

DSA Original Equipment Manufacturer - Getting Started Guide

August 2016

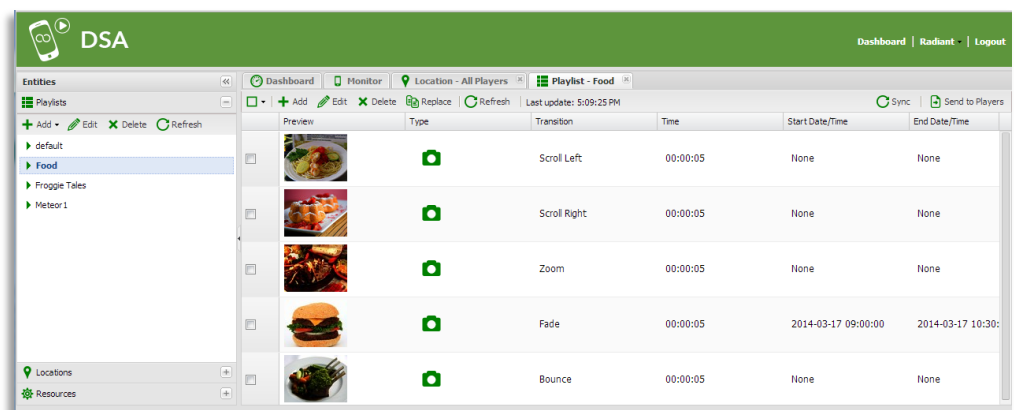


Introduction

DSA Player is an advertising / information application for Android Phones, Tablets and Android mini-PCs in a retail environment. The application is designed to run on WIFI or Ethernet or 3G/4G connected devices connected to a permanent power supply / charger.

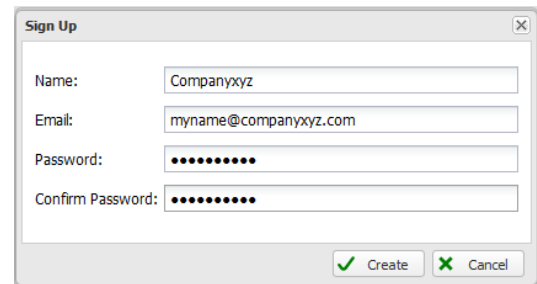
DSA Player plays a multimedia loop which is activated by the device's screen timeout. When the screen is touched the device may be used for customer demonstrations with certain restrictions (settings menu items are locked out). If the screen is not touched for 30 seconds, DSA Player resumes. DSA Player can also be configured for digital signage and kiosks on suitable host platforms.

DSA Player connects via an internet connection to a Cloud Service allowing the multimedia loop to be centrally controlled.



1. Create your service account and register your licence(s)

Following are instructions to create an account, register a licence and location code, add media, create a default playlist and register a player which will play the default playlist. For ongoing use consult the operations manual.

A 'Sign Up' dialog box with a title bar and a close button. It contains four input fields: 'Name' with the text 'Companyxyz', 'Email' with 'myname@companyxyz.com', 'Password' with masked characters, and 'Confirm Password' with masked characters. At the bottom right are two buttons: 'Create' with a green checkmark icon and 'Cancel' with a red X icon.

1.1 What will I need?

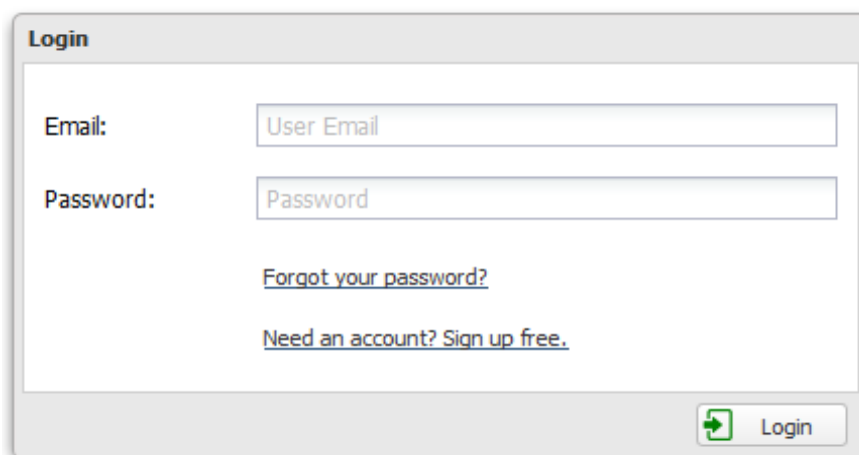
DSA Licence code – this is of the form xxxx-xxxx-xxxx-xxxx

Web browser access to the DSA Cloud Server - <https://www.dsa-cloud.net>

Android device with web access.

1.2 Set up a DSA Cloud Service account

Browse to the DSA website: <https://www.dsa-cloud.net>

A 'Login' dialog box with a title bar. It contains two input fields: 'Email' with placeholder text 'User Email' and 'Password' with placeholder text 'Password'. Below the fields are two links: 'Forgot your password?' and 'Need an account? Sign up free.'. At the bottom right is a 'Login' button with a green right-pointing arrow icon.

