



Vestel VSign Digital Signage Platform

CONTENT MANAGEMENT SYSTEM

User Guide

TABLE OF CONTENTS

1	INTRODUCTION	4
2	VSIGN CONTENT MANAGEMENT SYSTEM (CMS).....	6
2.1	INTRODUCTION	6
2.2	LOGIN.....	6
2.3	MENU	7
2.3.1	<i>DASHBOARD</i>	7
2.3.1.1	STATUS DASHBOARD.....	7
2.3.1.2	ICON DASHBOARD.....	7
2.3.1.3	MEDIA DASHBOARD	8
2.3.2	<i>SCHEDULE</i>	9
2.3.2.1	CALENDAR	9
2.3.2.2	EVENTS	10
2.3.2.2.1	RECURRING EVENTS.....	10
2.3.2.2.2	PRIORITY SCHEDULE	11
2.3.2.2.3	DELETING AN EVENT.....	11
2.3.2.3	SCHEDULE NOW	11
2.3.3	<i>DESIGN</i>	12
2.3.3.1	CAMPAIGNS.....	12
2.3.3.2	LAYOUTS.....	14
2.3.3.3	TEMPLATES.....	18
2.3.3.4	RESOLUTIONS.....	19
2.3.4	<i>LIBRARY</i>	20
2.3.4.1	MEDIA.....	20
2.3.4.1.1	IMAGE.....	20
2.3.4.1.2	VIDEO.....	20
2.3.5	<i>DISPLAYS</i>	22
2.3.5.1	DISPLAYS.....	22
2.3.5.1.1	CONNECTING A DISPLAY	22
2.3.5.1.2	DISPLAY ADMINISTRATION	22
2.3.5.1.3	DISPLAY EDIT.....	23
2.3.5.1.4	DISPLAY DELETE	23
2.3.5.1.5	UPDATE DISPLAY SOFTWARE.....	24
2.3.5.2	DISPLAY GROUPS.....	24
2.3.5.2.1	ADDING AND DELETING	24
2.3.5.2.2	GROUP MEMBERS	24
2.3.5.2.3	SET DEFAULT LAYOUT	25
2.3.5.2.4	UPDATE DISPLAY GROUP SOFTWARE	25
2.3.5.3	DISPLAY SETTING PROFILES	25
2.3.5.3.1	VIEWING THE AVAILABLE PROFILES.....	26
2.3.5.3.2	EDITING A PROFILE	26
2.3.6	<i>ADMINISTRATION</i>	26
2.3.6.1	SETTINGS	26
2.3.6.1.1	CDN.....	26
2.3.6.1.2	EMAIL.....	27
2.3.6.1.3	CMS LICENSING.....	27
2.3.6.2	FTP PARAMETERS	27
2.3.6.3	MODULES	27
2.3.6.3.1	Installing New Modules	28
2.3.6.3.2	Embedded.....	28
2.3.6.3.3	Shell Command.....	30
2.3.6.3.4	Dataset	31
2.3.6.3.5	ForecastIO.....	33
2.3.6.3.6	DatabaseIO	34
2.3.6.4	DEALERS	34

2.3.6.4.1 Branch..... 34



1 INTRODUCTION

VSign Digital Signage Platform is a powerful Digital Signage content management system and suite of signage players. Digital signage is a form of electronic display that shows information, advertising and other messages. Digital signs (such as LCD, LED, SIGNAGE MONITOR, plasma displays, or projected images) can be found in public and private environments, such as retail stores and corporate buildings. In other words, digital signs are there to service a need for information. It's important then to ensure a good mix of information and targeted advertising to meet the business's goals.

VSign is a digital signage solution and consists of a suite of applications, including:

- Content Management System (CMS)
- Signage Monitor/SoC Display Client
- Windows Display Client
- Android Display Client

With VSign the content is designed from anywhere using a web browser on the internet accessible CMS, scheduled to Display clients and then downloaded automatically when appropriate. Content Management System enables you to create content, schedule and to manage both the content and content players.

VSign solution is based on 4 concepts:

- Displays
- Media
- Layouts
- Scheduling

Basically VSign will allow multiple displays to show media contained on multiple different screen layouts on a scheduled basis.

Displays represent the hardware connected to the SIGNAGE MONITOR/Projector/Tablet panel that is actually displaying the end content. Each Display is uniquely identified in the CMS so that they can have their own unique content, layout designs and schedules set to them.

Media content is the core of a VSign solution and many different types of content are supported. These are generally split into two categories. File based media that is uploaded and stored in the Library and Layout based media that doesn't have an associated file but is configured directly on a layout instead. An image or video would be Library Media and some free Text would be Layout based media. VSign supports following Media types. Each Vsign client supports different subset of Media types.

- Image
- Video
- Text
- RSS/Ticker
- Web page
- Flash
- Widgets (Clock, Weather etc.)
- External Video (RTSP, UDP Live Stream)

Layouts are the design that is seen on the screen. VSign allows you to split the screen up into different Regions, each containing their own Timeline of media to play. A layout itself remains on screen until all

the Timelines have finished playing through once, then an entirely fresh Layout can be loaded with different positioning and size of Regions, with different Timelines.

Once displays are registered and Layouts are designed it is time to put them all together and Schedule Layouts onto the Displays. Each Display will check for new Scheduled content periodically, and download Scheduled Items in advance of playback. Scheduling is highly flexible and supports scheduling to single Displays and Groups, single Layouts and Campaigns and Recurring Schedules. Each Display has a Default Layout that will be shown when nothing else is scheduled.

This manual will guide you through the details of CMS usage.



2 VSIGN CONTENT MANAGEMENT SYSTEM (CMS)

2.1 INTRODUCTION

Management of VSign platform is provided by VSign CMS (Content Management System). It is a web based application and can be accessed on the Internet from anywhere by using any web browser. However usage of Google Chrome or Mozilla Firefox will result in better results. VSign CMS is packed with features, such as:

- User Groups
- User and Group Permissions
- Display Groups
- Display Group Permissions
- Menu and Page Permissions
- Campaigns (ordered groups of Layouts)
- Layout Templates

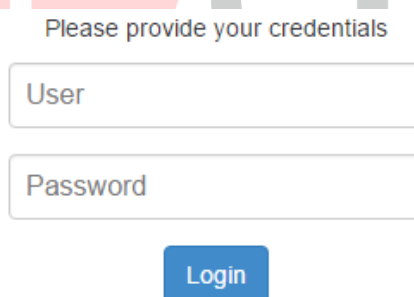
The following sections represent the core concepts and the more advanced CMS features. We start off with Login, Scheduling, Layouts and Library and then move on to Display Management and Users.

2.2 LOGIN

The CMS is protected by an authentication system that requires a user name and password.

During installation a user name and password is provided which grants unrestricted access to all areas of the CMS. This account belongs to administrator. Additional user accounts can be created with various permissions. More information on the users, user groups and permissions can be found in the Users section of this manual.

All pages in the CMS are authenticated. Firstly, User should enter the URL of VSign CMS to any web browser and if the user is not logged in, the below login form will appear.



Please provide your credentials

User

Password

Login

Figure 1: CMS Login Screen

After installation the user name and password provided during installation must be used to access the CMS. Users can be created by an administrator account and given access to the system. The user name and password for any new user should be shared in a private and secure manner and the user should change their password after they have logged in for the first time.

The CMS uses cookies to track whether users are logged in or not. If you are experiencing trouble logging in you may need to adjust your browser settings for cookies.

Each user is assigned a dashboard which they will be taken to after login.

2.3 MENU

The menu items of Vsign CMS web interface will be discussed in more detail in following sections but mention briefly: You can follow different states of players and their usage bandwidth with “Dashboard”. You can organize working time of player of the system and designs to be used by players with “Schedule”. You can design layouts and campaigns that will play on players with, save created layouts for using again in the future with “Design”. You can reach media elements such as photos and videos in the appropriate format with “Library”. You can provide access the players and the players groups are attached to the system with “Displays”.

2.3.1 DASHBOARD

After Log In, the dashboard page is shown. Each user is assigned a dashboard. There are three alternatives for dashboard page:

- Status Dashboard
- Icon Dashboard
- Media Dashboard

2.3.1.1 STATUS DASHBOARD

The CMS Status Dashboard is intended as a high-level view of the system for administrator type users. It provides information relating to the library and bandwidth usage, logged in displays and latest news.

