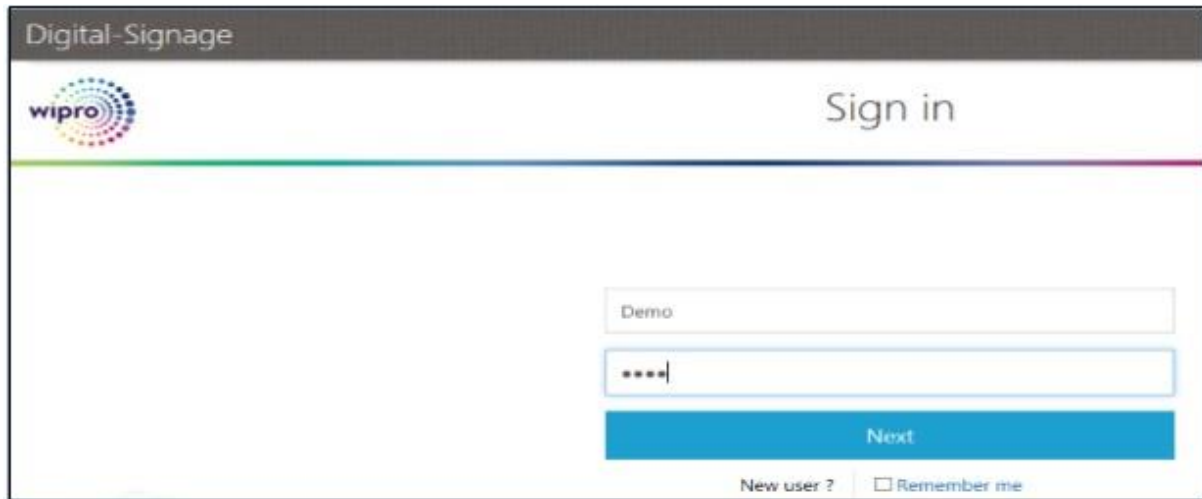


Figure 1: Sign in

1.4. Process Flow

1. Home
2. Content - Select Content Template and add your Message.
3. Playlist- Create a Playlist and target the Content to the Devices.
4. Devices - List of Devices located in various places.
5. Device Group – Device Group is a group of devices that are categorized in two levels, Parent Group and Sub Group.
6. Admin - Apply settings to a Playlist as required.
7. Dashboard – View graph on content and playlist.
8. Report – Generate history.

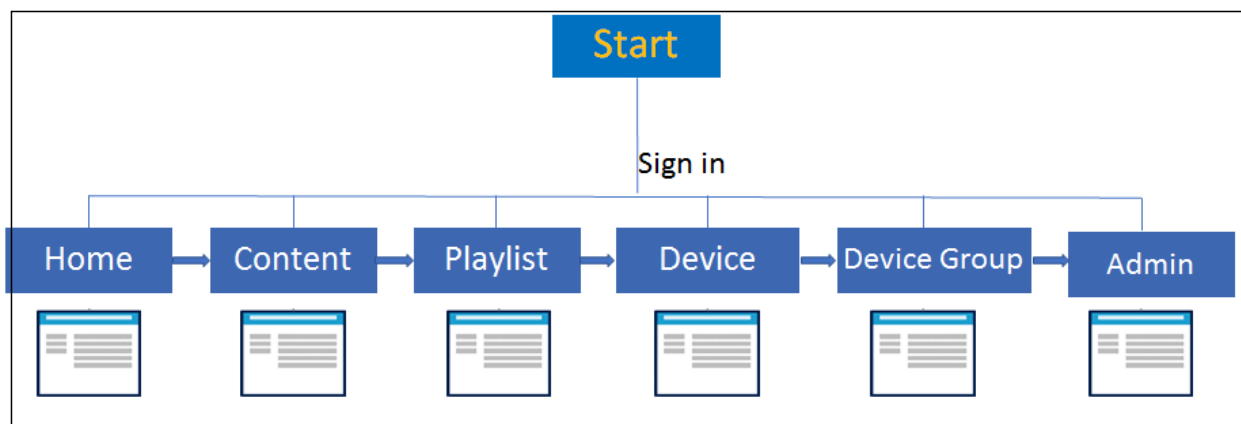


Figure 2: Workflow

1.5. Navigation

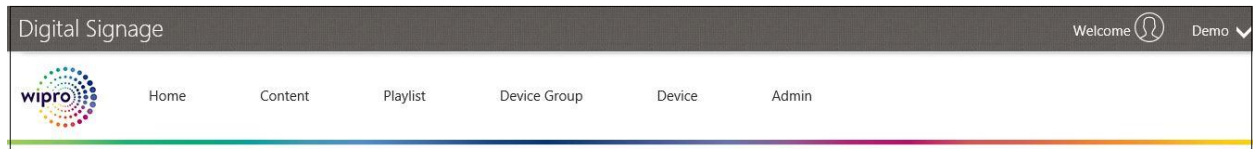


Figure 3: Main Menu

Main menu consists of following items:

- [Home](#)
- [Content](#)
- [Playlist](#)
- [Device Group](#)
- [Device](#)
- [Admin](#)

2. Home



Figure 4: Main menu

3. Content

Content is your messages or information on billboards and so on, which is displayed on Devices as grouped within a Playlist.

3.1. Change Role

To change role:

1. Select Role from the **Manager** Drop-down list.
2. Click **Preview** icon to view the Content
3. Click **Submit**.

Note: A confirmation message will be displayed on the screen.