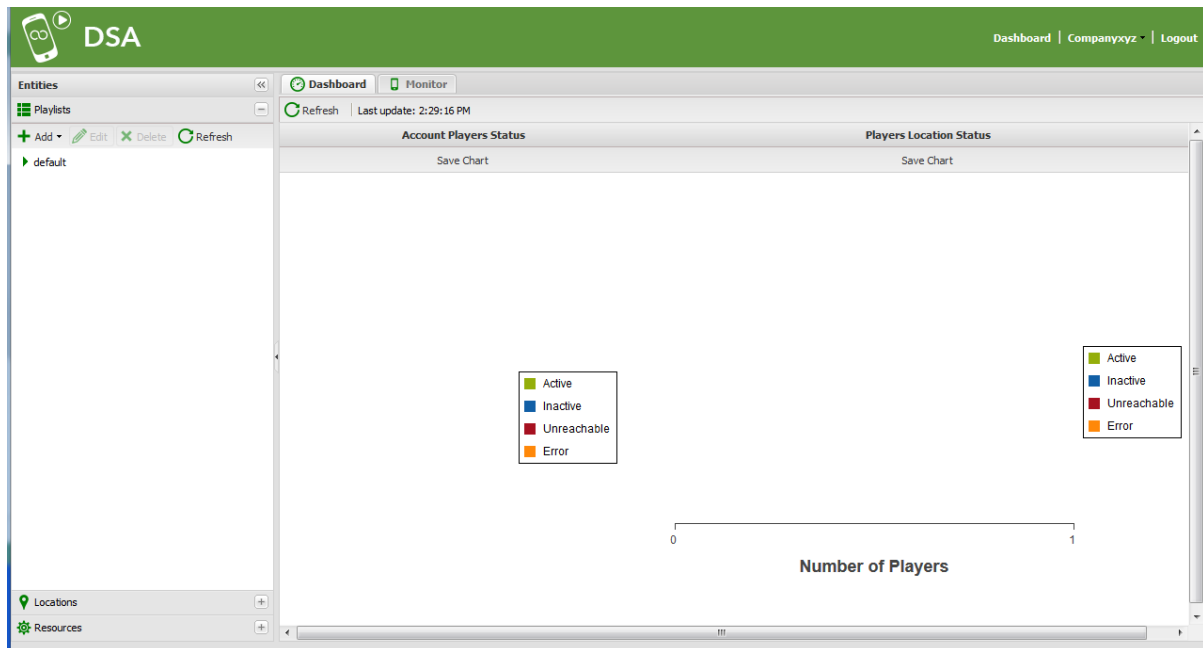
Click *Need an account? Sign up free*. Enter your organisation name, email and password:

Click *Create*.

Wait for your confirmation email

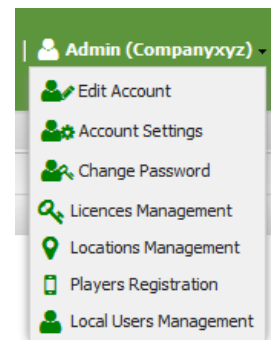
1.3 Login to your DSA Player Cloud Service Account

Use the login URL and credentials specified in 1.2 to access the DSA CMS



1.4 Add your player licence code(s) to your account

Click on your user name and select Licences Management



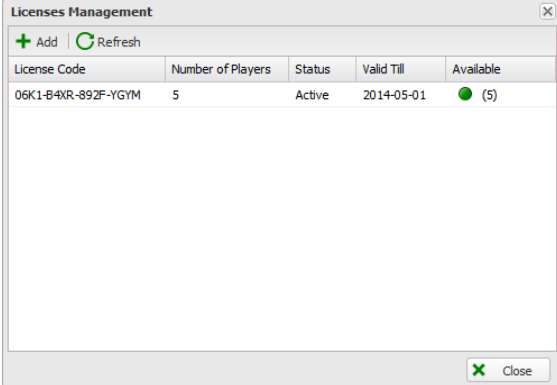
The screenshot shows the 'Licences Management' console. It has a table with columns: License Code, Number of Players, Status, Valid Till, and Available. An 'Add License' dialog box is open, showing a 'License Key' field with the value '06K1-B4XR-892F-YGYM'. The dialog has 'Add' and 'Cancel' buttons. The console also has 'Add' and 'Refresh' buttons at the top.

In the Licences Management Console, click **+Add** and type or paste the licence which was emailed to you.

Click **Add**

Your added licence details are now displayed.

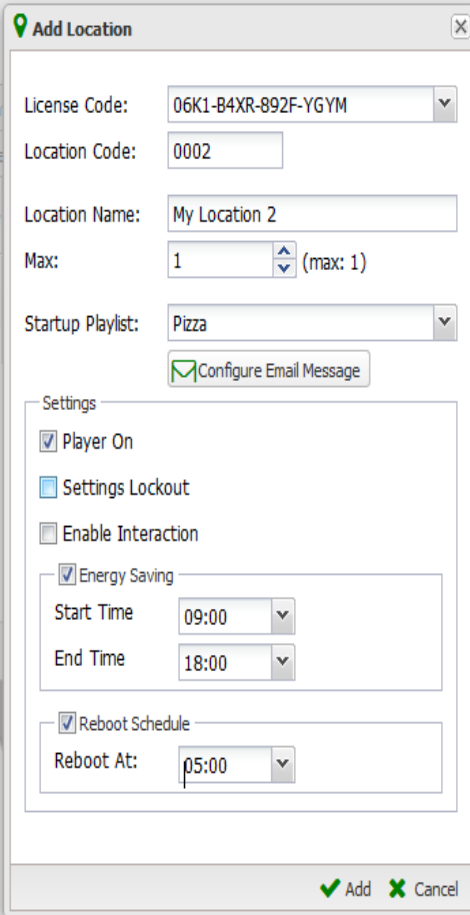
Click *Close*



License Code	Number of Players	Status	Valid Till	Available
06K1-B4XR-892F-YGYM	5	Active	2014-05-01	● (5)