It follows a metro style interface so that the information is clearly presented for a good overview. An example dashboard is below:

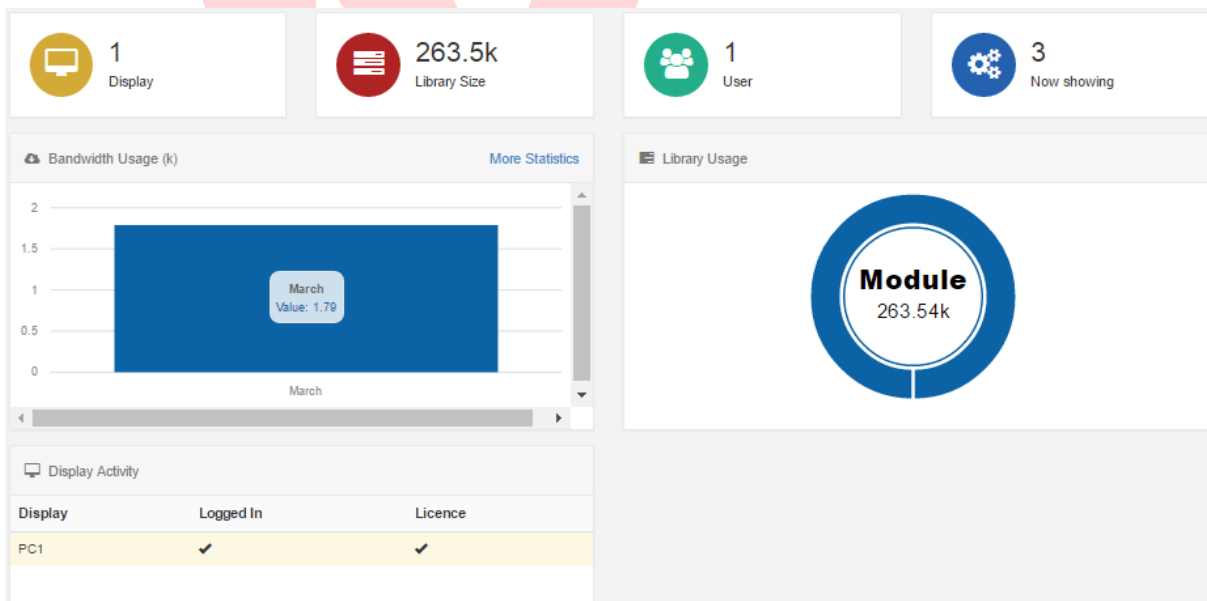


Figure 2: Dashboard – Status Dashboard

2.3.1.2 ICON DASHBOARD

The CMS Icon Dashboard is intended as a "Launcher" into other areas of the system for standard users. The icons in the dashboard are shown / hidden according to the menu permissions of the user.

The Icon Dashboard is the default dashboard for all new users.

An example of the icon dashboard is below:

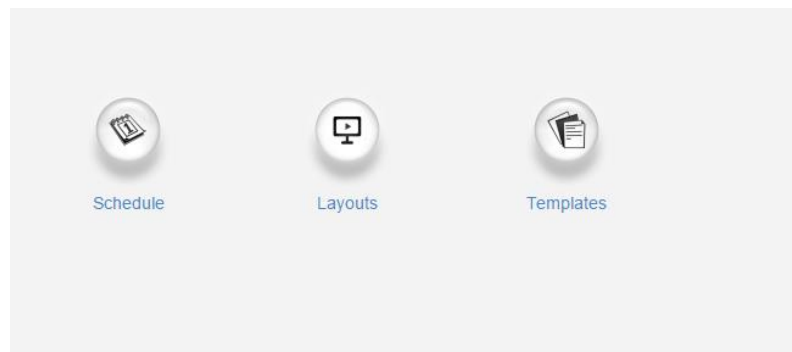


Figure 2: Dashboard – Icon Dashboard

2.3.1.3 MEDIA DASHBOARD

The CMS Media Dashboard is intended as a restricted access view of the system for users who should only edit the media they have been given permission for.

It presents a grid style interface which lists out each item the user has permissions to edit and offers media edit form.

 A screenshot of the 'Media Manager' interface. It features a table with columns for Layout, Region, Media, Type, and Sequence. The table is organized into sections: COOL (8), DEFAULT (3), REGION (1), and TWITTER (1). Below the table is a pagination control showing '1 - 13 / 13 (13)' and a page size dropdown set to '20'.

Layout	Region	Media	Type	Sequence
▶ COOL (8)				
▲ DEFAULT (3)				
Default Layout	Region 1		text	1
Default Layout	Region 1		ticker	2
Default Layout	Region 2		text	1
▲ REGION (1)				
Region Loop	Region 1	H264 MPEG4.mp4	video	1
▲ TWITTER (1)				
Twitter Tests	Region 1		twitter	1

Figure 3: Dashboard – Media Dashboard

2.3.2 SCHEDULE

VSign has a sophisticated scheduling system allowing for scheduling Layouts and Campaigns across Displays and Display Groups. This is achieved through Schedule Events and visualized on the Calendar.

Events have the following properties:

- Events spanning two dates - no maximum or minimum time
- Recurring events
- Priority events
- Schedule an event for more than one Display / Display Group at once

When a Display has more than one Layout scheduled to it at one time it will automatically alternate between the Layouts in the schedule.

If at any time there are no layouts scheduled to run, the default layout for the Display will be run automatically.

When Schedule Menu is selected, the following page is seen. This page shows a calendar with a control bar on top of page. Monthly View is selected by default.

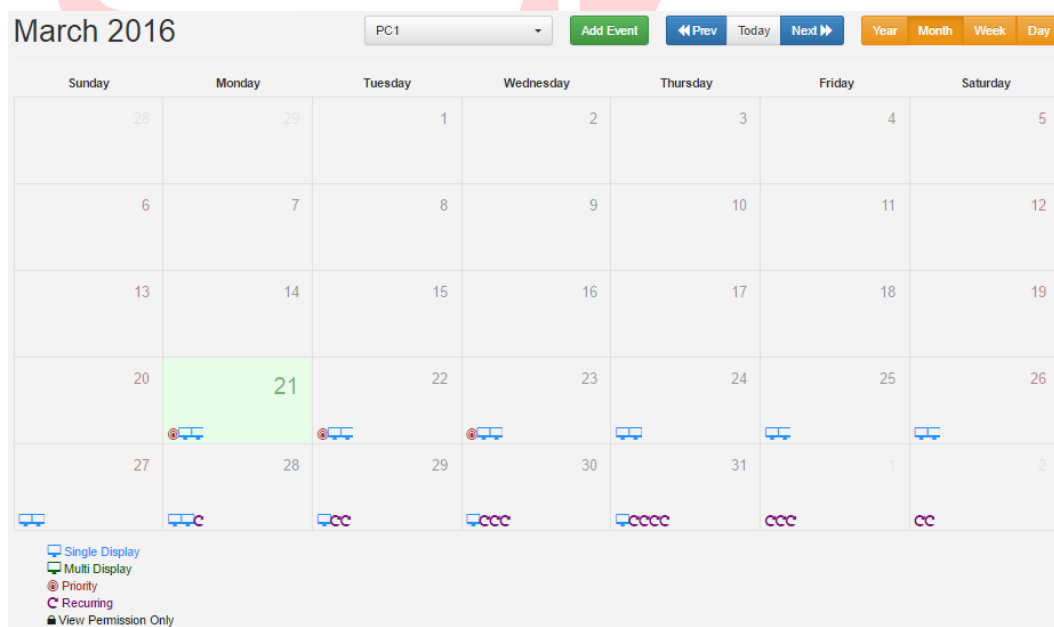


Figure 4: Schedule Page – Monthly View

Following sub-sections explain functionalities supplied by Schedule Page.

2.3.2.1 CALENDAR

The calendar has 4 views:

- Year
- Month
- Week
- Day

Scheduling transactions can be performed when in any view.

The control bar at the top of the calendar is for selecting the Displays, Adding Events and navigating through time and the views. The following figure shows control bar and related functionalities for each control.

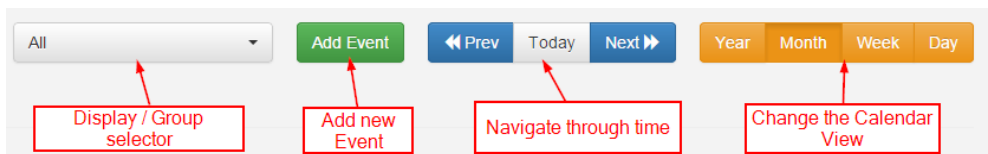


Figure 5: Schedule Page – Control Bar

2.3.2.2 EVENTS

Events are Layouts or Campaigns assigned to Displays at specific dates and times.

The event form can be launched from the Calendar Control buttons and by clicking on any existing event in the calendar.