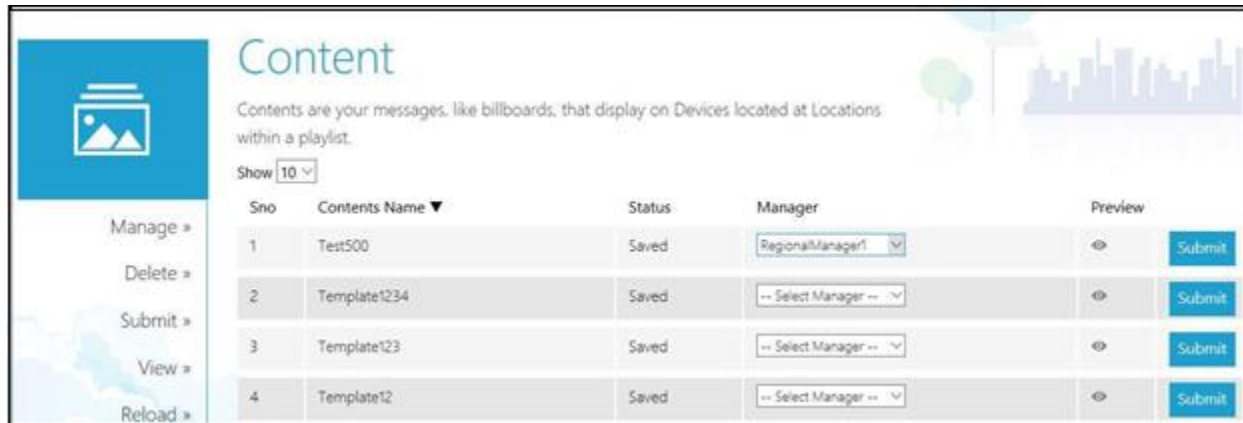


Figure 5: Content

3.2. Manage - Upload Content

To upload Content:

1. Select **Content** from the main menu.
2. Click **Manage Content** for the sub menu.
3. Click Upload.
Note: Upload your own Content such as an image with text or select a template and create Content with the template tool.
4. Enter **Content Name**.
 Add the name to the Content which you will add to Devices within your Playlist.
5. Enter **Description about the Content**.
 General description of your Content.
6. **Upload**
 For Content, upload Image, Video, Web URL and Video URI (blob) located on your local drive.
7. Click **Save**.

Figure 6: Upload Content

3.3. Manage – Predefined Template

To add Content:

1. Select **Add Content > Custom Template** from the sub menu.

Note: This is your message which is composed of images and text that appear on Devices within your Playlist.

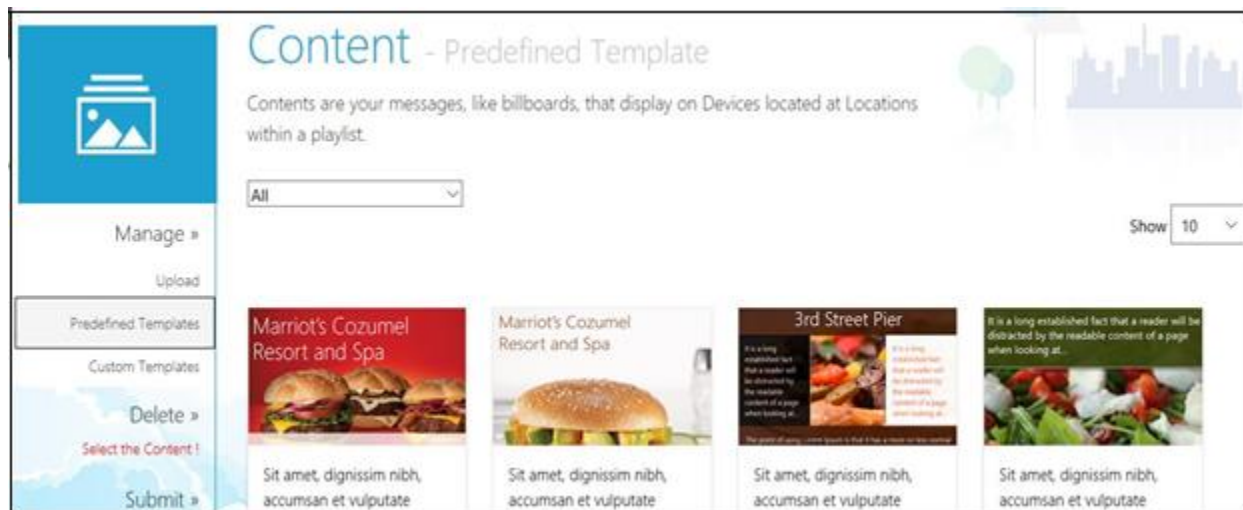


Figure 7: Content - Predefined templates

2. Select a template and select **Click to Edit** and **Upload**.
3. Select a static template to customize your image and text.
4. Select the **Category** from the drop-down list.

Restaurant

View other templates »

Manage »

Upload

Predefined Templates

Custom Templates

Delete »

Select the Content !

Submit »

View »

Reload »

NewYork Classic
Burger

Iceberg 190

Lorem ipsum dolor sit amet,
dignissim nibh, accumsan et
ipsum sit amet, diguyg sim
vull

100% Iceberg Lettuce.

Week 5

7th July - 2nd Sep 2017

190

Place holders

Lorem ipsum dolor sit amet,
dignissim nibh, accumsan et ipsum
sit amet, diguyg sim vull

100% Iceberg Lettuce.

190

Burger

Browse...

Delete Template

Template Position 0

Save

Cancel

Figure 8: Customizing template

5. In the **Place Holder** section, customize the information you would like it to appear on the image.
6. Select the icon position. Left-Top, Left-Top, Left-Bottom and Right-Bottom.
7. Scroll down and Enter the **Template Name**.
8. Select an image and Upload using the **Browse** button.
9. Enter a number in **Template Position** box where you want the template to appear.
10. Click **Save**.

3.4. Manage - Custom Template

You can customize the template by selecting **More Options to Create Template**.

1. Enter a name for custom template.
2. Customize your Content template by selecting custom template options such as orientation (landscape/portrait) and animation.
3. Click **Save**.