1.5 Allocate licences to Player locations

Click on your user name and select *Locations Management* in the Locations Management Console, click *+Add*:



Add Location

License Code: 06K1-B4XR-892F-YGYM

Location Code: 0002

Location Name: My Location 2

Max: 1 (max: 1)

Startup Playlist: Pizza

☒ Configure Email Message

Settings

☒ Player On

☐ Settings Lockout

☐ Enable Interaction

☒ Energy Saving

Start Time: 09:00

End Time: 18:00

☒ Reboot Schedule

Reboot At: 05:00

Select the *Licence Code*

Create a 4 unique 4-digit *Location Code*

Type the location name

Enter how many of the players you would like to use at that location.

You can optionally configure a licence email message which will be automatically sent to a local user associated with that location (see *Local Users Management*)

Select the player start-up playlist. In this case we will use the default playlist.

Configure Settings:

-> Tick *Player On* to auto start player.

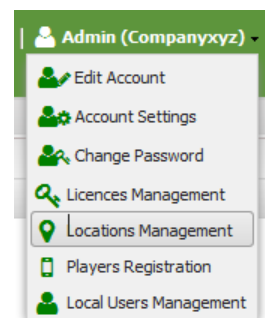
-> Leave *Settings Lockout* unticked unless you need to disable local Android Settings Menu access.

-> Optionally tick *Enable Interaction* to allow local users to access the touch screen.

-> Optionally configure *Energy Saving* to set screen on and off times.

-> Optionally set daily player *Reboot Schedule*

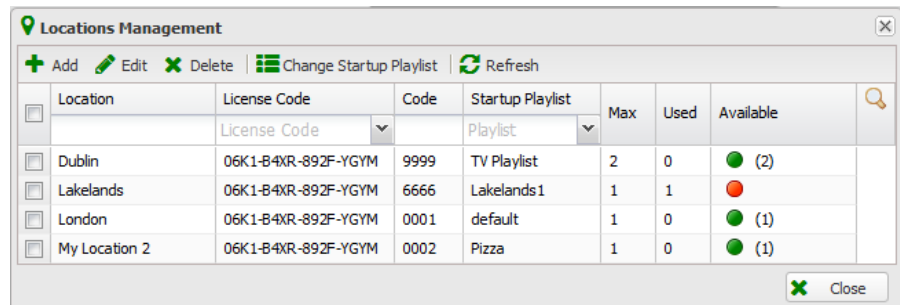
-> Optionally Configure the Geographic Location



- * Reboot will only operate on devices with *DSA Player Manager App* installed. This app requires root access. Daily reboot is not required on devices that are switched off out of hours.

Click *Add* to add the new location.

Your added location details are now displayed:



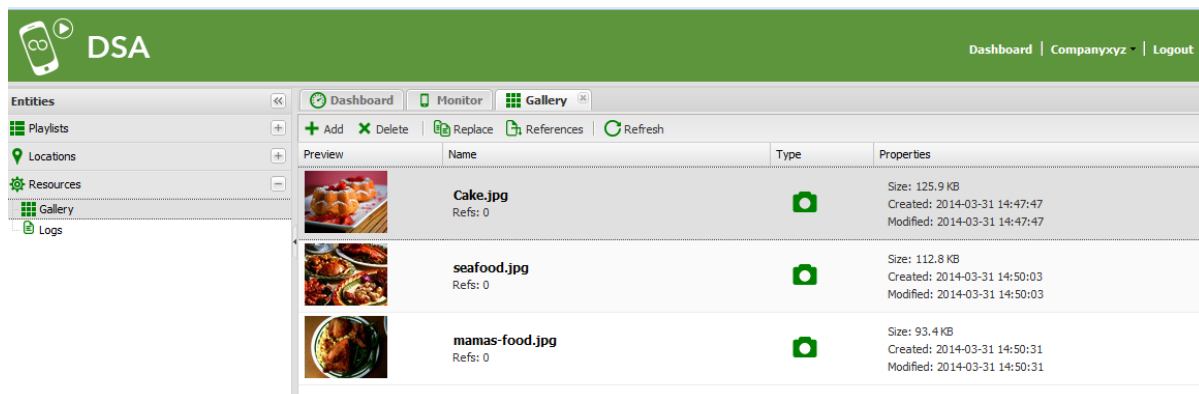
Location	License Code	Code	Startup Playlist	Max	Used	Available
Dublin	06K1-B4XR-892F-YGYM	9999	TV Playlist	2	0	● (2)
Lakelands	06K1-B4XR-892F-YGYM	6666	Lakelands1	1	1	● (1)
London	06K1-B4XR-892F-YGYM	0001	default	1	0	● (1)
My Location 2	06K1-B4XR-892F-YGYM	0002	Pizza	1	0	● (1)