When launched the form looks like this:

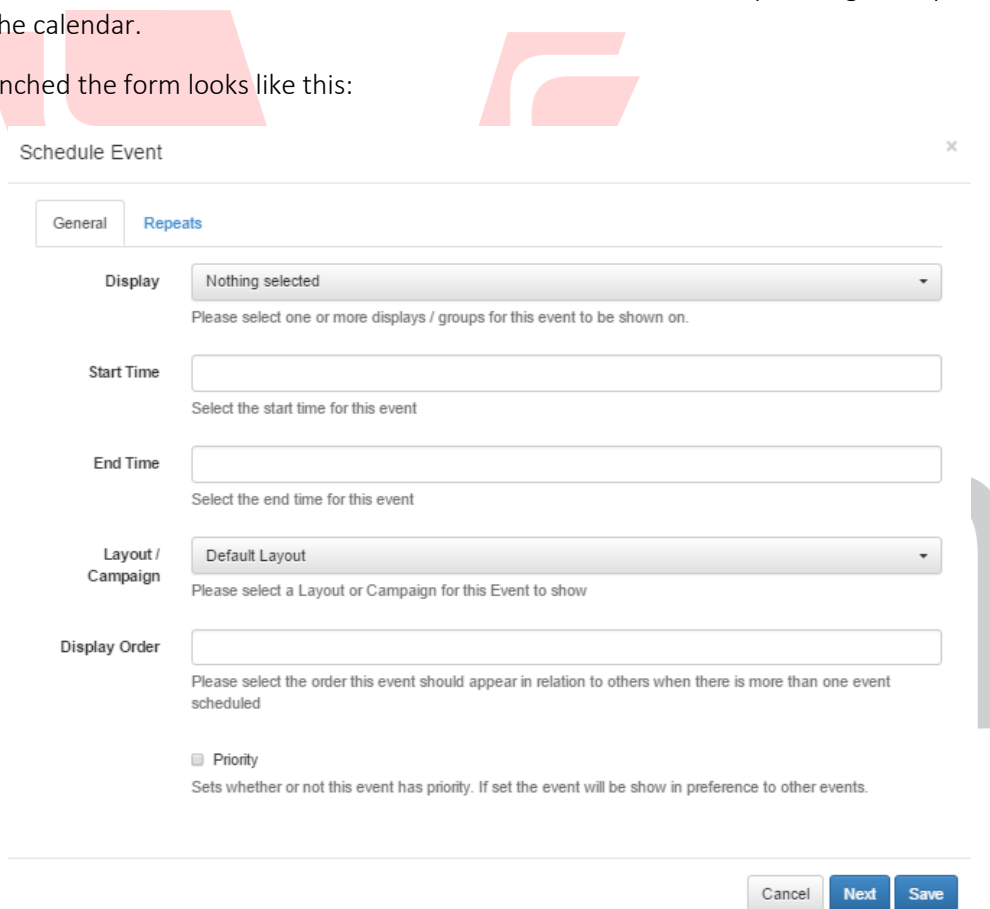


Figure 6: Schedule Page – Schedule Event Form

2.3.2.2.1 RECURRING EVENTS

The scheduler features the ability to create recurring events. To set recurrence for events, select “Repeats” tab from “Schedule Event Form”, shown in the figure above, and then select the required "Repeats" value from the list and the appropriate additional fields will be revealed.

A scheduled event can be repeated at defined interval (hourly, daily, weekly, monthly or yearly) until the specified date / time.

2.3.2.2.2 PRIORITY SCHEDULE

Priority schedules allow an event to be added that overrides all other non-priority events on the schedule. This functionality is useful for displaying temporary important notices, or overriding the schedule for a specific event without having to cancel the layouts that would normally be running at that time.

When adding a new schedule, or when editing an existing schedule, tick the "Priority" box to make the schedule override the others.

Multiple priority events may be scheduled concurrently. They will be shown in a cycle in the same way as non-priority layouts would be.

2.3.2.2.3 DELETING AN EVENT

To delete an event, first open the Schedule Event Form and then select the "Delete" button from the button bar on the form. The Delete Event form will open allowing confirmation of the Delete.

2.3.2.3 SCHEDULE NOW

"Schedule Now" functionality is available throughout the CMS and provides a quick way to Schedule a Campaign or Layout for a specific amount of time. This is typically used for displaying temporary notices on the signage system.

"Schedule Now" functionality is available from the following pages:

- Campaign
- Layout
- Layout Designer
- Display

The form has been standardized across all areas of the CMS.

Schedule Now

Layout: Default Layout
Please select a Layout or Campaign for this Event to show

Hours:
Hours this event should be scheduled for

Minutes:
Minutes this event should be scheduled for

Seconds:
Seconds this event should be scheduled for

Display: PC1
Please select one or more displays / groups for this event to be shown on.

Display Order: 0
Should this event have an order?

Priority?
Sets whether or not this event has priority. If set the event will be show in preference to other events.

Cancel Save

Figure 7: Schedule Now Form

2.3.3 DESIGN

By using the submenu of this menu, you can create layouts and campaigns you want to play on the players.

2.3.3.1 CAMPAIGNS

Layouts can be grouped together into an ordered list, called a Campaign. Campaigns can then be scheduled as whole units and the Display will play them in sequence.

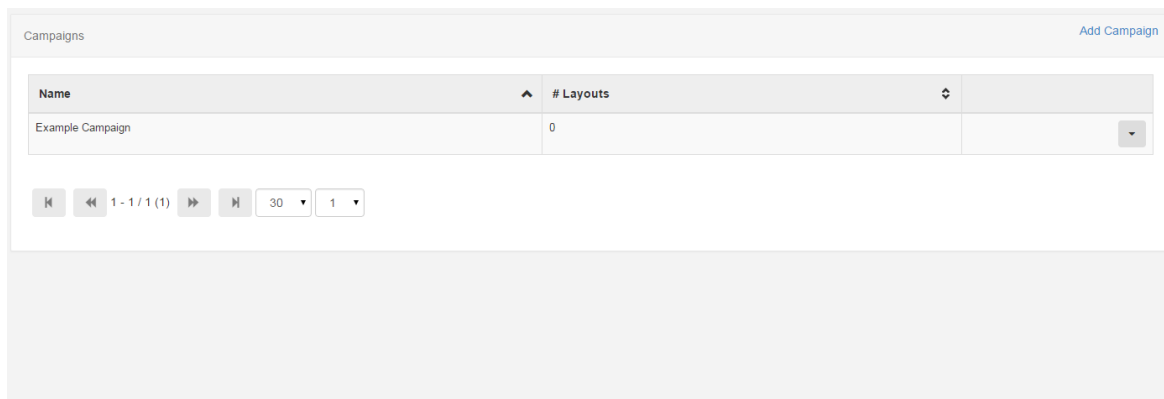


Figure 8: Campaigns Page

You can see campaign list at screen of Figure 8. You must click on “Add Campaign” button at the top right of the page. After click on it, Figure 9 appears. Then you enter campaign name and save it.



Figure 9: Campaigns Page – Add Campaign

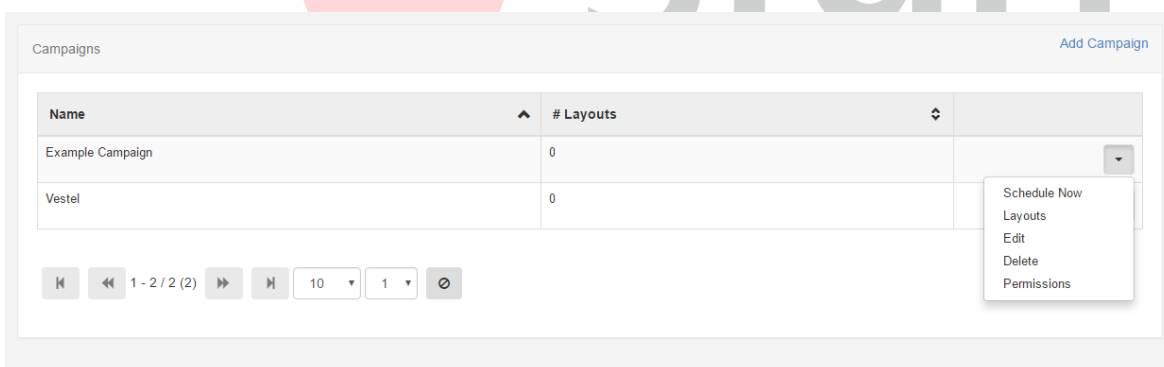


Figure 10: Campaigns Page – Campaign Submenu

You can see added campaigns but there isn't any layout on campaign. You must click submenu (Edit) at the top right of Figure 10. Here you can delete campaign, edit name of campaign, edit user permission for being able to see campaign. When you click on “Schedule Now”, Figure 11 appears and you can schedule for campaign.

Schedule Now

Layout Default Layout
Please select a Layout or Campaign for this Event to show

Hours
Hours this event should be scheduled for

Minutes
Minutes this event should be scheduled for

Seconds
Seconds this event should be scheduled for

Display Nothing selected
Please select one or more displays / groups for this event to be shown on.

Display Order 0
Should this event have an order?

Priority?
Sets whether or not this event has priority. If set the event will be show in preference to other events.

Cancel Save

Figure 11: Campaigns Page – Schedule Now

If you select “Layouts” from submenu in Figure 10, Figure 12 appears. You can choose layouts that you want to play on player from a new menu.

Layouts on Campaign

Choose Layouts

Name	Tags
<input type="text"/>	<input type="text"/>
Name	
Default Layout	<input type="checkbox"/>
Vestel	<input type="checkbox"/>

Navigation: 1 - 2 / 2 (2) 5

Cancel Save

Figure 12: Campaigns Page – Add Layout On Campaign Form

2.3.3.2 LAYOUTS

You can design layouts that you want to play on player. When you click on “Layouts” menu, Figure 13 appears. There is layout table in this figure.

ID	Name	Description	Thumbnail	Owner	Permissions	Status
5	Default Layout			admin		✓
6	Vestel			admin		✗

Figure 13: Layouts Page

If you want to add a new layout, you must click on “Add Layout” button that is button at the top right of the screen. Figure 14 shows new menu. Also you can upload layouts in your computer with “Import” button.

Add Layout

General | Description

Name
The Name of the Layout - (1 - 50 characters)

Tags
Tags for this layout - used when searching for it. Comma delimited. (1 - 250 characters)

Template
Optionally choose a template you have saved before.