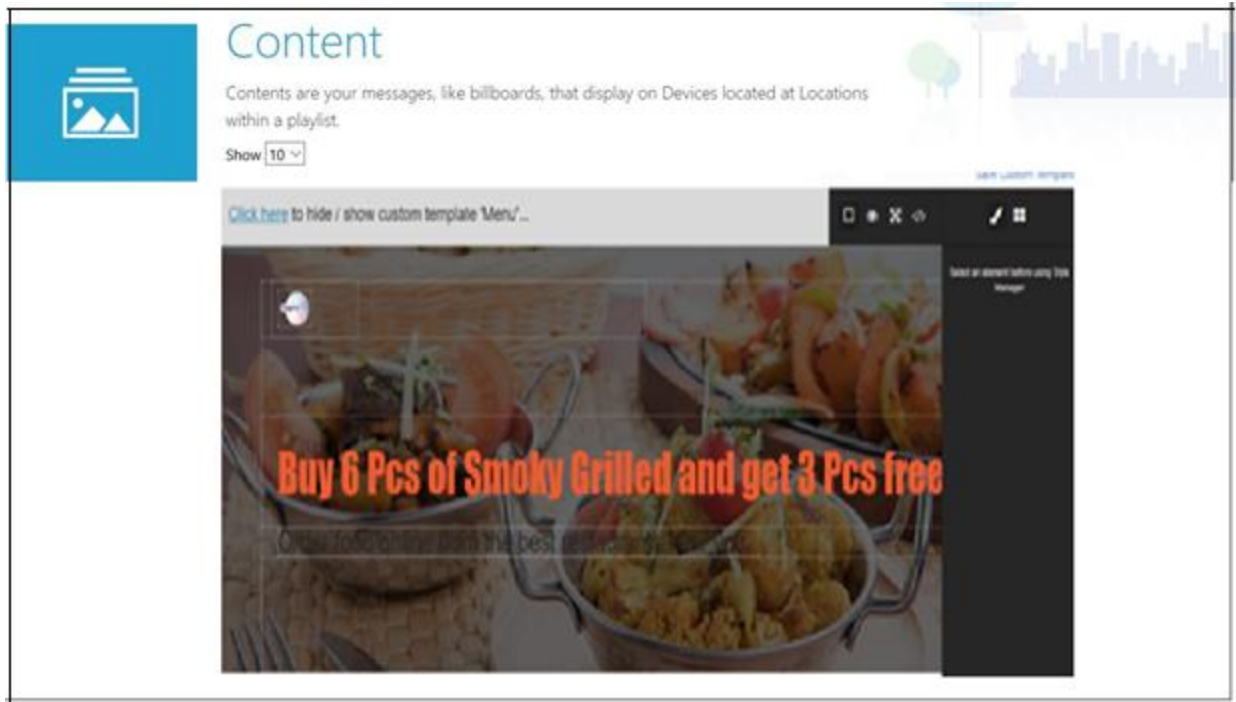


Figure 9: Custom template

3.5.Delete Content

To remove Content:

1. Click View from the sub menu.
2. Check the row which you wish to delete.
3. Click Delete.

Note: The screen will refresh and the selected Content is deleted.

3.6.Approve

To Approve/Reject Template:

1. Click **Content** for the main menu.
2. Click **Approve/Reject**.
3. A notification message will be displayed when the template is approved or rejected.

S.No	Content Name ▲	Manager	Status	Preview	Approve
1	BigFile	Demo	Submitted	👁	Reject Approve
2	Bike6MB	Demo	Submitted	👁	Reject Approve
3	BL Template	Demo	Submitted	👁	Reject Approve
4	LargeSizedImage	Demo	Submitted	👁	Reject Approve
5	Test	Demo	Submitted	👁	Reject Approve
6	testChips	Demo	Submitted	👁	Reject Approve

Figure 10: Approvals

3.7.Reload

Reload sub menu is used to refresh the Content list.

4. Playlist

A playlist is a campaign which is a collection of Contents that gets displayed through devices.

You can edit and publish the start/end date and time in the Playlist.

S.No	Playlist Name ▲	Content Name ▲	Device Group ▲	Start Date & Time ▲	End Date & Time ▲
No data available in table					

Figure 11: Publish Playlist

4.1.Add Playlist

To add a Playlist:

1. Select Playlist from the main menu.
2. Check one or more approved Content for your Playlist, which you wish to display on the Device.
3. Enter the **Playlist Name** from the sub menu.

4. Set the **Start/End Date and Time (dd-yyyy)** format.
Select an image placed on your local drive to display the Content
5. Set the **Interval in Display Interval (in seconds)**.
Playlists are displayed in 3,5,10,30,60 second intervals.
6. Click **Save**.
7. Click **Publish**.

Note: Publish the Playlist. Refer to [Publish](#) for more details.

The screenshot shows a web interface for creating a playlist. The main heading is 'Playlist - Add Playlist'. On the left, there is a blue square with a white rocket icon and a button labeled 'Add Playlist »'. On the right, there is a sub-form titled 'Campaign - Add Campaign'. This sub-form has a description: 'A campaign is a group of stations, with one or more players at each station, that display one or more scenes on those players.' Below the description is a button labeled 'Add Campaign »'. The sub-form contains a section titled 'Select Scenes to Preview and Publish' with a dropdown menu. Below this, there are input fields for 'Station Name', 'Campaign Name' (with 'demo' entered), 'Start Date' (2/16/2018), 'End Date' (2/16/2018), 'Start Time' (10:37 AM), 'End Time' (2:37 AM), and 'Display Interval (in seconds)' (30). At the bottom of the sub-form are 'Save' and 'Cancel' buttons.

Figure 12: Create Playlist

4.2. View a Playlist

To view a Playlist:

1. Click Playlist.
2. Select **View Playlist** from the sub menu you wish to view the current and active Playlist in the list.

Note: The list is refreshed.

4.3. Publish

To publish a Playlist:

1. Create a Playlist.
2. Select **Publish** from the sub menu.
3. Select the **Publish** icon and your Playlist is published.

Note: This Playlist will display devices based on the predefined date, time, and frequency.

4.3.1. Unpublish Playlist

To Cancel the publishing from the list, Click **Cancel** to unpublish the name from the Playlist.



Figure 13: Publish Playlist

4.4. Reload

Reload sub menu is used to refresh the Playlist.

4.5. Expired List

The list which does not exist anymore.

5. Device

A Device is a HDMI IoT stick, which is plugged into components such as monitors, projectors or televisions, where Content is displayed within a Playlist.

5.1. Add Device

To add Devices:

1. Select **Device** from the main menu.
2. select **Add Device** from the sub menu.

Devices - Add Device

Devices are HDMI IoT sticks that are plugged into devices, like monitors, projectors or televisions, located at locations that content display on within a playlist.

Device Serial No
43445554534123

Device Name
Demo1

Save Cancel

Figure 14: Device List

3. Enter **Device Serial No.**
Note: The product serial number is displayed at the back of the component.
4. Enter **Device Name.**
Add the Device name and add/select the Content for each Device.
5. Click **Save.**

5.2.Reload

Reload sub menu is used to refresh the Device list.

