



## **PlugnCast User Manual**

**Digital Signage CMS**

**3.10.51 001D\_en**



## **Legal information**

### **PlugnCast User Manual 3.10.51 (001D\_en)**

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## Table of Contents

### Part I - Installations and settings

Introduction	1.1
PlugCast server installation, startup and configuration	1.2
Creating a domain and a distribution frontal	1.2.1
Playzilla App Installation	1.2.2
Installation of PlugCast Server and App Playzilla license keys	1.2.3
Device configuration for PlugCast	1.3
Assigning a Gekkota media player	1.3.1
Assigning an LG WebOS Signage smart monitor	1.3.2
Assigning a SAMSUNG Tizen SSSP smart monitor	1.3.3
Device registration in PlugCast Server	1.4
Checking your configuration	1.5

### Part II - Use of the software

Launching the PlugCast web interface	2.1
General presentation	2.2
Library	2.3
Edition	2.3.1
Files	2.3.2
Localized folders	2.3.2.1
Widgets created from models	2.3.2.2
Playfolder	2.3.2.3
Playlist	2.3.2.4
SlideMaker	2.3.2.5
URI	2.3.2.6
Fonts of character	2.3.2.7
Device Ontologies	2.3.2.8
Time slots	2.3.3
Variables	2.3.4
Custom Variable	2.3.4.1
Date and time variable	2.3.4.2
Device Info Variable	2.3.4.3
Layout	2.4
Calendar	2.4.1
Layout	2.4.2
Manifest	2.4.3
Properties	2.4.4
Diffusion targets	2.5
Publication	2.5.1
Device status	2.5.2
Assigning a custom variable value to a device	2.5.3
System	2.5.4
Target groups	2.5.5
Settings	2.6
Configuration	2.6.1
My account	2.6.1.1
Domains	2.6.1.2
Registration of devices on the distribution front panel	2.6.1.3
Servers	2.6.1.4
Users	2.6.1.5
User groups	2.6.1.6
Roles	2.6.1.7
Licences	2.6.1.8
Association of a Playzilla App version with a domain	2.6.1.9
SSL Certificates	2.6.1.10
Middleware and Scripts	2.6.1.11
Information	2.6.2
Addons	2.6.3

## **Part III - Access rights and user profiles**

General information on ACLs (Access Control List)	3.1
Editing an ACL	3.2
Resource owner	3.3
File and folder	3.4
Library time event	3.5
Layout	3.6
Release calendar	3.7
Domain	3.8

## **Part IV**

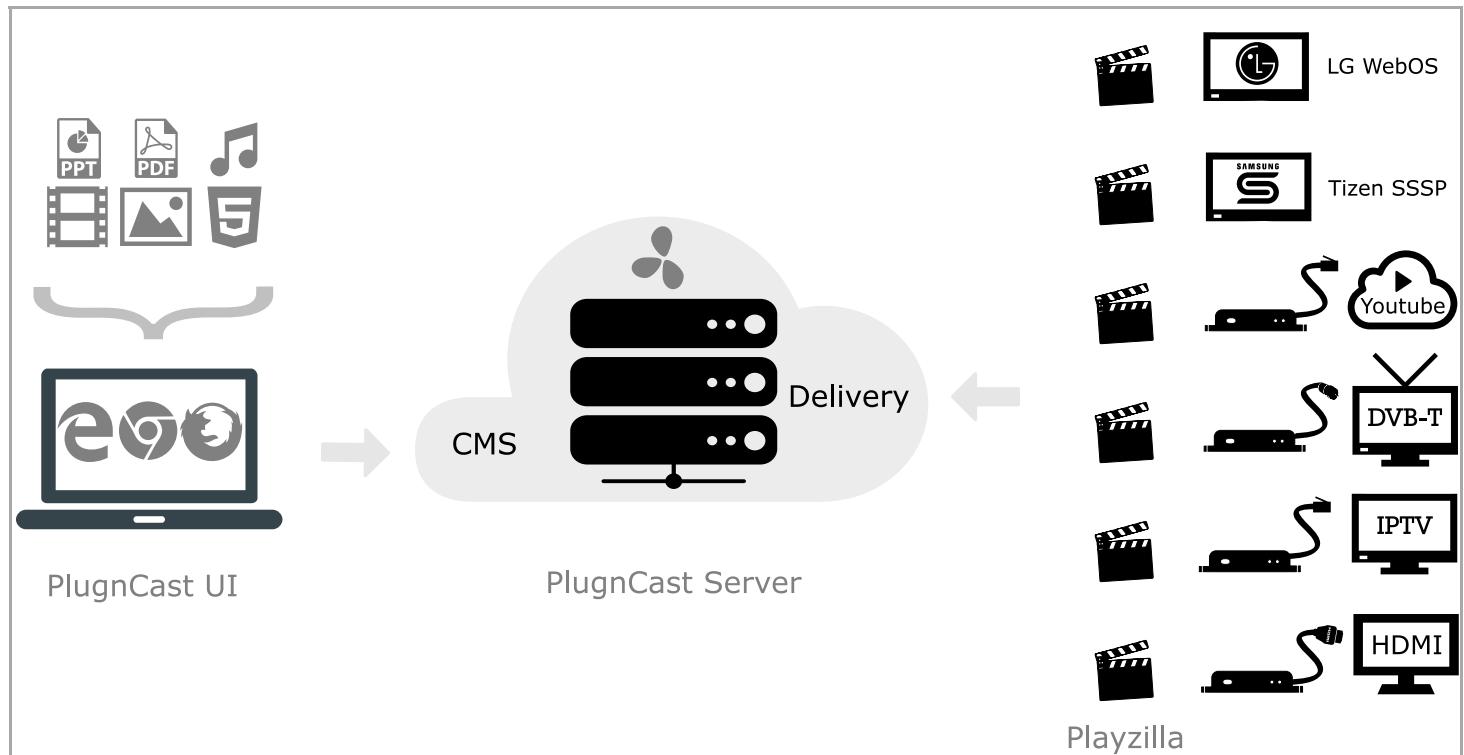
Contacts	4.1
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## **Appendices**

Web Services API	5.1
Get a custom variable value in a HTML page	5.2

## 1.1 Introduction

PlugnCast Server is a multimedia-oriented CMS (Content Management System). It allows content to be published on networks of screens or monitors.



## 1.2 Installation, startup and configuration of PlugnCast Server

### System requirements to install PlugnCast Server

PlugnCast Server on-premises must be installed on a recent PC.

- MS-Windows Server 2008 R2 or 2012+ system,
- Processor: Core i7 or Xeon,
- RAM: 4 GB (or more),
- Hard disk: 160 GB (or more).

☞ The firewall must allow port 80 (http) and 443 (https) (by default), or another if another one has been defined for PlugnCast Server. At the firewall level, also allow the application `C:\Program Files (x86)\Innes PlugnCast Server\plugncast-container.exe` to communicate through the firewall ( Allow an application via the Windows Firewall ).

☞ It is recommended to reserve a dedicated machine for `PlugnCast Server` in order to guarantee the best performance of the software. It is therefore not recommended to have other software running in parallel with the PlugnCast server.

☞ `PlugnCast Server` runs on MS-Windows virtualized configurations.

☞ Although Innes recommends installing `PlugnCast Server` on an MS-Windows server system 2008 R2 or 2012, `PlugnCast Server` can also run on MS-Windows 7, MS-Windows 8.1 or MS-Windows 10 systems for experimental purposes.

☞ Innes also offers an off-premises `PlugnCast Server` solution. If necessary, contact the sales department at `sales@innes.fr` for more information on this hosted solution.

### PlugnCast Server Installation

`PlugnCast Server` is available in 2 parts:

- a Web server part `plugncast-container.exe` which is executed on the server machine and
- a Web Interface part that is loaded and executed by the users browser.

For MS-Windows PCs, run the installer `plugncast_server-nt_ia32-setup-3.10.51.exe`.

☞ For the SAAS solution, Innes takes care of the installation and configuration (domain and licenses).

The default installation folder `PlugnCast Server` is:

`C:\Program Files (x86)\Innes PlugnCast Server`

By default, the user data installation folder of `PlugnCast Server` is:

`C:\Users\Public\Public Documents\Innes PlugnCast Server`

⚠ It is very important to set up a system to regularly backup this data.

### PlugnCast Server update

For a simple update, get the version from <http://www.innes.pro/> and run the installer `plugncast_server-nt_ia32-setup-3.10.51.exe`. All data created by users is retained when updating the version of `PlugnCast Server`.

☞ Following each update, users of `PlugnCast Server` must refresh their browser with the 'F5' key on the keyboard or restart their browser.

### Starting the server

Once installed, 3 PlugnCast commands marked with the icon  are available in the MS-Windows application launch bar.

- `Start` : Starts the PlugnCast server,
- `Restart` : Restarts the PlugnCast server,
- `Stop` : Stops the PlugnCast server.

⚠ The PlugnCast server should not be started by clicking directly on the executable file `C:\Program Files (x86)\Innes PlugnCast Server\plugncast.exe`.

### Launch of the PlugnCast Server web interface

Once started, to check that your server is functional, connect to its web interface. The recommended browsers to work with `PlugnCast Server` are :

- Google Chrome,
- Mozilla Firefox.

From your web browser, type the IP address of your PlugnCast server (see previous paragraph).

A home page then prompts you to enter your username and password to access the server. The user ID and password of the only user present by default with the `Super Administrator` profile, are respectively `superadmin` and `superadmin`.

## PlugnCast

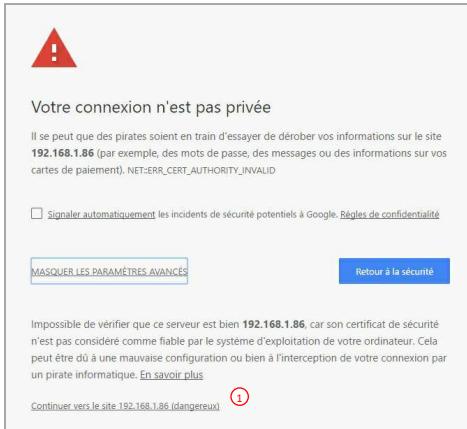
**Se connecter**

Identifiant

Mot de passe

Ok

The browser asks you through a security message to continue to the site [①](#). Accept this request to continue.



## Configuring the server by adding a user preference

It is possible to configure your PlugnCast server with the user preference file ``all.js``. This file does not exist by default. If it has not yet been created,

- Create an empty file `all.js` and copy the desired user preferences with the form

```
pref("<pref_name>", <value>);
```

- Stop `PlugnCast Server` by clicking on the desktop icon **Stop**
- Copy the file `all.js` in the user profile of `PlugnCast Server` whose default directory is: `C:\Users\Public\Documents\Innes PlugnCast Server\.profile\preferences`
- Start `PlugnCast Server` by clicking on the desktop icon **Start**

## Using another port

It is possible to run your `PlugnCast` server on a port other than the default ports 80 and 443. For this, it is necessary to add a user preference (see paragraph above). Here is an example for the port `8080` for http and `8443` for https:

- Copy the 2 user preferences below into the file ``all.js``

```
pref("innes.webserver.providers.http.port", 8080);
pref("innes.webserver.providers.https.port", 8443);
```

- Restart `PlugnCast Server` by clicking on the desktop icon **Restart**
- In your browser, enter the URL with the format similar to the one shown below:

```
https://<plugnCast_server_ip_addr>:<new_port>
```

For example:

```
https://myServerPlugnCast.com:8443
```

For more information on creating the file `all.js`, refer to the previous paragraph: *Configuring the server by adding a user preference*.

## Publication of a Playzilla 4.11.13 App on a media player with Gekkota 3 embedded

By default, the `App Playzilla 3.10.10.10` is broadcast on any device with `Gekkota 3` embedded. However, it is possible to configure `PlugnCast Server` to publish instead the `App Playzilla 4.11.10` (or higher) in order to inherit the functions of `Playzilla 4.XX.YY` as:

- the validity period of a media,

- impose a default URI duration for example for web pages that do not have an intrinsic duration,
- impose one time per page for all media with manual paging mode,....

To do this, copy the user preference below into the file `all.js`.

```
pref("innes.plugncast.cms.targets.digitalsignage.playzilla4-on-gekkota3", true);
```

- `False` (default value): Playzilla 3.10.10 is played on the Gekkota 3 devices
- `True` : Playzilla 4.11.13 (or higher) is played on the Gekkota 3 devices

⚠ Programming the preference `innes.plugncast.cms.targets.digitalsignage.playzilla4-on-gekkota3` to `true` makes incompatible media from the content models `MeetingRoom-Mono` and `MeetingRoom-Summarization` for media players with Gekkota 3.

For more information on creating the file `all.js`, refer to the previous paragraph: *Configuring the server by adding a user preference*.

## Plugncast Server on command line

⚠ This chapter is reserved for advanced use. It is normally not necessary to apply these command lines to run PlugnCast server.

Role, ACL, or certificate configurations of the PlugnCast server can be reset from the command line. With a Windows command prompt, go to the PlugnCast installation directory, whose default directory is `C:\Program Files (x86)\Innes Plugncast Server\plugncast.exe` and enter one of the command lines below according to your needs.

Here is the list of the most used command lines:

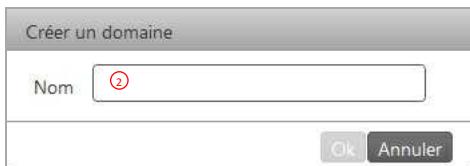
Command lines	Function
<code>plugncast.exe -k resetsuperadmins</code>	Deletes all accounts with the profile <code>Super Administrator</code> and restores a single account <code>Super Administrator</code> with the login/password respectively: <code>superadmin / superadmin</code> . Note: the next time you connect to this user, all his devices are deselected, the variables assigned to his devices are no longer visible. For more information, see the paragraph "targets > variables".
<code>plugncast.exe -k resetssl</code>	Resets the certificate of the PlugnCast server. This is useful when the IP address has changed or the server certificate is expired). Following this action, when using an https frontal, it is necessary to export the PlugnCast server certificate again through the browser and install it on all your devices.
<code>plugncast.exe -k resetroles</code>	Reset all roles to their default profile.
<code>plugncast.exe -k resetacl</code>	Deletes all ACLs from all resources.
<code>plugncast.exe -k repairdbs -domain &lt;plugncast_customer_domain&gt;</code>	Repairs and reorganizes the PlugnCast database. To be applied for PlugnCast server migrations lower than 3.10.21 (August 2015) to higher versions.

Replace `<plugncast_customer_domain>` with the name of the domain to be repaired. Repeat the online order as many times as there is a domain.  
`plugncast.exe --help` | Lists all available online commands.

## 1.2.1 Creation of a domain and a distribution frontal

### Domain creation

Once the Plugncast Server is started, you must connect to its web interface. Following a brand new installation of Plugncast Server, you are asked to enter a first domain name **②** (for example, `demo.plugncast.com`) without which PlugnCast cannot work.



Then select the operating domain **③**, for example, the one you just created.

If your Plugncast server trial license for a period of `30 days` has expired, you cannot create a domain without having a valid core server license again. If your domain was already created, the playout publication is no longer operational until a new valid core server (and/or domain) license is installed. In both cases, it is recommended to install the valid server licenses for:

- your main domain,
- secondary domains (if applicable).

For more information, see the chapter [Installation of Plugncast Server and App Playzilla licenses](#).

### 1.2.1 Frontal distribution creation associated with this domain

Once your domain has been selected, you must finalize it by associating it with a frontal without which `Plugncast Server` still cannot work. Click on the button `Edit domain` **①**. Accept this request to continue.

Press `Create a frontal` **+** for your selected domain **②**.

For this front end, choose the type `WebDAV/internal` <sup>1</sup>, enter your label, <sup>③</sup> then validate.

[ ^1]: `WebDAV/internal` means that the distribution frontal will be hosted on the machine where the PlugnCast server is installed.



The URL of the internal frontal <sup>⑥</sup>, generated automatically, allows direct access to this new directory of the HTTP/WebDAV server of your PlugnCast server. To finalize the configuration of your internal front end, enter your own username <sup>④</sup> and password <sup>⑤</sup> and press `Save`.

⚠ When using `SAMSUNG SSSP Tizen` or `LG WebOS` monitors, be careful not to enter a user name or password containing the character `@`.

☞ If necessary, click on the icon to view the password.

Domaine > domain.test

Frontaux

internal\_frontal

Type WebDAV/Interne <sup>⑥</sup>

URL http://demo.plugncast.com/frontals/webdav/domain.test/

Identifiant <sup>④</sup> players

Mot de passe <sup>⑤</sup> (Mot de passe enregistré)

Be sure to carefully note this URL, as well as the username and password, which will be required when configuring the devices in the next chapter.

The drop-down list <sup>⑦</sup> allows you to choose between a `http` or `https` protocol.

Domaine > demo.plugncast.com

Frontaux

internal\_frontal

external\_frontal

Type WebDAV/Interne <sup>⑥</sup>

URL https://192.168.1.17:8443/frontals/webdav/demo.plugncast.com/ <sup>⑦</sup>

Identifiant players

Mot de passe (Mot de passe enregistré)

If other new domains have been created, renew the creation of a distribution frontal for each of them.

## Using an HTTP/WebDAV server

For large deployments of broadcast targets, the PlugnCast administrator can also choose to use a `external frontal` to PlugnCast Server to store content used to update device content or to store update firmware. This server must be an HTTP/WebDAV server.

In this case, install a `HTTP/WebDAV server` (for example: a Microsoft IIS/WebDAV server or an Apache/WebDAV HTTP server,...)

☞ When using monitors only, this `HTTP/WebDAV server` must have the directories:

- `.device-status`
- `.setup`

☞ For more information on installing an HTTP/WebDAV server, contact your IT department.

DIGEST authentication is not supported on these intelligent monitors:

- `SAMSUNG Tizen SSSP 4`,

- SAMSUNG Tizen SSSP 5 ,
- SAMSUNG Tizen SSSP 6 ,
- LG WebOS Signage 3.0 ,
- LG WebOS Signage 3.2 ,
- LG WebOS Signage 4.0 .

As a result, these monitors are not able to connect to an HTTP/WebDAV server with this type of authentication. For these monitors, make sure that this `HTTP/WebDAV` server implements another type of authentication such as `BASIC` authentication.

☞ If the external frontal is created after the installation of the `App Playzilla` and therefore after its association with a domain, the `App Playzilla` is not immediately available on the external frontal and therefore the monitor will not be able to install it. To solve the problem:

- or press the `Restart` desktop icon to restart the server,
- or reassign your domain to your `App Playzilla`,
- or, if at least one device is registered on your external frontal, make a publication.  
☞ For more information about registering your device on an external frontal, go to the chapter [Settings > Domains](#).

### 1.2.2 Installation of the App Playzilla

By default, no version of `App Playzilla` is associated with a new domain. The publication cannot work. In order to be able to publish the version of `App Playzilla` of your choice on the devices, it is necessary to associate for each domain, a version of `App Playzilla`. For more information, follow the instructions [Association of a version of App Playzilla with a domain](#).

 The latest version of `App Playzilla` is available in Plugncast Server. It is therefore not necessary to download it from the Innes support site.

### 1.2.3 Installation of server and App Playzilla license keys

Following a completely new installation, `Plugncast Server` allows domain creation and content publishing on devices registered to this domain for `30 days`, the validity period of the trial version.

Beyond that, it is required to install:

- your `core server license key` for your main domain,
- your `domain server license keys`, one for each of your possible additional domains,
- your `app Playzilla license keys`, one for each of your devices registered on your domains.

For more information, bring your license keys and follow the instructions in the chapter [Server and App licenses](#).

### 1.3 Device configuration for PlugnCast Server

PlugnCast Server can work with:

- The devices: DM/SM series embedding:
  - Gekkota 3 or
  - Gekkota 4 .
- MS-Windows PCs, embedding:
  - Gekkota 3 RT
- The intelligent LG monitors embedding the OS:
  - WebOS Signage 3 ,
  - WebOS Signage 4 .
- The intelligent SAMSUNG monitors embedding the OS:
  - Tizen SSSP 4 ,
  - Tizen SSSP 5 ,
  - Tizen SSSP 6 .

Make sure before going further that the devices are:

- properly powered and started,
- connected to the network in LAN or WLAN with a valid network configuration,
- on time. If the NTP server is enabled, make sure it is operational.

### 1.3.1 Assigning a Gekkota media player to Plugncast

Gekkota media players can be:

- either devices carrying Gekkota OS
- or Windows PCs running Gekkota RT

#### Gekkota OS for SM and DM series

Gekkota OS is already pre-installed on SM and DM series devices.

- DMB400,
- DMB300,
- DMC200,
- DME204,
- SMA300,
- SMA200,
- SMT210,
- SMP200.

It remains to configure your device to work on your own network.

#### Gekkota RT for PC MS-Windows

This is the recommended configuration for installing the Gekkota RT middleware on an MS-Windows PC device:

- MS-Windows 7 or MS-Windows 10 system,
- Core i5/i7,
- RAM: 4 GB (or more),
- Hard disk: 128 GB (or more).

If you have the Gekkota RT middleware, delivered as an autorun USB stick, simply place it in a USB slot on the MS-Windows PC device.

If you have downloaded the Gekkota RT middleware, from the Innes website, run the executable on the dedicated MS-Windows device.

In both cases, wait for the end of the installation (which may take a few minutes) and go to the paragraph [Gekkota Settings](#).

#### Setting up a Gekkota media player using a configuration script

The configuration of a Gekkota media player can be done through a hosted configuration by script configuration file:

- either on a USB stick,
- or on your DHCP server (code 66). For more information, see the [Configuration-by-script application note](#)

#### Setting up a Gekkota media player using a web browser

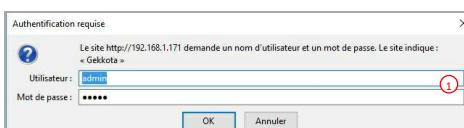
It can also be done through its Web configuration interface which requires the use of a recent Web browser such as :

- Google Chrome,
- Mozilla Firefox,
- Microsoft Edge.

⚠ For some versions of Gekkota, the browser must have the "Adobe Flash 11+" plugin (permanently enabled).

#### Connection to the user interface of a Gekkota device

Open a browser, and type the URL corresponding to the IP address of your device. For example, if the IP address of the device is 192.168.1.171, enter the URL, for example: <http://192.168.1.171/>. When opening the login window, enter the login and password (user: admin, password: admin by default) ①



☞ It is also possible to connect to their web interface by double-clicking on one of the media players discovered within the network through the explorer.

☞ If your network infrastructure and your computer support IPV6, it is possible to connect with the IPV6 address of the device, which can be viewed on the monitor connected to the device when the test pattern is activated. For more information, read the [IPV6 application note](#)

The <http://<device-IP-address>/playout> page is displayed.

**Contenu de /.playout/**

Nom	Dernière modification	Taille
Dossier parent	-	-
domain-repository/	-	-
scripts/	-	-
manifest.xml	10 mai 2017 à 10:03:23	2,1 Kio
manifest.xml.etag	10 mai 2017 à 10:03:23	86 o
player.00-1c-e6-02-1e-45.xpf	10 mai 2017 à 10:03:33	15,1 Kio
player.00-1c-e6-02-1e-45.xpf.etag	10 mai 2017 à 10:03:33	86 o
variables.00-1c-e6-02-1e-45.xml	10 mai 2017 à 10:03:29	277 o
variables.00-1c-e6-02-1e-45.xml.etag	10 mai 2017 à 10:03:29	86 o

Console d'administration (2)  
Journaux  
Télécharger le répertoire

Then click on Administration Console (2) to display the device configuration page.

## Setting up the Administrator screen

Go to the Administrator screen.

### Hostname

It is advisable to define a unique Hostname before assigning it to your device.

⚠ If the Hostname is already used by another device on your network, it may not be detected by PluggCast Server .

### Device identification method

The 3 methods of identification are:

- MAC (1) (default value): the device will be detected by PluggCast Server with an identifier containing its MAC address
- UUID (2): the device will be detected by PluggCast Server with an identifier containing its UUID .
- Hostname (3): the device will be detected by PluggCast Server with an identifier containing its Hostname

It is possible to change the identification method of your Gekkota devices.

⚠ Changing the identification method of your device means registering it again within the frontal of PluggCast Server with its new ID.

### Configuring the license of a Gekkota device

The license key is normally already filled in the device at the factory. If this key has not been entered, in the menu on the left, click on Configuration > Licence (1).

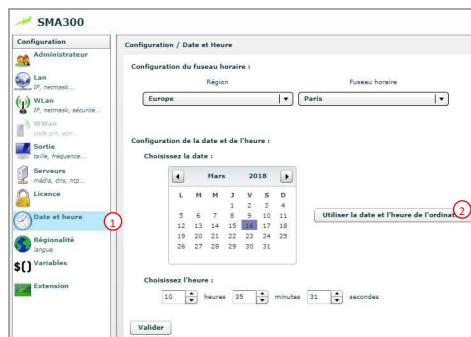
Enter the license key that was provided to you when you purchased Gekkota (2) and validate the page.

The license number is obtained by sending an email to [licenses@innes.fr](mailto:licenses@innes.fr) (specifying in the subject line of the message the MAC address and the serial number of the Innes device).

## Setting the date and time of the device

If the time or date of the Gekkota device is not correct, in the menu on the left ①, select Date and time . Check the date and time, correct it if necessary and validate.

It is also possible to use the date and time of the computer to retrieve the current date and time ②.



## Setting up a Gekkota media player for PlugnCast Server

In the menu on the left, select Configuration then Servers ①. Then on the right, press the Edit button ②. Select the mode configuration PlugnCast Server Generation 3 ③.

For Gekkota versions with HTML5 web interfaces, in the Configuration menu, select the menu App ⑦. Then on the right, select Pull Webdav ⑧.

Enter the URL of your distribution server. This URL can be copied to the clipboard from PlugnCast Server . Refer to the paragraph Domains then Device configuration .

The format is as follows ④: [1](http://<your IP>/frontals/.webdav/<your domain>/)

For example: <http://192.168.1.47:8080/.frontals/.webdav/demo.plugncast.com/>

Enter your username ⑤ and password ⑥.

To save, press OK and then press the Validate button at the bottom of the page.

<sup>1</sup>. The https protocol is also supported. ↪

## Heartbeat

Every minute, the device sends its device-status and synchronizes with the last content to play. This time interval is called `heartbeat`. On Gekkota devices, it is programmable in the screen of the previous paragraph.

## Adding the Plugcast Server certificate

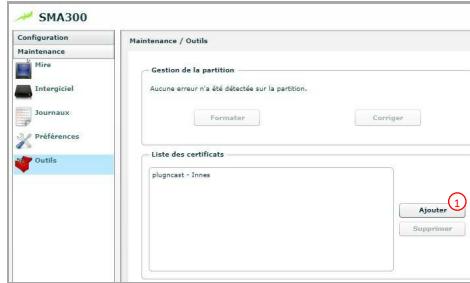
When using a front end with the `https` URL schema, it is necessary to install the PlugCast server certificate on your device.

 The certificate of your PlugCast server must be valid: it must have an unexpired validity date and must contain the IP address of your PlugCast server.

The export of the certificate of your `PlugCast Server` must be done once your PlugCast server is configured, with a domain and an `https` frontal registered. Thus, you must connect to the Web interface of your PlugCast server. Then, through the browser, export the certificate, for example in `*.crt` format. For more information on exporting certificates, contact your IT Department.

Then connect to the web configuration interface of each of your Gekkota devices and install the certificate there:

- In the menu `Maintenance > Tools > Certificate list`, add  the certificate from your PlugCast server that you have just exported with your browser.



 The addition of your PlugCast server certificate to all your devices can also be done through a configuration script.

### 1.3.2 Assigning an LG WebOS Signage smart monitor to PlugnCast Server

To install the App `Playzilla` for `PlugnCast Server` on an smart monitor `LG WebOS Signage 3.0` , `LG WebOS Signage 3.2` OR `LG WebOS Signage 4.0` , you must configure the application deployment settings using the monitor's menu `SETTINGS > SERVER` .

For this configuration, it is possible to:

- either prepare an auto-configuration USB key for the LG monitor,
- or perform the operation manually.

In both cases, you must access the hidden menu `SETTINGS > SERVER` .

⚠ Before starting to set up the monitors, make sure that the domain and its distribution frontal are registered in `PlugnCast Server` .

⚠ Beforehand, also check on the monitor that the network configuration and the date, time and geographical area settings are correct.

In order to find the names of the menus indicated, it is preferable to configure the screen in English language.

#### Access to the `SETTINGS > SERVER` menu

Devices `LG WebOS Signage 3.0`:

- Press and hold the (`SETTINGS`) button on the remote control for 5 to 6 seconds until a screen, called `toast/popup` , appears in the upper right corner indicating that the device is ready to receive your code entry.



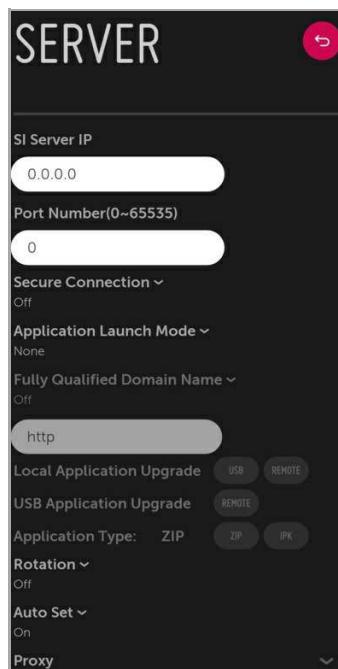
- Then quickly, enter the code `8080` with the remote control and confirm.

Devices `LG WebOS Signage 3.2` OR `LG WebOS Signage 4.0` :

- Press the (`SETTINGS`) button on the remote control. Then press the pictogram `Settings EZ` then on the right press the pictogram `SI Server Settings`
- Then press the `SI Server Settings` button again



Example of displaying the `SERVER` menu for a device `LG WebOS Signage 3.0` :



For a device `LG WebOS Signage 3.2` or `LG WebOS Signage 4.0`, the display is the same as for the device `LG WebOS Signage 3.0` except for the absence of the menu `Auto-set`.

For more information, refer to the LG website <http://webossignage.developer.lge.com/device/general-settings/server-info/>.

## Configuration by USB key

It is recommended to use a configuration file copied to a USB stick as described below or as indicated on the [LG support website](#).

With a simple text editor, create a file named `scap_installation.json` at the root of a USB storage key with the content defining the IP address of your distribution frontal, its port, its login/password and other parameters as described in the following example.

For a monitor `LG WebOS Signage 3.0` or `LG WebOS Signage 3.2`:

```
{  
    "serverIp": "192.168.1.1",  
    "serverPort": 80,  
    "secureConnection": false,  
    "appLaunchMode": "local",  
    "fqdnMode": true,  
    "fqdnAddr": "http://mylogin:mypwd@my_IP_addr/.frontals/.webdav/innes.plugncast.com/playzilla-plugncast-lg_webos.ipk",  
    "appType": "ipk"  
}
```

For a monitor `LG WebOS Signage 4.0`:

```
{  
    "serverIp": "192.168.1.1",  
    "serverPort": 80,  
    "secureConnection": false,  
    "appLaunchMode": "local",  
    "fqdnMode": true,  
    "fqdnAddr": "http://mylogin:mypwd@my_IP_addr/.frontals/.webdav/innes.plugncast.com/playzilla-plugncast-lg_webos_4.ipk",  
    "appType": "ipk"  
}
```

⚠ The `LG WebOS Signage` monitors do not allow the installation of custom certificates. When using the frontal with the secure network protocol with the `https` protocol scheme, make sure to use in `PlugnCast Server` a certificate signed by a certified authority, or otherwise configure your front end with the `http` protocol scheme.

On the monitor, in the `SETTING > SERVER` menu (devices `LG WebOS Signage 3.0`, `LG WebOS Signage 3.2`, or `LG WebOS Signage 4.0`):

- Configure `Auto Set` to `On` (for `LG WebOS Signage 3.0` devices only)
- Turn off the screen with the `POWER` button on the remote control,
- Insert the USB key,
- Turn on the display using the remote control, then wait a few seconds for a `toast/popup` to indicate that the configuration has been updated.



- Remove the USB key and
- Check that your configuration has been taken into account by going back to the `SETTING > SERVER` menu.

⚠ The `Auto Set` option returns to `Off` as soon as a new configuration by USB key is performed.

## Manual configuration with the remote control

- Access the menu `SETTINGS > SERVER`
- Configure `Auto Set` to `On` (for `LG WebOS Signage 3.0` devices only)
- Then configure the different parameters:
  - `Server IP` : [your\_frontal\_plugncast\_IP\_address]
  - `Port Number(0~65535)` : [port\_of\_your\_frontal\_plugncast]
  - `Secure Connection` : Off
  - `Launch Mode Application` : local
  - `Fully Qualified Domain Name` : On
  - `Address` : [your\_identifier]:[your\_password]@[your\_server\_IP\_address]:[your\_server\_port]/.frontals/.webdav/[your\_domain]/playzilla-plugncast-lg\_webos.ipk
  - `Application Type` : IPK
  - `Rotation` : Off
  - `Auto Set` : Off

⚠ The user and password IDs of the distribution frontal are required for monitors to distribute their status file and be registered within your `PlugnCast` server.

## Heartbeat

Every minute, the device sends its device-status and synchronizes with the last content to play. This time interval is called `heartbeat`.

## Installation of the Playzilla App from the Plugncast Server

To install the App `Playzilla` (.IPK) on your monitor from the PlugnCast server:

- Go to `Local Application Upgrade` and press the `OK` key to `Remote`. In the confirmation box, press the `CONFIRM` button.

APPLICATION UPGRADE FROM REMOTE  
Please don't plug out the cable while the process is running

- Wait a few seconds for the installation of the App `Playzilla`.

COMPLETE APPLICATION  
Complete

 If this fails at this time, check the network connection between the monitor and the PlugnCast server.

- Turn off the screen with the `POWER` button on the remote control,
- Turn on the screen again and wait a few seconds for the App `Playzilla` to start.

If the App `Playzilla` does not start automatically, go to the application menu (`Home` ) and select `Playzilla` for the application to start. If the App `Playzilla` is not available in the menu, try restoring the factory settings of your monitor and start again. The App `Playzilla` should display an information message *Information, waiting for new content*

Your device can now be detected and registered by your PlugnCast server.

 For more information about registering your device at PlugnCast, go to the chapter [Settings > Domains](#). Once registered, your monitor will also be able to set updates the version of the App `Playzilla` automatically.

 Depending on the monitors, it may not be possible to enter `IP server` and `Port Number`. Refer to the section *configuration by USB key*.

## Restoring factory settings

Device `LG WebOS Signage 3.0`:

- Press and hold the (`SETTINGS`) button for 5 to 6 seconds. When the `toast/popup` appears on the right, enter the code `0000` then press the `OK` button.



- When the installation menu appears, select the `Factory Reset` menu at the very bottom.

Device `LG WebOS Signage 3.2` OR `LG WebOS Signage 4.0`:

- press the (`SETTINGS`) button then the `Administration` button then the `Reset factory settings` button

For more information, refer to the dedicated manual on the LG support website <http://webossignage.developer.lge.com/device/general-settings/factory-reset/>.