Click Close

2 Add content and populate the default playlist

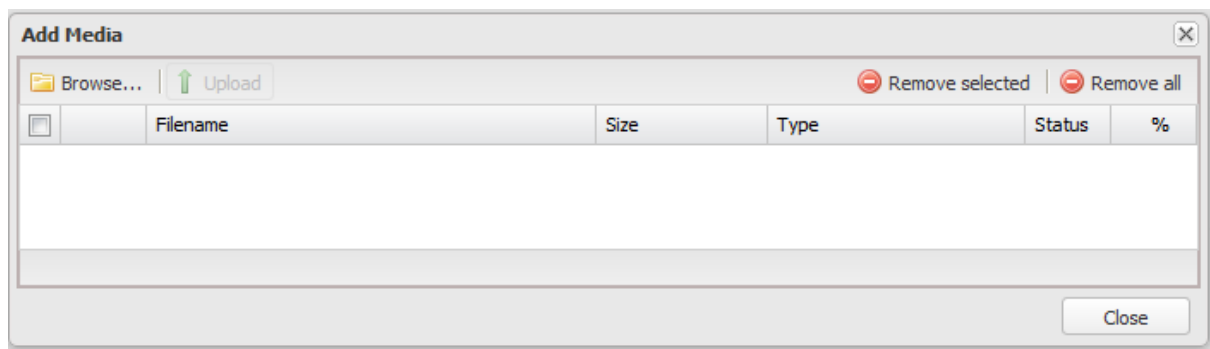
2. Add content to the Media Gallery

In the *Entities* console, click on *Resources* and then *Gallery*



Preview	Name	Type	Properties
	Cake.jpg Refs: 0		Size: 125.9 KB Created: 2014-03-31 14:47:47 Modified: 2014-03-31 14:47:47
	seafood.jpg Refs: 0		Size: 112.8 KB Created: 2014-03-31 14:50:03 Modified: 2014-03-31 14:50:03
	mamas-food.jpg Refs: 0		Size: 93.4 KB Created: 2014-03-31 14:50:31 Modified: 2014-03-31 14:50:31

Click **+Add** to add media items (jpeg, PNG, MP4)

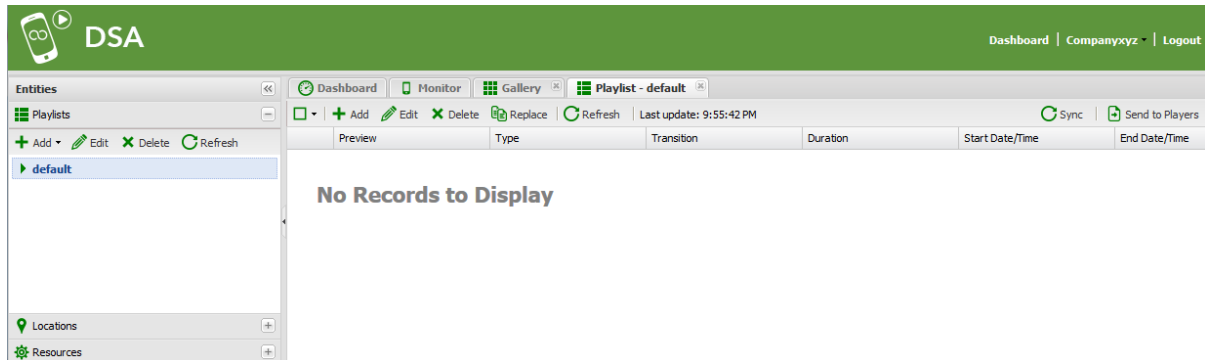


You can add one or more files (use CTRL Click)

2.2 Modify the default playlist

You can create as many playlists as you like and target them at one or more players. The default playlist is automatically played by any players that have not been targeted with a specific playlist, so it's a good idea to populate this playlist with at least one item (for example your company logo)

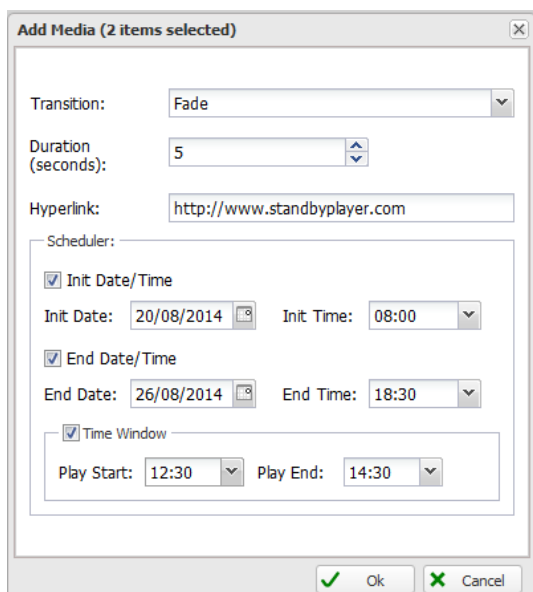
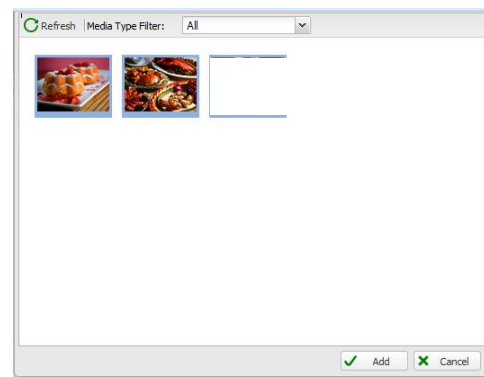
In the *Entities* console, click on *Playlists* and then *default*.