5.3.Remove Device

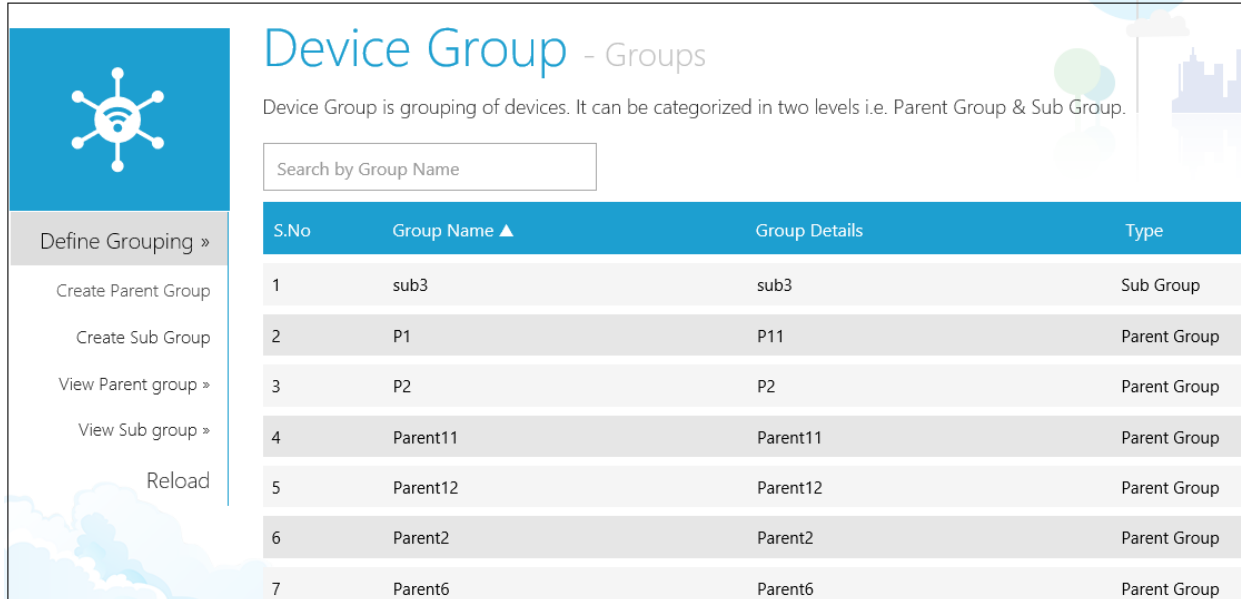
To remove a Device:

1. Select **Device** from the main menu.
2. Click **Remove Devices.**
3. Check the Devices you wish to remove.
4. Click Remove Devices.
Note: The screen will refresh and the selected Device is deleted.

6. Device Group

Device Group is a group of devices that are categorized in two levels, Parent Group and Sub Group.

1. Select **Device** from the menu.
2. Click **Device Grouping.**
3. Create **Parent or Sub Group** from the sub menu.



Device Group - Groups

Device Group is grouping of devices. It can be categorized in two levels i.e. Parent Group & Sub Group.

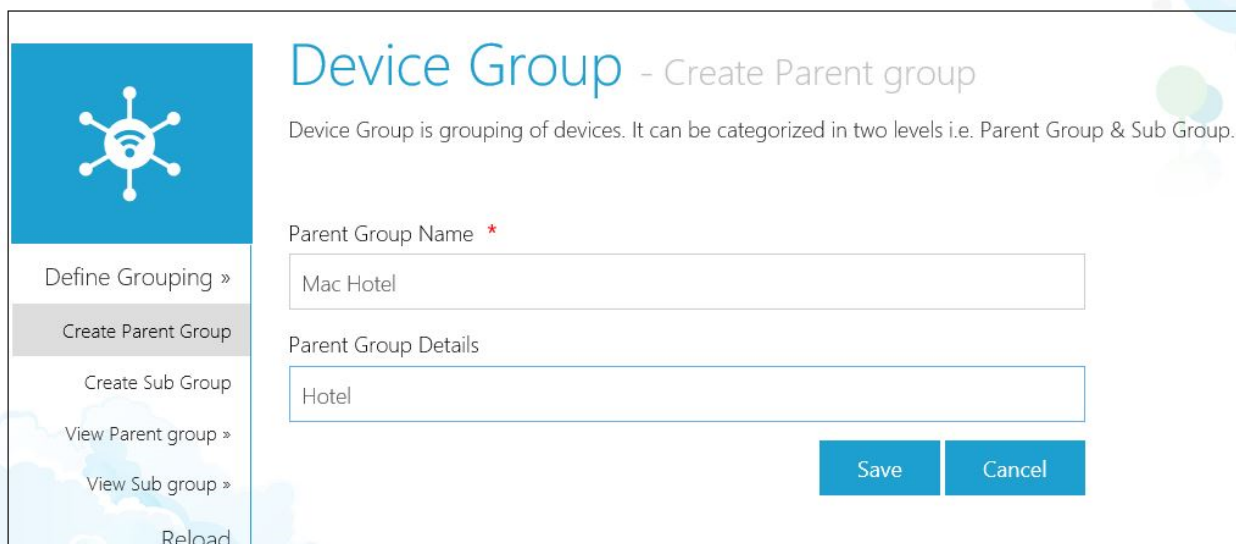
Search by Group Name

S.No	Group Name ▲	Group Details	Type
1	sub3	sub3	Sub Group
2	P1	P11	Parent Group
3	P2	P2	Parent Group
4	Parent11	Parent11	Parent Group
5	Parent12	Parent12	Parent Group
6	Parent2	Parent2	Parent Group
7	Parent6	Parent6	Parent Group

Figure 15: Device Group

6.1. Create Parent Device Group

1. Click **Device Grouping**
2. Select **Create Parent Device Group** from the sub menu.
3. In **Parent Group Name**, enter the name of the Device group.
4. In **Parent Group Description**, enter description of the Device group.
5. Click **Save**.



Device Group - Create Parent group

Device Group is grouping of devices. It can be categorized in two levels i.e. Parent Group & Sub Group.

Parent Group Name *

Mac Hotel

Parent Group Details

Hotel

Save Cancel

Figure 16: Add Parent Group

6.2. Create Sub Group

1. Click **Device Grouping**

2. Select **Create Sub Group** from the sub menu.
3. In **Sub Group Name**, enter the name of the Device group.
4. In **Sub Group Description**, enter description of the Device group.
5. Click **Save**.