### 1.3.3 Assigning a SAMSUNG Tizen SSSP smart monitor to PlugnCast Server

To install the App Playzilla for PlugnCast Server on a smart monitor device such as SAMSUNG Tizen SSSP 4 , SAMSUNG Tizen SSSP 5 OR SAMSUNG Tizen SSSP 6 , you must configure the application's deployment settings using the menu Launch URL of the monitor's carousel.

⚠ Before starting to set up the monitors, make sure that the domain and its distribution frontal are created and saved in PlugnCast Server and that App Playzilla 4.11.13 (or higher) is associated with this domain.

⚠ Beforehand, also check on the monitor that the network configuration and the date, time and geographical area settings are correct. It is recommended to use an NTP server to automatically update the monitor voting time. If there is no web connection, it is possible to configure the Windows PC hosting PlugnCast server (or any other PC) as an NTP server. For more information, see the note [Activate NTP server on MS-Windows](#) in the Tools menu on [Innes website](#)

In order to find the names of the menus indicated, it is preferable to configure the screen in French language.

Press the HOME button on the remote control. When the carousel appears on the screen, in the Launch URL menu, press the tab Parameter then Install Web Application .

⚠ In the case of a SAMSUNG Tizen SSSP 6 device, if the Launch URL menu is not present and is replaced by the MagicINFO S Player 6 menu, exit the carousel and press the MENU key, then the System menu, then the Read with menu. Choose Launch URL instead of MagicInfo .

In the case of a SAMSUNG Tizen SSSP 4 device, enter the URL :

```
http://<user>:<pwd>@<srv_ip_addr>:<port>/frontals/.webdav/<domain_name>/playzilla-plugncast-sssp_4/
```

In the case of a SAMSUNG Tizen SSSP 5 device, enter the URL :

```
http://<user>:<pwd>@<srv_ip_addr>:<port>/frontals/.webdav/<domain_name>/playzilla-plugncast-sssp_5/
```

In the case of a SAMSUNG Tizen SSSP 6 device, enter the URL :

```
http://<user>:<pwd>@<srv_ip_addr>:<port>/frontals/.webdav/<domain_name>/playzilla-plugncast-sssp_6/
```

with

- <user> : login to connect the frontal of your PlugnCast server
- <pwd> : Password to connect the frontal of your PlugnCast server
- <srv\_ip\_addr> : IP address of your PlugnCast server
- <port> : operating port of your PlugnCast server
- <domain\_name> : name of the domain on which the frontal of your PlugnCast server is based

Confirm with the remote control.

⚠ User and password IDs of the distribution frontal are required for monitors to broadcast their status file and be registered within your PlugnCast server.

For more information, refer to the user manual of your SAMSUNG device.

⚠ The monitors SAMSUNG Tizen SSSP 4 , SAMSUNG Tizen SSSP 5 and SAMSUNG Tizen SSSP 6 do not allow to install custom certificates. When using the frontal with the secure network protocol with the https protocol scheme, make sure to use in PlugnCast Server a certificate signed by a certified authority or otherwise configure your frontal with the http protocol scheme.

#### Installation of the Playzilla App from the PlugnCast server

To install the App Playzilla on your monitor from the PlugnCast server, press the HOME button on the remote control. When the carousel appears on the screen, in the Launching the URL menu, press the tab Launching the URL , then choose the menu Installing the Web application and confirm.

After a moment, the application is installed. It is possible that the App Playzilla will start automatically after installation. In this case, it displays the message *Information - No content*.

Your device can now be detected and registered by your PlugnCast server.

☞ For more information about registering your device at PlugnCast, go to the chapter [Settings > Domains](#). Once registered, your monitor will also be able to update the version of the App Playzilla automatically.

To complete the installation of the App Playzilla, press the HOME button on the remote control. When the carousel appears on the screen, at the menu level Launching the URL , press the tab Playzilla .

#### Heartbeat

Every minute, the device sends its device-status and synchronizes with the last content to play. This time interval is called heartbeat .

#### Cloning USB key

Once configured, in order to duplicate the configuration on other monitors of the same type, it is possible to clone the configuration of your monitor. Empty the USB stick of its contents and insert it on your monitor. Press the HOME button on the remote control. When the carousel appears on the screen, in the menu MENU , press the tab Clon product and press the Export button.

⚠ In case the key has not been emptied of its contents, the monitor can detect the presence of an existing duplication file; in this case press the 'Export to external storage device' button to replace the existing file.

To install a duplication file on a new monitor, press the **HOME** button on the remote control of your new monitor. When the carousel appears on the screen, in the menu **MENU**, press the tab **close product**. Choose the menu, **Import from external storage device**. Install the Playzilla App and start it as described in the previous paragraphs.

⚠ Cloning does not only concern the App Playzilla but also all the other monitor configuration parameters. For more information, contact your SAMSUNG support.

## Device registration

Once the Playzilla App is started on the devices, the installation of the devices must be completed by registering each of them on the Plugncast Server. For more information, follow the instructions [Registering devices within the distribution frontal](#)

## 1.5 Checking your configuration

Verifying your configuration consists in publishing content with the user account of a given domain.

For this test, it is advisable to create, for example, a new user with access to a particular domain, and with a `General Editor` role. For more information, go to the chapter [Users](#).

Login to PlugnCast Server with the new user. To replenish your default broadcast channel `Playout`,

- Import an image into your library. For more information, go to chapter [Library](#).
- Select the default broadcast channel present `Playout`. For more information, see chapter [Calendar](#).
- Drag the image into the calendar on the right at the desired day level.
- Adjust the created time slot.
- Associate your `Playout` broadcast channel with your device [Device Targets](#).
- Publish your `Playout` broadcast channel on your device. For more information, go to chapter [Publication](#)
- Wait for the time of the `Heartbeat`. The device must update itself with the new content to be played. If it does not update, check the publication error messages.

 Domain users can publish content on devices with the evaluation license for 30 days. But after this period, publication will no longer be allowed, and an information message will invite them to contact the IT department.

## 2.1 Launch of the PlugnCast Server web interface

To be able to connect to the web interface of your PlugnCast server, type the IP address of the server machine into a web browser and enter the `Login` and `Password` that your `PlugnCast server` administrator has provided you with.

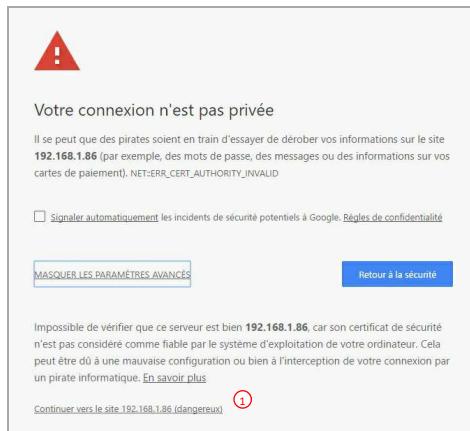
The default login and password for the `Super Administrator` are respectively `superadmin` and `superadmin`. However, the administrator is advised to modify it for obvious security reasons.

It is necessary to know the IP address of the server machine to connect to the `PlugnCast server` software through its web interface. For more information contact your `PlugnCast server` administrator.

A home page then invites you to enter your username and password to access the server. The default username and password are `superadmin` and `superadmin` respectively.



The browser asks you through a security message to continue to the site ①. Accept this request to continue.



## localhost

If `PlugnCast Server` is installed on your machine, it is possible to access it by entering the URL:

```
http://localhost:<port>/
```

## Reloading the PlugnCast web interface

Following an update of the version of `PlugnCast server` by your network administrator, you are asked to restart the web interface of `PlugnCast server` by refreshing your browser with the `F5` key or to close and reopen your browser.

## Supported character type

PlugnCast Server is case sensitive when editing the names of the different resources (directory names, file names, playout names, variable names, ...). Login and password are saved in lower case.

## 2.2 General presentation

Once connected to the server, the browser displays the PlugnCast web interface. Four icons at the top of the web interface provide access to the main functions:

- Library <sup>①</sup> for content manipulation,
- Playouts <sup>②</sup> for defining diffusion contexts (called `Playouts`),
- Targets <sup>③</sup> for device and screen control (assignment of `Playouts` to devices, definition of scheduled device standby) or restart tasks, assignment of variables),
- Parameters <sup>④</sup> for configuring external servers, its domains (frontals and devices), user accounts, user groups and roles, certificates, licenses, middleware and scripts.



The process of preparing and distributing content on the devices (media players or screens) is carried out in four steps:

- In the `Library` <sup>①</sup>, import your multimedia content or create new ones using the document generation wizards (models or slides SlideMaker),
- In the `Playouts` environment <sup>②</sup>, create a playout (broadcast context) with a weekly calendar and organize it by means of a `layout` (multi-region),
- In `Targets` <sup>③</sup>, assign the desired playout to several selected devices or a group of devices,
- Press the `Publish` button <sup>④</sup> to start the diffusion process on all devices (or a subset of devices).

⚠ The devices with which you wish to operate must first be registered in a distribution frontal. If they are not present, contact your `PlugnCast Server` administrator.

## 2.3 Library

The `Library` environment is composed of two views:

- On the left, the view of the resources to be handled (files and folders, fonts, time slots,...)
- On the right, an editing view corresponding to the type of the selected resource.

The `Library` contains all the content elements that can be used to broadcast on the screen network:

- Unitary multimedia documents (videos, images, audio),
- Composite multimedia documents (HTML5 widget [WGT or MAFF], Swift Adobe Flash templates)
- Books (MS-Powerpoint, PDF)
- Web Pages
- RSS news feeds,
- Folders or localized folders,
- Playlists,
- Playfolders (play rules for the content of a folder),
- URIs (shortcuts to web pages, library files, IP or TV/DVB network streams),
- Data files (.css, .csv, .htm, .html, .ics, .js, .json, .md, .mdp, .sdp, .srt, .tsv, .txt, .vtt, .xml),
- Fonts of characters,
- Variables,
- Ontologies of peripherals (remote controls, control command by GPIO,...).<sup>1</sup>

The view of the library's resources is organized into five sections accessible by tabs:



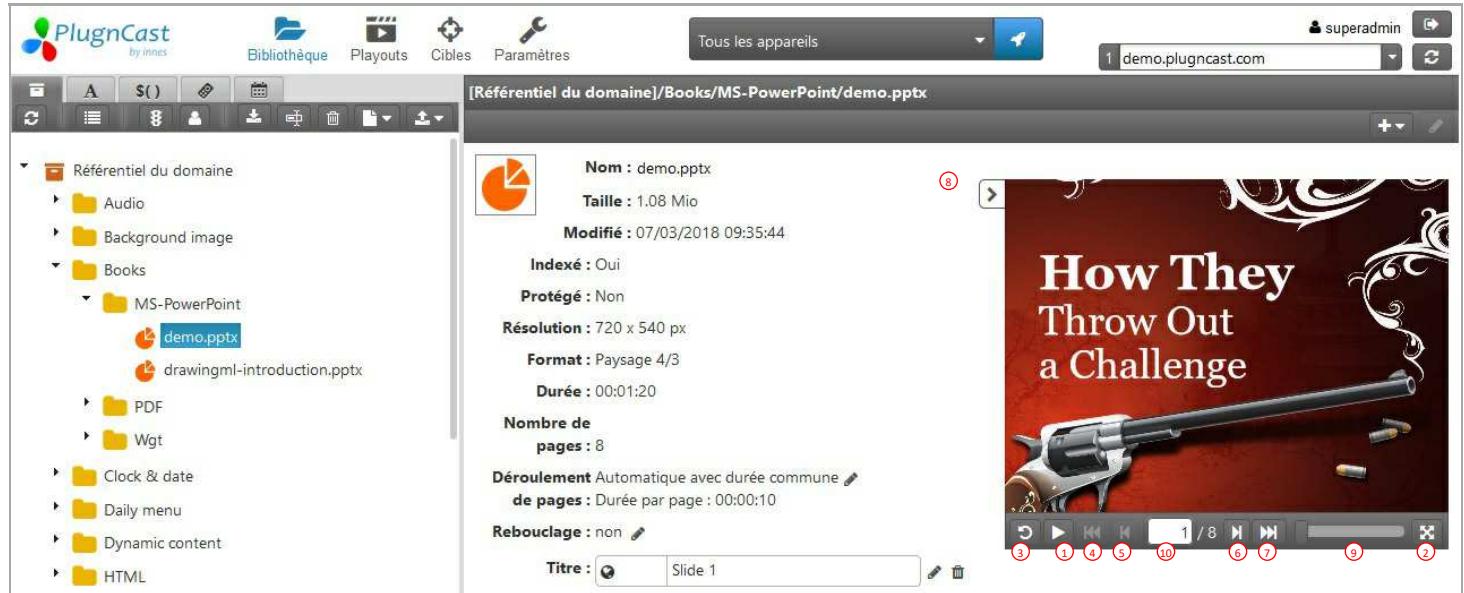
- `Files` <sup>①</sup>: Allows you to create files and directories or import files from your computer to the library.
- `Character fonts` <sup>②</sup>: Allows you to import and view fonts.
- `Variables` <sup>③</sup>: Allows you to create, edit and view variables
  - `Custom`,
  - `Date and time'` (xpath),
  - `Device information`.
- `Peripheral Ontologies` <sup>④1</sup>: Allows you to create and edit actions for triggering content.
- `Time ranges` <sup>⑤</sup>: Allows you to create schedules (`Todo`), or time slots (`daily calendar`) for scheduled device restarts or screen savers.

<sup>1</sup>. Not supported in the current version of PlugnCast. ↵

### 2.3.1 Editing panel

#### Preview

The editing panel allows you to perform a unit preview of a selected media in your library. All types of media can be previewed, including URIs, playfolders, playlists and MS-PowerPoint media. However, to be previewed, the media type must be supported by your web browser. For example, some video containers may not be supported or some web pages display might not be allowed.



Select a media in your library (for example MS-PowerPoint media). Press the **Play** button **①** to play the media. Press the **Full screen** button **②** to preview it in full screen. Press the **start** button **③** to move to the beginning of the media. The **Diminish** **⑧** button decreases the preview window.

In the case of multi-page media, it is possible to preview the pages one by one, with the toolbar that supports the functions:

- **Back to first page** **④**
- **Previous page** **⑤**
- **Next page** **⑥**
- **Last page** **⑦**

In the case of a media with many pages, an elevator **⑨** is available to get to a given page more quickly. It is possible to directly enter a page number **⑩** to preview a desired page.

In the case of a **playlist** or **playfolder**, the **calendar** button allows you to simulate the date and time of the preview when they are inserted in a time slot. If the playfolder or playlist contains media with validity metadata, the media stored inside will or will not be played according to this simulation date.



#### Edition

This panel also naturally allows you to edit editable media in order to modify their content. After selecting a media from your library, press the **Edit** button **⑪** to edit your media.

Référentiel du domaine

- Audio
- Background image
- Books
- Clock & date
  - BlueClock.html
  - Clock & date template1.html
  - clock & date 16\_9.swf
- Daily menu
- Dynamic content

You can modify:

- resources files: .css, .csv, .htm, .html, .ics, .js, .json, .md, .md, .mdp, .sdp, .srt, .tsv, .txt, .vtt, .xml ,

```

<!DOCTYPE html>
<html><head>
<meta http-equiv="Content-type" content="text/html; charset=UTF-8">
<script type="text/javascript">
function init(){
    clock();
    setInterval(clock, 1000);
}

function clock(){
    var now = new Date();
    var ctx = document.getElementById('mon-canvas').getContext('2d');
    ctx.save();
    ctx.clearRect(0,0,150,150);
    ctx.translate(75,75);
    ctx.scale(0.5,0.5);
    ctx.rotate(-Math.PI/2);
}

```

- media forms from the `content models` package,

Tickers

- Daily tickers
  - Ticker friday.maff
  - Ticker monday.remote.maff
  - Ticker thursday.maff
  - Ticker tuesday.maff
  - Ticker wednesday.maff
  - text\_friday.txt
  - text\_monday\_remote.txt
  - text\_thursday.txt
  - text\_tuesday.txt
  - text\_wednesday.txt

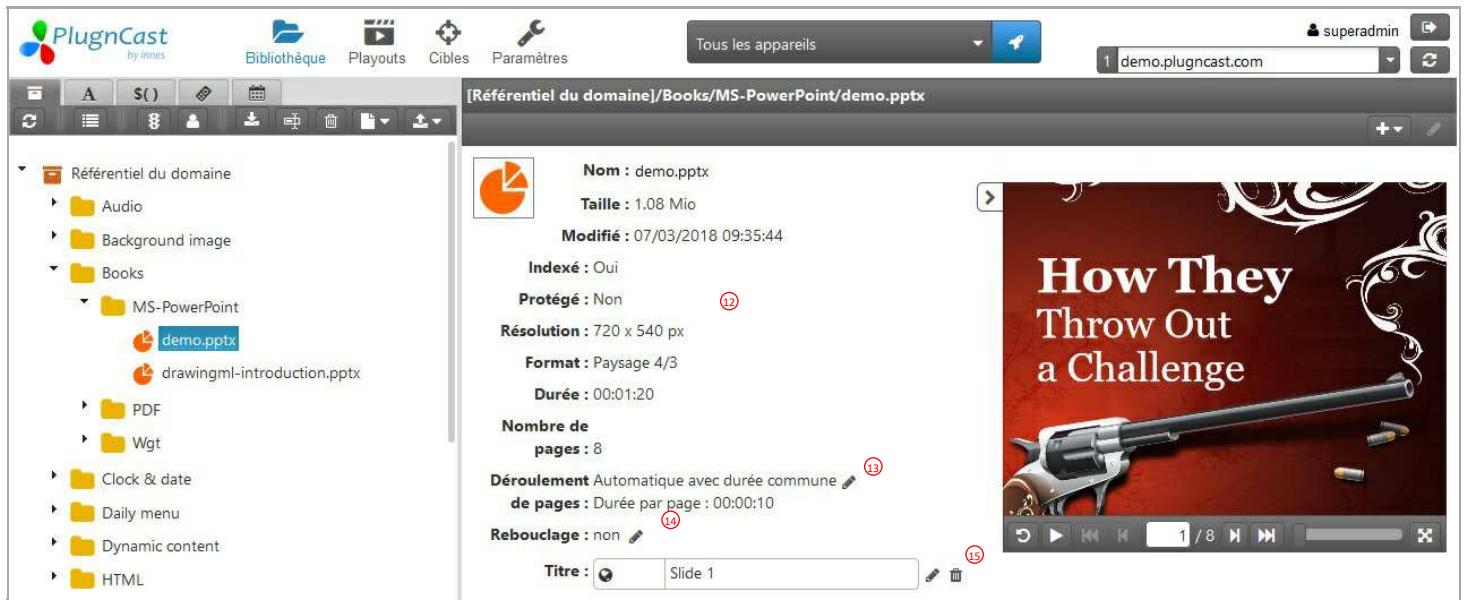
- SlideMaker slides,
- URIs , playfolders , playlists .

Référentiel du domaine

- Audio
  - List
    - audio1.mp3
    - audio2.m4a
    - audio3.mp3
- audio\_list.xspf

## Media metadata

This panel also allows you to consult its metadata at first glance .



The screenshot shows the PlugnCast software interface. On the left, there is a file tree with categories like Référentiel du domaine, Books, MS-PowerPoint, PDF, and HTML. In the center, detailed metadata for a file named "demo.pptx" is displayed. The metadata includes:

- Nom : demo.pptx
- Taille : 1.08 Mio
- Modifié : 07/03/2018 09:35:44
- Indexé : Oui
- Protégé : Non 
- Résolution : 720 x 540 px
- Format : Paysage 4/3
- Durée : 00:01:20
- Nombre de pages : 8
- Déroulement Automatique avec durée commune de pages : Durée par page : 00:00:10 
- Rebouclage : non 
- Titre :    

On the right, a preview window shows a slide from the presentation with the title "How They Throw Out a Challenge" and an image of a revolver.

The number of metadata displayed may vary depending on the selected media. Some metadata can be edited    . Click on the **Edit**  button to change their value. The following metadata can be found:

- Name : name of the file with its extension.
- Size : Memory footprint of the media on your storage space.
- Modified : date of the last modification of the file.
- Indexed : indicates whether the media has been successfully indexed in the database.
- Protected : Indicates whether the media is write-editable.
- Resolution : width and height of the media in pixels.
- Format :
  - Landscape 16-9,
  - Landscape 4-3,
  - Portrait 9-16,
  - Landscape 3-4
- Number of images per second : for example, for SWF media types.
- Model version : for Innes content models.
- Model ID : for Innes content models.
- Duration : The intrinsic duration of the media when played once fully.
- Page flow  : Allows you to view or choose the page flow mode of your media.
  - manual :
    - Duration per page : no. The transition to the next page is made through a user action.
    - page number : automatically detected.
    - Media duration : not defined.
  - Automatic with common duration :
    - Duration per page : all pages run one by one with a common programmable duration.
    - page number : automatically detected.
    - Media duration : automatically calculated according to the duration per page and the number of pages.
  - Automatic with differentiated duration :
    - Scroll mode: detected by `PlugnCast Server` but not editable.
    - Duration per page : all pages are displayed one by one with sometimes different durations per page.
    - page number : automatically detected.
    - Media duration : calculated automatically.
    - it is possible to overwrite this scrolling mode with the `manual` OR `automatic` mode with `common duration` mode.
  - manual and automatic :
    - Scroll mode: detected by `PlugnCast Server` but not editable.
    - Duration per page : some pages have a manual process requiring user interaction to move to the next page, some others have an automatic process.
    - page number : automatically detected.
    - Media duration : not defined.
    - it is possible to overwrite this scrolling mode with the `manual` OR `automatic` mode with `common duration` mode.
- Autoloop  :
  - this metadata is present in your MS-PowerPoint media only if at the time of its editing, the option `Slideshow > Configure slideshow > Run continuously to ESCAP` has been checked.
  - Yes : to activate the function `Execute continuously until ESCAP`.

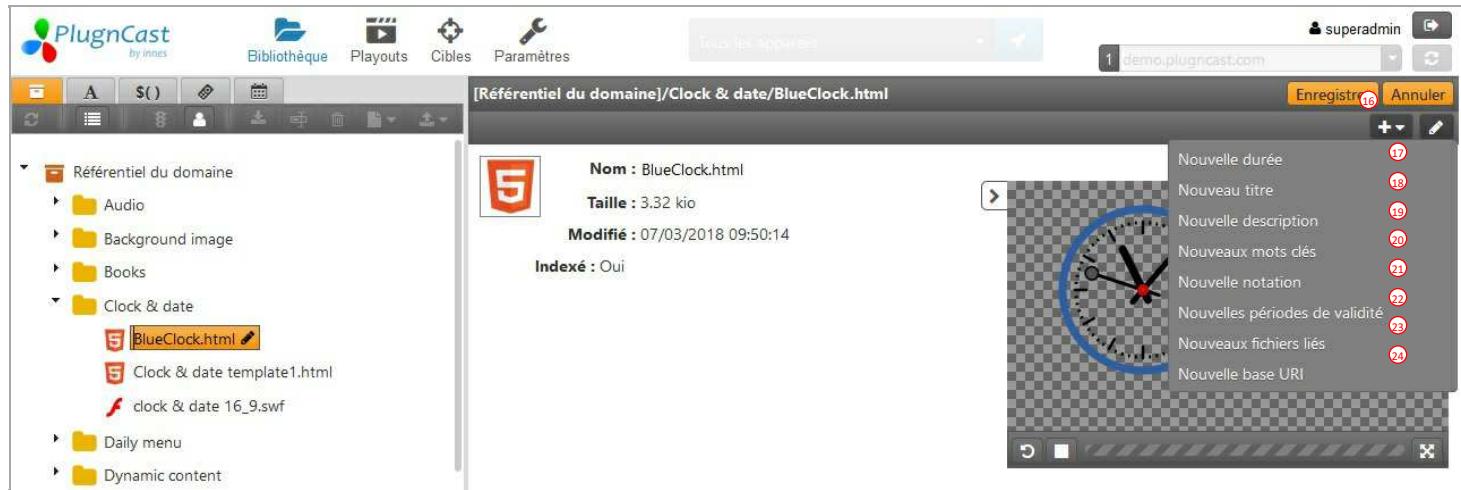
- No : to disable the *Execute continuously until ESCAP* function.
- this metadata is used only by the Gekkota RT middleware.
- Headline  free text.
- Media compatibility : this metadata presents the list of OSes supported by this model. When all OSes are supported for a model, here is the list displayed: gekkota-4,gekkota-3,lg\_webos-3,lg\_webos-4,sssp\_4,sssp\_5,sssp\_6 .

 In this version of `PlugnCast server`, when updating a model version, the metadata value `Media compatibility` is not updated at this time.

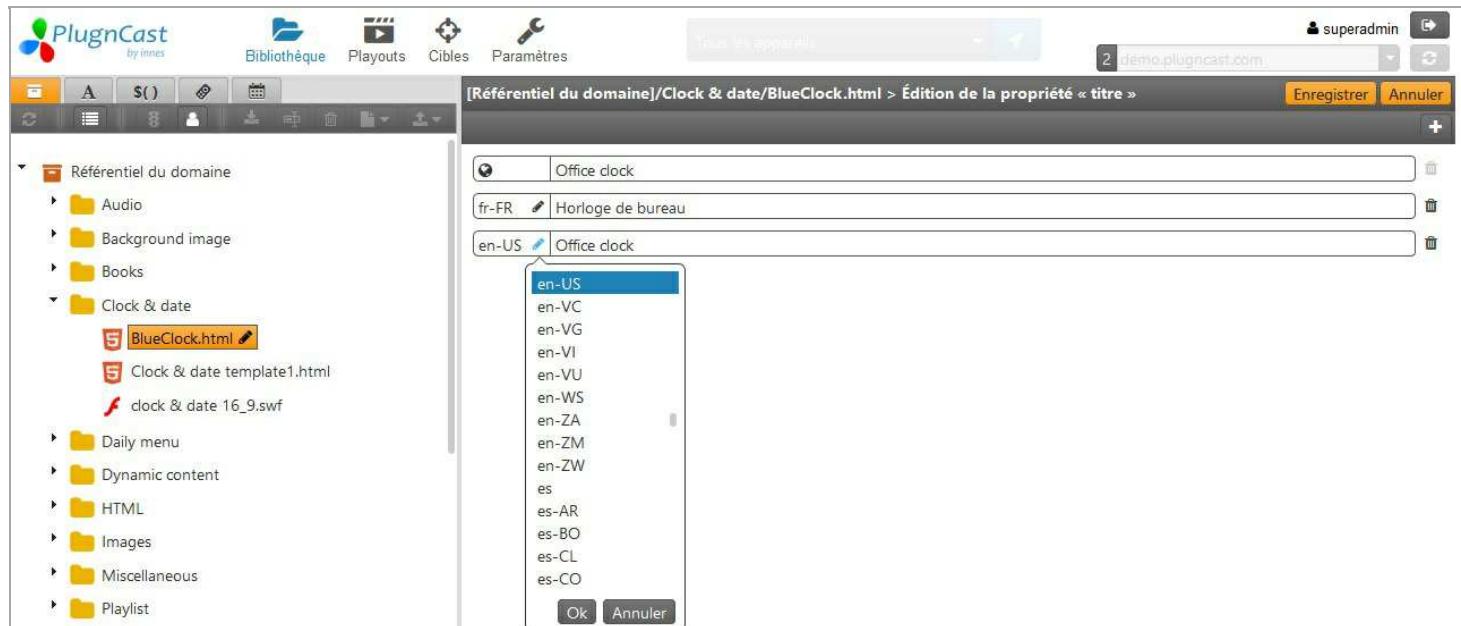
 Some metadata may not be present for some types of media.

## Adding additional metadatas

When they are not already present, it is possible to add additional metadatas to your media with the button `Add` .



- New duration  : Allows you to define an intrinsic duration to your media in order to guarantee, once played, to move to the next media when it is played for example within a playlist.
- New title  : Allows to add standardized titles at the language level:
  - the first corresponding to the international language (most often English),
  - the following ones each corresponding to the desired languages.



- New description  : Allows to add standardized descriptions at the language level:
  - the first one corresponding to the international language (most often English),
  - the following ones each corresponding to the desired languages.

- New keywords : Allows you to associate keywords with your media. These keywords can then be used in the game criteria [1](#) in playlists or playfolders.
  - New notation : Allows you to associate a rating to your media from 1 to 5 stars. This notation can then be used in the game criteria [1](#) in playlists or playfolders.
- <sup>1</sup> Not supported in the current version of PlugnCast.
- New validity periods : Allows you to associate a 'validity period' with your media that is used during the game in a time slot. Outside this validity period, this media can no longer be viewed within a time slot.

The unitary preview of media at the library level is always possible. It is possible to simulate the preview time for URIs, playfolders and playlists.

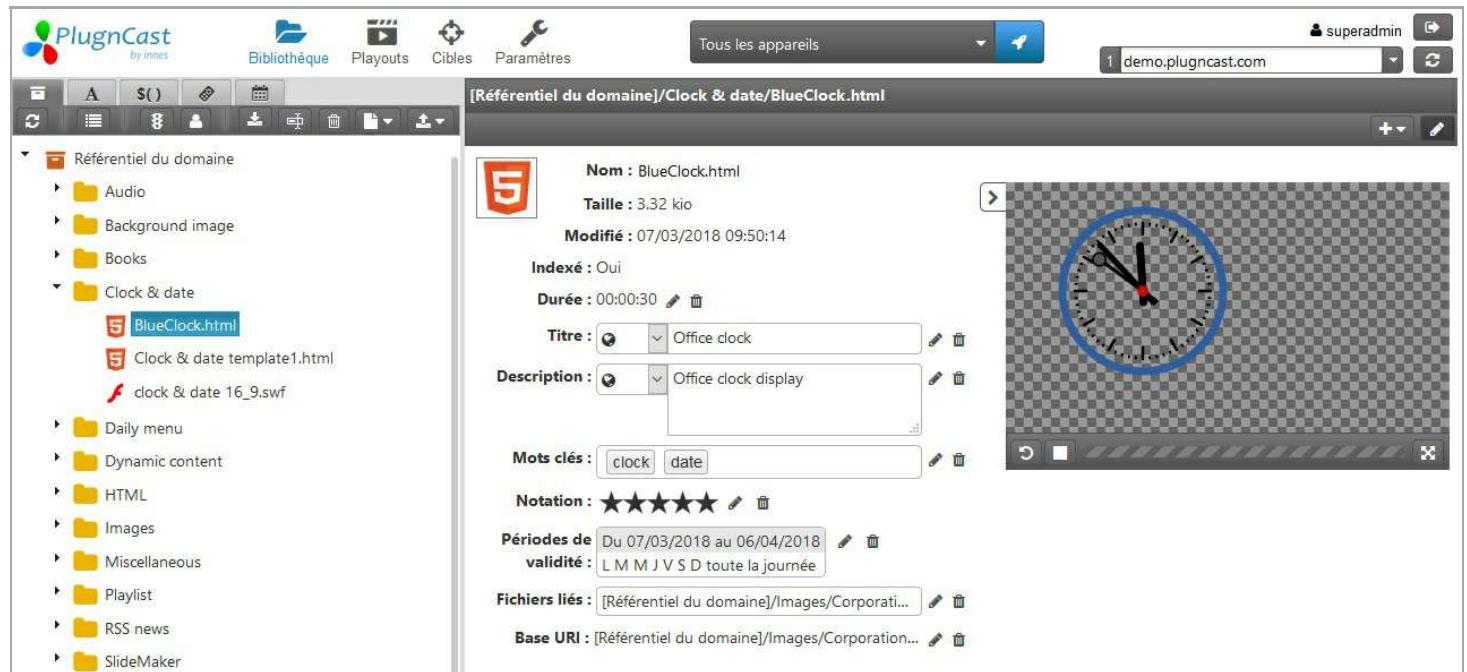
- New linked files : Allows you to view or edit the dependencies related to the selected multimedia document. These linked files can be:
  - fonts of character,
  - resources (.css, .csv, .htm, .html, .ics, .js, .json, .md, .md, .mdp, .sdp, .srt, .tsv, .txt, .vtt, .xml)
  - images

Drag files one by one from the `library` on the left to the `Linked files` screen on the right. Then `Save`.

The `linked files` are used in particular when using `date` and `time` variables in playfolders or URIs

- New URI database  : Allows you to define a resource directory

## Metadata rendering examples



The screenshot shows the PlugnCast software interface. On the left is a file tree with categories like Référentiel du domaine, Audio, Background image, Books, Clock & date, Daily menu, Dynamic content, HTML, Images, Miscellaneous, Playlist, RSS news, and SlideMaker. The 'Clock & date' folder is expanded, showing files: BlueClock.html (selected), Clock & date template1.html, and clock & date 16\_9.swf. The main panel displays the metadata for 'BlueClock.html'. The metadata fields include:

- Nom :** BlueClock.html
- Taille :** 3.32 kio
- Modifié :** 07/03/2018 09:50:14
- Indexé :** Oui
- Durée :** 00:00:30
- Titre :** Office clock
- Description :** Office clock display
- Mots clés :** clock, date
- Notation :** ★★★★☆
- Périodes de validité :** Du 07/03/2018 au 06/04/2018  
L M M J V S D toute la journée
- Fichiers liés :** [Référentiel du domaine]/Images/Corporati...
- Base URI :** [Référentiel du domaine]/Images/Corporati...

On the right, there is a preview window showing a blue digital clock face with black numbers and hands, set against a checkered background.

## 2.3.2 Files

The file panel contains two types of content repositories.

- The Domain Repository (part of the library belonging only to the selected domain),
- The Shared Repository (part of the library common to all domains on this server).



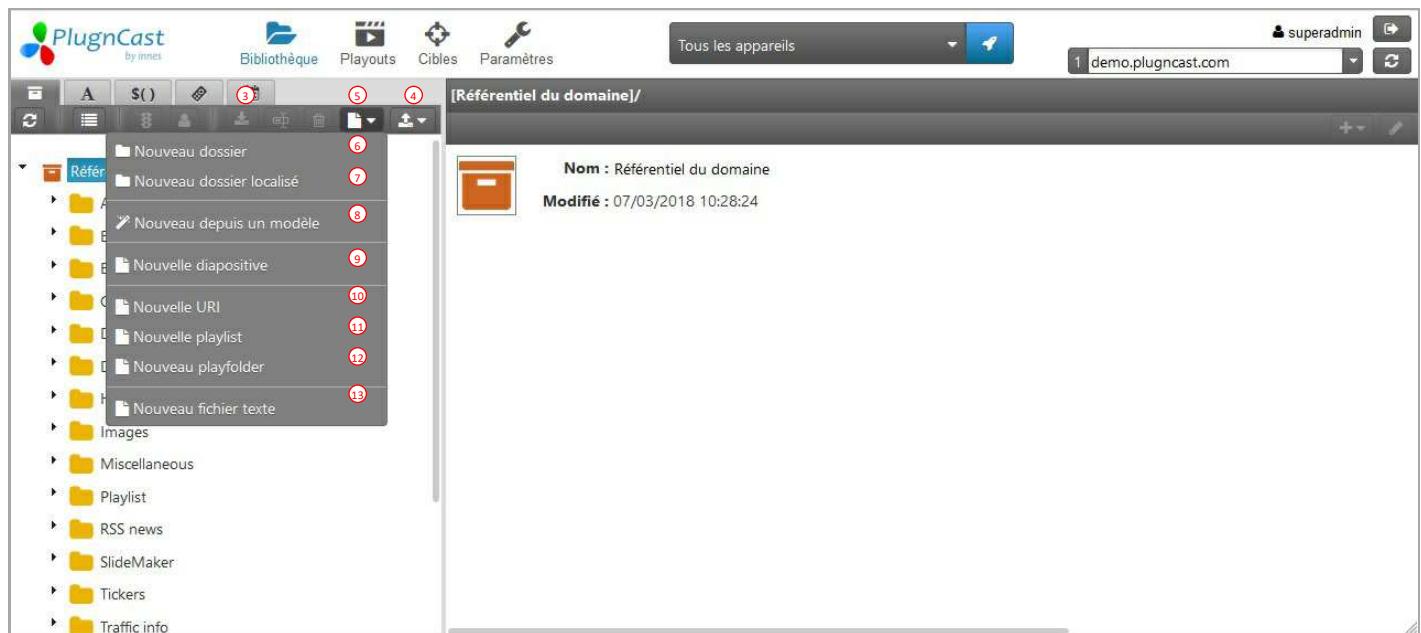
The Download (3) button allows you to export media from the server to the user workstation.