Click **+Add** to add media items or playlists from the gallery.

You can select multiple items with CTRL Click

When you have selected your items, click **Add**



Click **Ok**

Configure the required playlist item properties:

Select a transition type

Select a duration

Configure the optional properties:

Hyperlink: Associate the item with a URL (for touch screen players only)

Item Schedule: Allocate a start and / or end time for the playlist item(s)

Time Window: Configure a daily time window during which the content will play (day parting)

3. Install the Player App and register with the service

1. To download the app browse to: <http://dsa-cloud.net/app/DSAPlayer.apk>

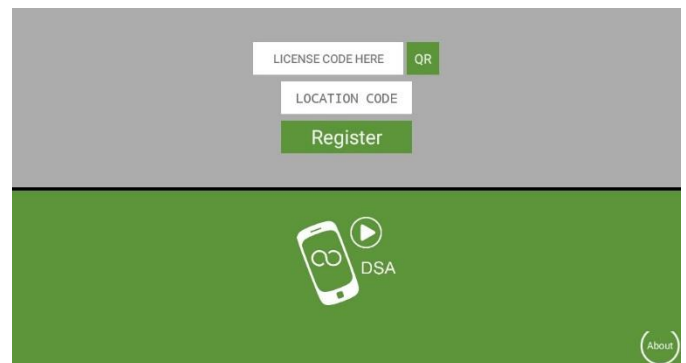
2. Touch *Install* to start the installation.

3. Touch *Accept* and wait for the download / install to complete.

4. Touch *OPEN* to start the application

5. *Device MUST be internet connected for this step:-*

When the Licences page appears, touch Licence Code and enter the licence code provided (including the dashes). Touch *LOCATION CODE* and enter the 4 digit location pin which will have been provided with the licence code. Touch *REGISTER* on the keypad or touch *Enter*.



6. Settings Options (*Note required settings may be preset on registration*)

On the settings page ensure at least *Player On* is selected.

Optional Settings

Player descriptions: Enter the player name, Serial Number or location info here.

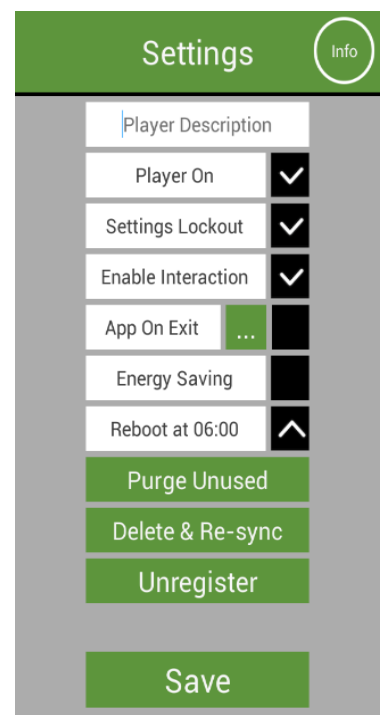
Settings Lockout: Tick to ensure that users cannot access the Android Settings menu.

Player Interaction: Tick to enable touch screen support. Untick to suppress Android on-screen keys (full screen player on tablet devices).

App On Exit: Tick to switch to a third party application when the screen is touched (requires *Enable Interaction*)

Energy Saving – Tick this to manually configure the local screen times.

Reboot at.... - Set the daily reboot time here.

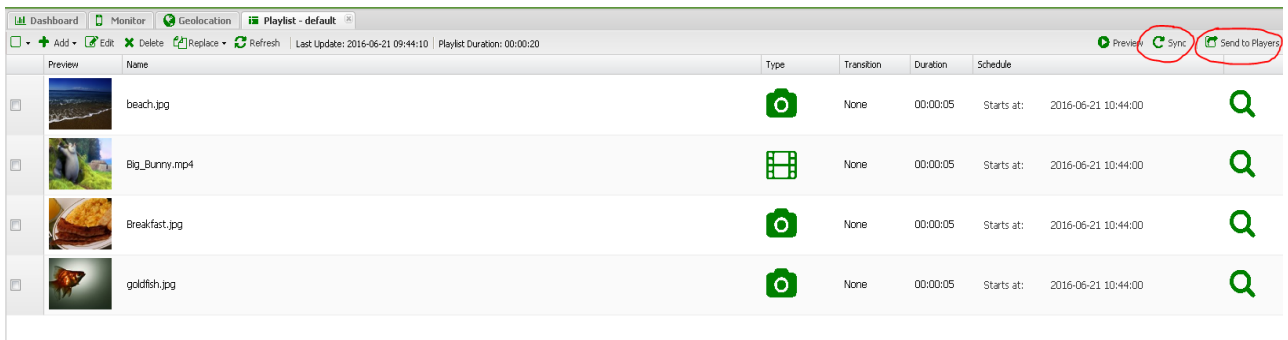


4. Synchronize and display the Default Playlist

Since the starting playlist has been set to Default, that is what the player(s) will download and display to start with.