Device Group - Create Sub group

Device Group is grouping of devices. It can be categorized in two levels i.e. Parent Group & Sub Group.

Sub Group Name *

Mac Hotel

Sub Group Description

Mac

Save Cancel

Figure 17: Add Sub Group

6.3. Assign Parent Devices

1. To select Devices, drag the Devices from **List Available** column and drop to the **List Selected** column.
2. Click **Save**.

Device Group - Attach Devices/Device Group

Device Group is grouping of devices. It can be categorized in two levels i.e. Parent Group & Sub Group.

Sub Groups with associated devices & Stand-alone devices can be selected.

Available List for P2

Assigned List for P2

EmptyDevice

D1

EmptyDevice9898

StandAloneDevice2

StandAlone3

DeviceSub1

DeviceParent1

Device2Sub

Figure 18: Assign Device

6.4. Assign Sub Devices

1. To select Devices, drag the Devices from **List Available** column and drop to the **List Selected** column.
2. Click **Save**.

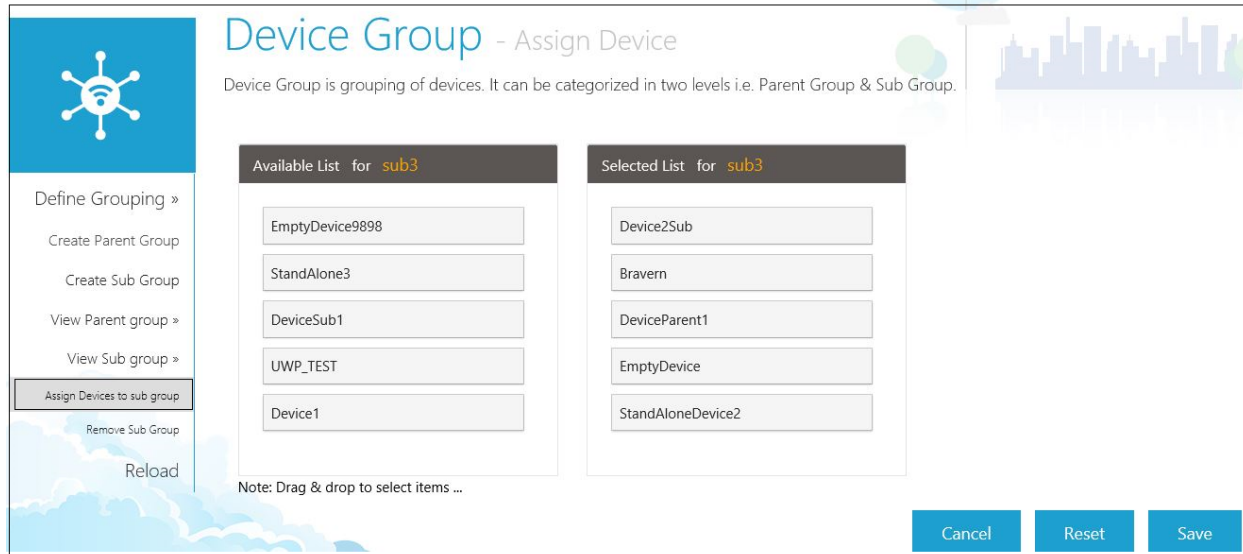


Figure 19: Assign Devices

6.5. Remove Device Group

To remove a Device:

1. Click **Device Grouping**
2. Select **Device** from the main menu.
3. Click **Remove Devices**.
4. Check the Devices you wish to remove.
5. Click Remove Devices.

Note: The screen will refresh and the selected Device is removed.

6.6. Reload

Reload sub menu is used to refresh the Device list.

7. Admin

In **Admin**, you can select and modify **User Roles** and **Approvals** for your Playlist.

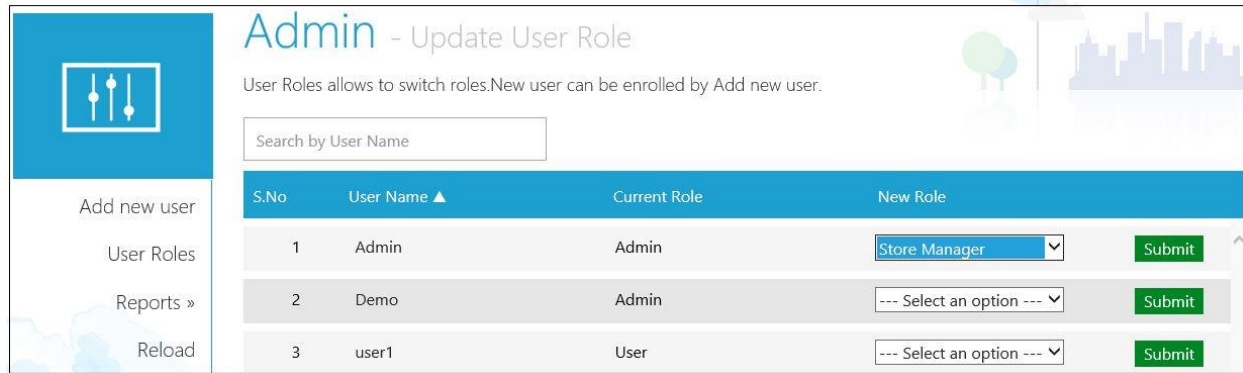


Figure 20: Admin

1. Select **Admin** from the main menu.
2. To define user roles, click **User Roles** from the sub menu.
3. Select the role by clicking the **New Role** drop-down list.
4. Click **Submit**

Note: A confirmation message will be displayed as **User details updated successfully**.

Figure 21: Settings

User roles allow you to switch roles. Approvals are required to qualify the Content for a Playlist.