Resolution
Choose the resolution this Layout should be designed for.

Cancel Save

Figure 14: Layouts Page – Add Layout

Here you can enter the name of layout, select working resolution and form (portrait, landscape etc. If your device is horizontal, you can select landscape). You can select any template for using layout (Templates are explained later). Also you can add description about your layout. After you save it, Figure 15 appears.



Figure 15: Layouts Page – Design Layout

You can change region's size and location with drag and drop.

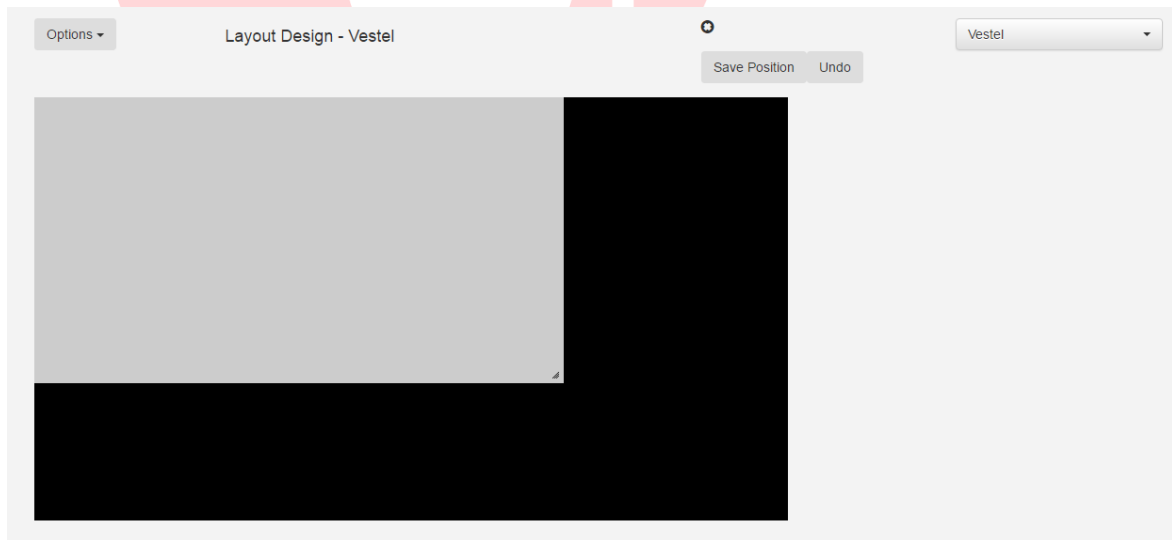


Figure 16: Layouts Page – Drag and Drop

If you want a lot of media on layouts, you must add new region. So in the Figure 17, you should click on “Add Region” menu and new areas will be identified for you. For example there are a lot of media in the Figure 18.

And each region can be thought as a playlist as well. Each media plays with the given media order. When all the media are played, if repeat mode is active, player repeats it until a new layout is set.

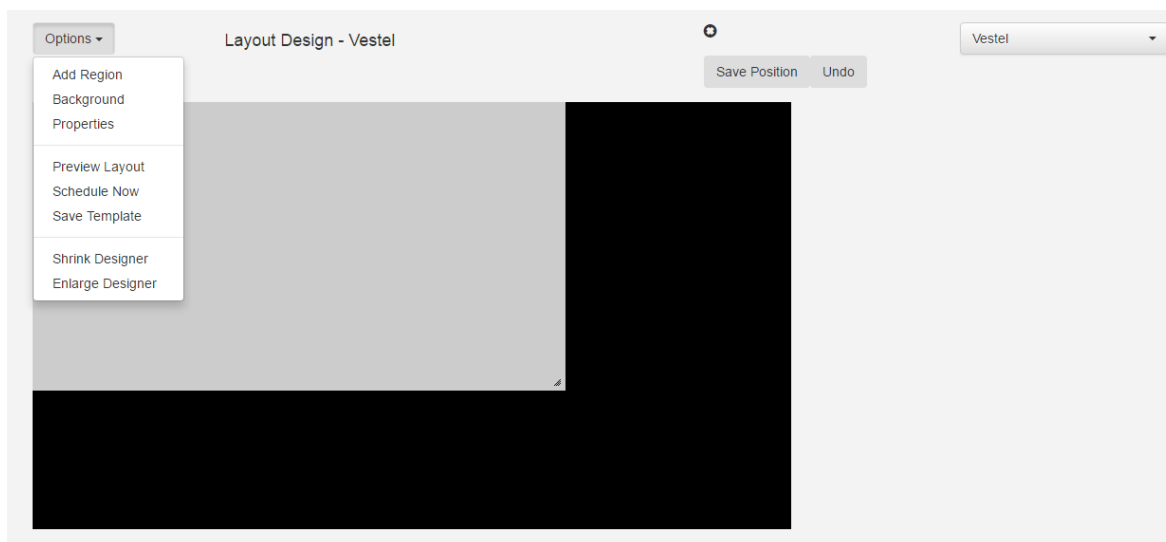


Figure 17: Layouts Page – Add Region

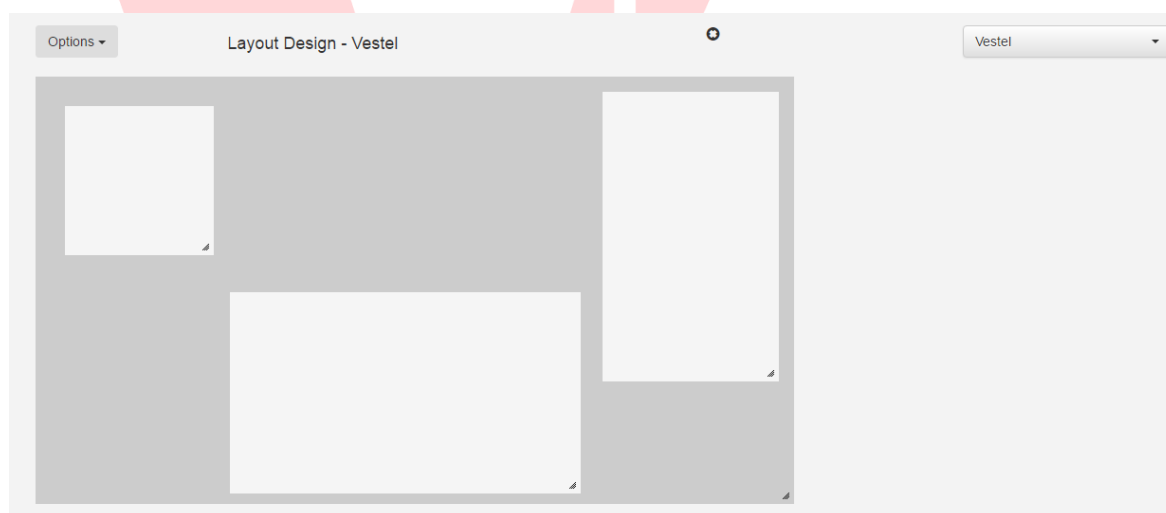


Figure 18: Layouts Page – Add Lots Of Regions

After you add and position regions, you must “Save Position” not to change the location of the regions. In Figure 17, you can change layout’s background and color or you can set whatever image for background with “Background”. You can change layout’s name etc. with “Properties”. Also you can play your layouts without installing any player with “Preview Layout”. You can select player and time/date for layouts with “Schedule Now”. You can save layout for using again with “Save Template”. You can shrink design area with “Shrink Template” and can enlarge design area with “Enlarge Template”.

You added a region but there isn’t any media in it. For adding a media, you can select “Edit Timeline” in the Figure 19. If you select it, Figure 20 appears and then you can add media that you want.

Brand logos can be added to any layouts as a region with high layer order. Layer order can be set from Region options menu. If two layers are overlapped, region with high layer order value becomes visible in front of the one with the lower layer order.