The Import contents (4) button allows you to import media from your computer to enrich the PlugnCast library. Here are the file extensions supported in the library:

```
.apng, .ASF, .avi, .css, .csv, .eof, .gif, .htm, .html, .ics, .ismc, .jpg, .jpeg, .js, .json, .m2v, .m4a, .m4v, .maf, .maff, .md, .mjpg, .mka, .mks, .mkv, .mov, .mp3, .mpd, .mpg, .mxm, .odt, .odp, .oga, .ogg, .ogv, .otf, .pdf, .playfolder, .png, .pps, .ppsx, .ppt, .pptx, .ps, .sdp, .srt, .svg, .swf, .ts, .tsv, .ttf, .txt, .uri, .vob, .vtt, .webm, .wgt, .wma, .wmv, .woff, .xls, .xlsx, .xml, .xspf
```

The button New (5) allows to access a creation menu:

- For folder (6),
- For located folder (7),
- For media created from a model (8),
- For media slideMaker (SlideMaker) (9),
- For URI (web pages, live video stream,...) (10),
- For media playlists (11),
- For playfolders (directory game rules) (12),
- For text file (.css, .csv, .htm, .html, .ics, .js, .json, .md, .mdp, .sdp, .srt, .tsv, .txt, .vtt, .xml) (13).



The view of the files in the PlugnCast Server media library can be accessed through WebDAV client software (MS-Windows file explorer, BitKinex, CaroDAV, ...). For example, on the MS-Windows system, under the file explorer, create a new network drive with the https (or http) address of your PlugnCast server followed by /.plugncast. Once finished, point to the folder .domains/<your domain name>/domain-repository where <your domain name> is for example demo.plugncast.com. Your Domain Repository files are then accessible directly from the MS-Windows File Explorer. The modification of MS-Powerpoint files can be done directly from this network drive.

## Importing multimedia documents

PlugnCast Server supports many multimedia document formats (audio, video, image, MS-Powerpoint, pdf,...). To add a new multimedia document to the repository, click on the Import button , then choose the file to import from your workstation. Several files can be selected simultaneously.

## Data source file associated with multimedia documents

PlugnCast Server supports many file data sources (importation or creation):

- .css, .csv, .htm, .html, .ics, .js, .json, .md, .mdp, .sdp, .srt, .tsv, .txt, .vtt, .xml.

To add a new data file to the repository, click on the button .

 Data files are not directly playable but may be necessary for a media to work properly. They are either automatically inserted by the media or it is up to the user to add it as a linked file.

 Data sources can be dragged and dropped into the `manifest` view of a `playout`. In this case, the data resource will systematically be downloaded into the device without necessarily being associated with a time slot. This can be useful, for example, for permanently adding fonts to a device.

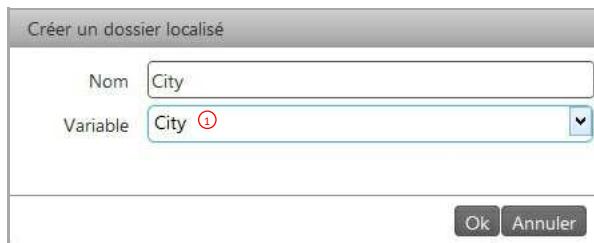
### 2.3.2.1 Localized Folder

A localized folder is a special folder whose subdirectory names are conditioned by the value names of a `localized variable`.

Before creating a localized folder, you must have a `localized variable` with values.

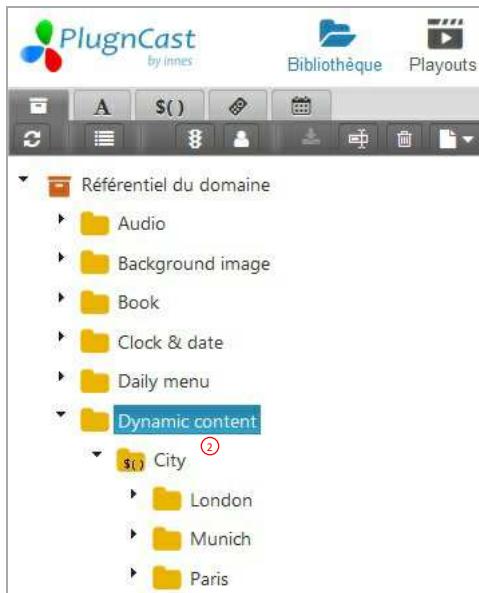
Make sure that a `localized variable` exists beforehand (e.g. the variable `city`). If necessary, refer to the paragraph describing the operation of the [Variables](#).

When creating the localized folder (e.g. the `city` localized folder), choose one of the existing localized variables (e.g. the `city` variable) ①.



Subfolder names are automatically created. For example, in the `variables`' library, if the localized variable `City` has the values `London`, `Munich`, `Paris` as values, subfolders with the name `London`, `Munich`, `Paris` are automatically created at the level of the localized folder `City`` ②, identified by a symbol `$()`.

Valeur	Libellé
Paris	PRS
London	LDN
Munich	MUC



Add as you wish the subdirectories `London`, `Munich`, `Paris` with media.

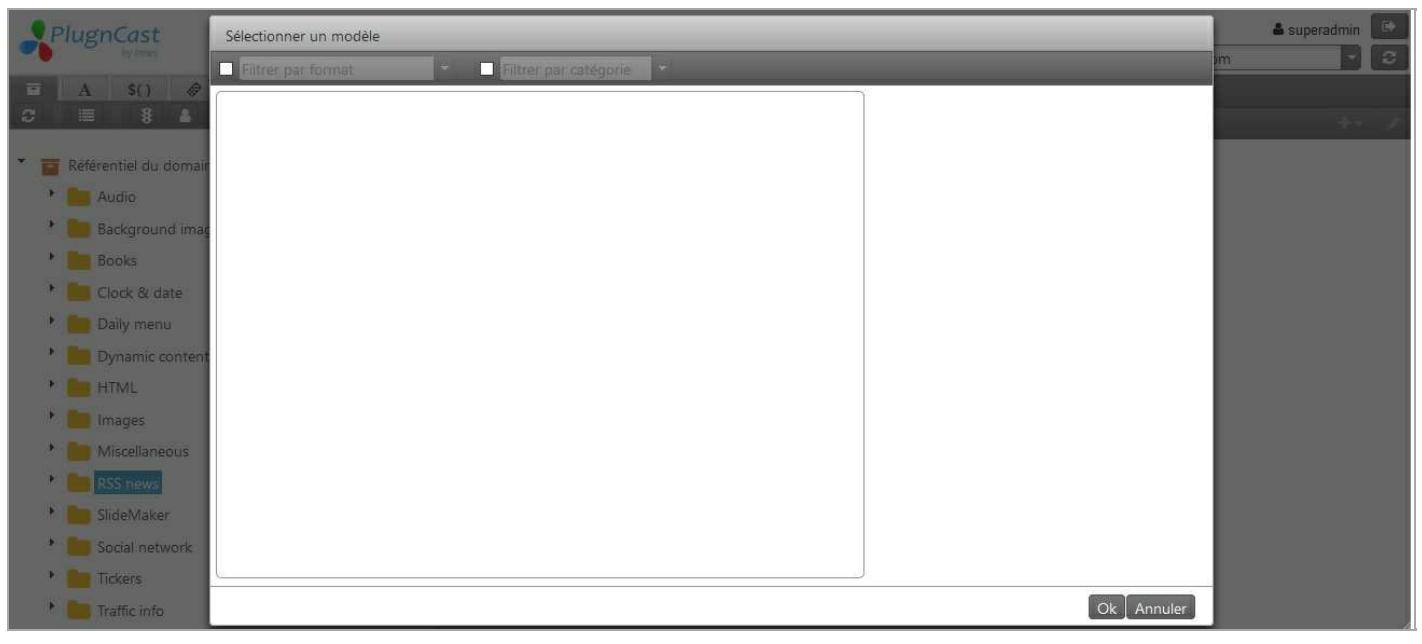
A `localized folder` is usually used by a playfolder, which depending on the variable present in the device, plays the content of the appropriate folder.

### 2.3.2.2 Widget generated from a model

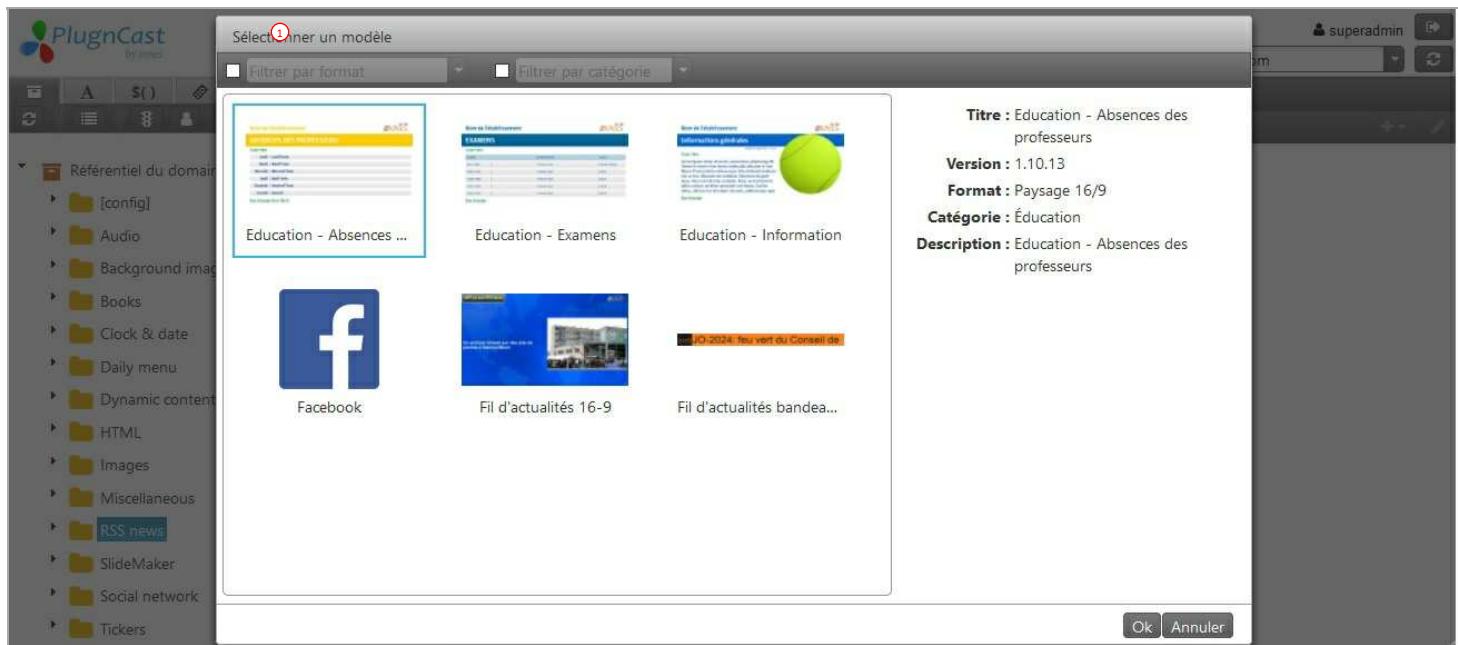
PlugnCast Server allows you to create widgets from document `models`. To do this, select a directory, then in the `Files`  click on the `New from a model`  button.



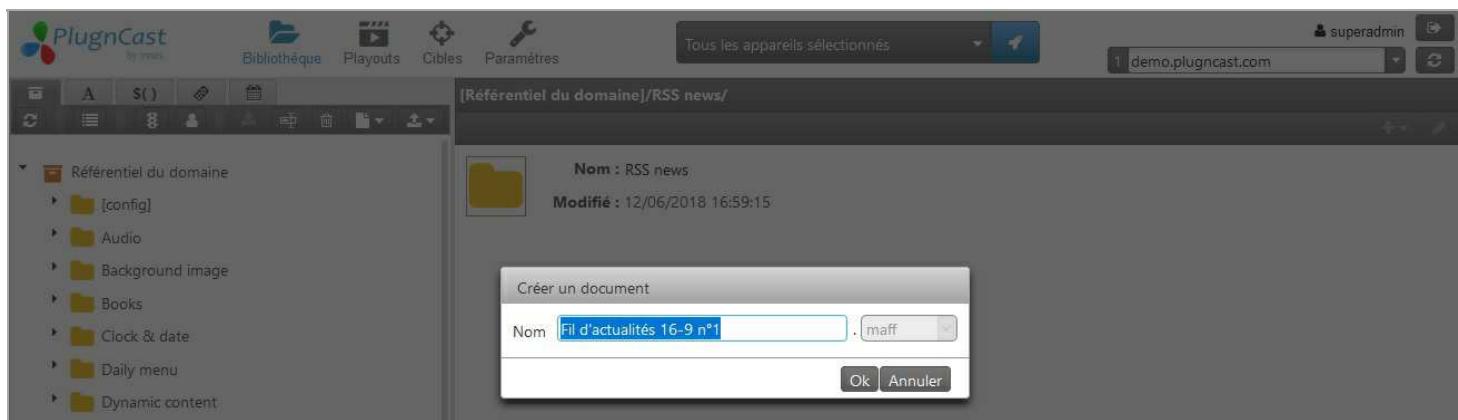
Content models are not installed by default. For more information on installing document models, see the chapter [Parameters > Addons](#).



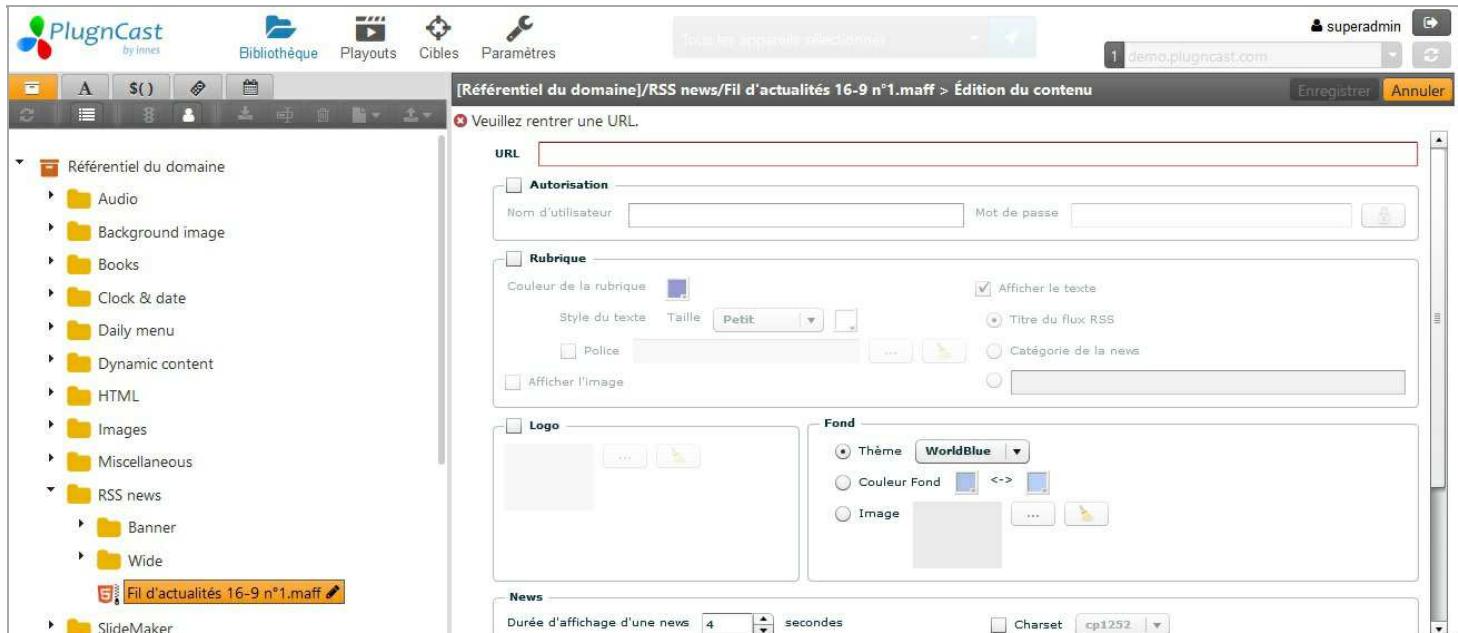
Once you have installed the document models of your choice, in the `Files` panel, select a directory from your library, click on the button `New`  then select `New from a model` .



For example, select the content template `News feeds 16/9` and validate



The media created `News feeds 16/9 #1` from the content model `News feed 16/9` appears in the library in edit mode. Fill in the media form and then `Save` your changes.

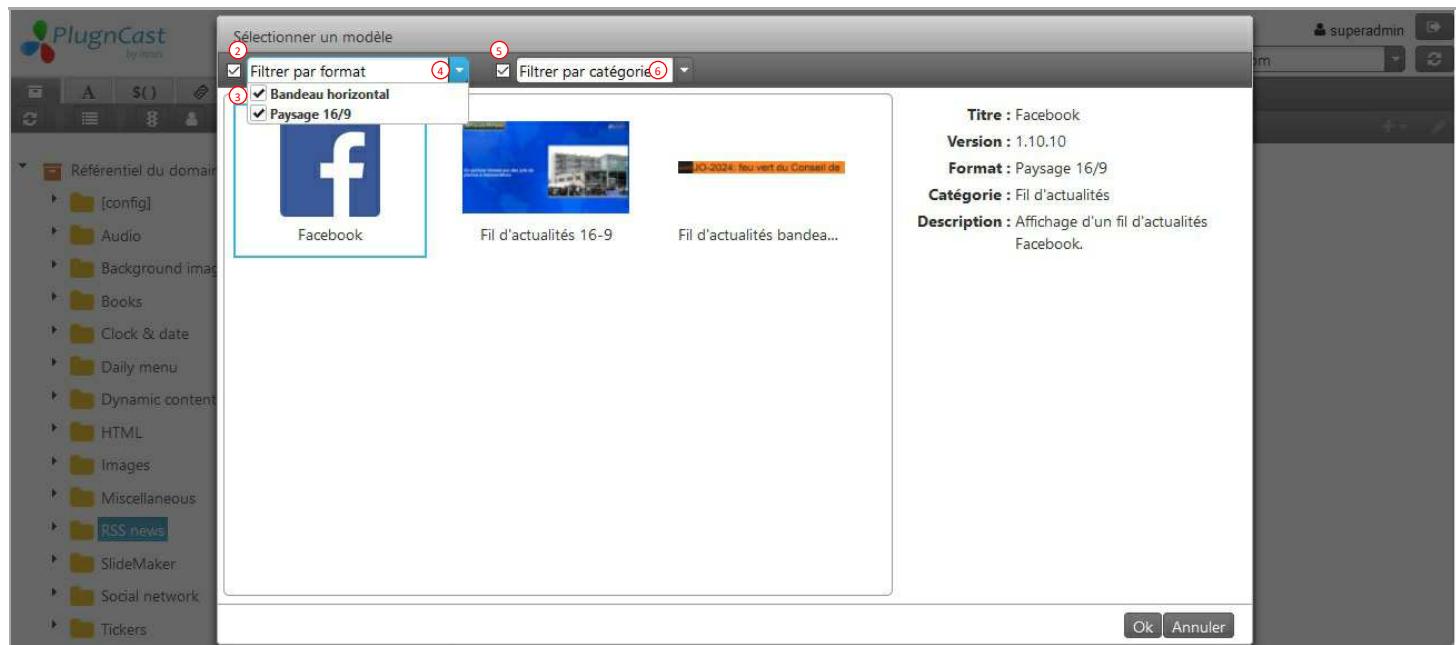


If many models are installed, it is possible to reduce the number of models displayed by filtering them by their model `category` or `format`. To do this,

- enable filtering by `format` ② then select the desired `format` values ③ for filtering at the checkbox level (`Horizontal band`, `Landscape 16/9`, ...) using the `format` drop-down list ④
- enable category filtering ⑤ then select the desired `category` values for filtering at the checkbox level (`News feed`, `Education`, `Signalétique`, ...) using the `category` drop-down list ⑥

- Attention: select a filter value outside the checkbox, allows you to select the value in front of the checkbox but deselects all the other values.
- Filter values are persistent after a disconnection.

Select the desired content model and validate.



### 2.3.2.3 Playfolder

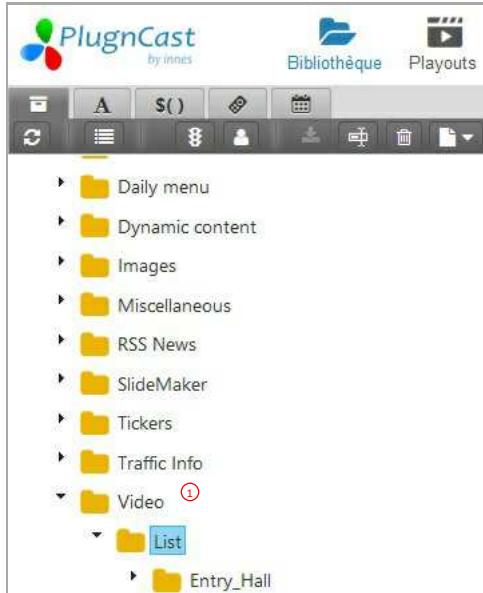
A playfolder allows you to define the conditional play of the content of a folder (its media and sub-folders). A playfolder is created by simply dragging and dropping a folder from the library to the edit field of the Content Editor tab on the right. The directory path pointed to by the playfolder can be:

- A file,
- A localized file.

It is also possible to add variables or free text to the folder name.

#### Folder Playfolder

For example, I have a `/Video` directory ① that contains media and I want to create a game rule that will allow me to play the content of this directory in a calendar time slot:



First select a folder in the library to store your playfolder. Then click on `New > Playfolder` ②.

Enter a name for your playfolder ③ for example `video_list`.

Créer un fichier playfolder

Nom	Video_list	③
<input type="checkbox"/> Créer le dossier associé		
<input type="checkbox"/> localisé		name
		Ok Annuler

Select the `/Video_List` folder ④ in the library and drag it to the playfolder editing area on the right ⑤.

[Référentiel du domaine]/Video/Video\_list.playfolder > Édition du contenu

[Référentiel du domaine]/Video>List/ ⑤

Prévisualisation [Référentiel du domaine]/Video>List/

Si absent, remplacer par Glisser et déposer un fichier ici

Ordre de lecture:

- Ordre alphabétique
- Ordre alphabétique inversé
- Aléatoire

Mode de lecture:

- Lire un seul média
- Lire tous les médias

Your playfolder is ready to be inserted in your channel calendar.

#### Playfolder for folder containing variables or free text

It is possible to create a more advanced playfolder rule whose path to the pointed directory contains variables. So when developing the folder path, drag existing variables. For example, I have a first localized variable (e.g. Building ) ⑥ with values (e.g. Hall , Factory , Showroom and Warehouse ) ⑦ Hall being the preview value to help visualize the path created before publication ⑧.

Type : localisé

Famille : Personnalisée

Valeurs	Valeur	Libellé
Hall ⑦		
Warehouse		
Showroom		
Factory		

My `/Video_List/` folder contains several directories ⑪:

[Référentiel du domaine]/Video>List/

Nom : List  
Modifié : 07/03/2018 10:22:44

To be able to play the contents of the `/Video_List/Entry_Hall` folder, I can create a `Video_list` playfolder with variables and free text.

Create a playfolder and then in its editing mode, instead of dragging and dropping a directory, go first to the variable tab ⑫ of the library to drag and drop the necessary variables (e.g. Building) into the playfolder editing area ⑬.

Only localized custom variables can be used in the creation of playfolders, as well as device information variables or date and time variables.

Then, to insert free text behind a variable instead of the / character, hover over the dropped variable (here: Building), and click on **Edit**

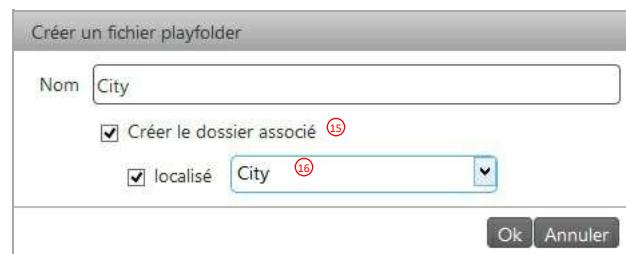
Then enter the prefix of your directory (here: /Entry\_) ⑭. Click outside the area to validate your free text.

In the Targets environment, do not forget to assign the values of your variables in your devices.

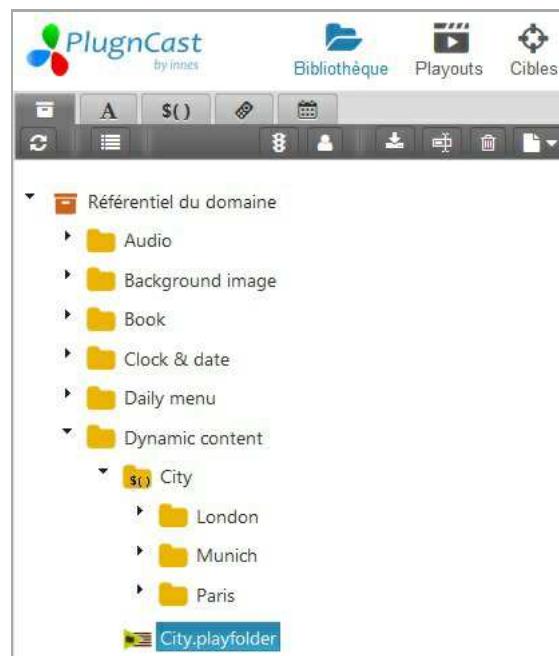
It is also possible to use variables Date and time OR Device info .

## Playfolder rule of localized folder

It is possible to create a more advanced playfolder whose path to the pointed directory contains a `localized folder`. If your `localized folder` does not yet exist, an option **⑯** allows, when creating the playfolder, to create it automatically by choosing a variable **⑰** of your choice.



If your localized folder already exists, select it and drag it to the playfolder edit screen as a standard folder.



Your playfolder is ready to be configured:

- Define an alternative media if the file is empty or not found,
- Define the media playback order,
- Define whether the playfolder should play all the media in the directory before ending or play only one media,
- Define if you also want to play the content of the subdirectories.

Valeur	Libellé
Paris	PRS
London	LDN
Munich	MUC

#### 2.3.2.4 Playlist

Plugncast allows you to create playlists in the media library. The playlist is then replenished by simply dragging and dropping it from the media library.



☞ The playlist is in XSPF format. This XML format is described at [www.xspf.org](http://www.xspf.org). The root of the folder where the media objects to be played are located is described by means of a `xml:base` (<http://www.w3.org/TR/xmlbase/>).

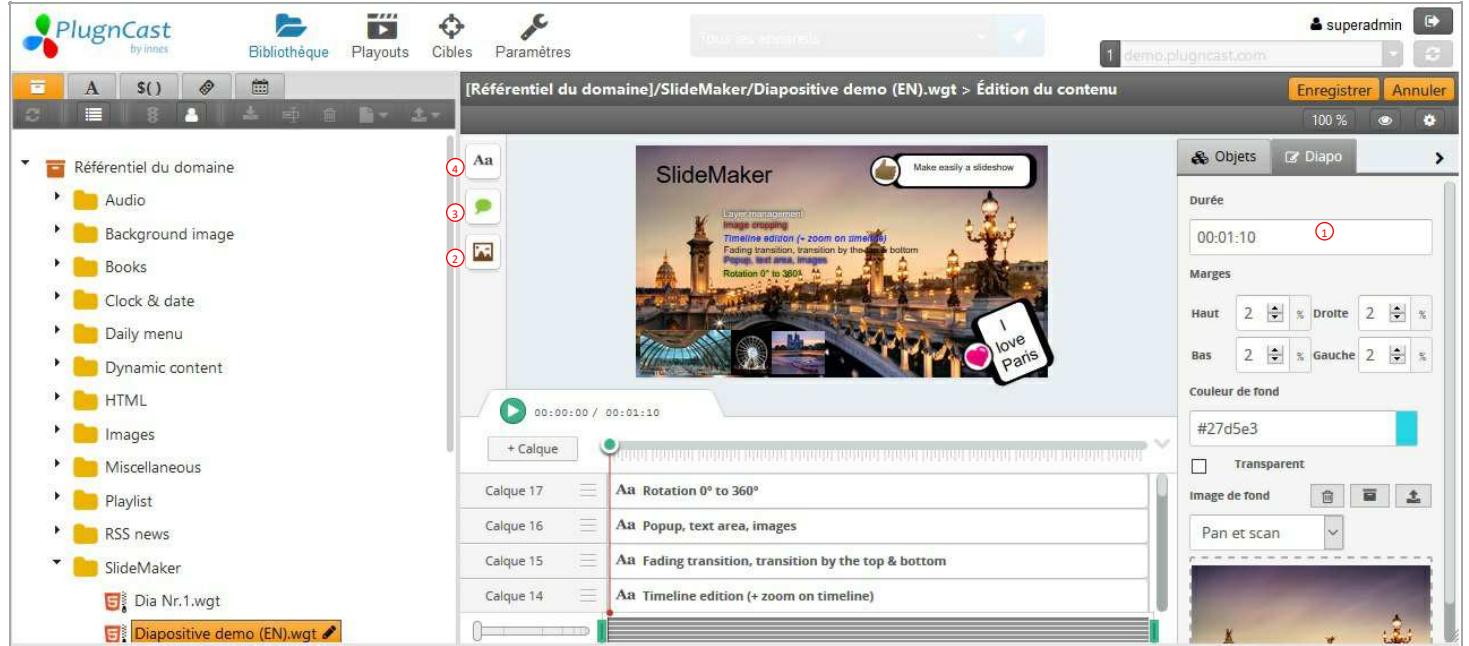
### 2.3.2.5 Widget generated from the slide editor *SlideMaker*

PlugnCast Server allows, thanks to its *SlideMaker* tool, to create a slide in WGT W3C format, a slide show that links the display of media by following a timeline. The duration of the slideshow is programmable (as well as that of the media that compose it) ①. It is possible to zoom in on an area of the timeline to make finer time or start adjustments. The *play* button ▶ / *pause* ■ then displays the rendering (with or without margin, with or without zoom). The layer manager allows you to manage the depth of the different layers. The objects supported in the *SlideMaker* tool are:

- Images ②,
- Popups ③ (with about twenty bubble models),
- Text boxes ④.

Supported functions include:

- The fade in, fade out, slide up or slide down transition,
- The rotation of objects (to the nearest degree),
- The possibility to choose the *fonts* of characters and their format (type, size, shadow, color).



⚠ Remember to save your *SlideMaker* project before leaving your workstation. Indeed, the automatic disconnection, in case of inactivity *PlugnCast Server* of more than 30 minutes, will cancel all your changes.

## 2.3.2.6 URI

URIs are shortcuts to network media (web pages, video streams, television, IPTV, ...).

### URL of a web page

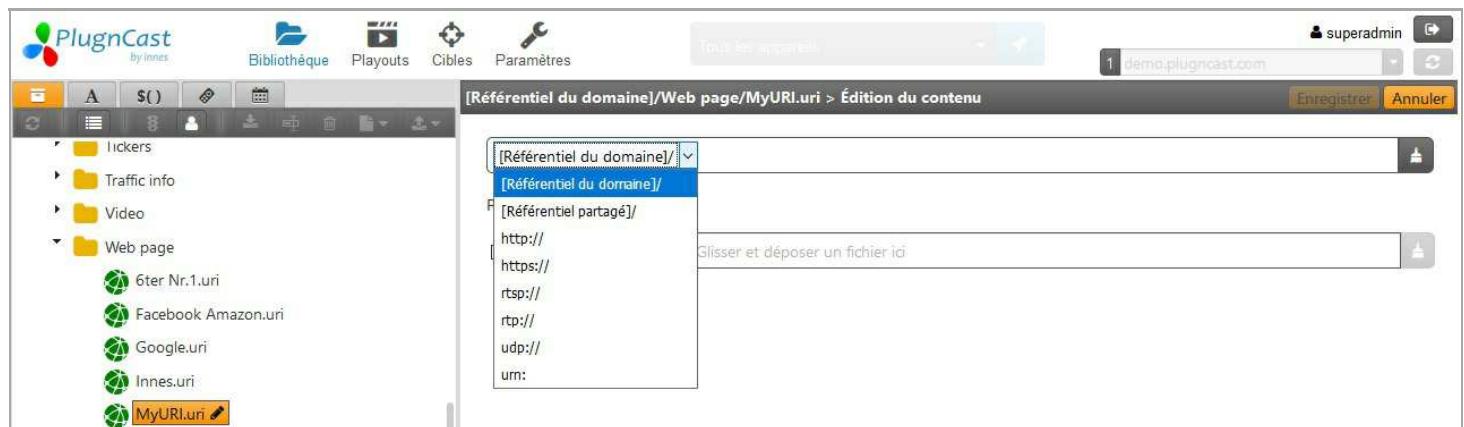
To create an URI to a web page, proceed as follows: In the **Files** panel , click on the **New** button  then select **New URI**. In the **Name** field of the **Create URI file** window, give an evocative name to the URI of your web page and validate.



In **Edition of the content**, click on the link **add a scheme** .



Choose a protocol from the list of proposed protocols (`http://`, `https://`, ...). It will then be possible to enter free text to complete the URL by hovering over the 'scheme' with the mouse.



Enter the URL of the page (for example, <https://www.google.com>).



Copy and paste is supported. The `http(s)` protocol scheme is automatically resolved if the copied and pasted URL contains one.

The URI can contain a variable created in PlugnCast, for example, `http://www.innes.pro/{$custom:Lang}/`. Once conditioned by this variable it can play one web content or another. For example:

- `http://www.innes.pro/fr/` or
- `http://www.innes.pro/de/`

It is possible to define a default media that is played in case the URL cannot be resolved (network interruption, cable disconnected,...) <sup>1</sup>.

<sup>1]</sup>: not available in the current version of PlugnCast.

## Shortcut to a file

The pointed file can be hosted on your `PlugnCast Server` or on the Internet.