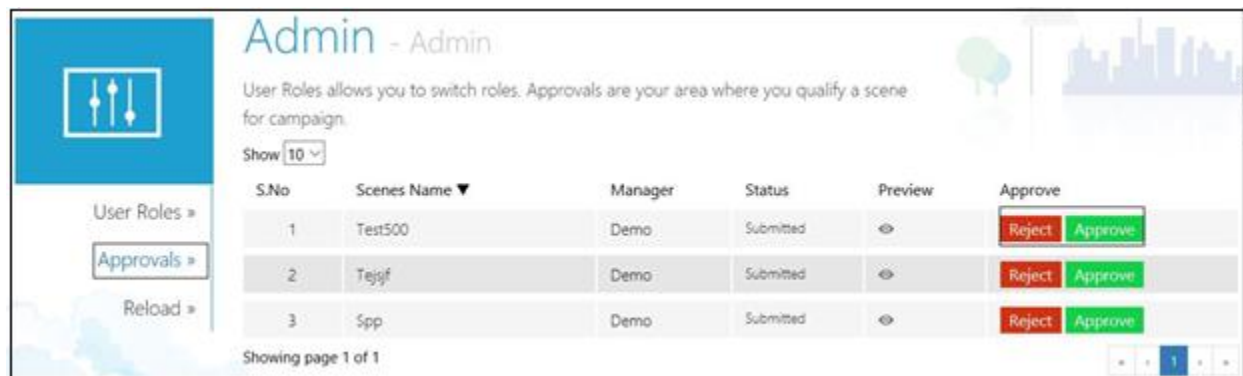


Figure 22: Approve/Reject user roles

In Approvals sub menu, click **Approve** or **Reject** to approve or reject a user from the Playlist.

Note: A confirmation message is displayed depending on the response selected.

7.1.Add User

To add a new user:

1. Click **Admin** from main menu.
2. Click **Add new user**
3. Enter **email address**.
4. Enter **Password**.
5. Click **Submit**.

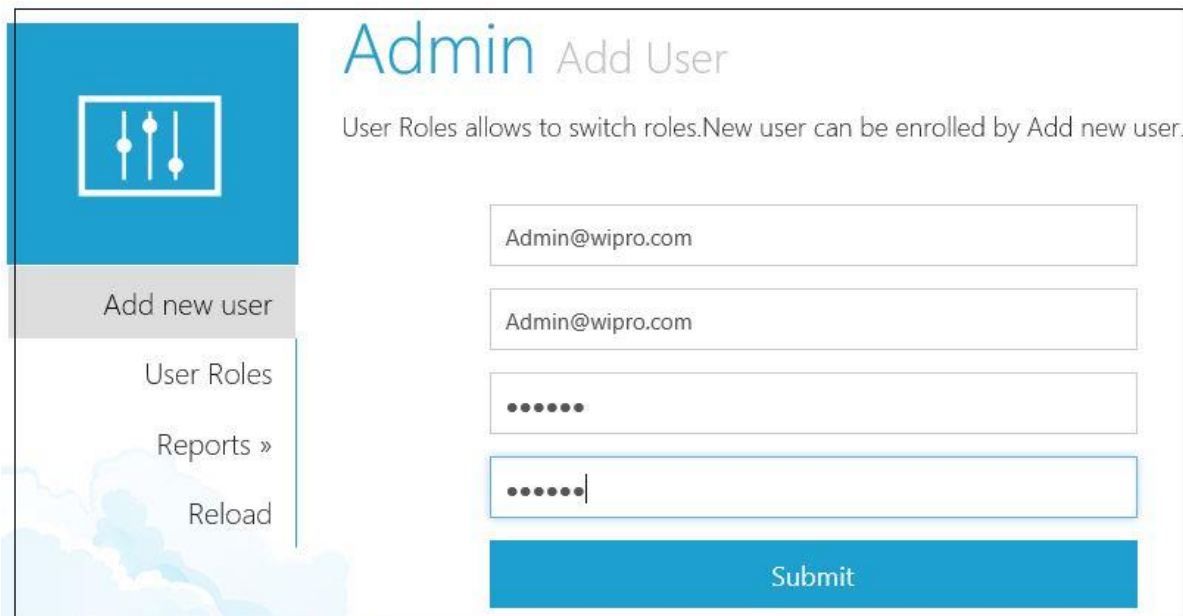


Figure 23: Add User

7.2. Reload

Reload submenu is used to refresh the roles either after assigning user roles or approving/rejecting the roles for a Playlist. Click **Reload**.

8. Reports

Reports are generated to provide history based on Playlist and Device details. A detailed view of Playlist name, Content name, Device name, start/end date and time and status is displayed in the report. Report Menu is located in Admin menu.

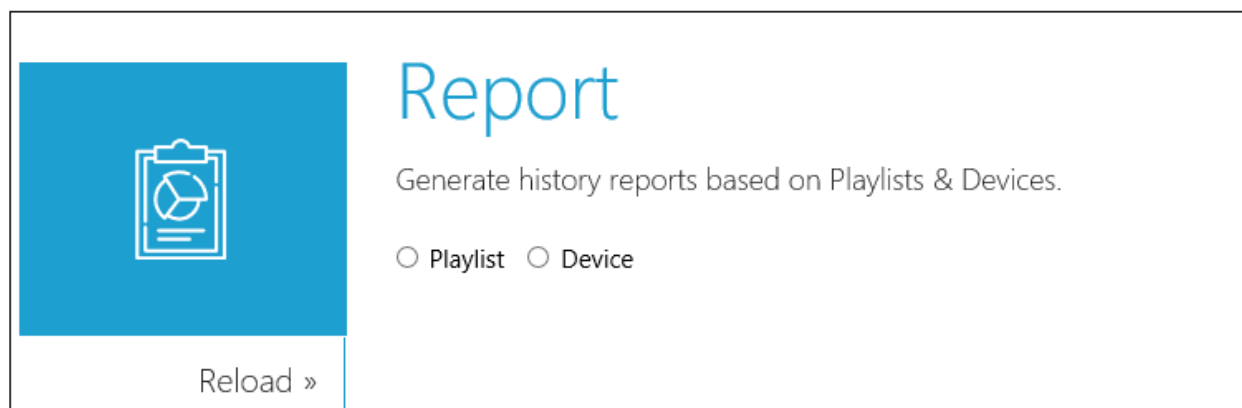



Figure 24: Reports

8.1. Download Report

Click the  icon to download the report.

8.2. Playlist wise reports

To generate the Playlist wise report, do the following:

1. Click **Playlist** radio button.
2. Enter the **Start Date** from the drop-down.
3. Enter the **End Date** from the drop-down.
4. Click **Show Report**.