You can modify this Default playlist with content of your choosing, or you can make a new playlist and fill that with content, then click Send to Players to choose which players will run this playlist.

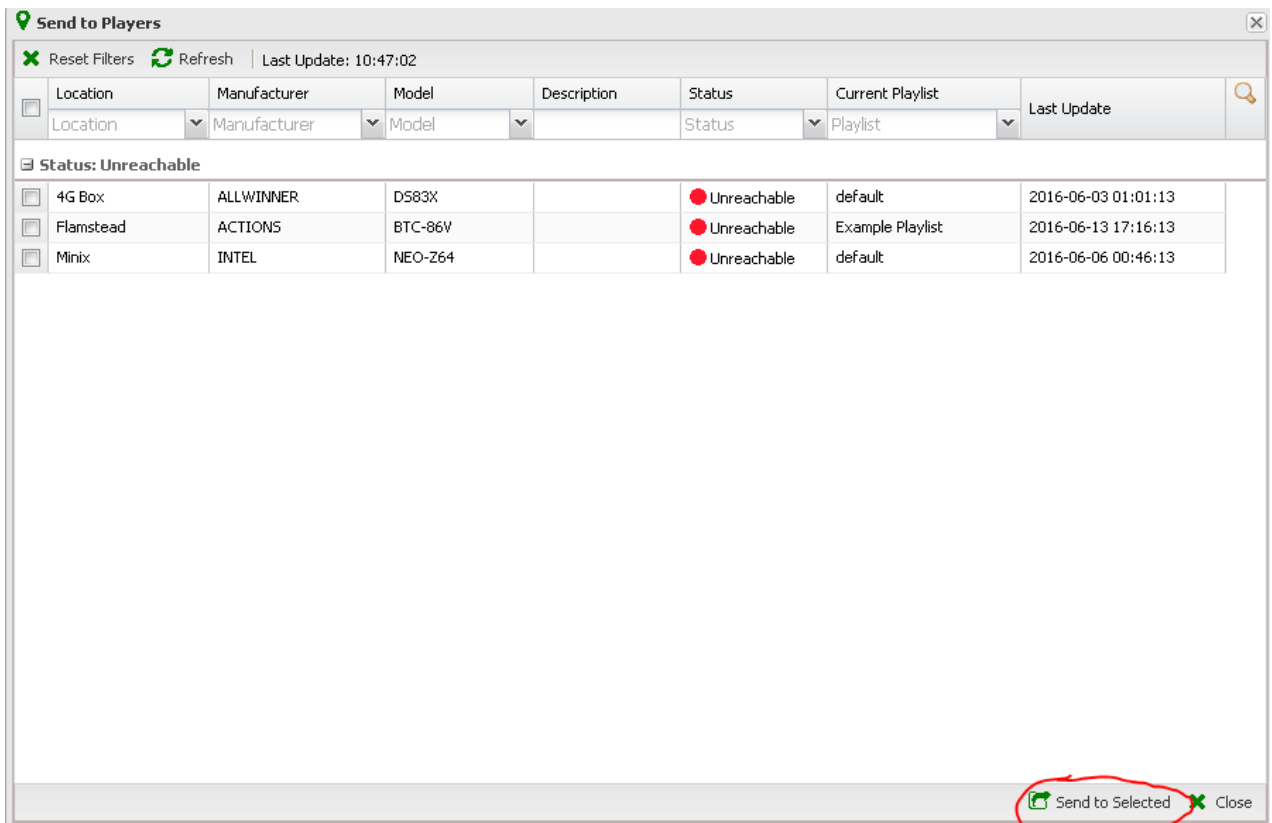
If you modify the content within this playlist after sending it to a player, you can click Sync to update the player with the changes.



The screenshot shows the 'Playlist - default' interface. At the top, there are tabs for Dashboard, Monitor, Geolocation, and Playlist - default. Below the tabs is a toolbar with buttons: Add, Edit, Delete, Replace, and Refresh. The main area contains a table with columns: Preview, Name, Type, Transition, Duration, and Schedule. The table lists four items: beach.jpg, Big_Bunny.mp4, Breakfast.jpg, and goldfish.jpg. To the right of the table, there are two buttons: Sync and Send to Players, both of which are circled in red.

Preview	Name	Type	Transition	Duration	Schedule
	beach.jpg		None	00:00:05	Starts at: 2016-06-21 10:44:00
	Big_Bunny.mp4		None	00:00:05	Starts at: 2016-06-21 10:44:00
	Breakfast.jpg		None	00:00:05	Starts at: 2016-06-21 10:44:00
	goldfish.jpg		None	00:00:05	Starts at: 2016-06-21 10:44:00

When you click Send to Players, you will be able to select any number of registered players to send this playlist to. Tick the ones you want, then click Send to Selected.