The file pointed to by the URI may have a path that may contain variables. For example, `[Domain repository]/City/{$custom:City}/{$custom:filename}` or `http://192.168.1.40/.frontals/.webdav/domaine.amilo/.medias/mediatheque/wgt/{$custom:City}/{date:date()}/production_process.mp4`.

The shortcut is built with a simple drag-and-drop of resources from the library <sup>②</sup> to the Content Editor tab <sup>③</sup>.

It is possible to drag and drop:

- The root of the `domain repository` ,
- The root of the `shared repository` ,
- A `folder` ,
- A `located folder` ,
- Variables `date and time` , `personalized` , OR `device information` .

The content of a file shortcut must have an extension, so:

- Either it ends with a variable of type `File name` <sup>2</sup> .
- 2. Creating a new variable may be required to finalize the creation of a file shortcut. ↵
- Either it ends with a `localized variable` <sup>2</sup> . In this case, the manual addition of an extension is required from the list of proposed extensions (to select an extension, hover over the last variable and click on `.*` <sup>④</sup>)



**Example:** The use of a localized variable can allow, for example, to play with a single URI, several different media depending on the variable loaded on the devices.

The localized variable `Building` contains 3 values :

```
Hall
Factory
Warehouse
```

The `/Video/List` folder contains 3 videos :

```
Video_Hall.mp4
Video_Factory.mp4
Video_Warehouse.mp4
```

Insert the shortcut that points to `/Video/List/Video_{$custom:Building}.mp4` in a calendar event (playout). Assign the value `Hall` of the variable `Building` to a first device, `Factory` to the second device, `Warehouse` to the third and publish. Each device resolves the URI according to its variable and therefore plays the only suitable media.

⚠ The use of `date and time` variables in shortcuts requires the addition of media dependencies that must be present at the time of resolving the file name in the device. To do this, once the URI is created, add a metadata `Bound Files`, and add the target files by a simple drag and drop (for example, the text file of a scrolling text, the media located in the `Hall` , `Building` & `Warehouse` directories).

☞ It is possible to drop several variables in a URI. It is also possible to move variables between them within a URI by a simple drag and drop. A `/` character is automatically inserted in front of the variable when developing the URI each time a new variable is dropped. When the path to the file or file name cannot be resolved, it is displayed in orange <sup>⑤</sup>.

## URN DVB (DVB-T and satellite TV)

The URI can also be used to create a shortcut to a TV channel (for owners of DVB-T tuner cards). In the `Files` pane , click on the `New` button then select `New` from a template . In the window `Select a model` , select the Category `TV` , then select the desired TV channel.

If your template library is empty, go to the Innes support site to retrieve the latest content template package for PlugnCast G3.

☞ To view other DVB-T channels, create a DVB-T URI manually by adding an `urn` protocol and respecting the following formalism: `urn:innes:owl:digitaltv-receiver:1#channel-name("<channel_name>")` , where `<channel_name>` corresponds to one of the names in the list of services detected by your DVB-T tuner card using the device's web interface (`Configuration > Extension > DVB card`). Example: `urn:innes:owl:owl:digitaltv-receiver:1#channel-name("France 2")` .

⚠ This fonction may not be available in your country.

## IPTV URI

This shortcut allows you to set a network favorite to play a streaming video stream. If your corporate network has multicast IPTV reception, you can declare a UDP or RTP reception source using the following steps. In the `Files` panel , click on the `New` button then select `New URI` . In the `Name` field of the `Create URI` file <sup>①</sup> window, give an evocative name to your multicast stream, here `streaming company network` then validate. Enter the URL (for example `udp://12.12.12.13:1234`). To

change the default flow display time, fill in the value `Duration` in the edit sheet on the right.



☞ the URI can contain a variable. It is possible to define a default media that is played in case the URL cannot succeed (network interruption, cable disconnected,...).

### 2.3.2.7 Character fonts

The Fonts panel allows you to manage and view the fonts that can be used by PlugnCast media. This allows you to add a specific font, for example, when it is part of the dependencies of a media and not embedded in the media.



Press the **Import** button  to add new fonts.

 It is possible to select several fonts at once. Fonts can come from external files or from the operating system hosting the PlugnCast software.

### 2.3.2.8 Device Ontologies

Device ontologies <sup>1</sup> allow you to use devices (control, command) that can interact with the device within a time slot, for example:

- An infrared remote control,
- A camera,
- A keyboard,
- A waste,
- An control panel,
- a presence detector,...

The ontologies are characterized by an rdf file in owl format ([http://fr.wikipedia.org/wiki/Web\\_Ontology\\_Language](http://fr.wikipedia.org/wiki/Web_Ontology_Language)). They use the OS's HTML5 API device integrated in the media player. They can be used in `PlugnCast Server` to describe the triggering of game events (advanced use).

<sup>1</sup>. Not supported in the current version of PlugnCast ↵

### 2.3.3 Time slots

The library time event panel allows to manage time slots  and time alarms .



#### Time slots (Daily calendars)

A time slot allows you to define a setpoint that can be used for regular screen idling (e.g. every day from 20:00 to 6:00).



 If the end time is less than the start time, the end time will be taken into account the next day

#### Time Alarms (ToDo)

A time alarm to define a regular setpoint that can be used to restart the devices (e.g. every day at 5:00 am).

## 2.3.4 Variables

The variables panel allows you to manage variables (create them, add new values, modify them, delete them).

Variables can be used in many features of `PlugnCast Server` :

- Creation of groups of devices linked to one or more criteria (geographical, organizational, functional),
- Creation of variable distribution rules in URIs or Playfolders,
- Variable fields in an HTML page.

They are divided into several categories:

- `Customized` : created and then assigned as needed by a user to one (or more) devices,
- `Device information` : variables available at any time in any Gekkota device,
- `Date and time` : library of predefined variables to manage media names or folders containing date information.

The user can define for each variable (custom or device information):

- A reference value , which makes it easy to change the reference value of devices in an entire fleet,
- A preview value , which is used to view the paths and name of your media when it is edited, or to view your media as a unit preview.

 Using variables in a `Playfolder` or `URI` may require manually adding files that are linked to your media.

#### 2.3.4.1 Custom variables

The `personalized` (or `custom`) variables can be of several types:

##### ✓ `filename`

For example:

Variable name	Video_list
Value(s)	production_process.mp4

##### ✓ `localized`

This type of variable can be used in two types of configuration. Equivalent to a string type (a little more advanced), it can be used in the elaboration of URIs, playfolders, and playlists to define for example a folder name. It can also be used in localized folders. Indeed, when a localized variable is filled with a new value, `PlugnCast Server` automatically adds a subfolder of the name of the new value to all localized folders pointing to this variable).

For example:

Variable name	city
Value	London , Munich , Paris

##### ✓ `text`

Character string type

##### ✓ `json`

JSON syntax, used for example in `MeetingRoom` (application dedicated to displaying meetings) to define the location of wayfinding pictograms and the name of the calendar

Variable name	CalendarUI
Value(s)	{"calendars":[{"id": "all_rooms"}], "locations":[{"resource": "ShowRoom", "sign1": "MR/picto/escalatorDown.png"}]}

☞ The variables of type `text` and `json` cannot be used in the formation of `URI`, `playfolder` or `playlist`.

### 2.3.4.2 Variables Date and time

Variable name	Value returned	Format	Example value
date:date	current date	YYYY-MM-DD	2009-11-05
date:day-abbreviation	short day name	Three characters in English, the first in upper case, the other two in lower case	Mon, Tue, Wed, Thu, Fri
date:day-in-month	day number in the month	date of the day	for November 5th: 5
date:day-in-week	day number in the week	day number of the week from 1 for Sunday to 7 for Saturday	For Wednesdays: 4
date:day-in-year	day number in the year	digit between 1 and 365	309
date:day-name	day name	day in English, starting in upper case	Monday
date:day-of-week-in-month	day number in the week (which will be repeated throughout the month)	day number of the week from 1 for Sunday to 7 for Saturday	for every Monday of the month, enter 2
date:month-abbreviation	name of the abbreviated month	three characters in English, the first in upper case, the other two in lower case	Nov
date:month-in-year	number of the current month	number corresponding to a month	for October: 10
date:month-name	name of the month in full	name of the month in English	October
date:weekend-month	number of the week in the current month	digit between 1 and 4	2
date:week-in-year	number of the week in the year	digit between 1 and 53	46
date:year	current year	Format YYYY	2019

### 2.3.4.3 Device Information Variables

Variable name	Value returned	Examples of values	
Field[1...5]	Value configurable via the Web interface of the devices	London, Munich, Paris	
Hostname	Device hostname	Device hostname (RFC 952 compliant)	Auto
Mac	MAC address of the device	Auto	
UUID	Universally Unique IDentifier of the device	Auto	

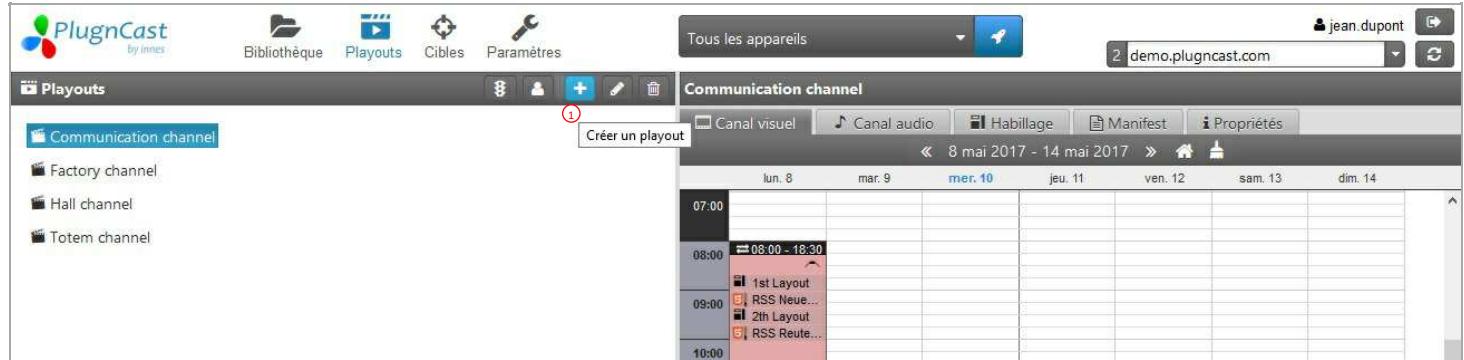
## 2.4 Playout

The **Playout** is a broadcasting context. It contains:

- Either a single channel: it can then be **audio OR visual OR audio-visual**,
- Two channels: an **audio** channel and a **visual** channel.

Each channel has an independent weekly calendar that can contain one or more time slots. Each time slot is charged to play a list of scheduled media.

In the **Playouts** interface, in order to create a new playout context, press the **Add** button  ①.



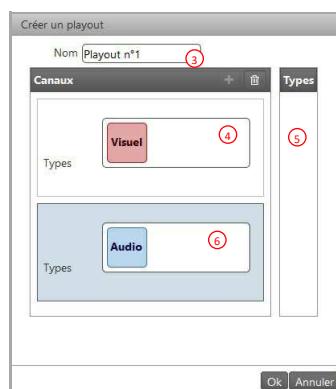
Choose a **Name** for your new playout. PlugnCast Server then allows 4 possibilities:

- Creating a **playout with a Visual channel**: The playout will contain only one calendar. It does not allow anything other than visual media to be played. Any audio included in audio-video media will not be played. By default, the playout type created by **PlugnCast Server** contains only a **Visual channel** ②.
- Creating a **playout with an Audio channel**: The playout will contain only one calendar. It does not allow to insert and therefore play anything other than audio media (mp3, wma, ...).
- Creating a **playout with an Audio-Visual channel**: The playout will contain only one calendar. It does not allow to insert anything other than visual media but the audio content in audio-video media will be played. It will be possible to add an audio zone in the layout to play a background sound in parallel with the main calendar.
- Creating a **playout consisting of a Visual channel and an Audio channel**: Each channel will have its own calendar, one for visual media, one for audio media.



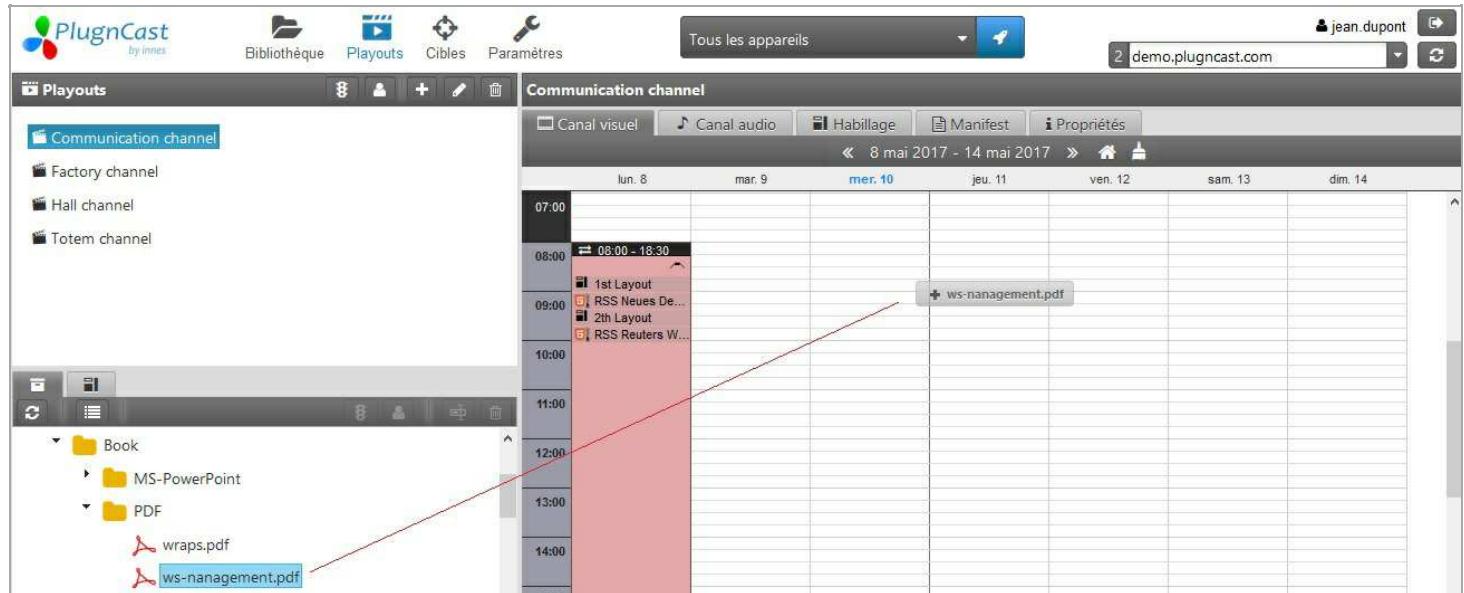
### Editing the attributes of a playout

- To give a name to the playout, type a label in the field **Name** ③.
- To create a playout containing a **Visual** and **Audio** channel, once the **Visual** channel is in place, click on the **Add Channel** button  ④, then drag and drop the **Audio** pictogram from the **Types** reservoir ⑤ to the left panel ⑥.
- To transform a **Visual** playout into a **Audio-Visual** playout, drag and drop the **Audio** pictogram from the **Types** reservoir to the **Type** panel already containing the **Visual** pictogram, then drag and drop the **Visual** pictogram from the **Type** panel to the **Types** reservoir on the right.

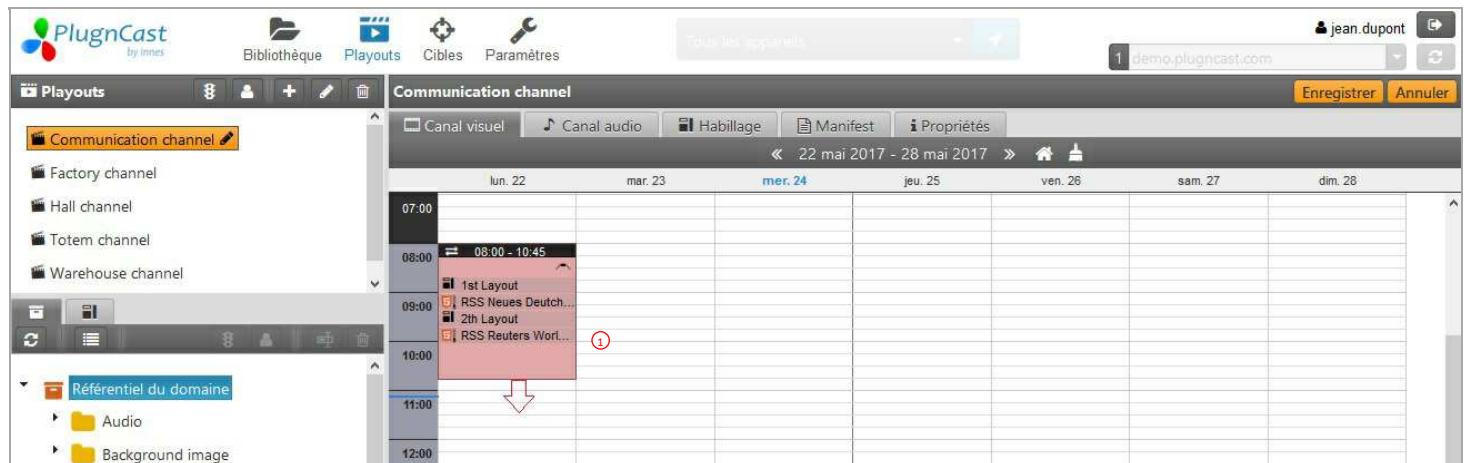


## 2.4.1 Calendars

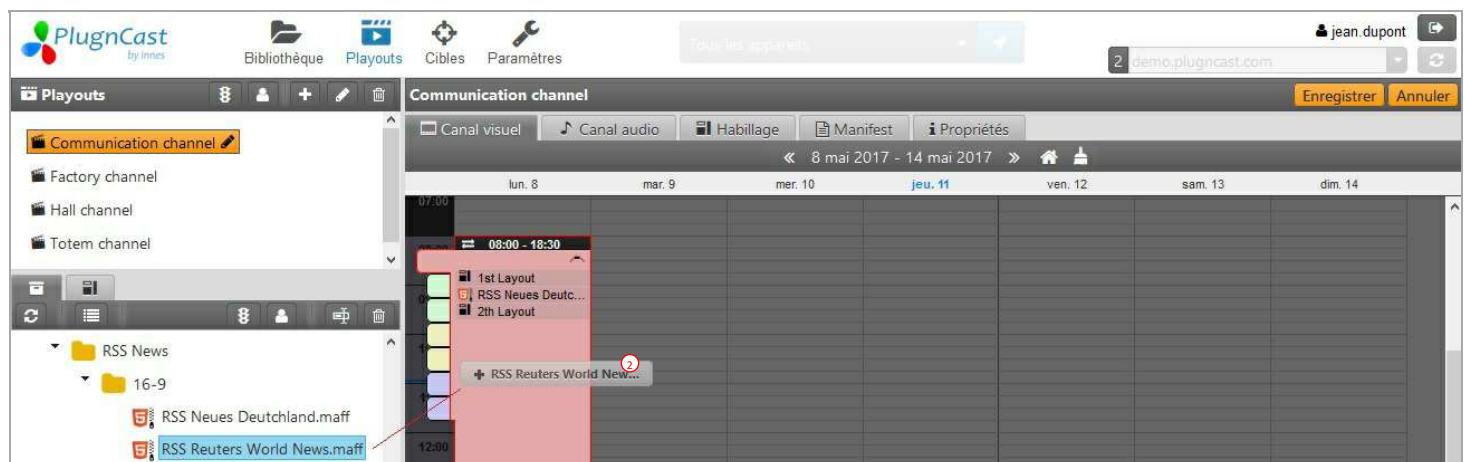
These panels present the calendars associated with a broadcasting context, also called **Layout**. Drag and drop a media into a free area of the calendar (white area) to automatically create a calendar time slot, represented here by a pink frame.



With the mouse, extend the calendar time slot ① by grasping it by its end.

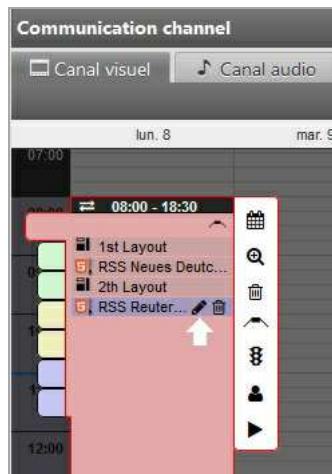


Other media can be dropped from the media library to the calendar to fill the calendar time slot ②.



Once the media are inserted in the time slot, hovering over a media in the time slot gives access to 2 context buttons for that media:

- Edit the media behavior within the time slot
- Delete the media



The layout grids can also be dragged and dropped from the grid library ③ to a time slot to impose a specific display mode. Dressings can switch dynamically within a calendar time slot. Simply insert them between the media.

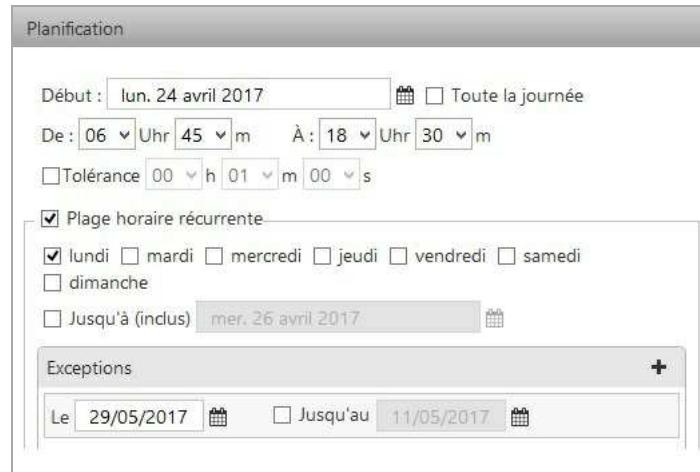
Only one grid is available by default. To choose another one, this other grid must first be created in the 'Layout' tab.

Click on a calendar time slot to bring up its context menu ④.

## Edit time slot planning

Click on **Edit event planning**  to configure:

- Its recurrence,
- Its start time, end time,
- Exceptions: definition of the specific days on which the sequence should not be played.



## Edit the media sequence of the time slot

Click on **Edit media sequence of time slot**  to change the behavior of each media within a calendar time slot.

The screenshot shows the PlugnCast software interface. The top navigation bar includes 'Planification', 'Bibliothèque', 'Playouts', 'Cibles', 'Paramètres', 'Tous les appareils', and a user account. The main area is titled 'Communication channel' and shows a weekly timeline from Monday, May 8 to Sunday, May 14. A red box highlights a 'Boucle' (Loop) section. Below the timeline, a table lists media files: '1st Layout' and '2th Layout'. The 'RSS News' folder is expanded, showing 'RSS Neues Deutschland.maff' and 'RSS Reuters World News.maff'. The bottom left sidebar shows a tree view of media assets, including 'Communication channel', 'Factory channel', 'Hall channel', 'Totem channel', and the 'RSS News' folder.

The mode of behaviors are:

- Read once (1X) or several times the media (2X, 3X, ...),
- Set a reading time in seconds,
- Read indefinitely.

 The presence of the other attributes depends on the type of media selected. For example, for URLs, the attribute `HTML simulated width` allows you to zoom in or out on a web page when it is played.

Modifier le comportement de l'élément de séquence

URI [Référentiel du domaine]/Web page/Innes.uri

Durée d'affichage

Lire  fois  au plus  h  m  s par lecture

Lire pendant  h  m  s

Lire indéfiniment

Fond

#

Utiliser la couleur d'habillage

Utiliser la couleur par défaut du média

Transparent

Variables Flash

Largeur simulée HTML  px

## Delete a time slot

Click on the **Delete** button to delete a media sequence.

## Introduction, loop, conclusion

Click on the button **xe908**. Selecting `Introduction`, `loop` or `conclusion` allows you to switch to the introduction and conclusion parts of the time slot and thus add media to it.

Entering the time slot	Time slot loop	Concluding the time slot

For example, for a time slot 8am-10am, the media in the time slot introduction are played at 8am and the media at the end of the time slot are played at 10am.

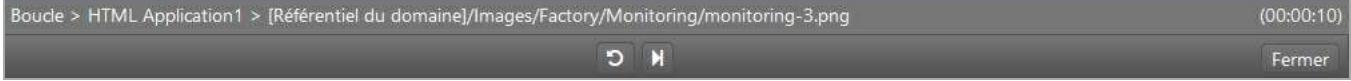
The sequences in introduction or conclusion are empty by default. Remember to return to the icon **Buckle** so as not to visually leave a sequence empty, the user can interpret after a few manipulations that his main sequence is empty.

## Preview a time slot

Clicking on the button allows you to view the time slot sequence.



You scratch my back, and I'll scratch yours.

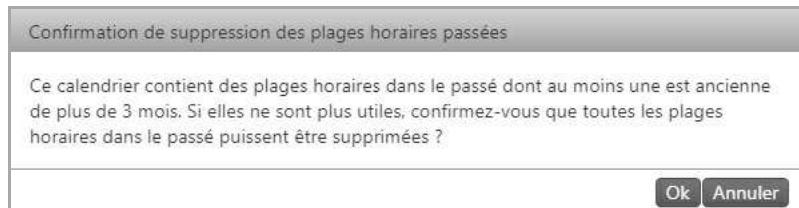


⚠ If some media are not played, check their validity date.

⚠ The date and time taken into account for the validity test at the time of the preview are the date and time of the 'start' of the selected time slot.

## Automatic cleaning of past time slots

If your playout contains past time slots, at least one of which is more than three months old, at the time of its edition, you are asked to delete all past time slots for this playout.



## 2.4.2 Screen layout

A screen layout describes the spatial organization of a Playout.

The configuration of the screen layout is divided into 3 parts:

- Properties (portrait or landscape, resolution, image or background color),
- Regions (for the creation of new band or floating zones and the definition of transitions),
- Grid (for the constitution of different zoning configurations).

### Properties

The **Properties** panel defines the parameters of the layout grids.



The size and orientation of the on-screen display is defined simply by selecting the desired value:

- Portrait,
- landscape,
- or personalized.

The display background can be configured by means of:

- a background color,
- an image.

### Regions

The **Regions** panel allows you to create several areas that can be used in the grids. Press the Add + button to create a new region.

Zones	couleur	Type	Libellé	Transition de zone	Transition entre médias	Durée de transition
		Principal	Events	Aucune	Aucune	aucune
		Haut	News	Aucune	Aucune	aucune
		Bas	Ticker and new banner	Déplacer vers le bas	Fondu enchainé	3 s
		Gauche	Optional information	Aucune	Aucune	aucune
		Droit	Flash information	Aucune	Aucune	aucune
		Flottant	Channel logo	Aucune	Aucune	aucune
		Flottant	Corporation logo	Aucune	Aucune	aucune
		Audio	Audio region	Aucune	Aucune	aucune

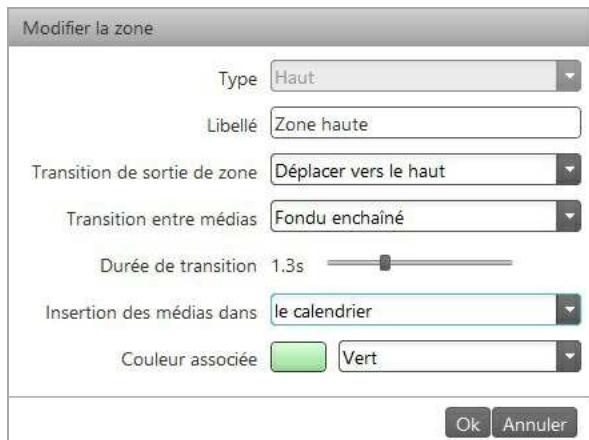
PlugnCast Server allows you to create several types of zones:

- Bottom banner,
- Top banner,
- Left banner,
- Right banner,
- Floating: region that can be superimposed on any other region. Floating regions have a "z Index", i.e. an index of the depth of the regions,
- Audio.

Once a region has been created with a certain type, it is not possible to change its type.

When creating an Audio-visual channel, the audio zone is not created by default. If your device must play the sound of your audio media, add an audio zone.

It is possible to select and modify an existing zone by clicking on the Edit button .



Here are the different configuration parameters of each region:

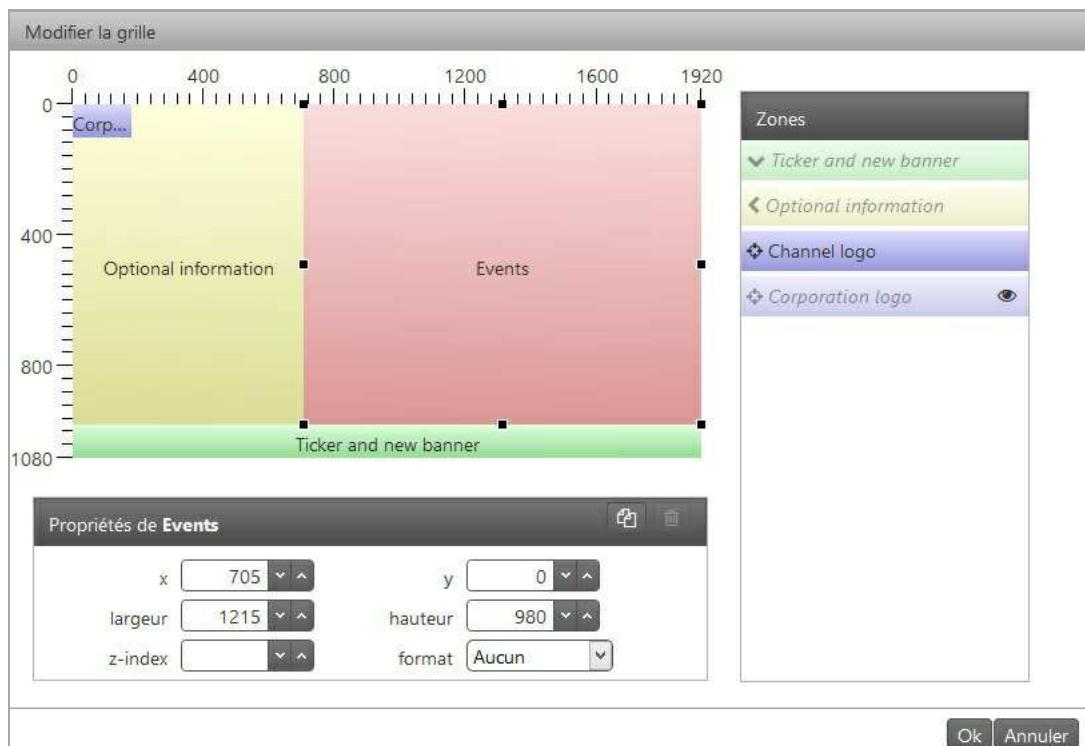
- 'Label': allows you to give a name to the region,
- 'Transition of region exit': defines how the media exits the screen after it has been played, when changing the layout grid. The reverse transition is automatically applied when the media is entering the screen,
- 'Transition inter medias': defines the transitioning of medias in an area,
- 'Transition time': characterizes the duration in seconds of the transition (maximum 3 seconds),
- The editing mode allows you to define where the zone can be edited:
  - Calendar (default mode): the content of the zone can be edited in the calendar,
  - layout: in an antagonism with the choice `Calendar`, allows you to set a default media for this region.

## Grids

The grids panel allows you to manage the different grid models associated with a layout. A grid contains multimedia regions.



Press the Edit button to edit one of the grids.

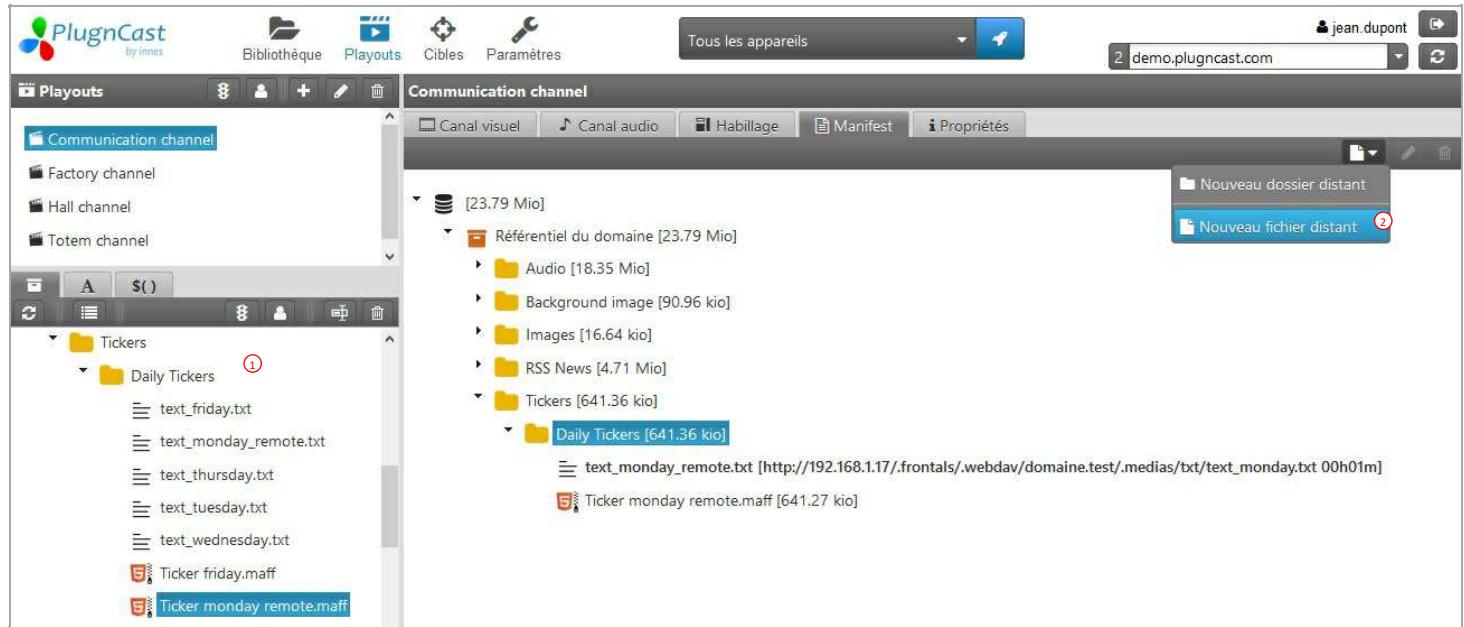


Press the Rename button to rename a grid or view its unique ID.



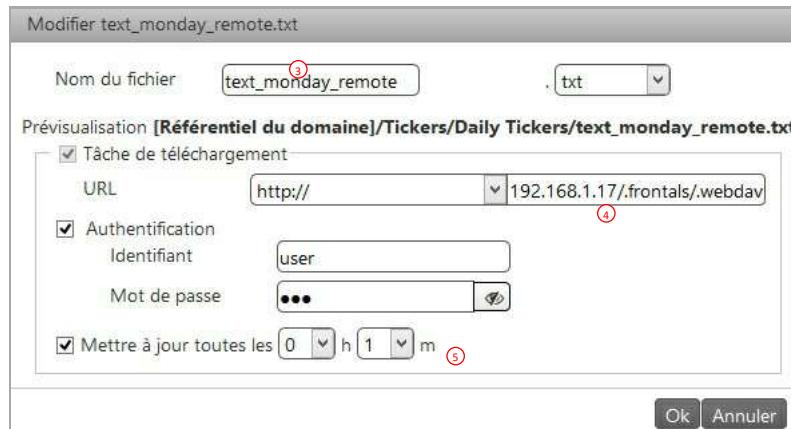
## 2.4.3 Manifest

The manifest lists the media included in your playout with the size of each media. This screen can be used to report instructions for regular file or folder downloads, for example, so that the device can retrieve file or directory content updated by a contributor. Click on **New remote file** (or **New remote folder** as required).