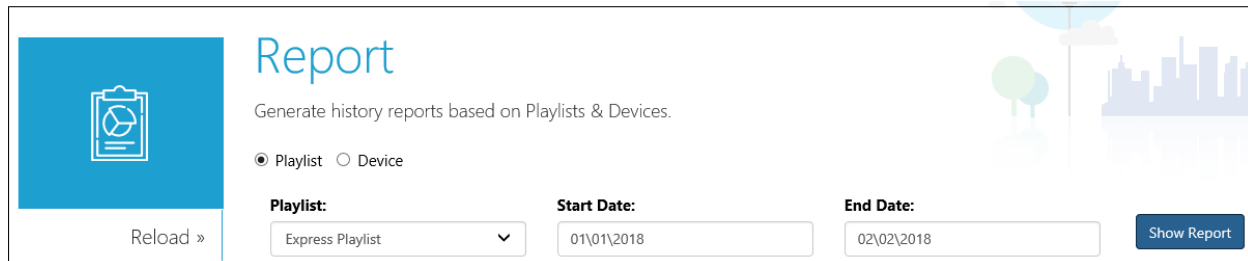
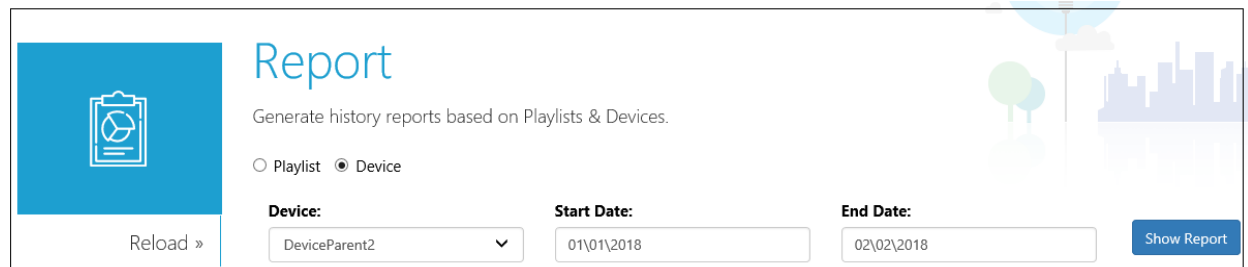


Figure 25: Playlist wise report


8.3. Device wise reports

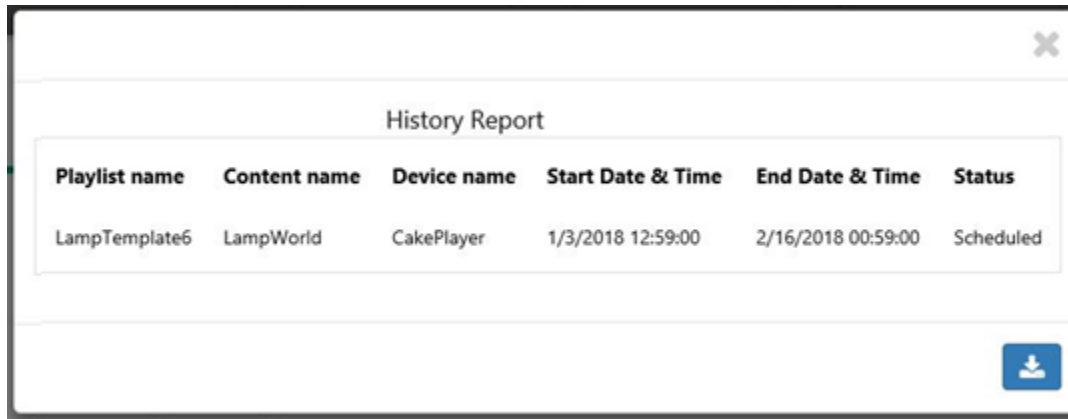
To generate the Device wise report, do the following:

1. Click **Device** radio button.
2. Enter the **Start Date** from the drop-down.
3. Enter the **End Date** from the drop-down.
4. Click **Show Report**.



8.4. Download Report

Click the  icon to download the report.



Playlist name	Content name	Device name	Start Date & Time	End Date & Time	Status
LampTemplate6	LampWorld	CakePlayer	1/3/2018 12:59:00	2/16/2018 00:59:00	Scheduled

Figure 26: Report

8.5.Reload

Reload submenu is used to refresh the Device and Playlist list.

9. Dashboard

Dashboard provides at-a-glance view of the Content and Playlist details. A detailed status of rejected, approved, saved, scheduled and published Content is displayed in the graph. Representing graphs based on the Content details and Playlist details. The dashboard menu is located in Admin<Reports<Dashboard.