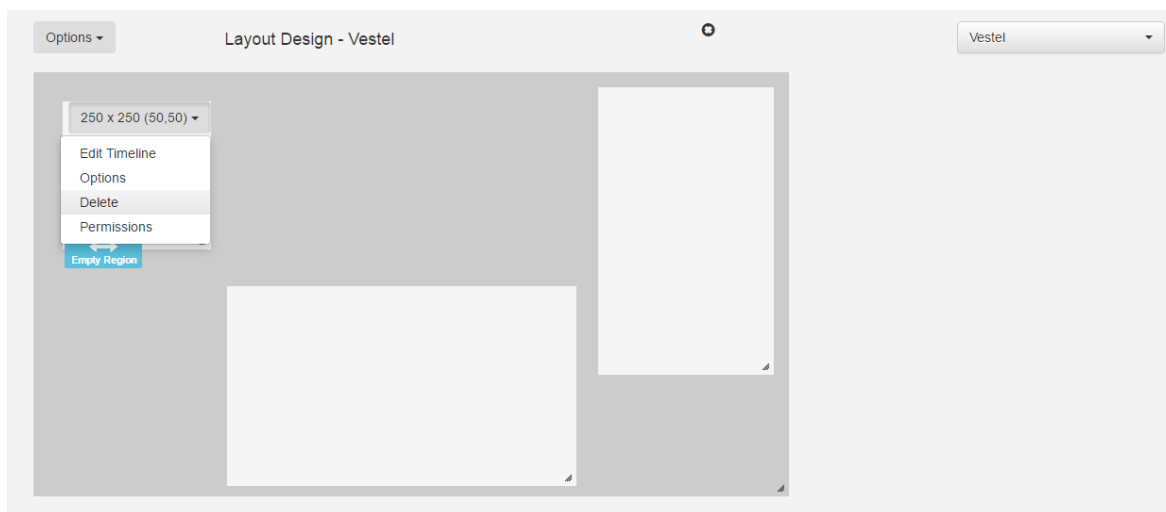


Figure 19: Layouts Page – Region Menu

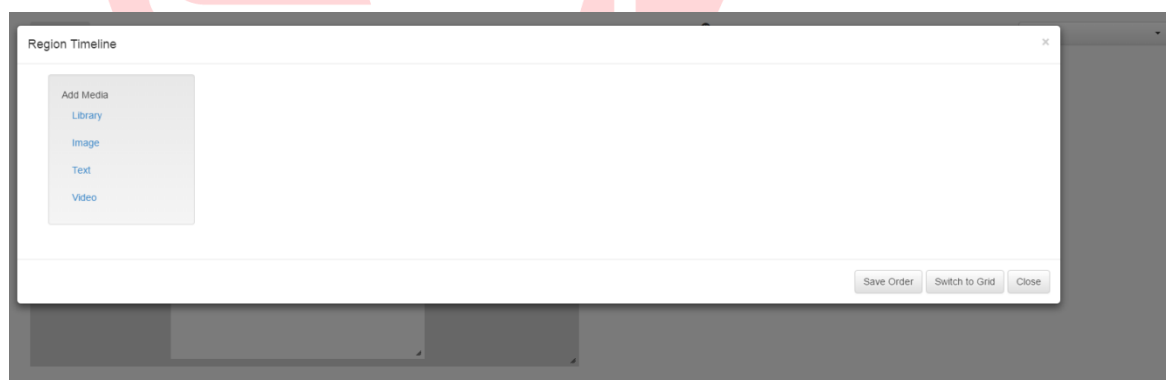


Figure 20: Layouts Page – Add Media

If you add a lot of media in a region and sort them with drag and drop or change order, you must click on “Save Order” and save new order. Speaking of the media types:

Library: You can reach data that is loaded into the system and add them to your regions.

Image: You can add files with jpg, jpeg, png, bmp, gif extension. Maximum image size to add can be set by configuring php settings of web server.

Text: If you want to see text on layout, you should use this.

Video: It allows you to load any video in layout and show it on player. If a layout will have lots of video, you must be careful about times of videos because videos', which has different periods, will show black screen on area that is finished early.

Local Video: It allows you to play a video being in the client or allows you to play an RTSP video link.

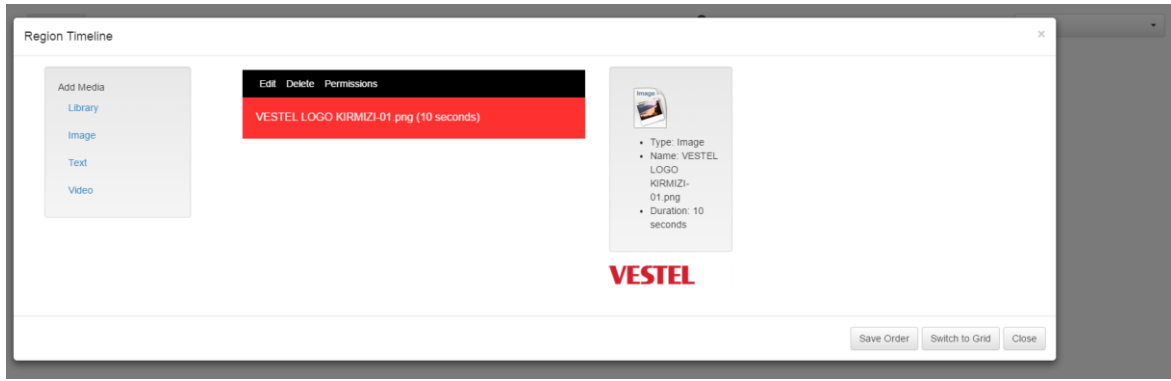


Figure 21: Layouts Page – Region Timeline

2.3.3.3 TEMPLATES

Templates are saved copies of Layouts that can be used when creating a new Layout. Using a Template can save a lot of time spent on the design process.

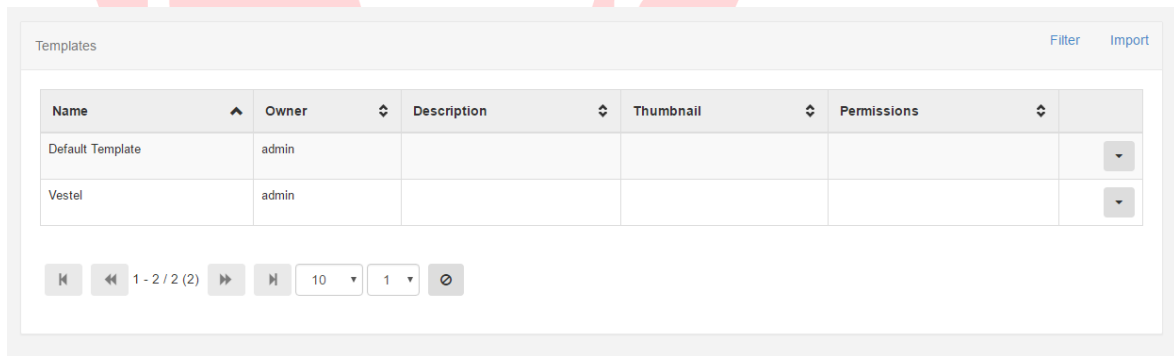


Figure 22: Templates Page

You can upload template that is in your computer with using “Import” button that is right top of Figure 22. Templates are saved from the Layout Designer Options menu using the “Save Template” menu item. Saving a template will store an exact copy of the layout, including regions, playlists and media.

With submenu that is showing in Figure 23, you can edit your template name, delete template, organize permission for viewing, deleting and editing your template by users. And you can download your template to your computer with using “Export” button.

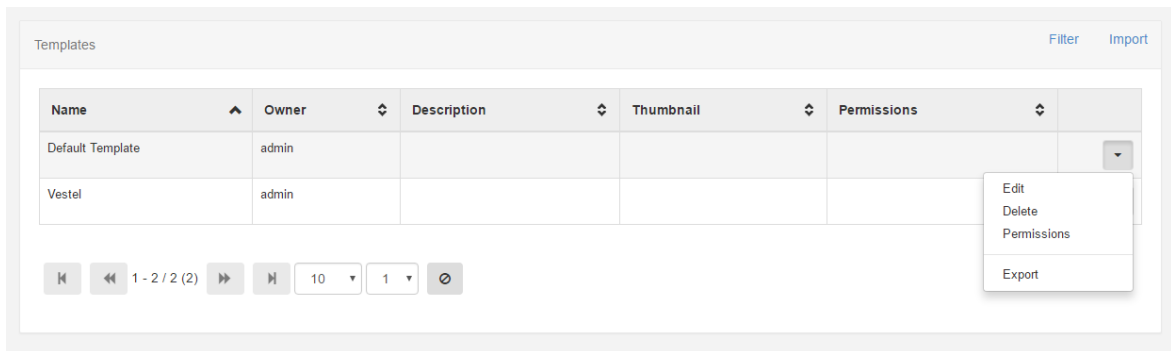
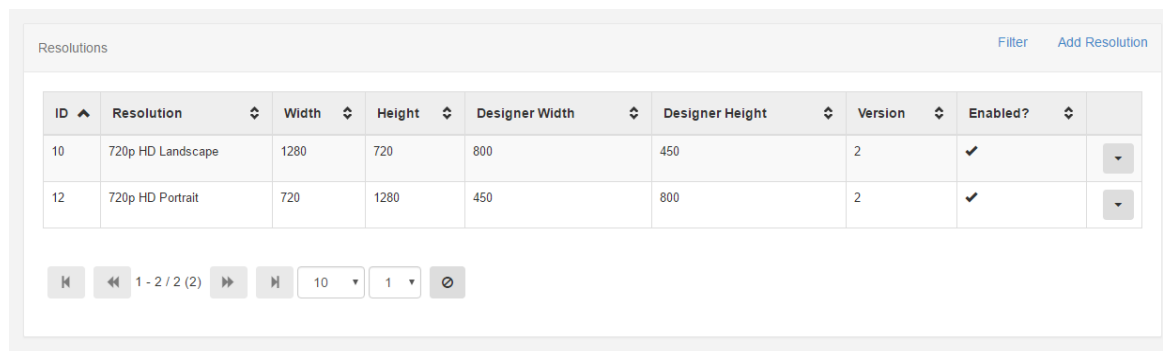