Create and click on the folder ① in which the file (or folder) to be downloaded should be located and choose **New remote file** ② (or **New remote folder** ).

Enter the **File Name** ③ (or **Folder Name** ). Enter the URL of the remote server with its username and password ④. Ask the device to synchronize every 'x' minutes (for example, one minute ⑤) to the content of this file (or folder).



## 2.4.4 Properties

This pane allows you to:

- define a default visual content <sup>①</sup> to be displayed if no other calendar time slot is programmed in this visual channel at this time of the day.
- define a default audio content <sup>②</sup> to be displayed if no other calendar time slot is programmed in this audio channel at this time of the day.
- define a Image display default duration <sup>③</sup> for images that do not have a metadata defined duration
- define a URI display default duration <sup>④</sup> for URIs that do not have a defined metadata duration (default: 1 minute)
- to impose for media with pagination a page flow with a default duration of <sup>⑤</sup> n seconds, for example for PDF media and MS-PowerPoint media
- define Error message display duration <sup>⑥</sup> of type content momentarily unavailable code n.

This panel also allows you to add scripts to run <sup>⑦</sup><sup>1</sup>. When a script is added within a playout in the scripts to run tab, the script is played in parallel with the playout when the playout starts. When the device plays another playout, this time containing no 'script to execute', the script is no longer executed (and automatically deleted from the device).

<sup>1</sup>] The scripts to run are written in JavaScript language. The script can do an action at the start of the playout, at a given time of the playout or for the entire duration of the playout.

⚠ The option Enforce on media with pagination a page progression with a default page duration does not work when publishing Playzilla 4.11.XX (or higher) on a media player with Gekkota 3 embedded.

## 2.5 Dissemination targets

The `target` environment allows:

- To associate the `playouts` to the devices,
- To associate 'variables' to the devices,
- Schedule `standby tasks` and `device restarts`,
- To supervise the proper functioning of the broadcasting on the devices,
- To manage the system commands on the devices:
  - Purge the playout,
  - Update middleware,
  - Deploy configuration scripts.

Nom de l'appareil	Playout	Publication		Téléchargement		Appareil				
		Date	Playout	Date	Playout	Info	Date	Playout	Info	Écrans
Factory device	Factory channel					05/05/17 10:31:22	Inconnu		1	
Outside totem device	Totem channel									

The left pane of the `target` environment contains, on the upper part, the devices to be managed (1) and on the lower part the resources ( Playouts (2), Variables (3), Time ranges (4) which can then be used in the right panel .

The right pane is associated with the selected target devices. It contains:

- The playout played for each of them and their respective publication status (5),
- Their tasks (6) of putting them on standby and restarting,
- Their respective variables (7),
- Their system status (8) (middleware version, configuration script, screen status, ....)

The assignment of `playouts`, `tasks` and `variables` to the target devices is done by means of a simple drag and drop.

## 2.5.1 Publication

The **Publication** pane allows you to manage the assignment of playouts to targets and to monitor the progress of publication on the devices.

Nom de l'appareil	Playout	Publication		Téléchargement		Appareil							
		Date	Q	Date	Playout	Q	Info	Date	Playout	Q	Info	Écrans	
Factory device	④	Hall channel	③	24/05/17 11:44:43	✓	24/05/17 11:44:48	⑥ Hall channel	✓	24/05/17 11:44:57	Hall channel	⑦	1	1

The table is composed of several groups of columns:

- **Device name** ①
- **Playout** : To assign a playout to a device, click on the playout tab ② and drag one of the playouts to the **Playout** column of the target device ③. To assign all selected targets with the same playout, drag the playout into the column title ④. This new assignment will be taken into account in the next publication.
- **Frontal publication** ⑤: Indicates whether the playout assigned to the target has been published on the distribution front end. To publish to all selected targets in the table, press the **Publish** button ⑧. The shortcut button ⑨ allows you to publish to :
  - The devices,
  - Only on selected devices or
  - On a subset of devices if groups of devices have been previously created.

\*\*<If a device in a selected group has no playout, the publication request will automatically trigger a publication error message.

- **Download** ⑩: Indicates whether a device is downloading new content from the front end.
- **Apparatus** ⑪: Indicates the status of the device, the playout that is played with its effective date and the status of the screen.

☞ If the **Device name** is not visible in the table, check that the target is selected on the left ⑫.

☞ For troubleshooting purposes, it is possible to export what has been published on the frontal for investigation by typing the URL of the format below from a recent web browser. Make sure to correctly enter your http or https protocol, domain and IP address).

`https://<your_server_IP>/.frontals/.webdav/<your_domain>/?export .`

⚠ This archive can be very large.\*

☞ In the case of large playouts, or when the number of devices increases, the overall publication time can be extended; a specific pictogram ⑬ appears indicating that publication is in progress.

## 2.5.2 Device states

A device has several operating states summarized in the following table:

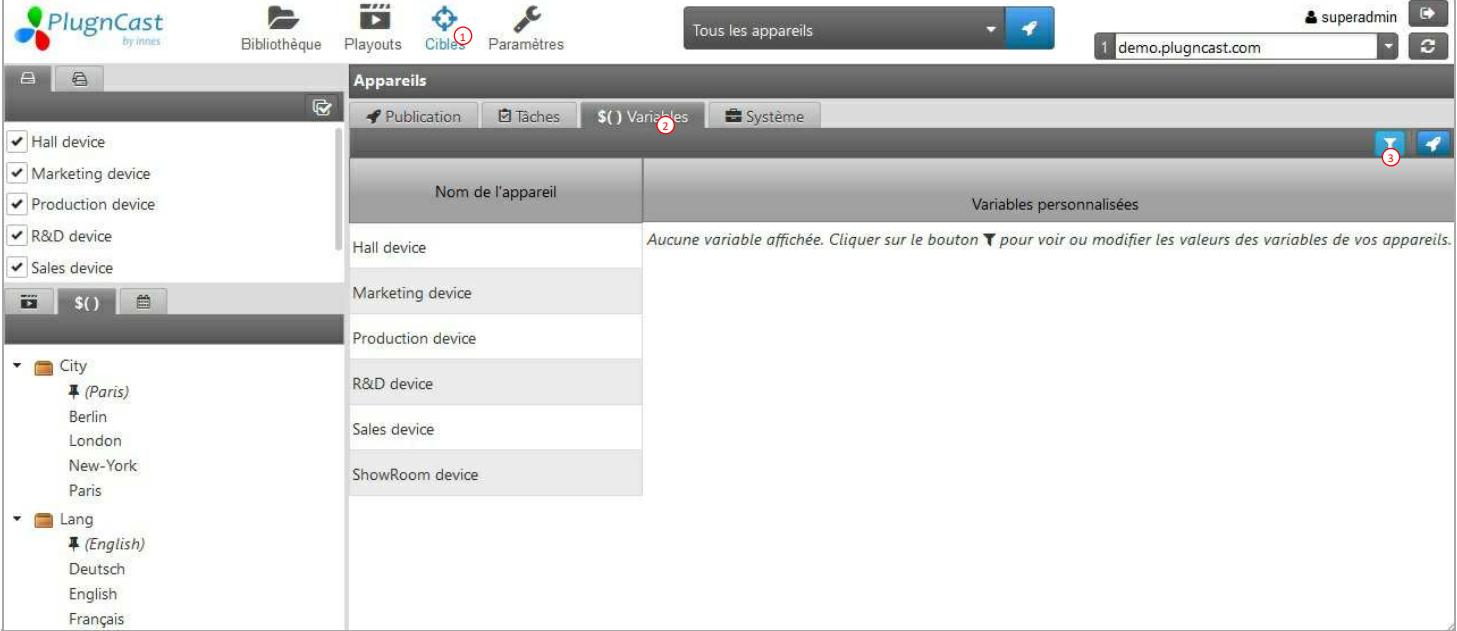
Status icon	Operation	Description	Action expected from the user
▶	OK	Operation The device plays the last playout published on the front panel. This playout must be fully recovered before it can be played	-
ⓘ	Information message	The device installs a configuration script and displays a system information screen. The device should naturally return to <code>OK</code> operating condition after a few seconds.	If the situation persists (e. g. in the case of USB injection), the user is prompted by a message to remove the USB key)
ⓘ	Degraded mode	Level1 : the device no longer plays the content because this content causes unexpected instability of the device (the content is not purged from the device). Level 2: Despite a 2nd publication, the device no longer plays the content that causes unexpected instability of the device. The contents are purged from the device. The last user preferences saved before the degraded mode appeared are restored	The user must publish content again. In the case of degraded mode, it is advisable before publishing again to identify the media that causes the device to be unstable (e. g. a video not supported by the device)
⚠	Publication problem on the frontal	Publication on the distribution frontal has failed because <code>PlugnCast Server</code> cannot solve all the dependencies of one or more media (linked file, playlist with a media that no longer exists, font of a PDF, ...)	It is recommended to solve the problem by going to the 'manifest' screen, then fixing the problems indicated by red labels. Once corrected, re-publish
	The device does not respond	<code>PlugnCast Server</code> sees that the device does not connect to its system	For an HTTPS front end protocol, check that the <code>PlugnCast server</code> certificate stored on the device is valid (IP, validity date). Check that the device is on time. Check the network connection between the <code>PlugnCast server</code> and the device (Ethernet cable disconnected, proxy, firewall, WLAN). Check the network configuration of the device (mask, gateway, IP address). Check that the device is configured as a <code>PlugnCast Server</code> for your front end with its connection IDs perfectly entered. Check that the Hostname of your device is unique on the network.
☒	Test chart	The device displays a Test Chart screen including its IPV4 address, IPV6 address, MAC address	For the device to display the playout (not the test chart) again, you must disable the test chart. Connect to the device's web interface and then disable the test pattern in the <code>Maintenance &gt; Preferences</code> menu (or send a dedicated configuration script that performs a similar action).
✗	No content	The device displays a <code>No content</code> screen because a user has asked to purge the device's content.	The user must publish content again ( <code>playout</code> ).

## 2.5.3 Assigning a custom variable value to a device

If you have URI media in your broadcast channel, or playfolder media using 'variables', do not forget before publishing to assign for each device a value of the appropriate variable. If you forget, an information message when publishing invites you to come and consult this chapter.

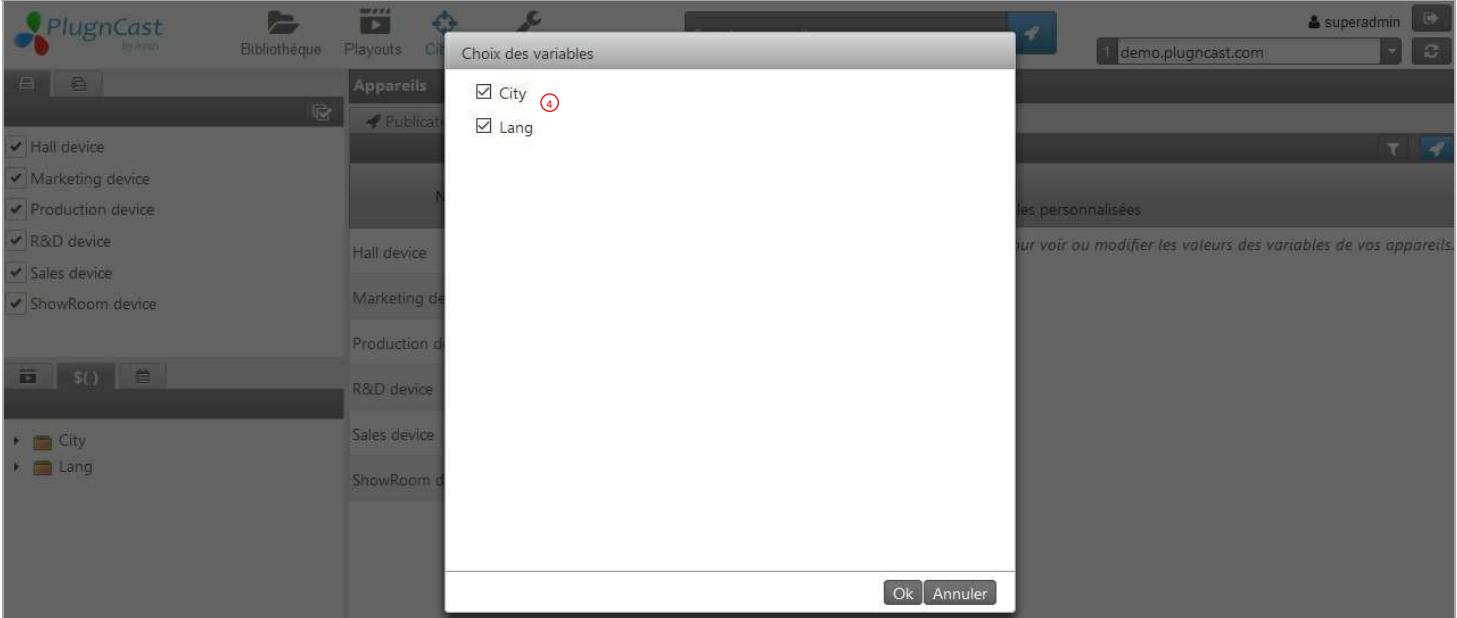
No variable names are displayed in the default table. Each line in the table corresponds to a device.

To display the variable names of your choice, in the **Targets** view , select the **Variables** tab , and press the **Select the variables** button .



Nom de l'appareil	Variables personnalisées
Hall device	Aucune variable affichée. Cliquer sur le bouton ▶ pour voir ou modifier les valeurs des variables de vos appareils.
Marketing device	
Production device	
R&D device	
Sales device	
ShowRoom device	

Then select the variable names of your choice and validate.



 If no variables are present in this screen, at least one must be created. For more information, return to the screen [Custom Variable](#)

Then assign a value of the desired **variable** to one or more devices by dragging and dropping from the variable resources screen  to one of the devices in the **Variables** tab .

Nom de l'appareil	Variables personnalisées
	City
Hall device	Berlin
Marketing device	
Production device	
R&D device	
Sales device	
ShowRoom device	

In the example, once dragging and dropping is done and once the publication and synchronization of the *Hall device* device has been completed, this device will have a variable value *City* equal to *Berlin* and will therefore be able to play media conditioned by the variable value *City = Berlin*. Repeat the operation for the other devices.

- These variable values are also called *Tags* in competing systems
- To avoid any future publication errors related to the use of media using this variable, consider associating a value of this variable with all your devices. In the same way, also remember to perform this operation for each new device registered.

In case of many devices, it is possible to assign the same variable value to all your selected devices in this screen. Simply drag the variable value from the variable resources screen ⑤ to the title of the column ⑥.

Nom de l'appareil	Variables personnalisées	
	City	Lang
Hall device	Berlin	(English)
Marketing device		
Production device		
R&D device		
Sales device		
ShowRoom device		

In the example, the default value *English* of the variable *Lang* is assigned to all selected devices.

Nom de l'appareil	Variables personnalisées	City	Lang
Hall device		Berlin	English
Marketing device			English
Production device			English
R&D device			English
Sales device			English
ShowRoom device			English

Press the **Save** button to finalize your changes.

## 2.5.4 System

To display the device system parameters, in the Targets view ①, select the System tab ②.

This screen contains 4 buttons:

- Deploy the configuration scripts ③ : Deploys the configuration scripts of the selected devices. These scripts must be available and enabled in [Middleware and Scripts](#) beforehand.
- update the middlewares ④ : Launches firmware version updates for the selected devices. Update firmware must be available and enabled in [Middleware and Scripts](#) beforehand.
- Purge ⑤ : Cleans the contents of all selected devices.
- Clean up the current actions ⑥ : Cancels the tasks of the 3 actions listed above, if of course the task has not already been executed.

Nom de l'appareil	Actions	Appareil	SN	Modèle	Intergiciel	Version	Script de ...	Stockage	T°
Hall device		MS-Win...	Gekkota 4	4.10.18...	13/09/2018 14:10:54		150.00 Gio		
Marketing device		00620-00027	DMB300	Gekkota 3	3.12.57	19/10/2018 08:48:59		13.56 Gio	
Production device		0B7PHSUB00...	SAMSU...	SSSP 5	T-KTML... 2060.7			4.44 Gio	
R&D device		805KCHEKZ1...	LG SOC	LG WebOS 4	06.01.73			3.71 Gio	
Sales device		00562-00175	SMT210	Gekkota 4	4.10.18...	05/12/2018 09:02:38		3.63 Gio	
ShowRoom device		01081-00001	DMB400	Gekkota 4	4.10.18...	03/01/2019 08:43:07		14.62 Gio	

This screen also contains a table containing the columns:

- Device name : device label
- Action
  - Status : Indicates if a task launched by one of the 3 buttons Upgrade the middleware , Purge , Deploy the configuration scripts is in progress.
  - Info: Indicates whether the task performed correctly or whether a problem occurred during its execution.
- Device
  - Status : Indicates information on the status of the device (playing content, sights activated, the device is no longer visible on the network, ....).
  - Info : Number of error messages returned by the device. Hovering it with the mouse allows you to view the message related to each error.
  - SN : Serial number of the device.
  - Model : Type of the device.
  - Middleware : Type of OS.
  - Version : Version of the firmware installed on the device.
  - Configuration script : Date and time of the last task to deploy the update script.
  - Storage : Amount of data storage space on the device: used/available.

For each device, it is possible by pressing the button to access a panel that displays the information that comes directly from the `device-status-<ID>.xml` file uploaded by each device at the rate of its Heartbeat .

**Appareils**

Publication Tâches \$() Variables Système

	Nom de l'appareil	Actions		Appareil							
		Q	Info	Q	Info	SN	Modèle	Intergiciel	Version	Script de ...	Stockage
+	Hall device			▶ 1		MS-Win...	Gekkota 4	4.10.18...	13/09/2018 14:10:54	45.05/150.00 Gio	
(5)	Marketing device			⚠ 1	00620-00027	DMB300	Gekkota 3	3.12.57	19/10/2018 08:48:59	0.55/13.56 Gio	

**Information**

Type d'ID : UUID  
Nom d'hôte : dmb300  
MAC : 00-1c-e6-02-1b-83  
UUID : 03e0001b-0000-0000-0000-001ce6021b83  
Adresse IP :  
    Adresse IP n°1 :  
        Origine : dhcp  
        Type IF : LAN  
        Valeur : 192.168.1.39/17  
    Adresse IP n°2 :  
        Origine : auto

## 2.5.5 Target groups

Once created, selecting a 'target group' allows you to have a view of only a subset of devices.

It is possible to create groups: - per devices : by selecting them from a list of available devices or

- per variables : by using a custom variable value assigned to these devices. In this case, it is necessary that these variables exist in the library and that variable values are assigned to your devices.

For more information on creating variables in the library, go to the paragraph [Custom Variable](#)

A target group per variable can be generated from a combination of variable values. The combination can be of type:

- AND : In order for the device to appear in such a group, all conditions of the specified variable values must be met. For example, the device belongs to the group, if its value of the variable *Lang* equals *FR* AND if its value of the variable *City* equals *PARIS*.
- OR : In order for the device to appear in such a group, at least one of the specified variable value conditions must be met. For example, the device belongs to the group if its value of the variable *Lang* equals *FR* OR if its value of the variable *City* equals *PARIS*.
- AND + OR: From 3 variables, it is possible to mix also the combinations AND and OR .

### Create a target group

Position yourself in the Targets view ① and select the Target group tab ②.

Nom de l'appareil	Playout	Publication			Téléchargement			Appareil			
		Date	Q	Date	Playout	Q	Info	Date	Playout	Q	Info
Hall device	Playout	08/01/19 16:01:32	✓	-	-	⊕	1	10/01/19 11:17:44	Inconnu	▶	1
Hall device2	Playout	08/01/19 16:01:32	✓	-	-	⊕	1	14/01/19 09:23:40	Playout	▶	1
R&D device	Playout	08/01/19 16:01:32	✓	-	-	⊕	1	08/01/19 16:02:26	Playout	▶	1
R&D device2	Playout	08/01/19 16:01:32	✓	-	-	⊕	1	Inconnu	■	1	1

Press the Manage Target Groups button ③.

Aucun appareil sélectionné. Sélectionnez un ou plusieurs appareils dans l'onglet □ ou un groupe d'appareils dans l'onglet □ du panneau en haut à gauche.

Press the Create Target Group button ④.

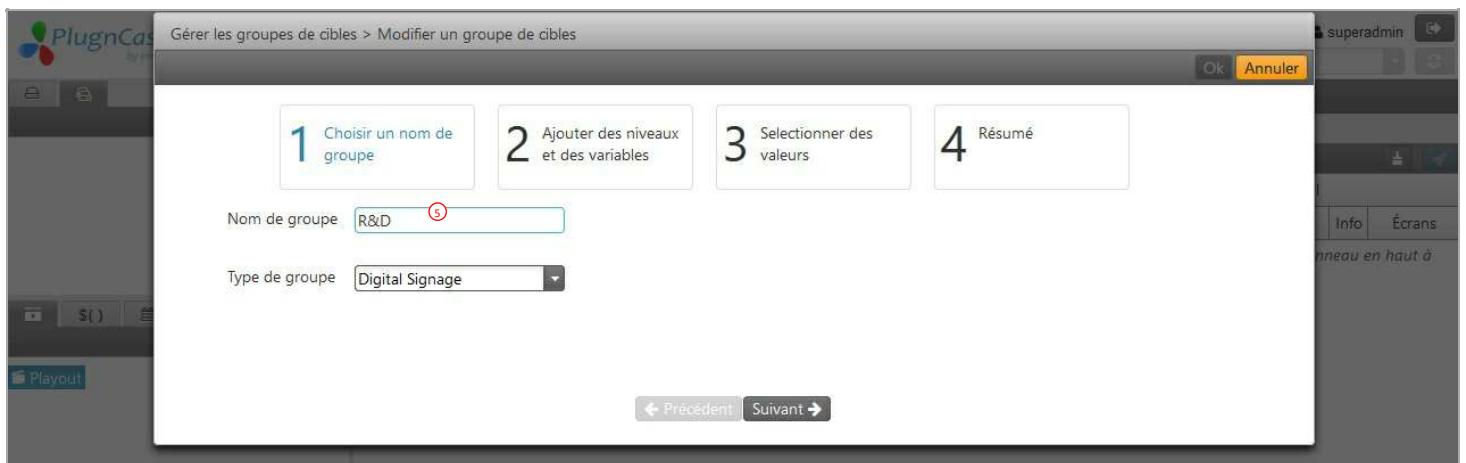


Enter a Group Name **⑤** for the Target Group . In the example, enter the name target group *R&D*. Then press Next .

Depending on your needs, choose an evocative 'target group' name.

In the examples below, the names of the target groups created will be

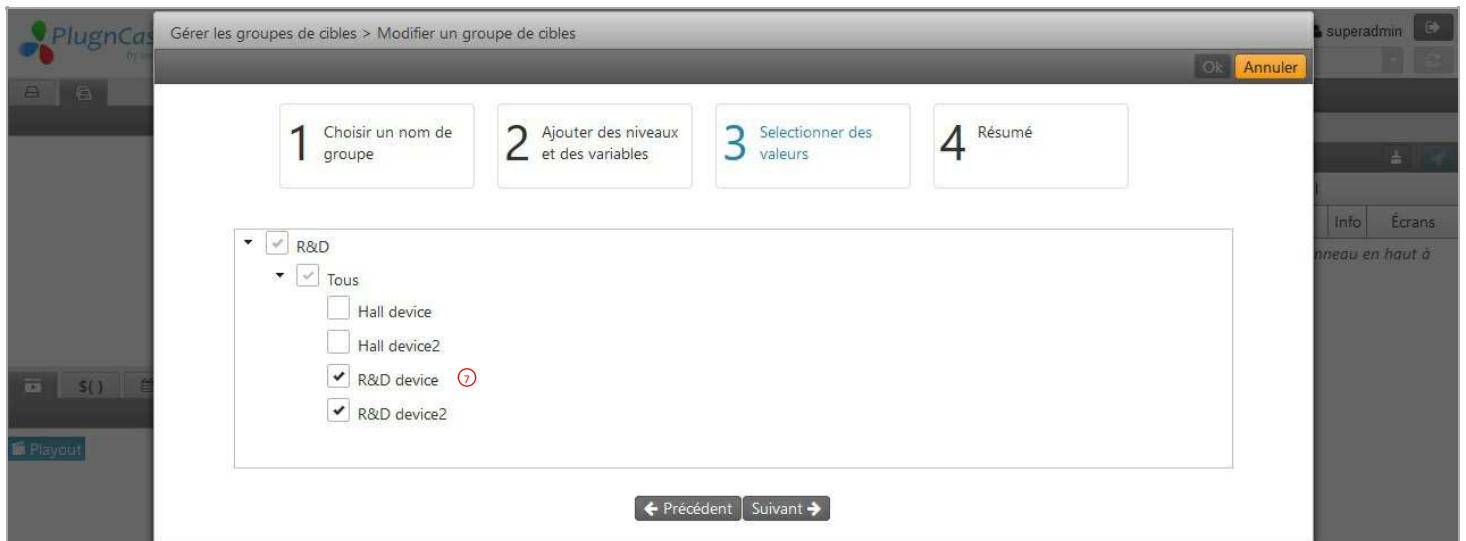
- *R&D*,
- *PARIS devices group*,
- *OR devices group*,
- - AND equipment group\*.



To create a Target Group / Per Device , select Per Device **⑥**. Then press Next .

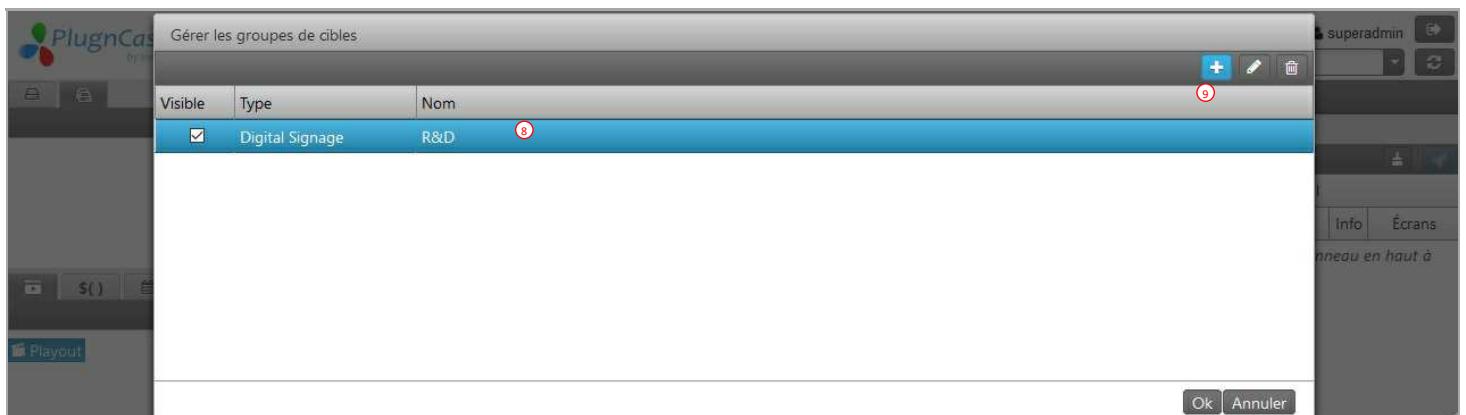


The complete list of all registered devices appears. Then check in the list the desired subset **⑦** of the devices indicated in the list that must be contained in your target group'. In the example, the target group' *R&D* includes the 2 devices *R&D device* and *R&D device2* that must be selected.



The R&D group is created ⑧ and appears in the list of available target groups .

To create a new group, click again on Create Target Group ⑨. Otherwise end by pressing OK .



### Target group by variables (only one variable)

Beforehand in the example, have 2 personalized variables :

Variable name	Variable values
Lang	fr, en, de
City	Paris, Berlin, London

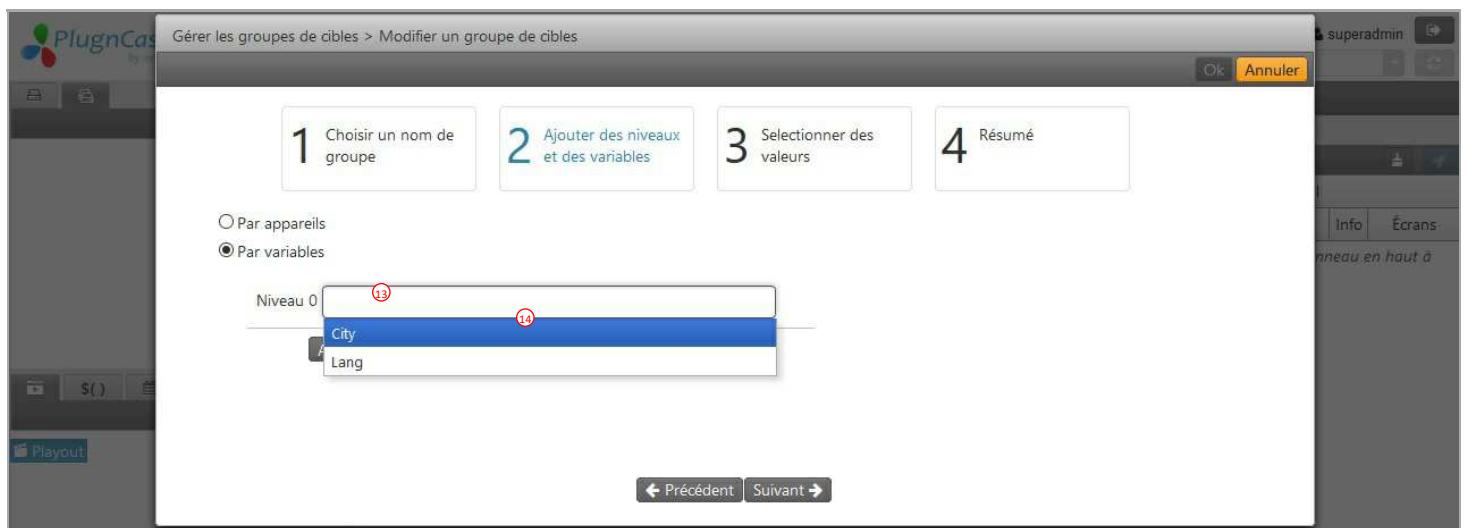
Enter a new group name ⑩, for example PARIS device group.



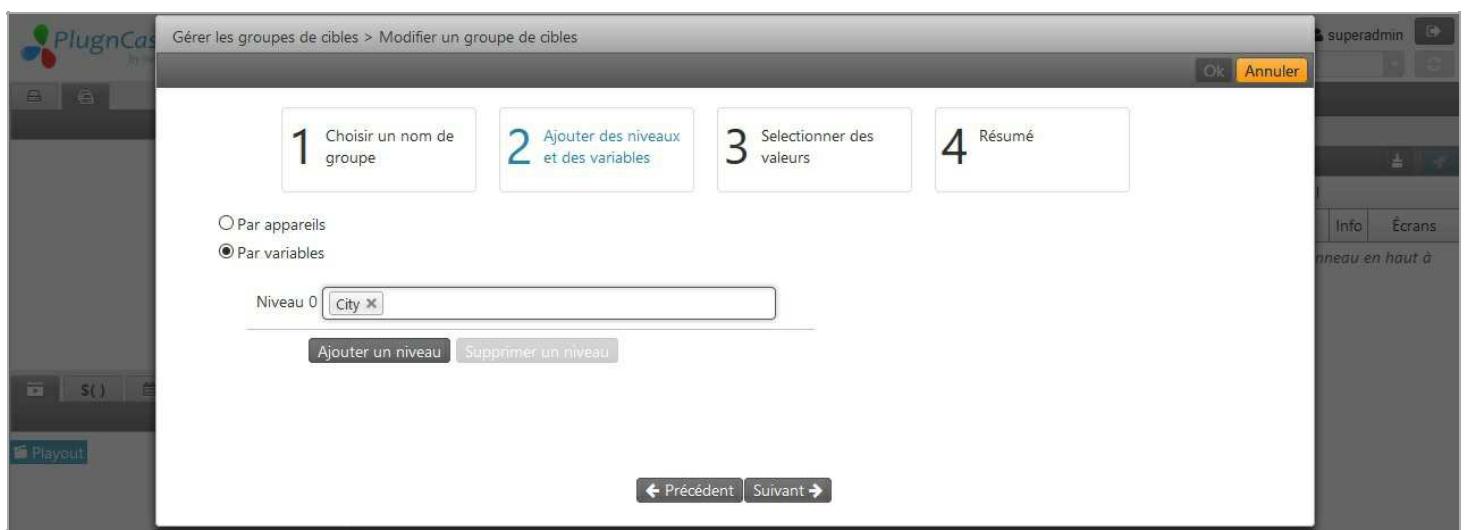
This time, to create a Target group by variable , choose By variables ⑪. By default, an entry field Level 0 is displayed ⑫.



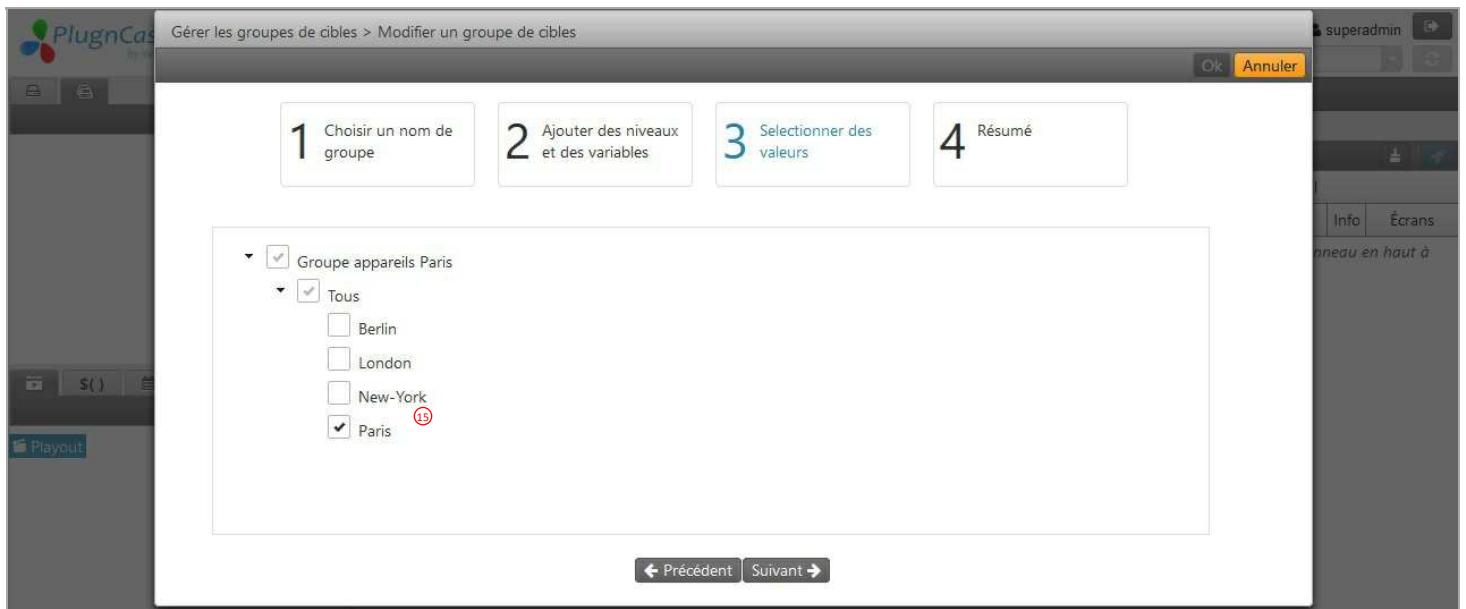
Click in the entry field `Niveau 0` ⑬. The list of available variable names is displayed. Select a variable name, for example `city` ⑭.