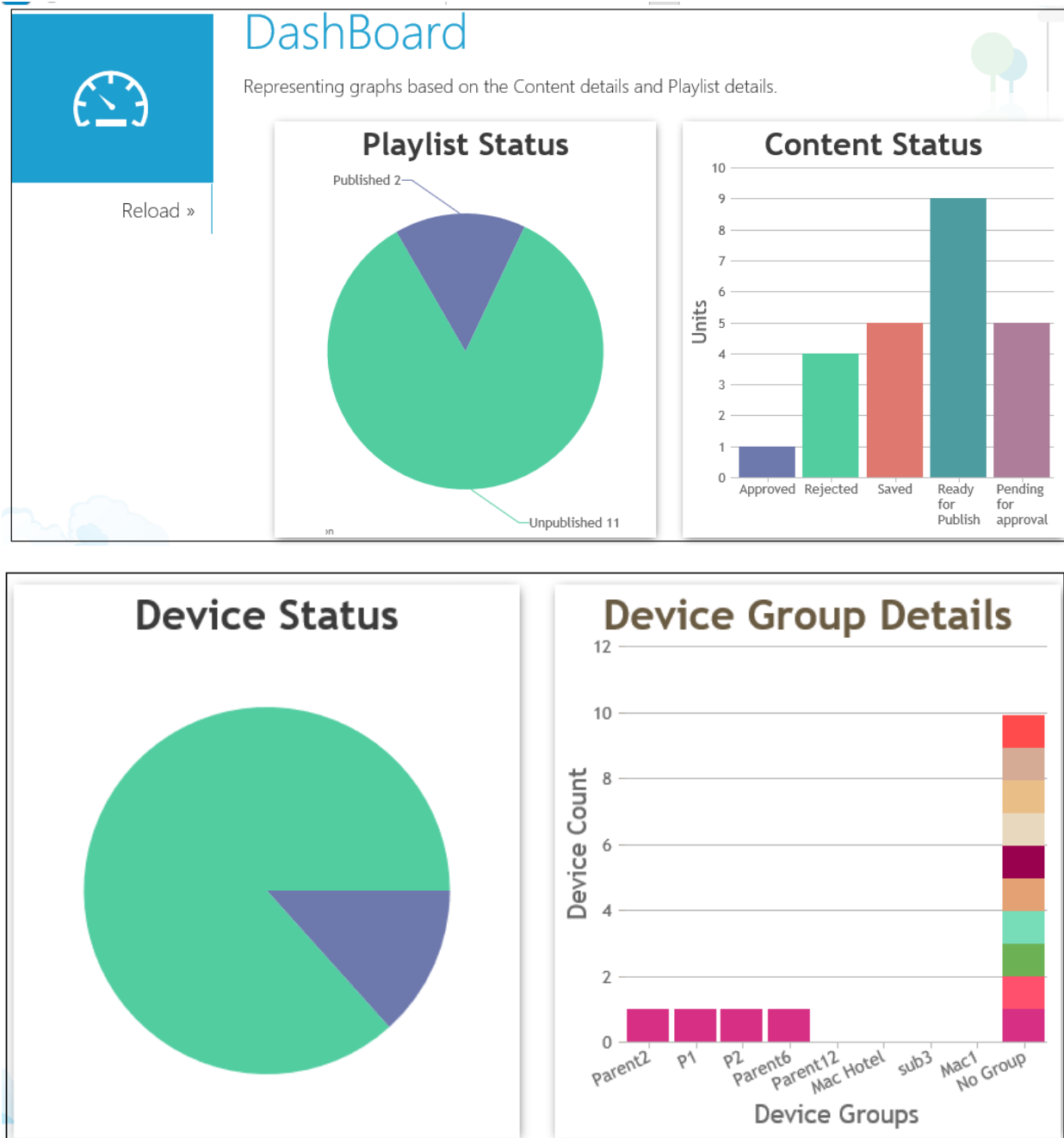


Figure 27: Dashboard

9.1.Reload

Reload sub menu is used to refresh the dashboard if any changes are made. The following graph is based on Content, Device and Playlist details:

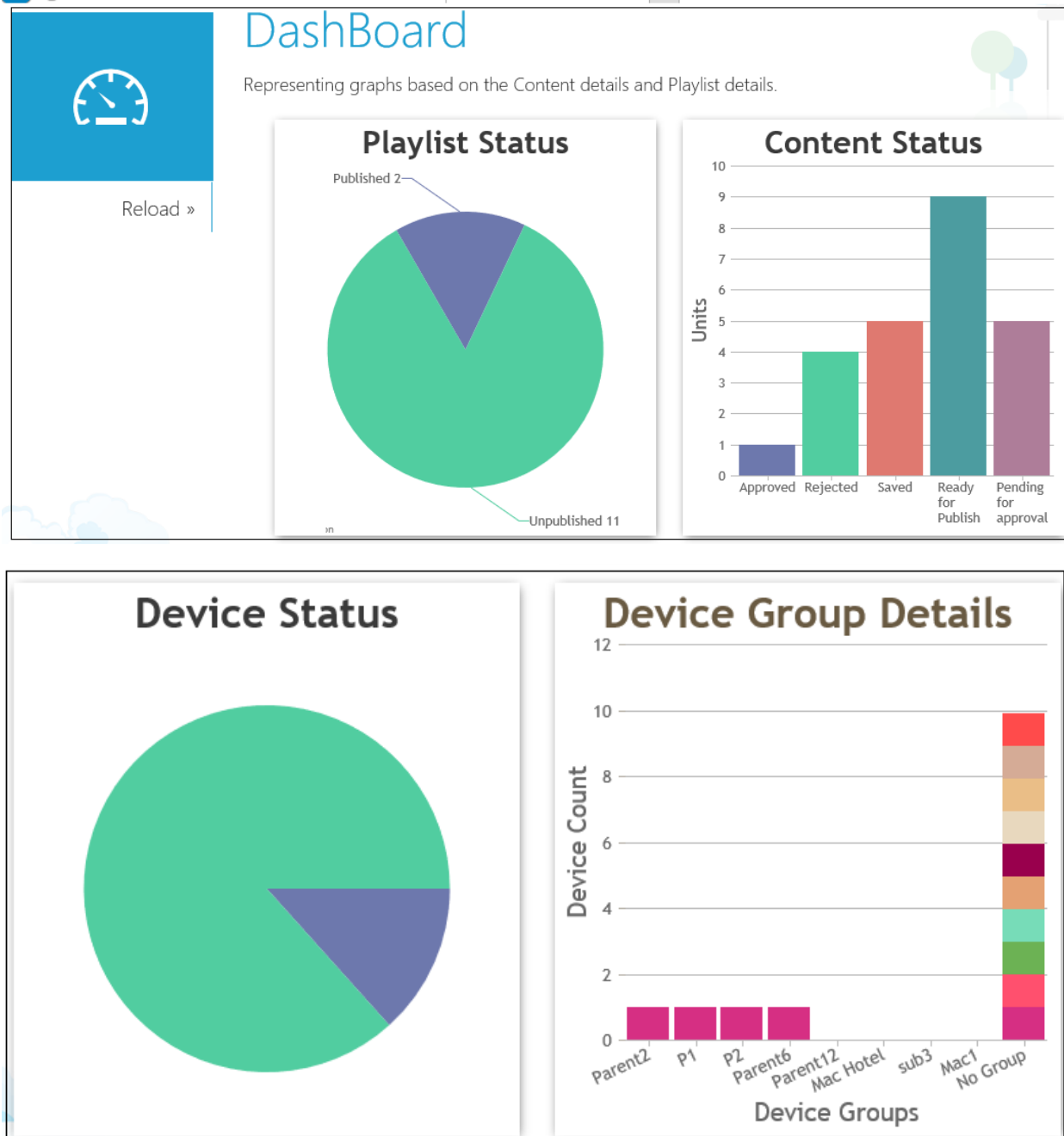


Figure 28: Dashboard