Figure 23: Layouts Page – Submenu of Template

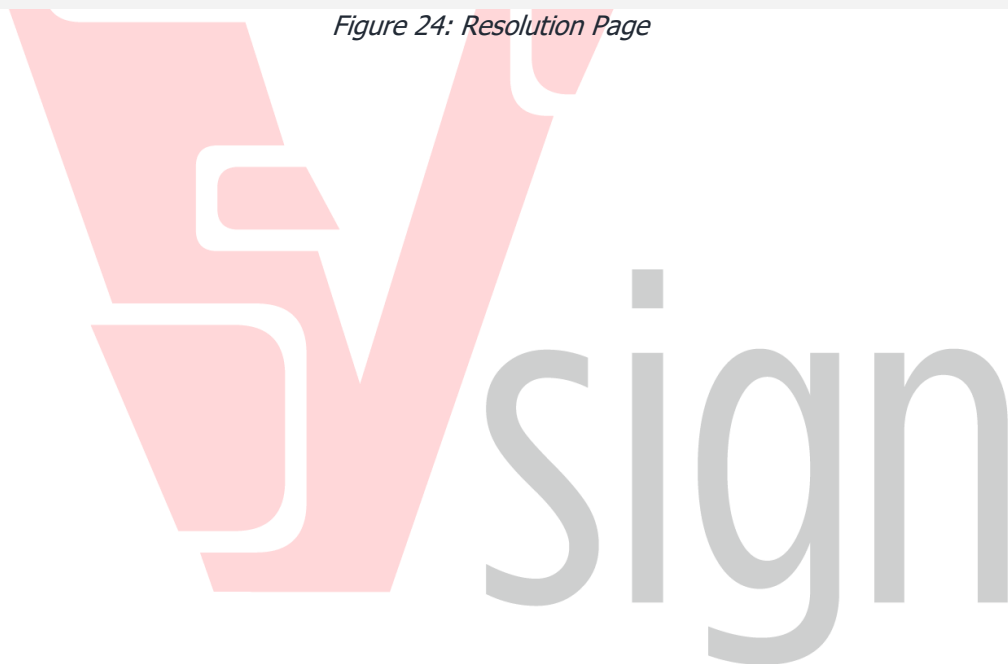
2.3.3.4 RESOLUTIONS

Resolutions that the design work is listed. You should select your layouts resolution and if your layout's resolution is compatible with your devices, image quality is maximum. VSign CMS comes with those resolutions at first installation: 1080p HD Landscape, 720p HD Landscape, 1080p HD Portrait, 720p HD Portrait, 4k and Common PC Monitor 4:3. If you want to play your layouts with different resolution, you can add new resolution with "Add Resolution" button that is showed in following figure. Also you can modify about resolution or delete resolution with resolution's menu.



ID	Resolution	Width	Height	Designer Width	Designer Height	Version	Enabled?	
10	720p HD Landscape	1280	720	800	450	2	✓	
12	720p HD Portrait	720	1280	450	800	2	✓	

Figure 24: Resolution Page



2.3.4 LIBRARY

You can upload video and image to system and list them.

2.3.4.1 MEDIA

You can reach the uploaded media, upload new media with using “Add Media” button that is showed in Figure 26. When you click on this button, Figure 25 appears. This figure show appropriate media types. Also you can delete unused media at the moment with “Tidy Library”. You can modify media, delete media, organize permissions, and download media with media’s sub menu. This menu is showed Figure 26.

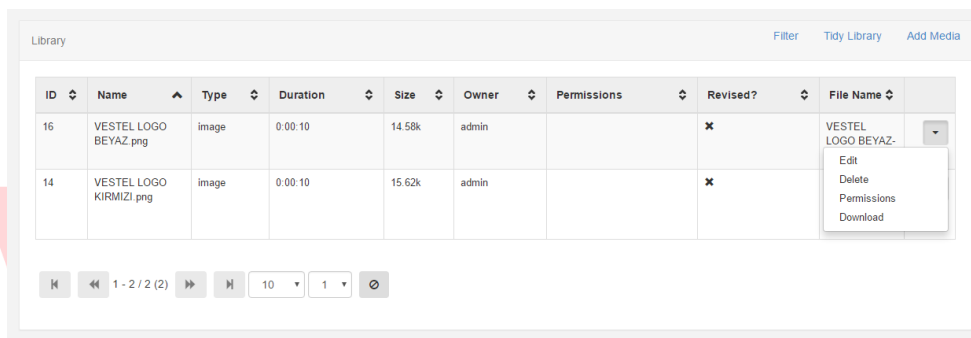


Figure 25: Media Page

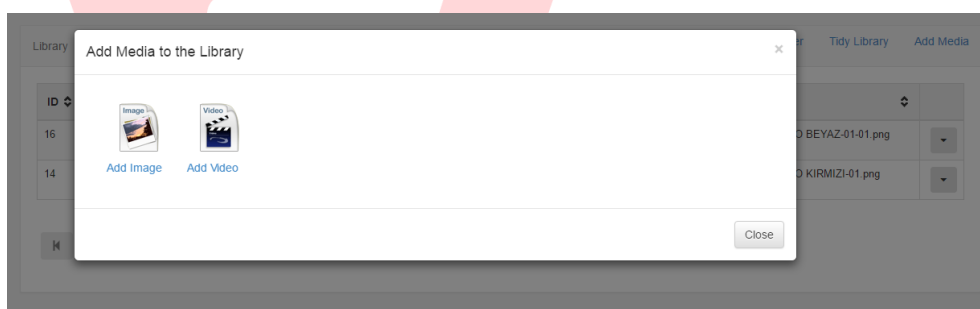


Figure 26: Media Page – Upload MediaForm

2.3.4.1.1 IMAGE

Images are used as foreground and background on Layouts. Once images are assigned to layouts they can be edited and given advanced properties. Click “Add Image” button in Figure 26, menu in Figure 27 will be opened. You can add images using “Add Files” button, after specifying “Name” and “Duration” of the image you can start uploading one by one with “Start” button or upload all images using “Start Upload”.

2.3.4.1.2 VIDEO

Videos uploaded to the CMS are cached for off-line playback on Displays. Click “Add Video” button in Figure 27, menu in Figure 28 will be opened. You can add videos using “Add Files” button, after specifying “Name” and “Duration” of the video you can start uploading one by one with “Start” button or upload all videos using “Start Upload”.

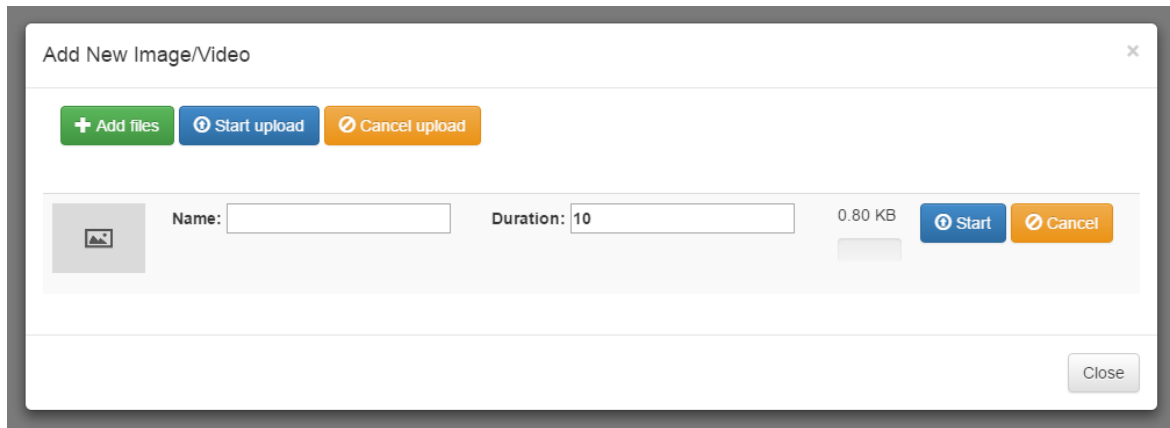


Figure 27: Edit Image



2.3.5 DISPLAYS

2.3.5.1 DISPLAYS

The most basic purpose of VSign is to show content on screens and the entire suite of applications exists for that one basic purpose. CMS provides a concept called Displays to manage when and how content is shown on a screen.

Displays are uniquely identified by a "hardware key" which is generated when the signage player software is installed. This hardware key is used to create a Display record in the CMS and is unique to that 1 Display record.

Following sub-sections give details of functionalities provided by Displays Menu.

2.3.5.1.1 CONNECTING A DISPLAY

Displays connect to the CMS over an API. Each signage player software application will have its own method of registering and connecting to the CMS - most of them only require the URL and CMS Key.

2.3.5.1.2 DISPLAY ADMINISTRATION

The CMS provides a page for Display Administration which is used to show the user the Displays they have permission to view and the status of those Displays.

The display administration table gives an easy to understand overview of each display registered in the CMS.

ID	License	Display	Description	Default Layout	Interleave Default	Email Alert	Logged In	Last Accessed	IP Address	Mac Address
1	✓	Hallway 1		Default Layout	✗	✗	✓	2014-10-29	172.28.128.1	34:AC:42:FA:BC:12

Figure 28: Displays Page

The rows and columns have the following meanings:

Status: The status of the display. Cross = missing content, Exclamation = downloading missing content, Tick = Up to Date.

ID: The internal ID for the display.

License: A tick or cross showing whether the display has been granted a license with the CMS. This prevents unauthorized displays being added to the CMS.

Display: A friendly name for the display. This can be set during the registration process in the display client software.