Once the variable name has been selected (e. g. `City`), the variable appears in the entry field `Niveau 0`. Press the `Next` button.



Then finalize the conditions for belonging to your group by selecting one or more values of the variable. For example, for the `Paris Equipment Group`, select the value `Paris` ⑮. This means that if a registered device has the value `Paris` of the variable `Lang`, it will automatically belong to this 'target group'. Click on the `Next`` button.



The 2 target groups created at the moment appear in the list of target groups created:

- R&D <sup>16</sup>,
- PARIS equipment group <sup>17</sup>.

Confirm by pressing the **ok** button.



To use target groups, select the Target groups tab again <sup>②</sup>. Selecting R&D <sup>18</sup> allows you to view only devices in the R&D group. Consequently, on the right, in the Publication tab, the view adapts and displays only the devices belonging to the selected group.

In the same way, selecting PARIS device group <sup>19</sup> displays only the devices in the PARIS device group.

PlugCast		Bibliothèque	Playouts	Cibles	Paramètres	Tous les appareils		superadmin				
R&D <sup>18</sup>		<b>Groupe &gt; R&amp;D</b>				Publication Tâches Variables Système						
Groupe appareils PARIS						Nom de l'appareil	Playout	Publication	← Téléchargement →	Appareil		
		Date	Q	Date	Playout	Q	Info	Date	Playout	Q	Info	Écrans
	R&D device	Playout	08/01/19 16:01:32	✓	-	-	-	08/01/19 16:02:26	Playout	▶	1	1
	R&D device2	Playout	08/01/19 16:01:32	✓	-	-	①	1	Inconnu	■	1	1

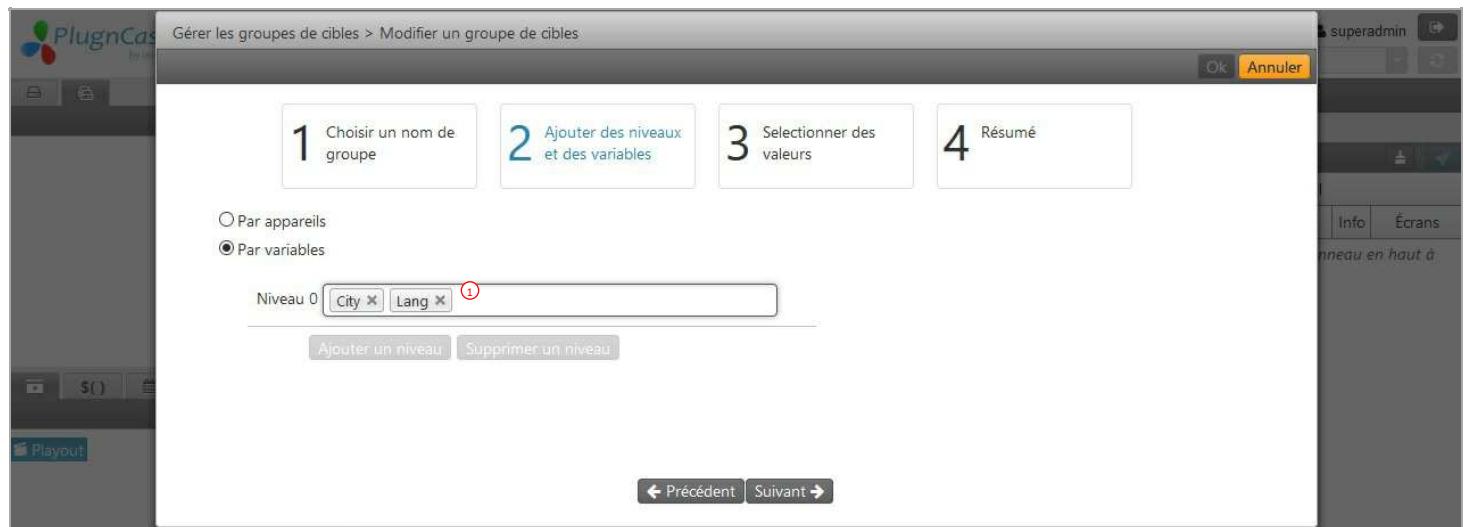
PlugCast		Bibliothèque	Playouts	Cibles	Paramètres	Tous les appareils		superadmin				
R&D		<b>Groupe &gt; Groupe appareils PARIS</b>				Publication Tâches Variables Système						
Groupe appareils PARIS <sup>19</sup>						Nom de l'appareil	Playout	Publication	← Téléchargement →	Appareil		
		Date	Q	Date	Playout	Q	Info	Date	Playout	Q	Info	Écrans
	Hall device2	Playout	08/01/19 16:01:32	✓	-	-	-	14/01/19 09:23:40	Playout	▶	1	1
	R&D device2	Playout	08/01/19 16:01:32	✓	-	-	①	1	Inconnu	■	1	1

## Target group by variables (OR)

To create a `target group` whose membership in the group is conditioned by the values of at least 2 variable names, with at least one of the variable values present in the device, i. e. one `OR` the other, create a `target group per variable` as indicated above, for example with the `target group name OR device group`.

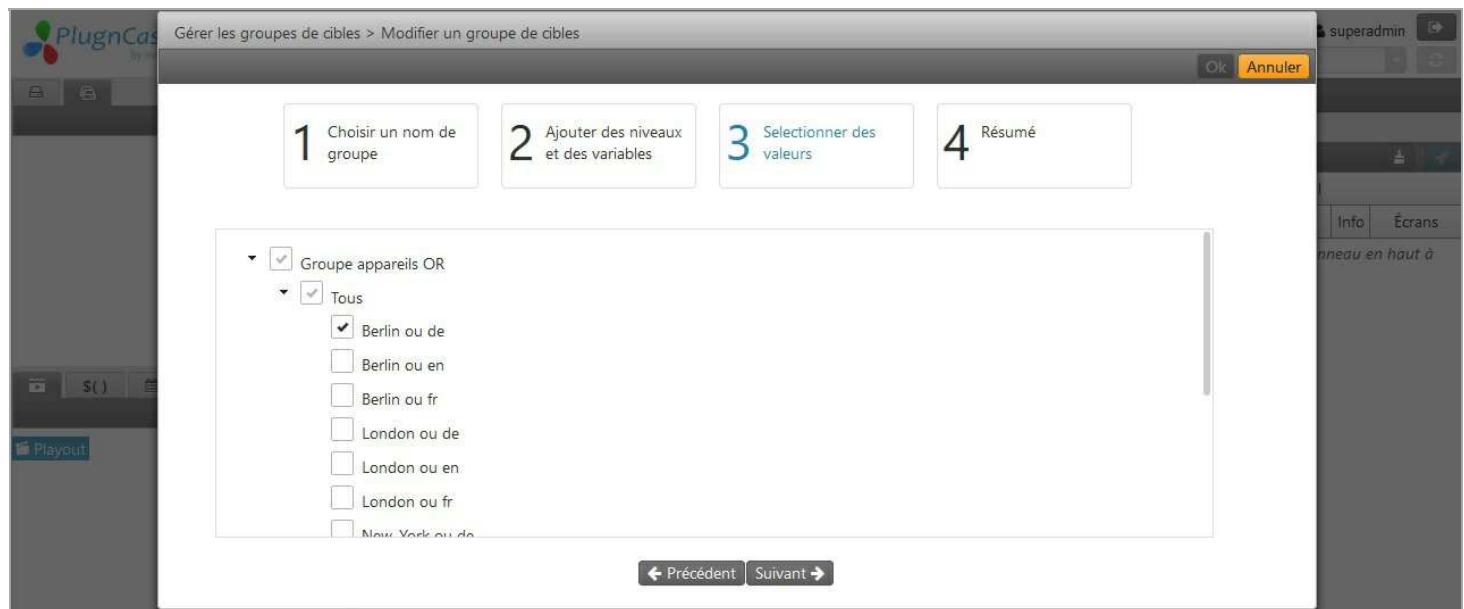
Add a second variable name in the entry field `Level 0`. For example, the variable `Lang` ①.

It is possible to add as many variables as there are `customized variables` available in your library.



The possible combinations of variable values are generated automatically. Select among them, those that define the conditions for belonging to your 'target group'. In the example, the device belongs to the group:

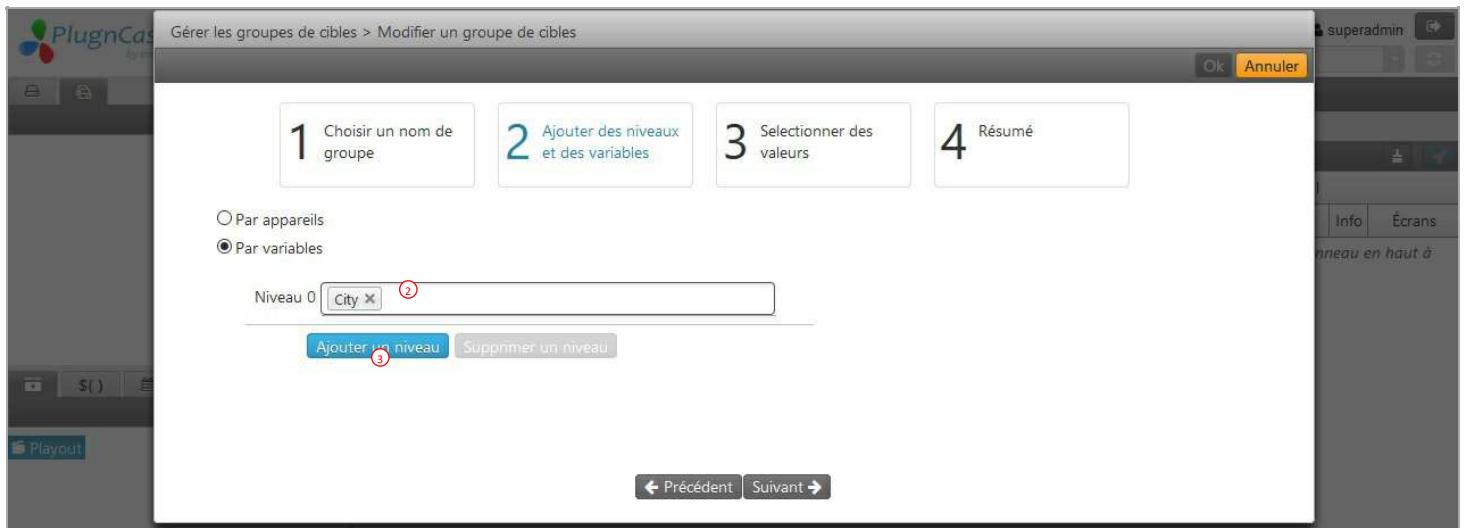
- if its value of the variable `City` equals `Berlin` `OR`
- if its value of the variable `Lang` equals `de`.



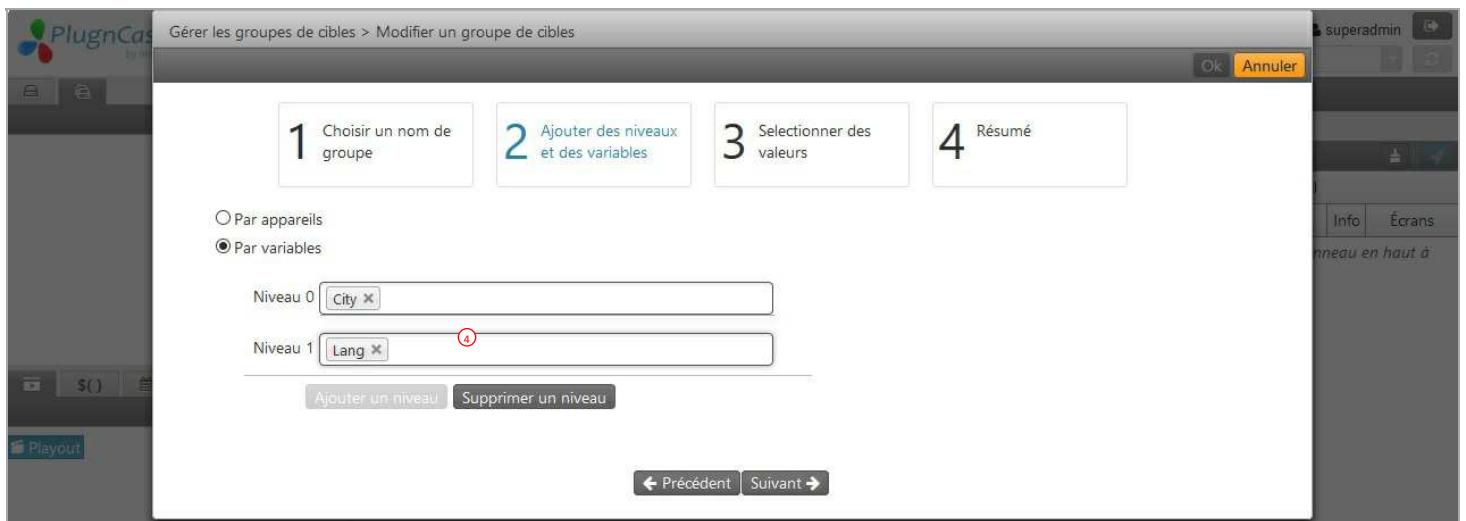
### Target group by variables (ET)

To create a target group whose group membership is conditioned by the values of at least 2 variable names, but this time with all the indicated variable values present in the device, create a `target group per variable` as described above, for example with the `group name And device group`, at the level of `Level 0` ②, select as before the first variable, for example `City`, then press the `Add level` button ③.

You must have as many levels as there are variables to combine with the `ET` condition.

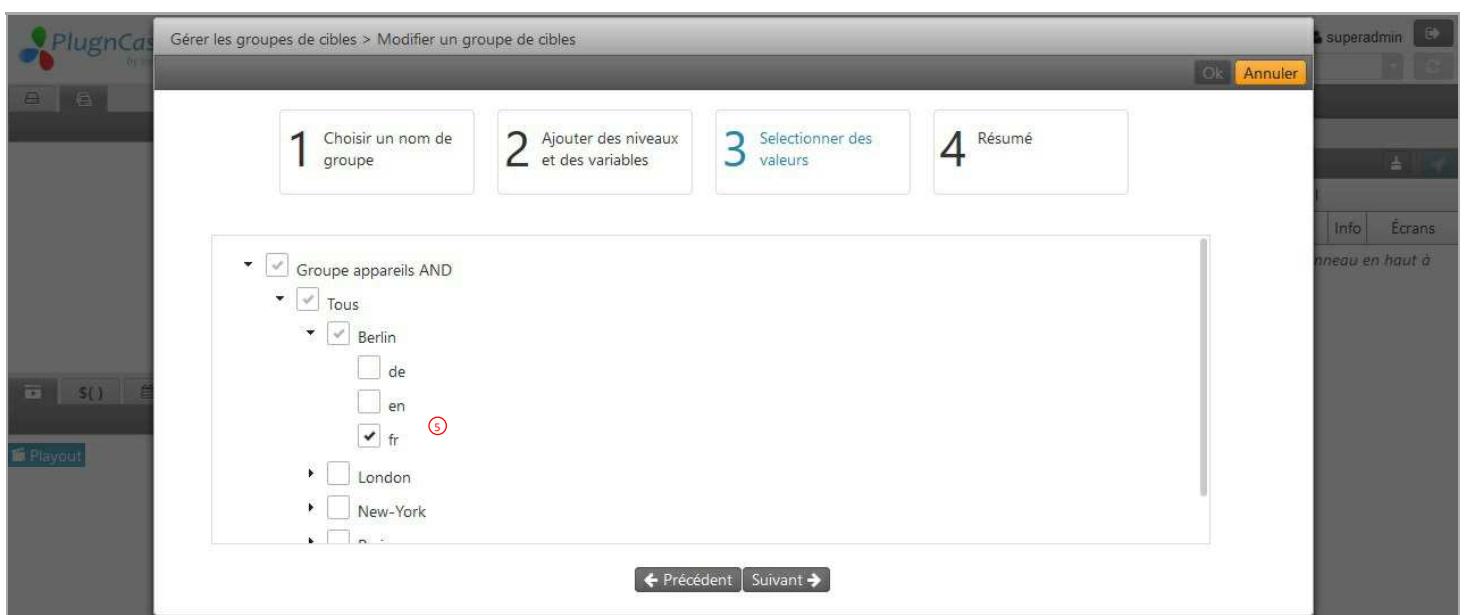


In the entry field Level 1 ④ created, in the same way, add the variable name, for example *Lang*.



The possible combinations of variable values are generated automatically. Select among them, those that define the conditions for belonging to your target group ⑤.  
In the example, the device belongs to the group:

- if its value of the variable *City* equals *Berlin* ET
- if its value of the variable *Lang* equals *fr*



### 2.6.1.1 My Account

The **My Account** pane allows you to edit:

- The username and password of your user account,
- The language in which PlugnCast Server should be displayed (French, English, German or Spanish) <sup>1</sup>.

<sup>1</sup>. it is possible to choose the language according to the browser's list of preferred languages. ↵

The screenshot shows the PlugnCast configuration interface. On the left, there is a sidebar with a tree view under the 'Configuration' tab. The 'Mon compte' item is selected and highlighted in grey. Other items in the tree include 'Serveurs', 'Domaines', 'Utilisateurs', 'Groupes d'utilisateurs', 'Rôles', 'Licences', 'Certificats SSL', and 'Intergiciels et scripts'. To the right of the sidebar, the main content area is titled 'Mon compte'. It displays a user profile for 'administrator' (administrator\_alias). Below the profile, there are three buttons: 'Changer mon mot de passe' (Change my password), 'Changer ma langue' (Change my language), and 'Changer mon identifiant' (Change my identifier). At the top of the page, there is a navigation bar with icons for 'Bibliothèque' (Library), 'Playouts', 'Cibles' (Targets), and 'Paramètres' (Parameters). A dropdown menu 'Tous les appareils' (All devices) is open. In the top right corner, there is a user session indicator for 'administrator' and a link to 'demo.plugncast.com'. The address bar also shows 'demo.plugncast.com'.

Depending on the role assigned to your user account, you may not be able to change your username or password. If necessary, contact your PlugnCast server administrator.

## 2.6.1.2 Domains

The domain view allows you to create and configure new operating domains.

A domain in the sense of `PlugnCast Server`, is an impermeable usage context that includes all user resources manipulated by the software:

- `Media and resource Library`,
- `Layouts`,
- `The target devices with their distribution frontals`.

⚠ You need at least one domain to be able to use `PlugnCast Server`. At the first installation of `PlugnCast Server`, if no domain exists, you are asked to create one.

Editing a domain allows you to create and configure distribution frontals (HTTP/WebDAV) on which `PlugnCast Server` can publish its diffusion scenario for recovery by the target devices.

The frontalscan be of two kinds:

- Internal: only 1 maximum, housed on the same machine as the PlugnCast server or
- External: housed on a different machine than the one where PlugnCast server is installed. PlugnCast can work with several external fronts. These are `HTTP/WebDAV servers` such as Microsoft IIS/WebDAV or Apache WebDAV.

### Adding and configuring a domain

Press `Add` + to add a domain. Once created, press `Edit domain` ✎ to configure it.

In the domain configuration interface, create a frontal by pressing the `Add Frontal` button +\*\* ①. Choose the `Name` of the frontal to create and define its type:

- `internal (default)` or
- `external`.

The frontal configuration consists of:

- define its HTTP URL(s) ②,
- define its connection parameters: `Login` ③ and `Password` ④,

☞ Note carefully the parameters that must be used in the configuration of the devices. It is possible to `copy` the URL and its login with the button .

☞ The type of authentication to access the internal frontal from the outside is the DIGEST mode in http and the BASIC mode in https.

The screenshot shows the PlugnCast domain configuration interface. In the top navigation bar, there are links for 'Bibliothèque', 'Playouts', 'Cibles', and 'Paramètres'. On the right, there is a user icon labeled 'administrator' and a 'Quitter et enregistrer' button. The main area shows a 'Domaine > demo.plugncast.com' breadcrumb. Below it, a 'Frontaux' section lists 'internal\_frontal' (marked with a red circle ①) and 'external\_frontal'. A 'Frontal > internal\_frontal' configuration panel is open, showing fields for 'Type' (set to 'WebDAV/Interne'), 'URL' (set to 'http://demo.plugncast.com/frontaux/webdav/demo.plugncast.com/'), 'Identifiant' (set to 'players'), and 'Mot de passe' (set to '(Mot de passe enregistré)'). There are also 'Appareils' and 'Propriétés' tabs. The entire interface has a clean, modern design with a light grey background and blue accents.

A domain can only have one internal frontal server but can have several external frontal servers. In the case of an internal server, the URL is automatically generated. All that remains is to choose between a `http` or `https` protocol scheme. In the case of a `https` schema, the certificate of the `PlugnCast Server` domain used must be exported through the browser and then installed in the devices.

⚠ The intelligent monitors `LG WebOS Signage` and `SAMSUNG Tizen SSSP` indicated in this documentation do not support the addition of custom certificates.

For more information, refer to the [Setting up Gekkota media players](#).

## Device registration in the distribution frontal

Unless a device is registered, it cannot be operated in `PlugnCast Server`.

It is necessary to position yourself in the right domain to register the devices that are suitable for this domain.

Once registered, the distribution frontal (HTTP/WebDAV server) is periodically consulted by the devices at the rhythm of their `heartbeat`. This allows devices to synchronize with the latest updates of playouts, firmware and configuration scripts and also publish their operating states in the `.device-status` directory.

The heartbeat is set to 1 minute for smart monitors and can be configured for devices carrying Gekkota.

It is possible to register:

- either manually created devices,
- or automatically detected devices. To avoid any configuration errors, this last solution is strongly recommended.

To be automatically detected by `PlugnCast server`, the URL of the distribution frontal defined in the device must be the same or equivalent to that of your internal (or external) frontal as well as for the identification parameters. For more information, go back to the previous chapter [Domains](#)

To be automatically detected by `PlugnCast server`, the devices must be configured correctly. For more information, see chapter [Device settings](#).

Devices detected automatically for the first time, and therefore never registered on this domain before, appear in a bold/italic font.

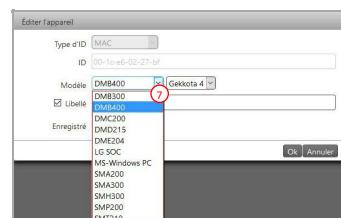
A device automatically detected for the first time by PlugnCast appears as `unregistered` .

To register a device, select the line of the desired device and click on the `Edit a Device` button.

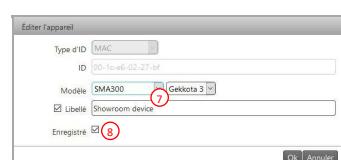
Nom	Type d'ID	ID	Modèle	Intergiciel	Dernière connexion	
Hall device	MAC	00-1c-e6-02-1b-83	DMB300	Gekkota 3	27/04/2017 11:57:47	
Outside totem device	MAC	aa-ee-ee-ea-ea-ea		Gekkota 3		
Showroom device	MAC	00-1c-e6-02-22-ad	DMB400	Gekkota 4	02/05/2017 15:00:16	
<b>00-1c-e6-02-27-bf</b>	<b>MAC</b>	<b>00-1c-e6-02-27-bf</b>	<b>DMB400</b>	<b>Gekkota 4</b>	<b>11/05/2017 15:08:54</b>	

Define the device model with its middleware among the proposed choices :

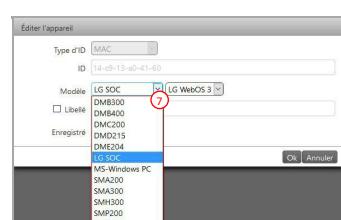
- For example, for a `DMB400` device, choose the `DMB400` model with its `Gekkota 4` middleware



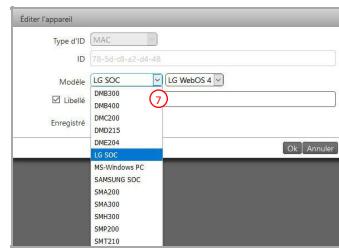
- For a `SMA300` device, choose the `SMA300` model with its `Gekkota 3` middleware



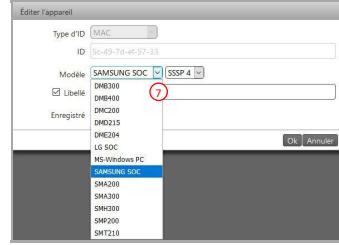
- For a monitor `LG WebOS Signage 3.0` OR `LG WebOS Signage 3.2`, select the model `LG SOC` with its middleware `LG WebOS 3`



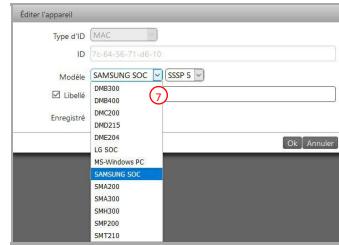
- For a `LG WebOS Signage 4.0` monitor, select the `LG SOC` model with its `LG WebOS 4` middleware



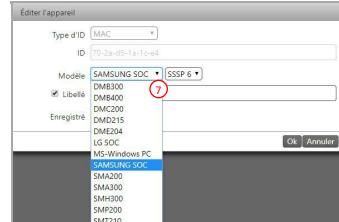
- For a SAMSUNG Tizen SSSP 4 monitor, select the SAMSUNG SOC model with its SSSP 4 middleware



- For a SAMSUNG Tizen SSSP 5 monitor, select the SAMSUNG SOC model with its SSSP 5 middleware



- For a SAMSUNG Tizen SSSP 6 monitor, select the SAMSUNG SOC model with its SSSP 6 middleware



Enter an appropriate and unique hostname for each device.

Choose a label, then check the option **Saved**  to save your device.

In Hostname identification mode, it is not possible to register 2 devices that have the same Hostname value. The correct method is to put a unique Hostname for each device by adding an ID to the Hostname (e.g. hall\_screen).

- ☞ The Hostname label restored by default by the LG Web OS monitors is *LGwebOSID*. Consider modifying it for the reason indicated above.
- ☞ The Hostname label returned by default by the monitors SAMSUNG Tizen SSSP is *SAMSUNG*. Consider modifying it for the reason indicated above.
- ☞ In multi-site environments, it is recommended to integrate in the Hostname the notion of geographical indication in order to be able to locate them (e.g.: 'screen-reception-paris').
- ☞ In any case, it is advisable to save your device configuration and location regularly in a file.
- ☞ If your new device had already been registered on the front panel before, if it is detected again by PlugnCast, it will not be displayed in bold and italic. Only the date of the last connection to this front end will be updated.
- ☞ In the case of a manual addition of a device, take into account the real identification method of your device ( MAC , Hostname or UUID ).
- ☞ If a device has already been registered with a certain identification mode (e. g. MAC ), and its actual identification mode has since changed (e. g. Hostname instead of MAC ), the device must be detected again with its new identification mode and registered. By the way, delete the old device (with the old identification mode), in order to avoid keeping devices with an obsolete configuration on your distribution frontal.
- ⚠** When using an https frontal, the PlugnCast Server certificate must be installed in the devices. This certificate contains an expiry date. When the date expires (or if the device has a date outside the certificate's validity range, the device can no longer connect to the PlugnCast Server frontal. If you have just restarted your device to adjust its configuration, press the Refresh button  to force automatic detection.

## 2.6.1.4 Servers

### LDAP

The `LDAP` panel allows you to associate `PlugnCast Server` with your company directory compatible with an LDAP(S) server such as Microsoft Active Directory.

The passwords of the configured users can then come from the company directory.

 Innes can provide a proprietary Briva LDAP server. Contact the sales department at [sales@innes.pro](mailto:sales@innes.pro) for more information.

### SMTP

The `SMTP` panel allows you to configure an SMTP(S) server so that `PlugnCast Server` can send email reports.

### Proxy

The `Proxy` panel allows you to set up `PlugnCast Server` so that it can use a Proxy server for its communications.

## 2.6.1.5 Users

The `users` panel allows you to declare new users and assign them a role. By default, only one user is created with a `Super administrator` role whose default login and password is `superadmin / superadmin`.

For security reasons, it is recommended to change the default password.

It is possible to add users of two types:

- Internal or
- From an LDAP-compatible directory such as Microsoft Active Directory.

To add an LDAP user, first, the `LDAP server interface` must be configured and the `LDAP server` started.

The supported user profiles are:

- Super administrator,
- General administrator,
- Domain administrator,
- General editor,
- Domain editor,
- Customer support,
- Contributor.

To know the roles of each profile and how to configure them, go to the paragraph [Roles](#).

The user name is saved in `PlugnCast Server` in lowercase letters. During authentication, all upper case letters are converted to lower case.

## 2.6.1.6 User groups

The user groups' panel allows you to declare user groups in order to facilitate the association of roles and access rights` to PlugnCast resources.

To add a user group, go to Parameters > User Groups <sup>①</sup>, click on the Create New Group button <sup>②</sup>, enter a group name and the domains concerned, and then select the users of these domains to group.

Libellé	Domaine
Marketing	demo.plugncast.com
Production	demo.plugncast.com
R&D	demo.plugncast.com

## 2.6.1.7 Roles

This panel allows you to configure the `User Roles` with their permissions.

All roles are configurable, except the `Super Administrator` role.

The default `role` configuration (factory setting) can be restored using the **xe60b;** button.

### Default roles

#### Super Administrator

This role has all the permissions of the software.

#### General Administrator

This role has the same permissions as the `Super Administrator` except:

- Override access control lists on objects.
- Install/modify/delete Apps (including add/modify/delete Playzilla licenses)

#### Domain administrator

This role has the same permissions as the `General Administrator` except,

- Add/edit/delete files in the shared repository,
- Add/edit/delete folders in the shared repository,
- Add/remove client certificates,
- Create server certificates,
- Add/remove middleware for devices,
- Add/remove device scripts,
- Add/remove domains,
- Add/remove licenses,
- Restore the factory preferences of the roles (all roles),

#### General Editor

This role has the same permissions as the `Domain Administrator` except:

- Edit ACLs,
- Modify the owner of a resource,
- See the certificates,
- See the devices,
- See the domains,
- See the licenses,
- Create/edit/delete a frontal,
- Change my account ID,
- Create/change/delete a role,
- Change server preferences,
- Create/modify/delete users,
- Create/modify/delete user groups,
- System > purge,
- System > middleware update,
- System > script publishing.

This role also has the following permissions:

- Add/Edit/Delete folders in the shared repository,
- Add/Edit/Delete files in the shared repository.

#### Domain editor

This role has the same permissions as the `General Editor` except:

- Add/Edit/Delete folders in the shared repository,
- Add/Edit/Delete files in the shared repository.

## ✓ Customer support

This role has the following permissions:

- See the domain repository (files, folders, fonts, content templates),
- See the shared repository (files, folders),
- See the events in a calendar,
- See the custom variables,
- See the playouts,
- See the protest,
- Change my account password,
- See the target groups,
- See the target devices,
- Clean up ongoing actions. This role does not allow the installation of content templates.

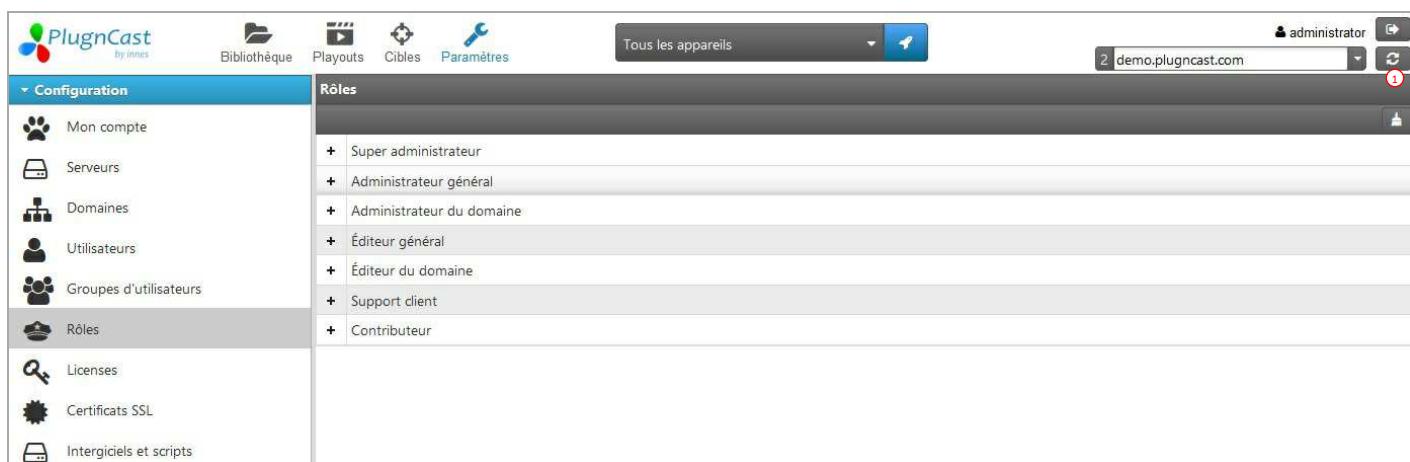
## ✓ Contributor

This role has only a very limited number of permissions:

- See the domain's repository,
- See the shared repository,
- See content templates,
- See target devices,
- Publish on targets. This role does not allow the installation of content templates.

### Note on permissions

☞ When a role permission is modified, the user must press the **Refresh domain** button  to update his permissions .



The screenshot shows the 'Configuration' menu open, with 'Rôles' selected. The main panel displays a list of roles: Super administrateur, Administrateur général, Administrateur du domaine, Éditeur général, Éditeur du domaine, Support client, and Contributeur. A red circle with the number '1' is located in the top right corner of the interface.

☞ When using the software, when permission is not granted, the user may notice a restriction of the function which is manifested by a red circle  .  Indicates that the rights you have only allow access to a part of the function.  Indicates that the rights you have do not allow you to access this function.

For more information on permissions restrictions, click on the pictogram  or  then on **More details** .

☞ For the same reasons, the color of a button or the color of the font of the button name may be red indicating that the function is not accessible with this role .



The screenshot shows the 'Référentiel du domaine' (Domain Repository) with a folder named 'Books'. A red error message box appears, stating: 'Vous n'avez pas tous les droits requis.' (You do not have all the required permissions.) Below it, a link 'Plus de détails'  leads to the error code: 'cms.library.domainrepository.folders.remove'. A red circle with the number '4' is on the left side of the interface.