The screenshot shows the 'Send to Players' dialog box. It has a title bar with a location pin icon and the text 'Send to Players'. Below the title bar is a toolbar with buttons: Reset Filters, Refresh, and Last Update: 10:47:02. The main area contains a table with columns: Location, Manufacturer, Model, Description, Status, Current Playlist, and Last Update. The table lists three players: 4G Box, Flamstead, and Minix. The Status column for all three players is 'Unreachable'. At the bottom right of the dialog box, there are two buttons: Send to Selected and Close, both of which are circled in red.

Location	Manufacturer	Model	Description	Status	Current Playlist	Last Update
4G Box	ALLWINNER	D583X		Unreachable	default	2016-06-03 01:01:13
Flamstead	ACTIONS	BTC-86V		Unreachable	Example Playlist	2016-06-13 17:16:13
Minix	INTEL	NEO-264		Unreachable	default	2016-06-06 00:46:13

5. Operation

As long as *Enable Interaction* is selected the application will pause when the device is touched and allow the user to interact with the device. Access to the device Settings Menu is disabled. The player will resume if device is not used for 15 seconds.

Accessing the settings Menu

To disable operation or reconfigure the application, press and hold the *VOL-* key for 5 seconds (this must be done while the standby player is running). If the device does not have Volume keys, stop the DSA Player App and delete the Security.txt file in the DSA Player folder. Restart the player to access the settings menu.

To proceed to the settings options, enter the location code for the device (specified at installation) and click *Enter*.

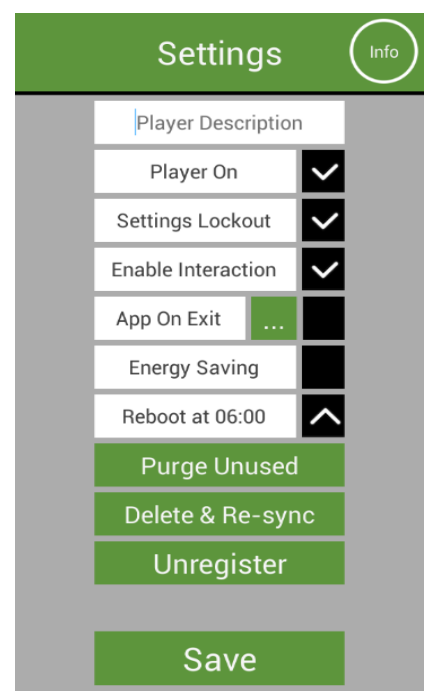
Reconfigure the application settings as required and click save.

The DSA Player will restart.



Local Device Control

<i>Recycle</i>	Delete all content files not referenced in the current playlist.
<i>Restart</i>	Delete all content files and playlist.
<i>Unregister</i>	Unregister the player from the service (player will display registration screen per 3.4.



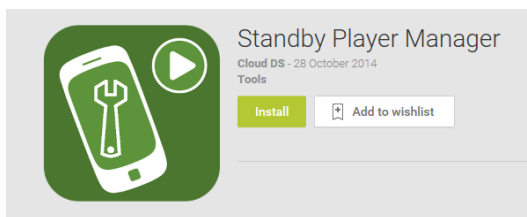
6. Installing DSA Manager (recommended)

Note: The manager must be installed on a rooted device and elevated as a system app. If the device is not rooted, do not install player manager.

Player manager provides additional capabilities including remote update of the player and reboot control.

Note : *Many Rooted devices are preloaded with a security application called SuperUser, SuperSU or SU. This application acts as a kind of gatekeeper to rooted functions. It should be configured to allow Super user access without manual prompting. To Configure SU see “Configuring SU” in the appendix.*

1. To download the manager browse to: <http://dsa-cloud.net/app/DSAManager.apk>

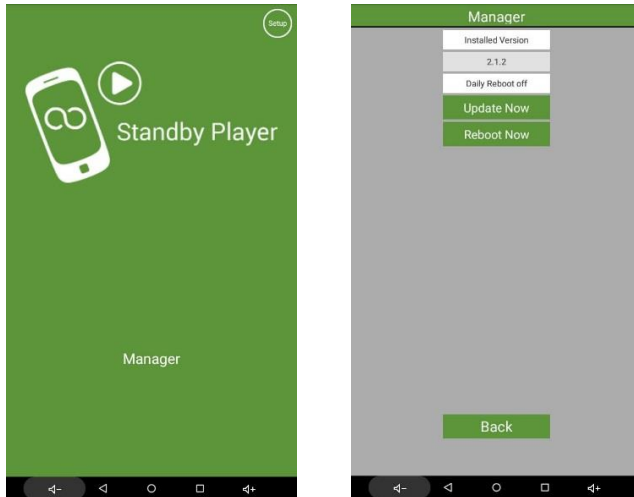


2. Touch *Install* to start the installation.
3. Touch *Accept* and wait for the download / install to complete.
4. Using Google Play, download System and install App Mover (j4velin).

If you cannot access via Google Play, you can download directly here:

<https://f-droid.org/repository/browse/?fdid=de.j4velin.systemappmover>

5. Click Open
6. Click Grant if required.
7. Acknowledge the warning and click OK
8. Scroll down the list to DSA Player Manager and click to move
9. Click OK
10. Click OK again to reboot (this might take a while – if it does not reboot, manually reboot the device)



To test manager functionality, click “reboot Now”

7. Uninstalling DSA Player

To disable the player, first access the application’s Settings Menu as described in the Operation Section. Untick *Player On* and *Settings Lockout* and touch *Save*.