Default Layout: The default layout that will play when there are no other layouts / campaigns scheduled or when all scheduled layouts are invalid.

Email Alert: A tick or cross showing whether an email alert will be sent by the Maintenance module.

Logged In: A tick or cross showing whether the display has logged in recently. The time out for the display is set on each display OR in the global settings field MAINTENANCE_ALERT_TOUT.

Last Accessed: The date/time of last access.

IP Address: The IP address the display had the last time it reported its status through the "Media Inventory" status call.

Mac Address: The Mac Address of the display (if the client software is capable of sending it).

2.3.5.1.3 DISPLAY EDIT

Before the display will be allowed to download its schedule or required media it must be licensed with the CMS. After a display client is registered a new display record will appear in the Display Administration - it will then need to be edited to grant it access (getting a license).

Click on the "Edit" button of the Display loads its editing window. You can then proceed to change the settings for the chosen Display.

The screenshot shows the 'Edit a Display' form with the following fields and values:

- Display:** MB95M Test
- Display's Hardware Key:** 00:09:DF:55:A6:3B
- Description:** MB95M Test - Vestek
- Licence Display?:** Yes
- Default Layout:** Rixos Default

Figure 29: Displays Page – Display Edit Form

2.3.5.1.4 DISPLAY DELETE

Deleting a display will remove it from the CMS entirely and can only be performed if the display is not active.

A display can be unlicensed without deleting it using the Display Edit form.

Deleting a display cannot be reversed. A display can be reconnected to the CMS by repeating the "register" procedure which will create a new display record.

2.3.5.1.5 UPDATE DISPLAY SOFTWARE

Please do the following operations in order to update display software.

- Go to Media page link in CMS navigation menu
- Click Add Media button and chose Generic File as media type and add client software installation file
- Go to Displays page link in CMS navigation menu
- Be sure that the Display you want to choose is logged in
- Chose the Display and chose Version Information function from the row menu of Display. Chose the installation file from the list and save.
- Chose the Display and chose Assign File function from the row menu of Display. Be sure that the installation file added via Version Information is assigned and then save. It is recommended that, you assign only one installation file for the Display and remove other assigned installation files if exist.
- The Display will download installation file and automatically update software in next connection to CMS.

2.3.5.2 DISPLAY GROUPS

Displays can be assigned to one or more Display Groups for easier Scheduling and Media Assignment.

When a new Display Group is added in the CMS it will be available on the Schedule Calendar for events to be scheduled against it. Display Groups are born empty and Displays will need to be added.

Following sub-sections give details of functionalities provided by Displays Groups Menu.

2.3.5.2.1 ADDING AND DELETING

A simple form is presented for Adding and Editing.

The screenshot shows a modal window titled "Add Display Group" with a close button (X) in the top right corner. It contains two text input fields. The first field is labeled "Name" and contains the text "Ground Floor Reception". Below this field is the subtitle "The Name for this Group". The second field is labeled "Description" and contains the text "All displays on the Ground Floor Reception". Below this field is the subtitle "A short description of this Group". At the bottom of the form, there are three buttons: "Help", "Cancel", and "Save".

Figure 30: Displays Page – Add Display Group Form

2.3.5.2.2 GROUP MEMBERS

A special type of form is used for adding / removing Displays from a Display Group. This form is accessible on the row menu of each Display Group and includes a drag and drop list of Displays already assigned versus Displays that can be assigned.

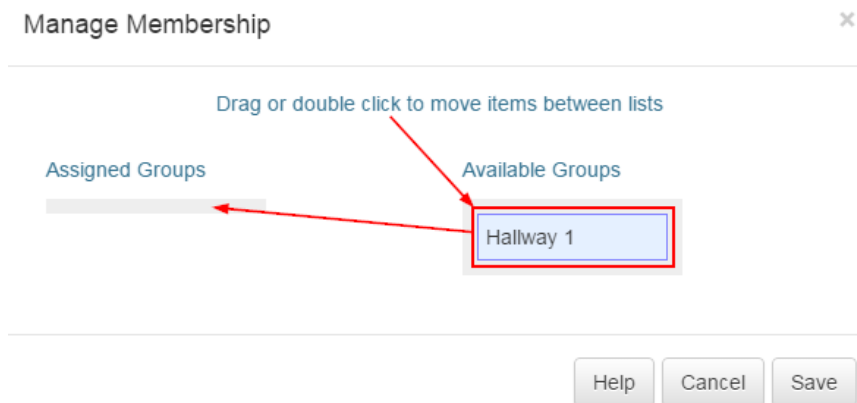


Figure 31: Displays Page – Manage Membership Form

2.3.5.2.3 SET DEFAULT LAYOUT

Changing the Default Layout of a display group could be done by clicking the Default Layout button under Display Group row menu. This action will change the Default Layout of all the group members.

2.3.5.2.4 UPDATE DISPLAY GROUP SOFTWARE

In order to update the software version of Display Group, it is required that all members of Display Group have same Display type (Such as mb120). Please do the following operations in order to update display group software.

- Go to Media page link in CMS navigation menu
- Click Add Media button and chose Generic File as media type and add client software installation file
- Go to Display Group page link in CMS navigation menu
- Be sure that the members of Display Group you want to choose are logged in
- Chose the Display Group and chose Version Information function from the row menu of Display Group. Chose the installation file from the list and save.
- Chose the Display Group and chose Assign File function from the row menu of Display Group. Be sure that the installation file added via Version Information is assigned and then save. It is recommended that, you assign only one installation file for the Display Group and remove other assigned installation files if exist.
- The members of Display Group will download installation file and automatically update software in next connection to CMS.

2.3.5.3 DISPLAY SETTING PROFILES

Display Clients are configured automatically from the CMS once they are connected. This is managed using Display Profiles.

A default display profile for each client type is provided and can be customized to the administrator preferences. It is also possible to create a new display profile and assign it directly to a display.

Following sub-sections give details of functionalities provided by Displays Settings Profiles Menu.

2.3.5.3.1 VIEWING THE AVAILABLE PROFILES

Profiles can be viewed from the "Display Settings" sub-menu on the "Display" menu. A list of profiles (shown below) will be shown when the page loads. Each profile has an action button to bring up the Edit or Delete forms.

Name	Type	Default	
TV Default Profile	tv	✓	

1-1/1 (1) 10 1 0

Figure 32: Display Settings Page

Each profile has a name, a type and a flag indicating if it is the default or not. Default profiles are automatically assigned to displays of the corresponding type.

2.3.5.3.2 EDITING A PROFILE

Once the Edit action is selected for a profile the below Edit Form is displayed. This form allows all the available settings to be adjusted.

Edit Profile

General Location Troubleshooting

Name: [TV Default Profile]
The Name of the Profile - (1 - 50 characters)

Default Profile?
Is this the default profile for all Displays of this type? Only 1 profile can be the default.

Collection Interval (seconds): 10
The number of seconds between connections to the CMS.

Cancel Save

Figure 33: Display Settings Page – Edit Profile Form

Each setting is explained on the form under each form field.

2.3.6 ADMINISTRATION

2.3.6.1 SETTINGS

2.3.6.1.1 CDN

In order to upload media files to Amazon Web Services CDN and make VSign Clients download files over CDN, complete the following steps:

- Go to the Settings page of CMS and then go to CDN tab
- Enter the AWS Secret Access Key ID, AWS Secret Access Key, AWS Library Name, AWS Region and CDN URL. These setting will be given by your CMS administrator.
- Go to the General tab
- Set “File download mode” to “CDN”
- Save settings and wait until “Settings Updated” message is displayed

2.3.6.1.2 EMAIL

In order to send email notifications, complete these steps

- Go to the Setting page of CMS then Maintenance tab
- Set Enable Maintenance to “On”
- Set Enable Email Alerts to “On”
- Set Admin email address (To)
- Set Sending email address (From)
- Set Maintenance Key (which will be used in task scheduler)
- Set Max Display Timeout to desired minutes
- If you want to receive emails every time maintenance task runs set Send repeat Display Timeouts to “On”
- Then save settings
- Go to Display tab of Settings page
- If you want users with permissions to get maintenance email alerts tick Maintenance Alerts for Users then click Save
- Go to Displays page then click Edit for display
- Under Maintenance tab set Email Alerts to “Yes”
- Tick the Use the Global Timeout? then click Save

2.3.6.1.3 CMS LICENSING

To renew CMS license key, complete these steps. CMS License key must be given by your CMS Administrator. CMS License Key limits total Display count, CMS License start and end dates.

- Go to the Setting page of CMS then Configuration tab
- Enter license key to “CMS License Key” field
- If key is accepted, “Settings Updated” window pops and “Main Dealer” is updated according to new key in dealer page.
- If key is not accepted, the warning window pops and key is not updated.

2.3.6.2 FTP PARAMETERS

The details of FTP parameters will not be given in this guide. Since, these parameters are completely related with VSign Set Top Box Client which is not officially released yet.

2.3.6.3 MODULES

All content displayed in Vsign is added / edited and served by a media module. There are a wide variety of modules to choose from and more are being added as new releases are made.

Modules can be enabled and disabled using the CMS admin interface on the Modules page. Each module also has a range of settings available.