☞ Any permission can be granted by a user with a role that already has this permission (the value `cms.settings.roles.edit` must be enabled beforehand to have the right to configure the lower roles).

☞ A user cannot change his own permissions.

☞ The ability to create a user account with a specific role requires the same (if not more) permissions.

☞ Some permissions are linked. Indeed, the deactivation of some can automatically deactivate others.

## 2.6.1.8 Server and App licenses

This screen allows you to:

- to enter the license key of your `PlugnCast Server` and any additional domains ,
- to enter the License Keys of `Playzilla` (as many Playzilla license keys as you have devices connected to your server),
- to associate domains with your versions of Playzilla,
- to install new versions of Playzilla.

☞ It is necessary to connect with a `Super administrator` profile to be able to enter Playzilla licenses.

**WARNING:** Since `PlugnCast` version 3.10.39, the evaluation license has an actual validity period of 30 days.

Before the end of the evaluation period, do not forget to enter your `license email`, your `server license keys` (key, label, PSN) and your `Playzilla license keys` (one per device connected to your `PlugnCast` server) in order to publish.

The `Server and App Licenses` Screen has two panels:

- a `Server and domain licenses` panel **①** allows you to enter the permanent `plugnCast license`, the associated `license email` and the licenses of any additional domains,
- an `Apps Licenses` **②** panel for users:
  - of devices
    - `Gekkota 3`,
    - `Gekkota 4`.
  - of monitors
    - `LG WebOS Signage 3.0`,
    - `LG WebOS Signage 3.2`,
    - `LG WebOS Signage 4.0`,
    - `SAMSUNG Tizen SSSP 4`,
    - `SAMSUNG Tizen SSSP 5`,
    - `SAMSUNG Tizen SSSP 6`.

This last panel allows you to associate a Playzilla App to the domain or to install an additional App version (ex: 4.11.10). Playzilla license keys can be allocated to different domains. The `App License` panel also allows, for all users, to add App Playzilla `license keys` (whether for the use of Playzilla 3.10.10 or the use of Playzilla 4.yy.zz).

### Warning message at first connection

During the first connection, `PlugnCast Server` detects that no App is configured in your server. The following message then appears inviting you to enter the license keys.



☞ Click on `ok` to make the message disappear.

### Get your license keys

The PSNs (Product Serial Number) of your software were provided to you when the products were delivered. If you cannot find this information, please contact `sales@innes.fr`. To obtain the license keys, send an email to `licence@innes.fr` with the email address that will be associated with the licenses as well as the PSNs of the software `PlugnCast Server` and `Playzilla`.

For example,

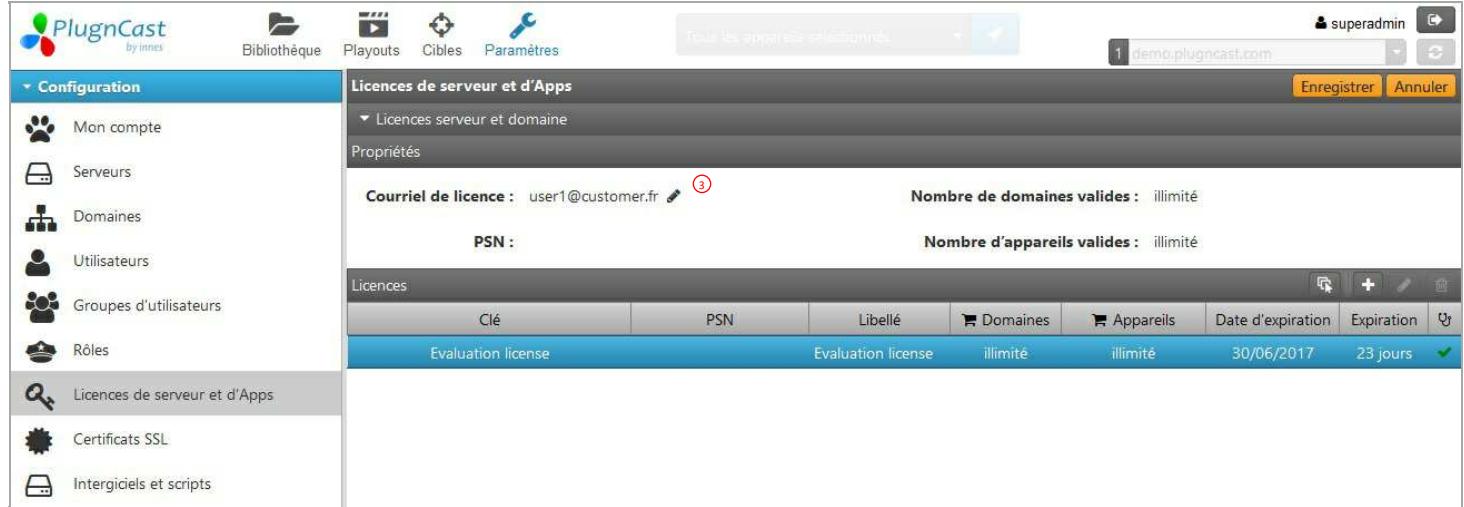
```
License email: `user1@customer.fr`  
PSN1111111-12345 CD2  
PSN12345-12345 CD7
```

You will then receive by email the license keys in a format of type :

```
tJhvY - YSbQ - NNVu - ouEp - rI3ig ; PSN11111-12345 CD2 ; plugnCast  
mJhtY - PSaQ - NNVu - xuCp - yI3Bg ; PSN12345-12345 CD7 ; playzilla
```

## Enter the license email of your PlugnCast server

Click on **Edit**  to enter the license email address.

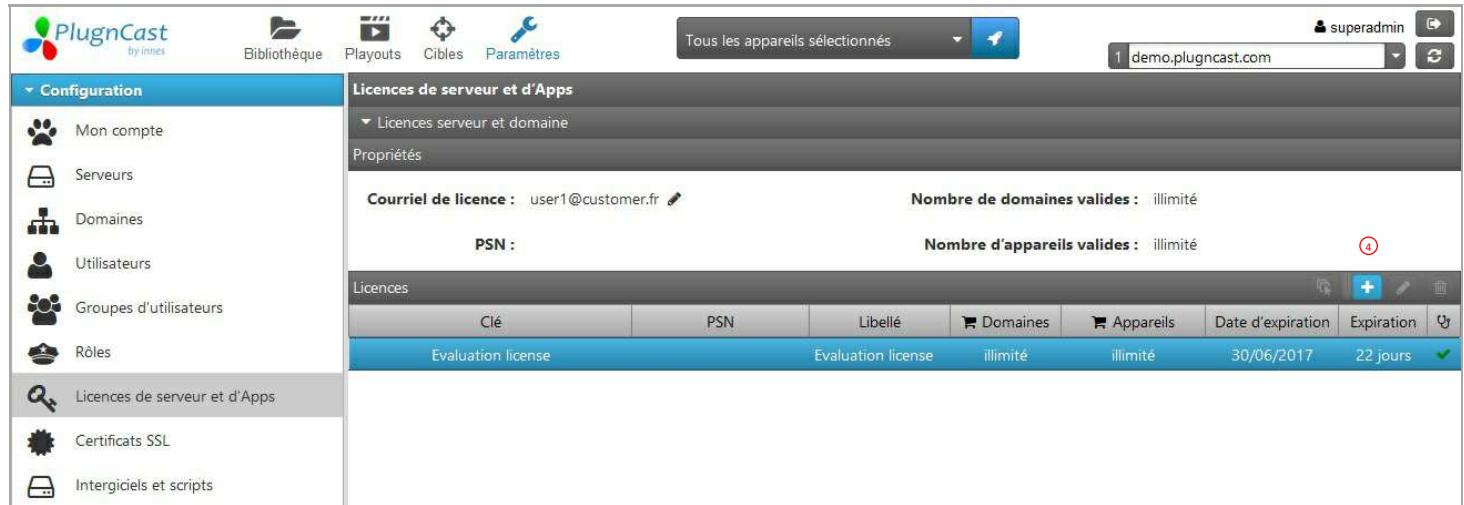


The screenshot shows the 'Licences de serveur et d'Apps' section of the PlugnCast configuration. The 'Courriel de licence' field is populated with 'user1@customer.fr' and has a red circle 3 icon. The 'PSN' field is empty. Below these fields is a table titled 'Licences' with columns: Clé, PSN, Libellé, Domaines, Appareils, Date d'expiration, and Expiration. One row is present: 'Evaluation license' with 'Evaluation license' in the Libellé column, 'illimité' in both Domaines and Appareils columns, '30/06/2017' in Date d'expiration, and '23 jours' in Expiration. A green checkmark is at the bottom right of the table.

## Enter the license key of your PlugnCast server and any additional domains.

It is now necessary to enter the license key of your PlugnCast server to use it beyond the 30-day trial period. This license key is linked to your server's PSN and license email.

Click on **Add**  to enter a server license.



The screenshot shows the 'Licences de serveur et d'Apps' section of the PlugnCast configuration. The 'Courriel de licence' field is populated with 'user1@customer.fr'. The 'PSN' field is empty. Below these fields is a table titled 'Licences' with columns: Clé, PSN, Libellé, Domaines, Appareils, Date d'expiration, and Expiration. One row is present: 'Evaluation license' with 'Evaluation license' in the Libellé column, 'illimité' in both Domaines and Appareils columns, '30/06/2017' in Date d'expiration, and '22 jours' in Expiration. A red circle 4 icon is next to the 'Appareils' column header. A red circle 5 icon is at the bottom left of the table.

Coller la clé de licence, le libellé et le PSN .

Ajouter des licences de serveur et de domaine

**Licences :**

1 Saisissez vos licences...

AppPE - 0c4E - +8I3 - xS6w - fz0cL ; PSN00780-00000 CD9 ; plugncast core

(5)

**Ok** **Annuler**

☞ If the license is not valid, this screen will be displayed each time the server is reconnected for the first time through its web interface.

The validity of the license is indicated by the pictogram ✓ (6).



## Playzilla App for PlugnCast

Two versions of App Playzilla are pre-installed on your PlugnCast server:

- Playzilla 3.10.10 (7) for devices that use the Gekkota 3 middleware (devices DMB300, SMA300, DMC200, ...).
- Playzilla 4.11.13 (8) :
  - for devices that use the Gekkota 4 middleware ( DMB400, SMA300, SMT210, DME204 ),
  - for the intelligent monitors LG WebOS Signage 3.0, LG WebOS Signage 3.2 OR LG WebOS Signage 4.0 ,
  - for the intelligent monitors SAMSUNG Tizen SSSP 4, SAMSUNG Tizen SSSP 5 OR SAMSUNG Tizen SSSP 6 .

Clé	PSN	Libellé	Date d'expiration	Expiration	Domaine
Il n'y a pas de licence. Veuillez cliquer sur + pour ajouter une licence.					

☞ We invite you to visit the [http://www.innes.pro/fr/support/index.php?PlugnCast\\_G3/Playzilla](http://www.innes.pro/fr/support/index.php?PlugnCast_G3/Playzilla) website to check if you have the latest version of the Playzilla App for PlugnCast Server (file \*.appi ).

## Enter Playzilla license keys

Click on Add + (9) to enter your Playzilla license keys . There must be as many Playzilla licenses as there are devices registered on your PlugnCast server. Enter the licenses (10) that have been provided to you (for example: mJhtY - PSAQ - NNVu - xuCp - yI3Bg ; PSN12345-12345 CD7 ; playzilla ).

☞ Each edition line corresponds to a license. It is possible to paste all licenses at once with CTRL+V .

Then check Domain and select the domain that should be associated (e. g. demo.plugncast.com ).

☞ If you need to allocate Playzilla's licenses to several domains, repeat this procedure for each domain. Using the CTRL key on your keyboard, it is possible to select licenses afterwards in order to link them to another domain.

Ajouter des licences d'App

**Licences :**

1	ganPK - ZtMT - TUIm - EGpn - c4G/w ; PSN1 ; playzilla	10
---	---	----

**Domaine** demo.plugncast.com

**Ok** **Annuler**

PlugnCast by innes

Bibliothèque Playouts Cibles Paramètres

Tous les appareils sélectionnés

superadmin Enregistrer Annuler

1 demo.plugncast.com

**Configuration**

- Mon compte
- Serveurs
- Domaines
- Utilisateurs
- Groupes d'utilisateurs
- Rôles
- Licences de serveur et d'Apps**
- Certificats SSL
- Intergiciels et scripts

**Licences de serveur et d'Apps**

- ▶ Licences serveur et domaine
- ▼ Licences d'Apps

Playzilla

ID : urn:innes:system-app#playzilla      Licences valides : 1

Versions

Version	Domaines
3.10.10	Tous
4.10.16	

Licences

Clé	PSN	Libellé	Date d'expiration	Expiration	Domaine
g4PWG - Phj7g - Phj7g - Tx2u - Phj7g	PSN00690-00001 CD4	playzilla			✓ demo.plugncast.com

⚠ Your Playzilla licenses remain invalid until the license account email is valid (or has been entered).

Cette licence est invalide, à cause d'une des raisons suivantes :

- La clé de licence ne correspond pas au « courriel de licence » du serveur
- La clé de licence ne correspond pas au « PSN » du serveur

</div>

To enter a valid license email, go to the **Server and Domain Licenses** tab.

From this version of PlugnCast with App version `Playzilla 4.11.11`, it is possible to publish `Playzilla 4.11.13` instead of `Playzilla 3.10.10` on older devices with the Gekkota 3 middleware. Depending on the user preference value `innes.plugncast.cms.targets.digitalsignage.playzillad-on-gekkota3`, here is the version of Playzilla distributed on Gekkota 3 devices. The value `'false'`, default value, `Playzilla 3.10.10` is published on the devices Gekkota 3. With the value `'true'`, `Playzilla 4.11.13` (or higher) is distributed to the Gekkota 3 devices. For more information on configuring this user preference, see the chapter [Installing, starting and configuring PlugnCast server](#).

## Link your domain to a version of App Playzilla

To be able to publish to Gekkota 4 devices (DMB400, SMA300, DME204, SMT210), or to intelligent monitors ( LG WebOS Signage 3.0 , LG WebOS Signage 3.2 , LG WebOS Signage 4.0 , SAMSUNG Tizen SSSP 4 , SAMSUNG Tizen SSSP 5 OR SAMSUNG Tizen SSSP 6 ), it is necessary to link your domain to an App version

Does not apply to App version 3.10.10 which is intended for Gekkota 3 devices (DMB300, DMC200, ...) and by default linked to all domains.

Select the App version (ex: 4.11.10) and then click on **Edit** to associate your domain to a version of App Playzilla (ex: Playzilla 4.11.13 <=> demo.plugincast.com .

App version 4.11.13 is recommended to work with Plugncast Server 3.10.51. If it is not present on this screen, for example in the context of a migration, please consult the next paragraph.

Version	Domaines
3.10.10	Tous
4.10.16	

Clé	PSN	Libellé	Date d'expiration	Expiration	Domaine
g4PWG - Phj7g - Phj7g - Tx2u - Phj7g	PSN00690-00001 CD4	playzilla			demo.plugincast.com



Version	Domaines
3.10.10	Tous
4.10.16	demo.plugincast.com

Clé	PSN	Libellé	Date d'expiration	Expiration	Domaine
BQV/Y - l1Ywg NsQq l1Ywg - l1Ywg	PSN00690-00003 CD8	playzilla			demo.plugincast.com

## Add and use a new version of App Playzilla

For Gekkota 4 devices or LG WebOS Signage or SAMSUNG Tizen SSSP monitors, it is possible to manage several versions of Playzilla. For example:

- Playzilla 4.10.20 for demo.plugincast.com ,
- Playzilla 4.11.1X for demo2.plugincast.com .

With this version 3.10.51 of Plugncast, it is recommended to use the version of App Playzilla 4.11.10 (or higher) for all your domains.

Click on the **Install App** button in the **App License** panel, then load the App Playzilla version, with a file name such as playzilla-plugincast-setup-4.11.10.appi .

**Licences de serveur et d'Apps**

ID : urn:innes:system-app#playzilla      Licences valides : 1

Versions

Version	Domaines
3.10.10	Tous
4.10.16	demo plugncast.com

Licences

Cle	PSN	Libellé	Date d'expiration	Expiration	Domaine
BQV/Y - l1Ywg - NsQq - l1Ywg - l1Ywg	PSN00690-00003 CD8	playzilla			✓ demo plugncast.com



Finally, assign this new version of App ⑯ to a domain using the **Edit** button ⑰.

**Licences de serveur et d'Apps**

ID : urn:innes:system-app#playzilla      Licences valides : 1

Versions

Version	Domaines
3.10.10	Tous
4.10.17 ⑯	
4.10.16	demo plugncast.com

Licences

Cle	PSN	Libellé	Date d'expiration	Expiration	Domaine
BQV/Y - l1Ywg - NsQq - l1Ywg - l1Ywg	PSN00690-00003 CD8	playzilla			✓ demo plugncast.com

## 2.6.1.10 SSL Certificates

This pane is used to configure the SSL certificates of `PlugnCast Server`.

- Trusted certificates (for websites interfacing with `PlugnCast Server`):

- Importing `*.crt` certificates,
- Display of the attributes of each certificate.

- Server certificates (only for the `PlugnCast Server` on-premises solution):

- Wizard for generating a new certificate (validity date, domain) and automatic loading,
- Display of the attributes of each certificate,
- Import of `.p12` certificate with password.

The screenshot shows the PlugnCast Server administration interface. The top navigation bar includes the logo, a search bar labeled "Tous les appareils", and several icons for "Bibliothèque", "Playouts", "Cibles", and "Paramètres". The left sidebar, titled "Configuration", lists various management options: Mon compte, Serveurs, Domaines, Utilisateurs, Groupes d'utilisateurs, Rôles, Licenses, Certificats SSL (which is selected and highlighted in grey), and Intergiciels et scripts. The main content area is titled "Certificats SSL" and displays detailed information about a selected certificate. Key details shown include:

- Nom : \*.plugncast.com - GeoTrust Inc.
- Début de validité : 20/07/2015 21:25
- Fin de validité : 21/07/2018 21:04
- Émis par : GeoTrust Inc.
- Numéro de série : 05:D0:7F
- Algorithme de signature : sha256WithRSA
- Émis pour :

  - CN = \*.plugncast.com
  - C = US
  - O = GeoTrust Inc.
  - CN = RapidSSL SHA256 CA - G3

- Clé publique :

  - Taille de la clé : 4096
  - Type de la clé : RSA

- Extensions :

  - Nom : Utilisation de la clé étendue
  - Critique : Oui
  - Non-répudiation : Non
  - Chiffrement de la clé : Oui
  - Agrément de clé : Non
  - Signature LCR : Non
  - Signature de certificat : Non
  - Chiffrement des données : Non
  - Signature : Oui
  - Nom : Noms alternatifs du sujet du certificat
  - Critique : Non

## 2.6.1.11 Middleware and Scripts

This panel allows you to add `middleware` or `configuration scripts` that can be deployed on the devices from the target system view.

### Configuration scripts

Select the `Configuration Scripts` panel.

⚠ This panel can be found at the bottom of the screen.

Press the button  Import to import a configuration script.

⚠ To be supported by the device, the configuration script must have a specific name and specific content as appropriate:

- here is the name it should take if it is intended for all devices:
  - `configuration.js`
- Here is the name it should take if it is intended for a particular device, it is then necessary to mention as a prefix the value of its identification method:
  - `<MAC>.configuration.js`,
    - ex: `00-1c-e6-02-fc-01.configuration.js`
  - `<Hostname>.configuration.js` Or
  - `<UUID>.configuration.js`



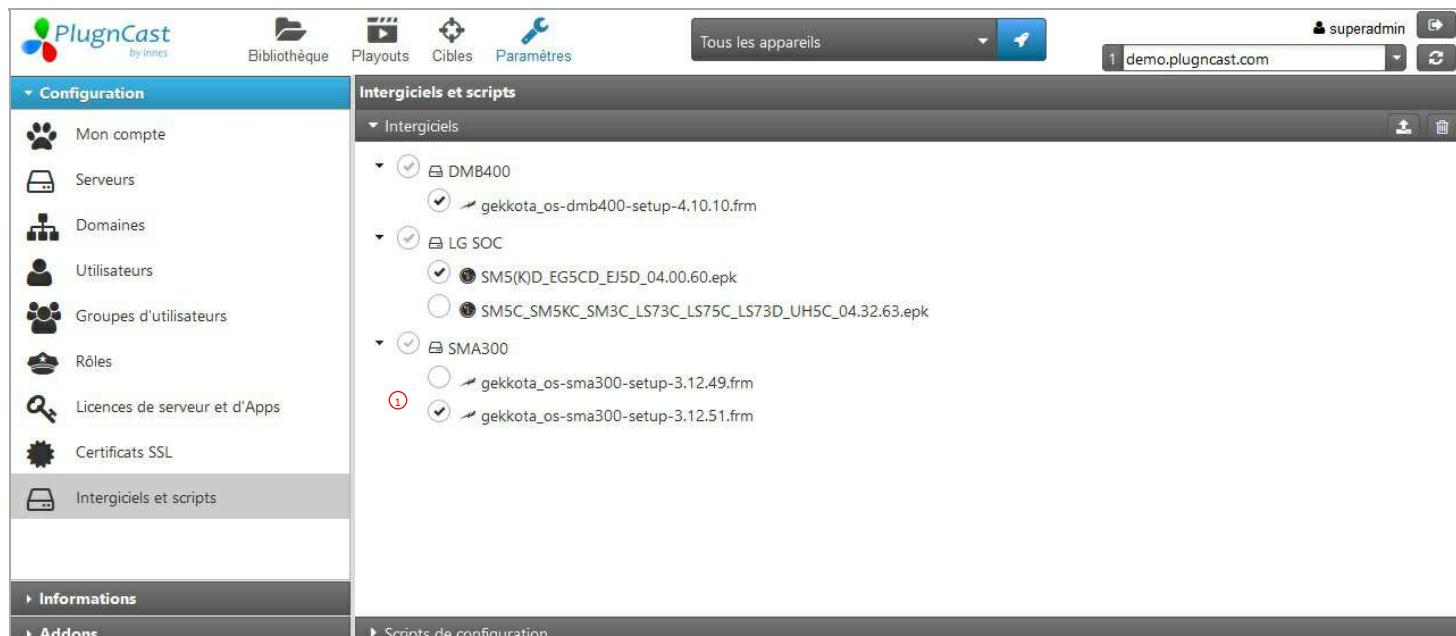
The screenshot shows the PlugnCast software interface. The top navigation bar includes icons for Library, Layouts, Targets, and Parameters, along with a user dropdown and connection status. The left sidebar has a 'Configuration' section with links for Mon compte, Serveurs, Domaines, Utilisateurs, Groupes d'utilisateurs, Rôles, Licences de serveur et d'Apps, Certificats SSL, and Intergiciels et scripts (which is selected and highlighted in grey). The main content area is titled 'Intergiciels et scripts' and contains a tree view under 'Scripts de configuration'. A single item, 'configuration.js', is listed under the root node. The bottom navigation bar includes links for Informations and Addons, and a 'Scripts de configuration' link is also visible.

### Middleware

It makes it easy to maintain a fleet of devices with different software versions.

When imported, middlewares are automatically sorted by device model.

To configure the middleware version deployment strategy, simply select ① the version by device model.



The screenshot shows the PlugnCast software interface with the 'Intergiciels et scripts' panel open. The left sidebar shows the 'Configuration' section with various links. The main content area displays a tree view of middleware files categorized by device model. Under 'Intergiciels', there are entries for DMB400, LG SOC, and SMA300. Each entry shows multiple files, with some having a red circle containing a number (e.g., ②, ③) next to them, likely indicating selected versions. The bottom navigation bar includes links for Informations, Addons, and Scripts de configuration.

**Gekkota Runtime**

**RELEASE NOTE**

- Change the update URL reader according to your Windows version:
  - Windows 10/Windows 7/Windows 8.1/Windows 10
  - Windows 7/Windows 7/Windows 8.1/Windows 10
- To avoid connection issues with multiple LAN, it is recommended to include all LAN interfaces of your player (e.g. wireless LAN, virtual LAN...) in your LAN interface. An interface for more information refer to Gekkota application note troubleshooting.

**2017-10-03 V3.12.47** [Download for Windows](#) [Download for Mac OS X](#)

**BUG FIX, NEW FEATURES, MINOR UPDATES**

- Add interface in Output menu (WPSU)
- Add support for Spanish language (WPSU)
- Add support for "no proxy" (WPSU)
- Other minor

## Software for your Gekkota4 devices

**Gekkota OS for DMB400**

**RELEASE NOTE**

Never make electric upgrade on your player while software upgrade is in progress (please be enlightened for few minutes after the player may not be able to work properly).

When using the device with Ultra HD resolution, do work with Screen Compose or PlugCart projects having also layout resolution in Ultra

**2018-03-02 V4.10.10** [Download for Windows](#)

**BUG FIX, NEW FEATURES, MINOR UPDATES**

- Change the default value for the user preference `news/video-decoding-group-enabled` to now `true`.
- Change the option execute continuously until ESCAPE key is pressed is not taken into account meaning that when it is selected, the MS key will be executed continuously until the escape key is pressed.
- Fix for MS PowerPoint media file.
- Fix for shapes and was not displayed (example for arrow).

## Software for your LG WebOS Signage 3.0 devices Software

To retrieve LG WebOS Signage firmware (.epk), log in to the LG support website <http://webossignage.developer.lge.com/>, log in to your account, choose the most recent version of SoC version for your device and then click on Download (create an account for the site first)

**Updating Firmware**

A firmware update consists of two types of firmware; SoC firmware and webOS firmware. Both types are updated together at once.

We recommend you to update your device with the latest firmware version and updating to the latest firmware, refer to the following guides:

- Updating Firmware
- Checking Firmware Version
- Manually Launching Software Update Menu

**webOS Signage 3.0 Models**

6SEESPC
5SEFSC, 5SEVSC
5SEHSC
5SEJSC
6SEVSC
42/49/55LS73C
42/49/55LS75C
42/49/55LS73D
43/49/55SM3C
32/43/49/55/65SM5KC
32/43/49/55/65SM5KC
49/55/65/HS5C
55XE3C
75XF3C
75KS2C

For example, for the monitor 32SM5KC :

**32/43/49/55/65SM5KC**

In this page, you can download firmware and read its release notes.

**Firmware Download**

Before you download the firmware, check the versions of webOS, firmware, and SCAP API. For more information, read the release notes.

webOS Version	Release Date	Firmware Version	SDK Version	SCAP Version	Download	Release Notes
06-MAR-2018	04.73.60	3.33.1	3.0.4	1.4/1.5	Download	View
21-DEC-2017	04.32.63	3.33.1			Download	View
29-SEP-2017	04.32.50	3.32.3			Download	View
31-JUL-2017	04.31.70	3.32.3			Download	View
19-MAY-2017	04.30.90	3.32.3			Download	View
31-MAR-2017	04.30.40	3.32.3			Download	View
13-JAN-2017	04.21.10	3.31.2			Download	View
11-NOV-2016	03.51.00	3.27.8	Download	View		

## Software for your LG WebOS Signage 3.2 devices Software

**Updating Firmware**

A firmware update consists of two types of firmware; SoC firmware and webOS firmware. Both types are updated together at once.

We recommend you to update your device with the latest firmware version and updating to the latest firmware, refer to the following guides:

- Updating Firmware
- Checking Firmware Version
- Manually Launching Software Update Menu

**webOS Signage 3.2 (3.0+) Models**

86TR3D
55EGSCD
32/43/49/55/65SM5FD
32/43/49/55/65SM5KD
55EJSD

For example, for the monitor 32SM5KD :

webOS Version	Release Date	Firmware Version	SoC Version	Microm Version	SDK Version	SCAP Version	Download	Release Notes
webOS Signage 3.2 (3.0+)	17-NOV-2017	04.00.60	3.04.4		3.2.5	1.5	<a href="#">Download</a>	<a href="#">View</a>
	16-AUG-2017	03.01.90	3.02.0				<a href="#">Download</a>	<a href="#">View</a>

\*\*Software for your LG WebOS Signage 4.0 devices

webOS Version	Release Date	Firmware Version	SoC Version	Microm Version	SDK Version	SCAP Version	Download	Release Notes
webOS Signage 4.0	12-SEP-2018	03.01.70	3.04.9		4.0.6	1.6	Currently Unavailable	<a href="#">View</a>

For example, for the monitor 49SH7E :

webOS Version	Release Date	Firmware Version	SoC Version	Microm Version	SDK Version	SCAP Version	Download	Release Notes
webOS Signage 4.0	12-SEP-2018	03.01.70	3.04.9		4.0.6	1.6	Currently Unavailable	<a href="#">View</a>

#### Software for your SAMSUNG Tizen SSSP 4, SAMSUNG Tizen SSSP 5 or SAMSUNG Tizen SSSP 6 devices

To recover firmware SAMSUNG Tizen SSSP 4 , SAMSUNG Tizen SSSP 5 OR SAMSUNG Tizen SSSP 6 , log in to the SAMSUNG support site <https://www.secslm.com>, identify yourself with your account, in the Help tab, select Download Center

In the text box Please enter title, enter the trigram of your monitor ``SAMSUNG Tizen SSSP``:

- For example, for example
  - QBN for the model ``SAMSUNG Tizen SSSP 6`` ``QB43N, ...``
  - DBJ for the model ``SAMSUNG Tizen SSSP 5`` ``DB43J\*``,
  - PMF for the model ``SAMSUNG Tizen SSSP 4`` ``PM32F, ...``

Then click on the Search button. In the results, select the appropriate firmware for your Smart monitor, the one whose trigram of your model is contained in the archive name <name>\_BEM.zip :

- For example,
  - QBN : QMN\_QBN\_QEN\_OMN\_OHN\_OMN-D\_OHN-D\_OHN-D\_QMR\_QBR\_QBR-N\_T-KTM2ELAKUC\_2020.8\_BEM.zip,
  - DBJ : QMH\_QHHH\_QBH\_QBH\_QBH-N\_DBJ\_T-KTMLAKUC\_2060.7\_BEM.zip,
  - PMF : PMF\_PMF-BC\_PHF\_MLF\_PHF\_MLF\_PHF-P\_PMH\_WWT-HKMLAKUC\_2060.2\_BEM.zip

Total: 10397 result(s)	Filter
1. Firmware for SBB-55N17-B LED Signage Player Box, SBB-55N17-KTH258HDWNC-1002.2	Total   5
2. Firmware for SBB-SN01AU (Tizen LED Signage Box, SBB-SN01AU_KTH258HDWNC-1001.0)	Total   5
3. MS-Surface OS Image version : 1001.0	Total   10
4. Firmware for MI_L1-MB94AC-002.9	Total   3
5. WEST OS Image for LF-Y0000	Total   4
6. UEC_MEC_UOC_U050_POC_T-EXCELCWIC_1029.0	Total   3
7. UEC_MEC_UOC_U050_POC_T-EXCELCWIC_1051.0	Total   4

For example, for the ``SAMSUNG Tizen TSSP 4`` monitor of the PM32F model and the 'LH32PMFP' type:

For example, for the 'SAMSUNG Tizen TSSP 5'' monitor of the DB43J model and the LH43DBJP type:

Download Center		<a href="#">Back to List</a>
Division:	QD	
Category:	UDU	
Period:	2020-07-14 07:02:22	
Firmware for OHM_QH-BQB_OBH-N_DBU_T-KTM1AKUC-2080.2(*5solution Applied for Download API issue with 2010.3*)		
<a href="#">View Details</a>		
Remote update purpose(HDC test, Maginote Server), T4TM1AKUC_XXXXXX_ben.zip		
This is to inform all our valued SSP Partners that Official FW 2020.2 has been released with the Solution Fix for known serious issue with Download API with earlier official Release FW 2010.3.		
Support Model:		
QHM-LH504RMPUGC(**)JAH09NHPUGC**1JAH09QHPUGC**		
QHM-LH504HMPUGC(**)JAH09HHPUGC**		
QHM-LH504BMPUGC(**)JAH09BHPUGC**		
Type:		
File ID : 1 Total Download : 8   30/11/2017		
LH504H-LH504BMPUGC,T080101.pdf		<a href="#">[Download]</a>
7093114   Total Download : 4   30/11/2017		
LH504H-LH504HMPUGC,T080101.pdf		<a href="#">[Download]</a>
104   Total Download : 1   30/11/2017		
QHM_QH-BQB_OBH-N_DBU_T-KTM1AKUC_2080.2_08.zip		<a href="#">[Download]</a>
104   Total Download : 1   01/12/2018		
QHM_QH-BQB_OBH-N_DBU_T-KTM1AKUC_2080.2_0105.dsp		<a href="#">[Download]</a>
104   Total Download : 100   20/02/2019		
QHM_QH-BQB_OBH-N_DBU_T-KTM1AKUC_2080.2_BEM059		<a href="#">[Download]</a>

For example, for the monitor 'SAMSUNG Tizen SSSP 6' of the model QB43N and type LH43QBN:

Download Center		<a href="#">Back to List</a>
Dataset	ID: Software Category: Partners Period: 05-04-2019 - 30-04-2019	
QMN_QBN_QEN_OMN_OHN_OHM-D_QMR_QBR_QBR-N_Main_T-KTM2ELAKUC_2020.8		
Subject: SSMSTools 4.01 Latest FW T-KTM2ELAKUC 2000.3 Removed		
Dear All Valued Samsung B2B Partners,		
This is an urgent Notice to kindly notify all of the Partners who downloaded, FW T-KTM2ELAKUC-2000.3 FW Version from SLM System since March 2019.		
The FW version is known to work with QMN_QBN_QEN_OHN_OHM-D Models and may show unexpected behavior while using with your Web-Application Solution/Content.		
Samsung Team are deeply regretful for this inconvenience occurred.		
New FW will be uploaded to SLM System soon and you'll be informed about the scheduled once it's confirmed.		
Notes:		
Team ID: 1 (Administrator ID: 10000000)		
QMN_QBN_QEN_OHN_OHM-D_QMR_QBR_QBR-N_Main_T-KTM2ELAKUC_2008.BIM.zip		<a href="#">Download</a>
Team ID: 1 (Administrator ID: 10000000)		
QMN_QBN_QEN_OHM-D_QMR_QBR_QBR-N_Main_T-KTM2ELAKUC_2020.8.BIM.zip		<a href="#">Download</a>

## **2.6.2 Information**

This section contains version information and legal notices of the PlugnCast software.

## 2.6.3 Addons

This panel allows you to install PlugnCast application extensions. In particular, it allows you to install 'content models'.

⚠ The **content models** are not installed by default during the PlugnCast installation.

The screenshot shows the 'Addons' section of the PlugnCast interface. The left sidebar has 'Addons' selected. The main area displays a message: "Aucun modèle disponible. Cliquez sur le bouton Import pour importer des modèles." There are filter options for 'Format' and 'Catégorie'.

For PlugnCast, the **content models** are grouped in different packages. They are available for download from the Innes website <http://www.innes.pro/fr/support> (Link to content template packs).

All user profiles except the **Customer Support** and **Contributor** profiles allow you to install the **Content Templates** packages.

To install your **Content models** package on a particular domain, select a **Domain** from the drop-down list ①, for example `demo.plugncast.com`, click on the **Import** button ② then select the desired **Content models** package. For example, to install the **Content Model Package Education**, install `plugncast-education-content-model_pack-1.10.10.10.zip`.