Now access the device Settings and uninstall the DSA Player in the normal way.

8. Uninstalling DSA Player Manager

To uninstall DSA Player Manager, first use System App Mover to change Player Manager back to a User Application, then uninstall the apk in the usual manner.

Appendices

OEM Configuration Checklist

- ✓ Install DSA Player
- ✓ Install DSA Manager
- ✓ Elevate DSA Manager to System App
- ✓ Configure SU Default Access to *Grant*
- ✓ Click Reboot Now in Manager Setup to test

Application Requirements – Mobile Phones & Tablets

Phone System Font Size should be set to Normal

For Android phones or tablets running Android version 2.3 or higher.

For secure operation (protection of the settings menu and preventing the app from being removed), the apps should be allowed to act as a system administrator: when registering the app will automatically offer this option.

Internet connection is needed for device registration using secure networks https.

To download system parameters and contents an Internet connection is needed.

To download media content Internet connection is needed.

To set the preferred Wifi network, the preferred network should use WPA-PSK encryption and TKIP security protocol.

The date and time should be set on the devices.

If Wifi is used to connect to the Internet, please make sure, that all devices can communicate with the router and have Internet access.

The Wifi network should not be hidden.

To run the app, please charge the devices to prevent them from running low on battery.

The app runs on the standard, factory operating systems. Unofficial and retail demo operating systems are not supported.

The devices should not have any scheduled task manager apps running, as these apps prevent the app from operating.

Before installing the app, it is advised to make a factory reset on the device.

Ensure WIFI is left enabled (but not connected). DSA Player checks the WIFI mac address from time to time and some devices do not support this parameter check if WIFI is disabled.

Application Requirements – Smart Screens and Android Players

See requirements above for mobile devices.

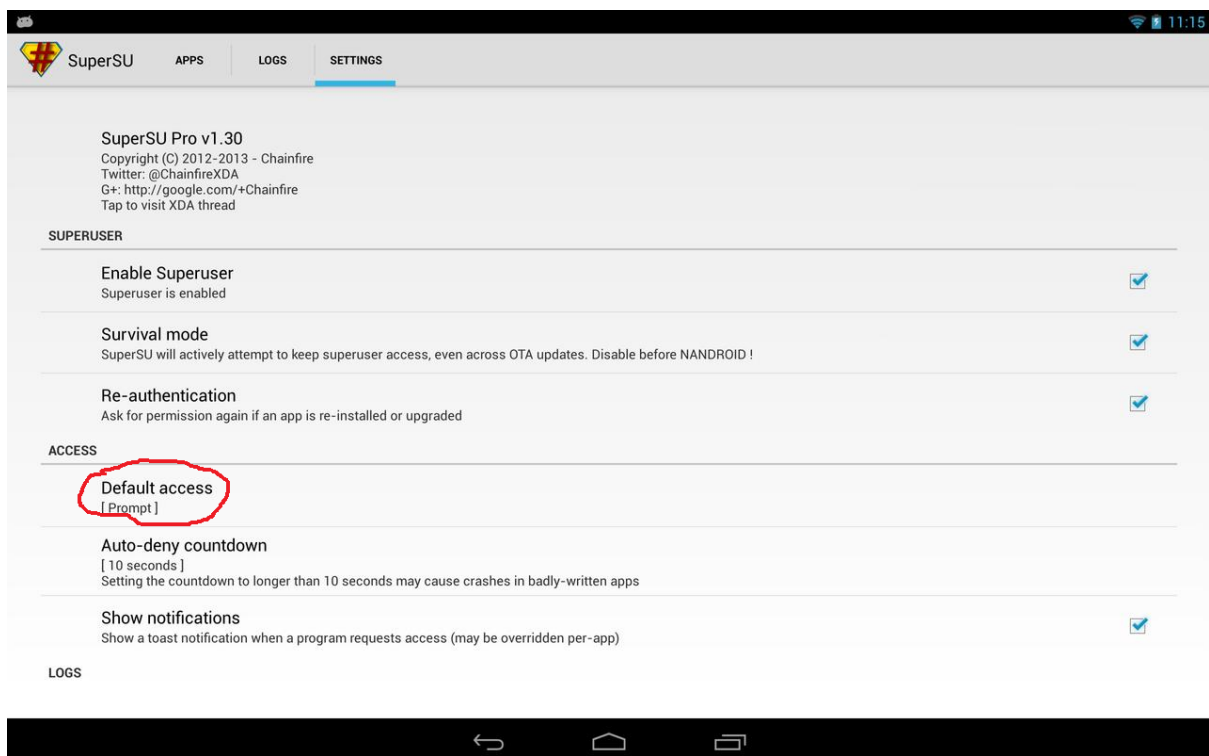
If Standbyplayer Manager is to be installed the device MUST be Rooted.

Ensure WIFI is left enabled (but not connected). Standby player checks the WIFI mac address from time to time and some devices do not support this parameter check if WIFI is disabled.

Configuring the Super User Application

This is a kind of gatekeeper app often installed on Rooted devices.

The default configuration of this app should be changed to ensure it does not inhibit DSAManager functions.



Change the **Default access** setting to **Grant**