Modules									Verify All
Name ^	Description	Library Media	Valid Extensions	Image URI	Preview Enabled	Assignable	Enabled		
Clock	Display a Clock	✘		forms/library.gif	✓	✓	✓	▼	
Counter	Customer Counter connected to a Remote Control	✘		forms/counter.gif	✓	✓	✘	▼	
Data Set	A view on a DataSet	✘		forms/datasetview.gif	✓	✓	✓	▼	
Embedded	Embedded HTML	✘		forms/webpage.gif	✓	✓	✓	▼	
Finance	Yahoo Finance	✘		forms/library.gif	✓	✓	✓	▼	
Flash	Flash	✓	swf	forms/flash.gif	✓	✓	✓	▼	
Font	A font to use in other Modules	✓	ttf,otf,eot,svg,woff	forms/library.gif	✘	✘	✓	▼	
Forecast IO	Weather forecasting from Forecast IO	✘		forms/library.gif	✓	✓	✓	▼	

Figure 34: Modules Page

2.3.6.3.1 Installing New Modules

The list of available modules to upload is presented at the top of the page. Clicking on the module name will install the module and refresh the page.

2.3.6.3.2 Embedded

The Embedded Content module allows HTML and JavaScript to be embedded into a Layout Region. This allows for custom enhancements to be made to Vsign without modifying the core application. Examples of where this might be useful are displaying a Clock or Weather region.

Add Embedded HTML ✕

Name
An optional name for this media

Duration
The duration in seconds this item should be displayed

Background transparent?
Should the HTML be shown with a transparent background. Not current available on the Windows Display Client.

Scale Content?
Should the embedded content be scaled along with the layout?

HTML to Embed

Custom Style Sheets

```
<style type="text/css">
</style>
```

HEAD content to Embed (including script tags)

```
<script type="text/javascript">
function EmbedInit()
{
  // Init will be called when this page is loaded in the client.

  return;
}
</script>
```

Figure 35: Modules Embedded

- **Duration**

The duration in seconds that this item should remain in the Region.

- **Transparent?**

Should the item be rendered with a transparent background? Xibo will try its best to do this when checked, however it may be overridden by the custom content.

- **HTML Content**

The HTML that should be loaded into the Region.

- **HEAD content**

Any content to put in the HEAD of the document - JavaScript should be wrapped in script tags. Xibo will automatically add jQuery.

The EmbedInit() method will be called by the Display Client and can be used to safely start any custom JavaScript at the appropriate time. The method is defaulted on any new Embedded Media Item.

```
<script type="text/javascript">
function EmbedInit()
{
    // Init will be called when this page is loaded in the client.

    return;
}
</script>
```

Show embedded HTML with Active-X content on the Windows Display Client the security settings of IE so that local files were allowed to run active content by default. This can be done in Tools -> Internet Options -> Advanced -> Security -> "Allow Active content to run in files on My Computer"

2.3.6.3.3 Shell Command

The Shell Command module is used to instruct the Display to execute a command outside of the Xibo environment, using the operating system shell.

The Shell Command is executed when the Widget is shown on the Layout.

A Shell command can be a string which is passed directly to the shell or a predefined command. If a command string is specified then an option for windows/linux is provided.

- **Windows Command**

The Shell Command for Windows. Will be executed using cmd.exe.

- **Linux Command**

The Shell Command for Linux/Android - Android players require root access to use shell commands.

Shell Commands do not have a duration, they are executed once and then expire automatically.

2.3.6.3.4 Dataset

The Dataset module allows content from a Dataset to be added into a Region, organised and displayed in a tabular fashion.

When the underlying Dataset Data is changed, the view automatically updates with new Data.

Once a Dataset has views care should be taken when editing the Column structure of the Dataset.

2.3.6.3.4.1 Adding a Dataset

When adding a new Dataset View the CMS provides a simple form asking for the Data Source and duration. These items cannot be changed without re-creating the View.

- **Dataset**

The Dataset to use as the Source of Data.

- **Duration**

The duration in seconds that this item should remain in the Region.

After choosing the Source of the View the Edit form will automatically open, providing access to the other options.

2.3.6.3.4.2 Editing a Dataset

- **Update Interval**

Displays can cache the content of this media type to prevent repeated download of identical resources. They are also cached for off-line playback.

- **Order**

An Order by clause using SQL syntax that should be applied to the Data Source. e.g. Name DESC

- **Filter**

A filtering clause using SQL syntax that should be applied to the Data Source. e.g. Region = 'Europe'

- **Upper Row Limit**

The upper row count (0 = unlimited)

- **Lower Row Limit**

The lower row count (0 = unlimited)

- **Table Headings**

Show the column headings on the table, or have the table without headings.

- **Rows per Page**

Spilt the data into multiple pages that will be cycled.

- **Columns Selected**

An ordered list of Columns Selected for this View. Items can be dragged / dropped between lists and ordered within the same list.

- **Columns Available**

A list of Columns that are available for display.

- **Style Sheet**

A CSS Style Sheet to control the visual styling of the Table.

Example Style Sheet

```
table.DataSetTable {
font-family:"Trebuchet MS", Arial, Helvetica, sans-serif;
width:100%;
border-collapse:collapse;
}

tr.HeaderRow {
font-size:1.1em;
text-align:center;
padding-top:5px;
padding-bottom:4px;
background-color:#A7C942;
color:#ffffff;
}

tr#row_1 {
color:#000000;
background-color:#EAF2D3;
}

td#col_1 {
color:#000000;
background-color:#EAF2D3;
}

td.DataSetColumn {
color:#000000;
background-color:#EAF2D3;
```



```

border:1px solid #98bf21
}

tr.DataSetRow {
text-align:center;
color:#000000;
background-color:#EAF2D3;
border:1px solid #98bf21
padding-top:5px;
padding-bottom:4px;
}

th.DataSetColumnHeaderCell {
font-size:1em;
border:1px solid #98bf21;
padding:3px 7px 2px 7px;
}

span#1_1 {
}

span.DataSetColumnSpan {
}

```

2.3.6.3.5 ForecastIO

2.3.6.3.5.1 Installation

The module comes pre-installed on all 1.7 installations, but needs an API key from DarkSky API to function correctly. This should be obtained by creating an account and (if you will exceed 1000 calls per day) entering your billing information.

This configuration is entered in the Module Administration page by editing the "Forecast IO" module.

There are two settings required:

API Key

The API key is obtained after registering an application on the Forecast developer website.

The API Key identifies the CMS with Forecast and allows the CMS access to the weather data.

If you receive “Unable to reach Forecast API. No Host Found” error, please be sure that you activate CA root certificates for curl and openssl extensions in PHP settings of your server. You can check CMS Installation Guide for further information.

Cache Period

Forecast allow 1000 requests for a forecast per day before charging a small fee for each subsequent request.

The CMS allows a cache period to be specified which will create a delay between requests for each geographic location.

2.3.6.3.6 DatabaseIO

Database IO module is used to get data from a database.

Connection String : Connection string to connect to database.

Username: Username information to connect to database.

Password: Password to connect to database.

Query: Query to get data.

Columns which will be shown have to be written to template region in parenthesis [column1],[column2].

2.3.6.4 DEALERS

Dealers are 3rd parties who can buy license to use Vsign server. Every dealer must have a number, name, display limit and duration. Vsign CMS has default dealer named “Main_Dealer”. “Main Dealer” stores the information of client limit and duration of Vsign CMS and can not be edited or deleted. “Main Dealer” is updated only when the license key is changed. Please check CMS Licensing section to get information about how to change CMS License Key.

Client limit: How many displays are reserved for a dealer.

Duration: How much time (in days) a dealer can use Vsign server.

2.3.6.4.1 Branch

Each branch is specific to one dealer. Each branch is defined with display limit and license duration. Each branch uses the display quota of the dealer it belongs to.

2.3.6.4.1.1 Add Branch

Click to action button of the dealer which branch will be added.

ID ^	Dealer No ⇅	Dealer Name ⇅	Client Limit ⇅	Left Client Limit ⇅	Created Date ⇅	Licence Duration ⇅	Expire Date ⇅	License ⇅	
1	1	Dealer1	50	48	2017-06-30 00:00:00	50	2017-08-19	✓	
3	3	Dealer2	10	9	2017-06-30 00:00:00	10	2017-07-10		<ul style="list-style-type: none"> Add Branch View Branches Edit Delete
4	1	Main_Dealer	100	38	2017-06-16 00:00:00	365	2018-06-16		

Figure 36: Dealers Page – Add Branch

Click Add Branch.

Fill required fields and click “Save”.

2.3.6.4.1.2 View Branches

Click to action button of the dealer whose branches will be showed.

ID ^	Dealer No ⇅	Dealer Name ⇅	Client Limit ⇅	Left Client Limit ⇅	Created Date ⇅	Licence Duration ⇅	Expire Date ⇅	License ⇅	
1	1	Dealer1	50	48	2017-06-30 00:00:00	50	2017-08-19	✓	
3	3	Dealer2	10	9	2017-06-30 00:00:00	10	2017-07-10		<ul style="list-style-type: none"> Add Branch View Branches Edit Delete
4	1	Main_Dealer	100	38	2017-06-16 00:00:00	365	2018-06-16		

Figure 37: Dealers Page – View Branches

Click View Branches.

vsign