The screenshot shows the 'Modèles de contenu' section after importing packages. One model, 'Education - Absences ...', is highlighted with a blue border. A tooltip on the right provides detailed information: Titre : Education - Absences des professeurs, Version : 1.10.13, Format : Paysage 16/9, Catégorie : Éducation, Description : Education - Absences des professeurs.

In this version, it is possible to import several model packages at once.

For example, here the **Content Model Package General** has been installed.

The screenshot shows the 'Modèles de contenu' section after installing the 'General' content model package. A tooltip on the right provides detailed information for the 'Fil d'actualités 16-9' model: Titre : Fil d'actualités 16-9, Version : 1.10.14, Format : Paysage 16/9, Catégorie : Général, Description : Affichage d'un fil d'actualités (RSS, Atom).

If you have installed many **content templates** packages, it is then possible to view only part of the **content models** by filtering them by their **format** ② or their **category** ③. Filter values are persistent even after a disconnection. By default, **filtering by format** and **filtering by category** are not enabled.

To install a package of `content models` in another domain, select another domain, for example `demo2.plugncast.com` ④ and repeat the operation.

⚠ The user profile used to log in should allow you to see multiple domains



If an installed `content models` does not seem useful to you, select it, and press the button `Delete`.

☞ It is possible to install content templates developed especially for customers based on specifications. For more information, contact the Innes Sales Department.

☞ Innes also offers an MDK (Model Development Kit) that allows you to develop your own `content models`. For more information, contact Innes support

### 3.1 ACL (Access Control List)

ACLs are additional rights that can override role permissions for specific resources (files, folders, time slots, ...).

⚠ The concept of ACL is an advanced function for experienced users who already know the concept of `roles`, `users`, and `user groups`.

ACL permissions consist of `Authorize` ✓ or `Prohibit` ✗ a feature of the software for a `user`, `user group` or all `users` with a particular `role`. The choice `inherit` ⚡ allows to define a permission implicitly by inheriting the value of this same permission declared at the `role` level.



The resources controlled by the ACLs are of type :

- Files and folders,
- Library time slots,
- Playouts and calendar time slots,
- Frontals and devices.

☞ Three permissions allow you to configure the behavior of the ACLs for a given user:

- `cms.acl.bypass` : allows a user not to be affected by the ACLs assigned to him,
- `cms.acl.edit` : allows a user to edit the ACLs of a resource even if he is not the owner,
- `cms.acl.owner.edit` : allows a user to edit the ACLs of a resource when he is the owner.

### 3.2 Editing ACLs

The ACL edit screen allows you to:

- First, choose a list of users, user groups or roles to be granted permissions,
- In a second step, change the permissions assigned to the selected resource.

The ACL editing screen is common to all PlugnCast Server resources and is displayed by clicking on the `Edit permissions` button, within a resource editing screen.

<sup>^1]</sup>: It is necessary first that `users` or `user groups` have been created within PlugnCast. For more information, refer to the paragraph [Users or User Groups](#).

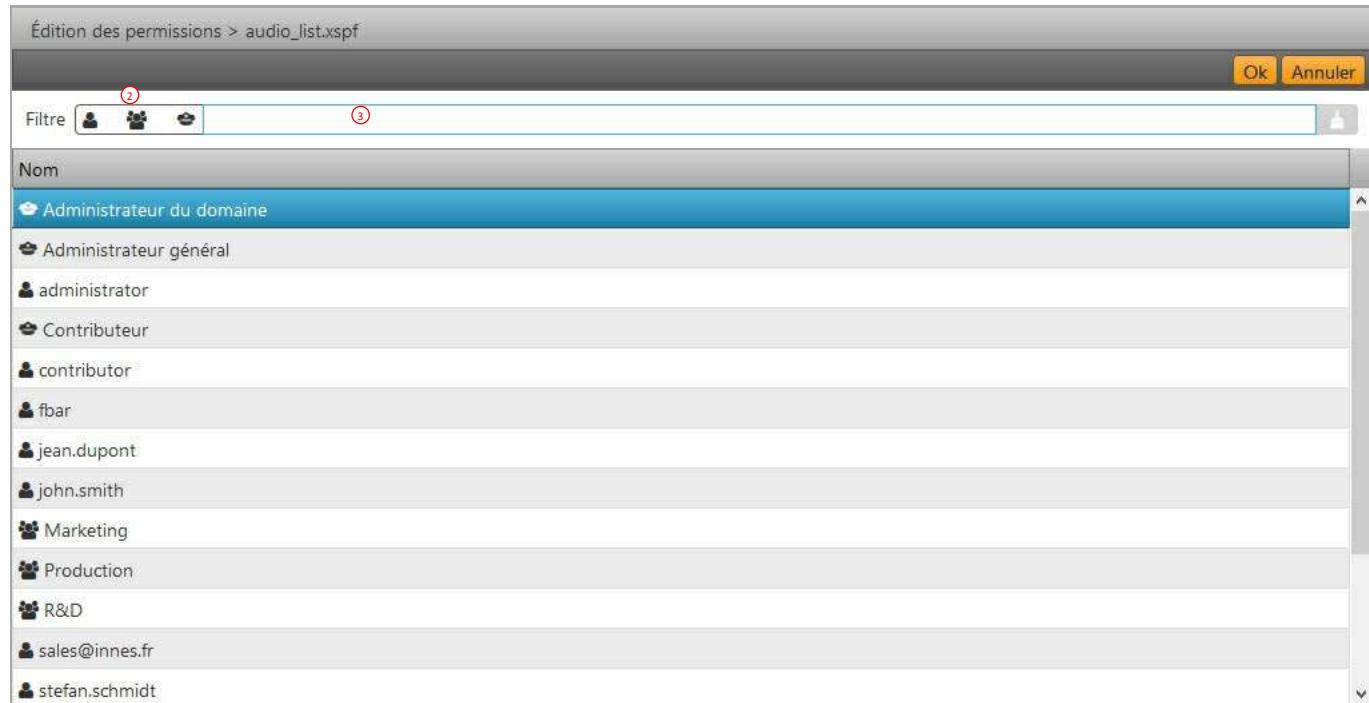
To add a user, a user group or a role click on the button  <sup>①</sup>.



- It is possible to add multiple `users`, `user groups` or `roles` at once for the same resource by holding down the CTRL or SHIFT key.
- For a selected `user`, `user group` or `role`, it is possible to change several permissions at once.
- If the list of `users`, `user groups` or `roles` is too long, it is possible to apply a display filter. The meaning of the pre-programmed filters <sup>②</sup> is as follows:

Pictogram	Description
	Do not display users
	Do not display user groups
	Do not display roles

The filter edit field allows you to enter a search text <sup>③</sup>.



Once a `user`, `user group`, or `role` has been selected, you can change the ACL permissions. For example, for the role `contributor`, for each permission selected on the right, click on the button  <sup>④</sup>.

Édition des permissions > audio_list.xspf	
	Permissions > contributor
	contributor
Description	Permission
Modifier ce fichier	
Supprimer ce fichier	
Renommer ce fichier	
Voir ce fichier	

Once the permissions dialog box is open, choose from the permissions :

- Allow`,
- Deny` ou
- Inherit`.

Édition des permissions > audio1.mp3

Ok Annuler

Description : **Supprimer ce fichier**

Permission

Autoriser  Hériter  Interdire

- ☞ In the event of a permissions conflict between users, user groups and roles, the value 'Ban' is always given priority.
- ☞ Some ACL permissions activations require you to activate other permissions beforehand. This is automatically detected by `PlugnCast Server` which asks the user for confirmation.
- ☞ The change is immediate for the user for whom ACLs have been modified. However, until he reconnects (e. g. by pressing the `F5` key) or refreshing his domain, the user will have an HTTP 403 error when trying to manipulate a resource whose ACLs are blocking access to the resource. After refreshing the domain, the user will be assisted by the pictograms or in case of insufficient permission

### 3.3 Editing the owner of a resource

Several types of resources have a defined owner when they are created. This concerns:

- The files, the folders,

The screenshot shows the 'Bibliothèque' tab selected in the top navigation bar. On the left, a tree view shows a folder structure under 'Référentiel du domaine': 'Référentiel du domaine' (containing 'Audio', 'Background image', 'Books', 'Clock & date', 'Daily menu', 'Dynamic content' (which contains 'City'), and 'City.playfolder'). On the right, a details panel displays the properties of the selected item, which is a folder named '\$()' with the variable 'City'. The modification date is listed as 07/03/2018 09:52:23.

- the `Library time slots`,

The screenshot shows the 'Playouts' tab selected in the top navigation bar. In the center, a configuration panel for 'Device reboot' is displayed. It includes a 'Planifications' section with a dropdown for 'Heure' set to '06 Uhr 00 min' and checkboxes for all days of the week (lundi, mardi, mercredi, jeudi, vendredi, samedi, dimanche) checked.

- The `playouts` and `calendar time slots`,

The screenshot shows the 'Playouts' tab selected in the top navigation bar. The main area displays a 'Hall channel' schedule for the period from May 8 to May 14. A specific slot from 08:00 to 11:45 on Monday, May 8, is highlighted with a red box and a magnifying glass icon, suggesting it is currently selected or being edited.

- The `frontals` and `devices`

The screenshot shows the 'Paramètres' tab selected in the top navigation bar. Under 'Domaine > demo.plugncast.com', the 'Propriétés' section shows 'Nombre maximal d'appareils' set to 'indéfinie'. The 'Frontaux' section lists 'internal\_frontal' and 'external\_frontal'. The 'Appareils' section lists several devices with their details:

Nom	Type d'ID	ID	Modèle	Intergiciel	Dernière connexion
Factory device	MAC	00-1c-e6-02-27-bf	DMB400	Gekkota 4	09/05/2017 17:49:22
Hall device	MAC	00-1c-e6-02-1b-83	DMB300	Gekkota 3	27/04/2017 11:57:47
Outside totem device	MAC	aa-ee-ee-ea-ea-ea		Gekkota 3	
Showroom device	MAC	00-1c-e6-02-22-ad	DMB400	Gekkota 4	02/05/2017 15:00:16
Warehouse device	MAC	00-1c-e6-02-1e-45	SMA300	Gekkota 3	27/04/2017 15:26:13

To display the owner of a resource, select a resource, and click on the button `Owner`

- If owner modification rights are allowed for your user profile, it is possible to change owners.
- When a user is deleted, a message is displayed asking to give a new owner for all its resources.

### 3.4 Files and folders

To modify the ACLs of a file or folder, select the **Library** tab ①, click on a file or folder ②, then click on the **Edit permissions** button ③.

After selecting one or more users, user groups or roles ④, you can edit the permissions of a file or folder.

- For a file

Description	Permission
Modifier ce fichier	
Supprimer ce fichier	
Renommer ce fichier	
Voir ce fichier	

- For a folder

Description	Permission
Créer un fichier dans ce dossier	
Créer un fichier dans un sous-dossier inclus dans ce dossier	
Modifier un fichier dans ce dossier	
Supprimer un fichier de ce dossier	
Renommer un fichier de ce dossier	
Voir les fichiers inclus dans ce dossier	
Créer un dossier dans ce dossier	
Créer un dossier dans un sous-dossier contenu dans ce dossier	
Supprimer ce dossier	
Supprimer les dossiers inclus dans ce dossier	
Renommer ce dossier	
Renommer les dossiers inclus dans ce dossier	
Voir ce dossier	
Voir les dossiers inclus dans ce dossier	

The permission to `delete the folders included in this folder` must be enabled to have the ability to delete subfolders.

The permission to see the folders included in this folder must be allowed to have the possibility to also see the subfolders.

When enabling the permission `see the files included in this folder` ⑤, `see this folder` ⑥, or `see the folders included in this folder` ⑦, an option `Provide permission to see parent folders` ⑧ is proposed to simplify the propagation of permissions on parent folders when saving ACL.

Édition des permissions > List

Nom	Permissions > Contributeur	⑧ <input checked="" type="checkbox"/> Propager l'autorisation de voir les dossiers parents	
Contributeur	Description		Permission
	Créer un fichier dans ce dossier		
	Créer un fichier dans un sous-dossier contenu dans ce dossier		
	Modifier un fichier dans ce dossier		
	Supprimer un fichier de ce dossier		
	Renommer un fichier de ce dossier		
	Voir les fichiers inclus dans ce dossier		
	Créer un dossier dans ce dossier		
	Créer un dossier dans un sous-dossier contenu dans ce dossier		
	Supprimer ce dossier		
	Supprimer les dossiers inclus dans ce dossier		
	Renommer ce dossier		
	Renommer les dossiers inclus dans ce dossier		
	Voir ce dossier		
	Voir les dossiers inclus dans ce dossier		

Ok Annuler

### 3.5 Library time events

To edit the ACLs for library time events, go to **Library** ①, click on a **library time event**, then click on the **Edit permissions** button ②.



After selecting one or more users, user groups or roles ③, you can edit the permissions of a library time event.

This screenshot shows the 'Edition des permissions > Display standby' screen. On the left, a sidebar lists 'Contributeur' (circled with ③). The main area is titled 'Permissions > Contributeur'. It contains a table with four rows:

Description	Permission
Editor cette plage horaire de bibliothèque	
Supprimer cette plage horaire de bibliothèque	
Renommer cette plage horaire de bibliothèque	
Voir cette plage horaire de bibliothèque	

### 3.6 Playout

To modify the ACLs of a playout, go to [Playouts](#), select the playout of your choice<sup>①</sup> and click on the [Edit permissions](#) button<sup>②</sup>.

After selecting one or more user(s), user groups or roles [3](#numstamp\_3), you can edit the permissions of the playout<sup>④</sup>.

- For an audio channel

Description	Permission
Supprimer ce playout	
Renommer ce playout	
Voir ce playout	
Modifier les propriétés de durée d'affichage du playout	
Créer une plage horaire dans le calendrier du canal audio	
Reprogrammer des plages horaires du canal audio	
Supprimer des plages horaires du canal audio	
Voir les plages horaires du canal audio	
Modifier le contenu des plages horaires du canal audio	
Voir le contenu des plages horaires du canal audio	
Modifier le contenu par défaut du canal audio	

- For an audio-visual channel

Description	Permission
Supprimer ce playout	
Renommer ce playout	
Voir ce playout	
Modifier les propriétés de durée d'affichage du playout	
Créer une plage horaire dans le calendrier du canal audiovisuel	
Reprogrammer des plages horaires du canal audiovisuel	
Supprimer des plages horaires du canal audiovisuel	
Voir les plages horaires du canal audiovisuel	
Modifier le contenu des plages horaires du canal audiovisuel	
Voir le contenu des plages horaires du canal audiovisuel	
Modifier le contenu par défaut du canal audiovisuel	

- For a visual channel

Édition des permissions > Totem channel	
Permissions > contributor	
Description	Permission
Supprimer ce playout	Administrateur
Renommer ce playout	Administrateur
Voir ce playout	Administrateur
Modifier les propriétés de durée d'affichage du playout	Administrateur
Créer une plage horaire dans le calendrier du canal visuel	Administrateur
Reprogrammer des plages horaires du canal visuel	Administrateur
Supprimer des plages horaires du canal visuel	Administrateur
Voir les plages horaires du canal visuel	Administrateur
Modifier le contenu des plages horaires du canal visuel	Administrateur
Voir le contenu des plages horaires du canal visuel	Administrateur
Modifier le contenu par défaut du canal visuel	Administrateur

- For one audio channel + visual channel

Édition des permissions > Hall channel	
Permissions > contributor	
Description	Permission
Supprimer ce playout	Administrateur
Renommer ce playout	Administrateur
Voir ce playout	Administrateur
Modifier les propriétés de durée d'affichage du playout	Administrateur
Créer une plage horaire dans le calendrier du canal audio	Administrateur
Reprogrammer des plages horaires du canal audio	Administrateur
Supprimer des plages horaires du canal audio	Administrateur
Voir les plages horaires du canal audio	Administrateur
Modifier le contenu des plages horaires du canal audio	Administrateur
Voir le contenu des plages horaires du canal audio	Administrateur
Modifier le contenu par défaut du canal audio	Administrateur
Créer une plage horaire dans le calendrier du canal visuel	Administrateur
Reprogrammer des plages horaires du canal visuel	Administrateur
Supprimer des plages horaires du canal visuel	Administrateur
Voir les plages horaires du canal visuel	Administrateur
Modifier le contenu des plages horaires du canal visuel	Administrateur
Voir le contenu des plages horaires du canal visuel	Administrateur
Modifier le contenu par défaut du canal visuel	Administrateur

Ok Annuler

### 3.7 Calendar time slots

To modify the ACLs of a calendar time slot in a `Layout`, select the `time slot` of your choice ① and click on the `Edit permissions` button of the event. ②.

After selecting one or more users, user groups or roles ③, you can edit the permissions of the calendar time slot ④.

Description	Permission
Reprogrammer cette plage horaire de calendrier	
Supprimer cette plage horaire de calendrier	
Voir cette plage horaire	
Modifier le contenu de cette plage horaire	
Voir le contenu de cette plage horaire de calendrier	

### 3.8 Domains

To modify the ACLs of a front end or device, go to Parameters (1), Domains (2), then double-click on the domain of your choice (here: demo.plugincast.com) (3).

Nom	Nombre maximal d'appareils
demo.plugincast.com (3)	indéfinie
innes.de	indéfinie

### Distribution frontals

Select the WebDAV/internal frontal (here: *internal\_frontal*) (4) or a WebDAV/external frontal, and click on the 'Edit permissions' button of the frontal (5).

Nom	Type d'ID	ID	Modèle	Intergiciel	Dernière connexion
Factory device	MAC	00-1c-e6-02-22-ad	DMB400	Gekkota 4	16/05/2017 15:11:27 ✓
Hall device	MAC	00-1c-e6-02-1b-83	DMB300	Gekkota 3	27/04/2017 11:57:47 ✓
Outside totem device	MAC	aa-ee-ee-aa-ea-ea		Gekkota 3	
Warehouse device	MAC	00-1c-e6-02-1e-45	SMA300	Gekkota 3	23/05/2017 10:29:20 ✓

After selecting one or more users, user groups or roles (6), you can edit the permissions of the frontal (7).

Description	Permission
Voir les appareils cibles de ce frontal de distribution	
Affecter un playout à un appareil de ce frontal de distribution	
Modifier une variable d'un appareil de ce frontal de distribution	

### Devices

Select the WebDAV/internal frontal (here: *internal\_frontal*) (8) or an HTTP WebDAV/external frontal, and click on the Edit device permissions button (9).

Domaine > demo plugncast.com

Propriétés

Nombre maximal d'appareils : Indéfinie

Frontaux

internal\_frontal (1)

external\_frontal

Frontal > internal.frontal

Nom	Type d'ID	ID	Modèle	Intergiciel	Dernière connexion
Factory device	MAC	00-1c-e6-02-22-ad	DMB400	Gekkota 4	16/05/2017 15:11:27 ✓
Hall device	MAC	00-1c-e6-02-1b-83	DMB300	Gekkota 3	27/04/2017 11:57:47 ✓
Outside totem device	MAC	aa-ee-ee-ea-ea-ea		Gekkota 3	
Warehouse device	MAC	00-1c-e6-02-1e-45	SMA300	Gekkota 3	23/05/2017 10:12:56 ✓

<sup>10</sup>, you can edit the device permissions <sup>11</sup>.

Édition des permissions > Factory device

Permissions > contributor

Description	Permission
Voir cet appareil cible	
Affecter un playout à cet appareil	
Modifier une variable de cet appareil	

## Contacts

For any information, you can reach us by phone: **+33 (0)2 23 20 01 62** or mail:

- **Technical Support:** *support@innes.pro*
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## 5.1 Web services API

### Monitoring devices with Plugncast

- Monitoring devices with Plugncast
  - Connecting to XQuery services of plugncast frontals
    - Example using *nodejs*
    - Example using *curl*
  - List of available XQuery methods
    - Fetchers
    - Formatters
    - Getters
    - Helpers
  - Examples of requests
    - Retrieve all device that have not sent their status for more than 5 minutes
    - Retrieve all devices that identify themselves with their mac address
    - Retrieve all devices that are not on time with the frontal
  - Grammars
    - Json objects `devices`
    - Json object `device`
    - XML element `devices`
    - XML element `device`

To retrieve information about devices, you have to connect to XQuery services of frontals.

### Connecting to XQuery services of Plugncast frontals

You have to send an HTTP request with the following parameters:

- destination: `https://<PLUGNCAST_CMS>/.plugncast/.domains/<DOMAIN>/.db/frontalsdb`
- method: *POST*
- headers:
  - `Content-Type : application/xquery`
  - `Content-Length : body size in bytes; chunked connections are not allowed`
- Authentication with one of the users of the domain concerned. Be careful if the user can not see everything: the result may be partial
- body: an XQuery request. Example:

```
declare namespace pncf = "ns.innes.plugncast.frontals";
pncf:getDevicesWithoutStatus()
```

### Example using *nodejs*

```
const https = require("https");

const toWrite = `declare namespace pncf = "ns.innes.plugncast.frontals";
pncf:getDevicesWithoutStatusJSON()`;
const req = https.request(
{
  agent: new https.Agent(),
  rejectUnauthorized: false, // to not check the ssl certificate
  hostname: "<PLUGNCAST_CMS>",
  port: <PORT>,
  method: "POST",
  headers: {
    "Content-Type": "application/xquery",
    "Content-Length": toWrite.length,
  },
  auth: "<USERNAME>:<PASSWORD>",
  path: "/.plugncast/.domains/<DOMAIN>/.db/frontalsdb",
},
function (req) {
  const result = "";
  req.setEncoding('utf8');
  req.on("data", function (chunk) {
    result += chunk;
  });
  req.on("end", function () {
    // TODO deal result
    console.log(result);
  });
},
```

```
);
req.write(toWrite);
req.end();
```

## Example using curl

```
curl -k -u <USERNAME>:<PASSWORD> -X POST --url https://<PLUGNCAST_CMS>/.plugncast/.domains/<DOMAIN>/.db/frontalsdb -d "declare namespace pncf = \"ns.innes.plugncast.frontals\";pncf:getDevicesWithoutStatusJSON()" -H Content-Type:application/xquery
```

- -k disable ssl check
- -u allow to give the identifiers
- -X to select http method to use
- -d allow to give the body
- -H allow to add headers

## Example using PowerShell

```
$LogFile = "output.log"

Function LogWrite {
    Param ([string]$logstring)
    Write-Host $logstring
    Add-content $LogFile -value $logstring
}

# Accept all certificates for http connection.
add-type @'
using System.Net;
using System.Security.Cryptography.X509Certificates;
public class TrustAllCertsPolicy : ICertificatePolicy {
    public bool CheckValidationResult(
        ServicePoint srvPoint, X509Certificate certificate,
        WebRequest request, int certificateProblem) {
        return true;
    }
}
'@

[System.Net.ServicePointManager]::CertificatePolicy = New-Object TrustAllCertsPolicy

# Prepare authentication header
$user = <USERNAME>
$pass = <PASSWORD>
$pair = "$($user):$($pass)"
$encodedCreds = [System.Convert]::ToBase64String([System.Text.Encoding]::ASCII.GetBytes($pair))
$basicAuthValue = "Basic $encodedCreds"
$headers = @{
    Authorization = $basicAuthValue
}

$Body = "declare namespace pncf = `\"ns.innes.plugncast.frontals`";pncf:getDevicesWithoutStatusJSON()"

try {
    $ExecutedRequest = Invoke-WebRequest -Method 'POST' -ContentType 'application/xquery' -Uri https://<PLUGNCAST_CMS>/.plugncast/.domains/<DOMAIN>/.db/frontalsdb -Headers $Headers -Body $Body
    LogWrite( $ExecutedRequest )
}
catch {
    LogWrite( "Exception during request" )
    LogWrite( ($_.Exception).ToString().Trim() )
    LogWrite( ($_.Exception.Message).ToString().Trim() )
}
```

## List of available XQuery methods

### Fetchers

- `fetchDeviceXML` : fetch a device from the database
  - parameters:
    - `frontalId` : *string*: the id of the frontal
    - `deviceId` : *string*: the id of the device
  - result: *XML element(device)*: the element is not modified (no meta information like privileges)
- `fetchDevicesXML` : fetch all devices from the database for a frontal or all

- parameters:
  - `frontalId` : *optional string*: the id of the frontal or nothing for all frontals
- result: *XML element(device)\**: the elements are not modified (no meta information like privileges)
- `fetchRegisteredDevicesXML` : fetch all registered devices from the database for a frontal or all
  - parameters:
    - `frontalId` : *optional string*: the id of the frontal or nothing if all frontals
  - result: *XML element(device)\**: the elements is not modified (no meta information like privileges)

## Formatters

- `formatDeviceWithoutStatusXML` : format a device using XML formatter and remove status
  - parameters:
    - `device` : *XML element(device)*: the device to format
    - `frontalId` : *optional string*: the id of the frontal. If not given, the device element must have been got from `fetchDeviceXML` OR `fetchDevicesXML`
  - result: *XML element(device)* with meta information
- `formatDeviceWithoutStatusJSON` : format a device using JSON formatter and remove status
  - parameters:
    - `device` : *XML element(device)*: the device to format
    - `frontalId` : *optional string*: the id of the frontal. If not given, the device element must have been got from `fetchDeviceXML` OR `fetchDevicesXML`
  - result: *JSON device object*
- `formatDeviceWithStatusXML` : format a device using XML formatter
  - parameters:
    - `device` : *XML element(device)*: the device to format
    - `frontalId` : *optional string*: the id of the frontal. If not given, the device element must have been got from `fetchDeviceXML` OR `fetchDevicesXML`
  - result: *XML element(device)* with meta information
- `formatDevicesWithoutStatusXML` : format devices using XML formatter and remove status
  - parameters:
    - `devices` : *XML element(device)\**: the devices to format
    - `frontalId` : *optional string*: the id of the frontal if is the same for all devices. If not given, the device elements must have been got from `fetchDeviceXML` OR `fetchDevicesXML`
  - result: *XML element(devices)* with meta information
- `formatDevicesWithoutStatusJSON` : format devices using JSON formatter and remove status
  - parameters:
    - `devices` : *XML element(device)\**: the devices to format
    - `frontalId` : *optional string*: the id of the frontal if is the same for all devices. If not given, the device elements must have been got from `fetchDeviceXML` OR `fetchDevicesXML`
  - result: *JSON device object*
- `formatDevicesWithStatusXML` : format devices using XML formatter
  - parameters:
    - `devices` : *XML element(device)\**: the devices to format
    - `frontalId` : *optional string*: the id of the frontal if is the same for all devices. If not given, the device elements must have been got from `fetchDeviceXML` OR `fetchDevicesXML`
  - result: *XML element(devices)* with meta information

## Getters

- `getDeviceWithoutStatusXML` : get a device, formatted as XML, removing status
  - parameters:
    - `frontalId` : *string*: the id of the frontal
    - `deviceId` : *string*: the id of the device
  - result: *XML element(device)* with meta information
- `getDeviceWithoutStatusJSON` : get a device, formatted as JSON, removing status
  - parameters:
    - `frontalId` : *string*: the id of the frontal
    - `deviceId` : *string*: the id of the device
  - result: *JSON device object*
- `getDeviceWithStatusXML` : get a device, formatted as XML
  - parameters:
    - `frontalId` : *string*: the id of the frontal

- deviceId : string: the id of the device
  - result: XML element(device) with meta information
- getDevicesWithoutStatusXML : get devices, formatted as XML, removing status
  - parameters:
    - frontalId : optional string: the id of the frontal, if not given, all frontals are sent
  - result: XML element(devices) with meta information
- getDevicesWithoutStatusJSON : get devices, formatted as JSON, removing status
  - parameters:
    - frontalId : optional string: the id of the frontal, if not given, all frontals are sent
  - result: json object devices
- getDevicesWithStatusXML : get devices, formatted as XML
  - parameters:
    - frontalId : optional string: the id of the frontal, if not given, all frontals are sent
  - result: XML element(devices) with meta information
- getRegisteredDevicesWithoutStatusXML : get registered devices, formatted as XML, removing status
  - parameters:
    - frontalId : optional string: the id of the frontal, if not given, all frontals are sent
  - result: XML element(devices) with meta information
- getRegisteredDevicesWithoutStatusJSON : get registered devices, formatted as JSON, removing status
  - parameters:
    - frontalId : optional string: the id of the frontal, if not given, all frontals are sent
  - result: json object devices
- getRegisteredDevicesWithStatusXML : get registered devices, formatted as XML
  - parameters:
    - frontalId : optional string: the id of the frontal, if not given, all frontals are sent
  - result: XML element(devices) with meta information
- getRegisteredDevicesWithoutStatusHavingStatusLaterThanXML : get registered devices, formatted as XML, removing status, having status newer than a given date
  - parameters:
    - laterThan : xs:dateTime: the date for filtering devices
    - frontalId : optional string: the id of the frontal, if not given, all frontals are sent
  - result: XML element(devices) with meta information
- getRegisteredDevicesWithoutStatusHavingStatusLaterThanJSON : get registered devices, formatted as JSON, removing status, having status newer than a given date
  - parameters:
    - laterThan : xs:dateTime: the date for filtering devices
    - frontalId : optional string: the id of the frontal, if not given, all frontals are sent
  - result: json object devices
- getRegisteredDevicesWithStatusHavingStatusLaterThanXML : get registered devices, formatted as XML, having status newer than a given date
  - parameters:
    - laterThan : xs:dateTime: the date for filtering devices
    - frontalId : optional string: the id of the frontal, if not given, all frontals are sent
  - result: XML element(devices) with meta information
- getRegisteredDevicesWithoutStatusHavingStatusOlderThanXML : get registered devices, formatted as XML, removing status, having status older than a given date
  - parameters:
    - olderThan : xs:dateTime: the date for filtering devices
    - frontalId : optional string: the id of the frontal, if not given, all frontals are sent
  - result: XML element(devices) with meta information
- getRegisteredDevicesWithoutStatusHavingStatusOlderThanJSON : get registered devices, formatted as JSON, removing status, having status older than a given date
  - parameters:
    - olderThan : xs:dateTime: the date for filtering devices
    - frontalId : optional string: the id of the frontal, if not given, all frontals are sent
  - result: json object devices
- getRegisteredDevicesWithStatusHavingStatusOlderThanXML : get registered devices, formatted as XML, having status older than a given date
  - parameters:
    - olderThan : xs:dateTime: the date for filtering devices
    - frontalId : optional string: the id of the frontal, if not given, all frontals are sent
  - result: XML element(devices) with meta information

## Helpers

- `getFrontalByRegisteredDevices` : get the frontal ids by device id
  - parameters: none
  - result: *json map*: map between a device id and a frontal id
- `countRegisteredDevices` : get the number of registered devices
  - parameters: none
  - result: number

## Examples of requests

### Retrieve all device that have not sent their status for more than 5 minutes

```
declare namespace pncf = "ns.innes.plugncast.frontals";
pncf:getRegisteredDevicesWithoutStatusHavingStatusOlderThanJSON(fn:current-dateTime() - xs:duration("PT5M"))
```

### Retrieve all devices that identify themselves with their mac address

```
declare namespace pncf = "ns.innes.plugncast.frontals";
pncf:formatDevicesWithoutStatusJSON(pncf:fetchDevicesXML()[fn:data(pncf:id-type) = "mac"])
```

### Retrieve all devices that are not on time with the frontal

```
declare namespace pncf = "ns.innes.plugncast.frontals";
declare namespace ds = "ns.innes.device-status";
let $devices := (
  let $tolerance := xs:duration("PT1S")
  for $device in pncf:fetchDevicesXML()
  let $status := $device/pncf:status
  let $recievedDate := xs:dateTime($status/pncf:date-status)
  let $generatedDate := xs:dateTime($status/ds:device-status/ds:status/ds:date)
  where $generatedDate + $tolerance < $recievedDate or $generatedDate - $tolerance > $recievedDate
  return $device
)
return pncf:formatDevicesWithoutStatusJSON($devices)
```

## Grammars

### Json objects devices

```
{
  "devices": Array<device>,
  "hiddenResources": boolean, // mean that some devices are not sent because of your permissions
}
```

### Json object device

```
{
  "phantom": boolean,
  "registered": boolean,
  "id": string,
  "idType": enum {mac, hostname, uuid, UNKNOWN},
  "frontalId": string,
  "owner": string,
  "currentUserPrivilegeSet": map of privilege -> enum {permit, deny},
}
```

### XML element devices

- élément `devices` : `device*`
  - élément `device` \*
  - élément `hidden-resources` : `xs:boolean`: mean that some devices are not sent because of your permissions

### XML element device

- élément `device`
  - élément `phantom` : *xs:boolean*
  - élément `registered` : *xs:boolean*
  - élément `id` : *xs:string*
  - élément `id-type` : *xs:string*
  - élément `status`
    - élément `date-status` : *xs:dateTime* (example : 2017-11-08T10:41:07.447Z)
    - élément `frontal-date-delta` : *xs:dayTimeDuration* (example : PT0S): estimated difference between the date of the frontal, and the date of the cms
    - élément `device-status` : cf. `device-status` app
  - élément `frontal-id` : *xs:string*
  - élément `owner` : *xs:string*
  - élément `current-user-privilege` : *xs:any\**
    - élément `permission` \*
      - élément `feature` : *xs:string*
      - élément `decision` : *xs:string* (permit or deny)

## 5.2 Get a custom variable value in a HTML page

```

<!doctype html>
<html lang="fr">

<head>
    <meta charset="utf-8">
    <title>Variable Digital Signage</title>
    <style>
        body {
            background-color: black;
            text-align: center
        }

        p {
            color: blue;
            font-size: 5em;
            color: grey;
            font-family: sans-serif
        }

        #logo {
            font-size: 25em;
            color: grey;
        }
    </style>
<script type="text/javascript">

(function () {
    /***** Here are the variables you can modify *****/
    // this is the name of the custom variable set and published
    var CUTSTOM_VARIABLE_NAME = "MyVariable";
    /***** From here don't modify anything *****/
    /***** */

    window.onload = function () {
        //Variable whose the name is to test
        var customVariableValue = getCustomVariableValue(CUTSTOM_VARIABLE_NAME);
        if (customVariableValue) {
            document.getElementById("outputTextArea").innerHTML = customVariableValue;
        } else {
            document.getElementById("outputTextArea").innerHTML = "Variable is not defined or you are not using this script in Playzilla";
        }
    };

    function getCustomVariableValue(customVariableName) {
        var customVariableValue;
        if (window.top.Playzilla !== undefined) {
            // Playzilla 4 usage, the object is not defined
            customVariableValue = window.top.Playzilla.customVariablesManager.getValue(customVariableName);
        } else {
            // Playzilla 3 usage, the Playzilla object is not defined
            var xpfns = "ns.innes.xpf.3";
            var variables = this.xpfDocument.getElementsByTagNameNS(xpfns, "variable");
            for (var i = 0; i < variables.length; i++) {
                if (variables[i].getAttribute("name") === customVariableName) {
                    customVariableValue = variables[i].textContent;
                    break;
                }
            }
        }
        return customVariableValue;
    }
})(this);

</script>
</head>

<body>

<p>NAME <br> MyVariable = <span id="outputTextArea">...</span></p>
</body>

</html>

```