

Deliverable

Project Acronym:	IMAC
Grant Agreement number:	761974
Project Title:	<i>Immersive Accessibility</i>



D3.2 Accessibility Content Manager

Revision: 1.0

Authors: Enric Torres Feixas & Kimiasadat Mirehbar (Anglatècnic)

Delivery date: M14 (27-11-2018)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement 761974

Dissemination Level

P	Public	X
C	Confidential, only for members of the consortium and the Commission Services	

Abstract:

This document is meant to be a concise user manual for professional users who wish to use ImAc accessibility content manager platform

REVISION HISTORY

Revision	Date	Author	Organisation	Description
0.1	26-06-2018	Enric Torres	ANGLA	Template and ToC
0.2	27-06-2018	Enric Torres	ANGLA	First version
0.3	27-06-2018	Enric Torres	ANGLA	Second version
0.4	28-06-2018	Enric Torres	ANGLA	Final version
1.0	27-11-2018	Kimia Mirehbar	ANGLA	Final version

Disclaimer

The information, documentation and illustrations available in this deliverable, is written by the IMAC – project consortium under EC grant agreement H2020-ICT-2016-2 761974 and does not necessarily reflect the views of the European Commission. The European Commission is not liable for any use that may be made of the information contained herein.

Statement of originality:

This document contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

EXECUTIVE SUMMARY

In T3.2 of the ImAc project, we are looking for a comprehensive environment for professional users for managing and controlling the workflow of accessibility contents.

In this report, during first chapter, we present an introduction. The introduction is followed by a presentation of architecture and a brief description in chapter 2. In the next chapter, we will see a guide through installation process and the methods to have access to source code and the ACM user interface.

Finally, in chapter 4, we present a simple and detailed user manual for professional users.

CONTRIBUTORS

First Name	Last Name	Company	e-Mail
Enric	Torres Feixas	ANGLA	enric@anglatecnic.com
Kimiasadat	Mirehbar	ANGLA	kimia@anglatecnic.com
Àlex	Soler de Ferrater	ANGLA	alex@anglatecnic.com

CONTENTS

Revision History	2
Executive Summary	3
Contributors	4
Contents	5
Tables of illustrations and tables	6
List of acronym	7
1. Introduction	8
1.1. purpose of this document	8
1.2. scope of this document	8
1.3. status of this document	8
2. Component description	9
2.1. General Description	9
2.2. Architecture	9
3. how to	11
3.1. Introduction	11
3.2. How to install the ACM	11
3.3. How to access the installed ACM interface	16
4. User manual	17
4.1. System manager	17
4.1.1. Users	17
4.1.2. Profiles	18
4.1.3. Languages	19
4.1.4. System	20
4.1.5. Logs	20
4.1.6. Scenario	21
4.2. Content manager	23
4.2.1. Assets	23
4.2.2. Bin	25
4.2.3. Reports	25

TABLES OF ILLUSTRATIONS AND TABLES

Illustration 1: System Manager Architecture	10
Illustration 2: Content Manager Architecture	10
Illustration 3: ACM login page	16
Illustration 4: Users List	17
Illustration 5: User create/edit dialogue	18
Illustration 6: Profile list	18
Illustration 7: Profile creation/editing dialogue	19
Illustration 8: Languages list	19
Illustration 9: System section	20
Illustration 10: Logs screen	21
Illustration 11: Creating the “Subtitle manager” profile	22
Illustration 12: Creating a user with “Subtitling manager” profile	22
Illustration 13: Asset creation	23
Illustration 14: Asset properties	24
Illustration 15: Video properties	25
Illustration 16: Subtitle properties	25
Illustration 17: Audio description properties	25
Illustration 18: Sign language properties	25
Illustration 19: Reports	25

LIST OF ACRONYM

Acronym	Description
ACM	Accessibility Content Manager
AD	Audio Description
AST	Audio Subtitles
ST	Subtitles
SM	System Manager Access
SL	Sign Language

1. INTRODUCTION

1.1. PURPOSE OF THIS DOCUMENT

One of the objectives of ImAc is to create a high level accessibility content production and management system for immersive media.

This deliverable presents a comprehensive presentation of task T3.2 “Accessibility Content Manager” of the ImAc project. The goal of this task is to develop a central control of the system where ImAc contents such as subtitles, sign language and audio description are available to users and external modules. It is also a place for automatic notifications and conversations among users.

This Task is specifically aimed to “professional users” who ensure the standard process of content production and management, hence this deliverable addresses the functionality of the first version of the developed Accessibility Content Manager (ACM) platform.

1.2. SCOPE OF THIS DOCUMENT

This document is focused on giving a bright view to professional users of ACM. As seen, the first chapter is dedicated to introduction, this is followed by chapter 2 where we present a general description of the system and a brief architecture of the software. In chapter 3, it is explained how to have access to codes and the environment and more importantly how to install ACM. Finally in chapter 4, a detailed user manual is presented in order to help professional users to recognize the environment and it eases their process of learning to work with ImAC ACM.

1.3. STATUS OF THIS DOCUMENT

As ImAc improves user’s requirements gradually, this deliverable D3.2 will be updated subsequently. This is the first version of D2.3 with delivery foreseen in M09.

2. COMPONENT DESCRIPTION

In this chapter we describe how the components are working and how the architecture is compatible with user requirements deduced from previous tasks. We start this section with a general description and we finish with the architecture elaboration.

2.1. GENERAL DESCRIPTION

As stated before, T3.2 is looking to develop a comprehensive ACM, where all accessibility contents are available, also it is a place where all automatic processes like notifications and conversations occur. According to the roadmap, up to this date the first version of the web interfaces have been developed for bellow objectives:

- Access in a controlled way with identification.
- Uploading videos and assigning metadata needed for the production of accessibility contents such as subtitling, audio description and sing language.
- Uploading and downloading accessibility contents and communication with the corresponding web editors for its edition.
- Cataloguing all the contents in Assets.
- Presence of complete settings and configurations in order to have a more standard environment
- Having statistical data and logs

2.2. ARCHITECTURE

The ACM structure is comprised of two parts for this purpose.

- SM (system manager)
- CM (content manager)

The system manager section refers to a part where system administration functionalities are included. The main users of this section will be technicians who set the working environment conditions. Professional users who work on content production and management i.e. management of work such as subtitling, etc. would not work in this area specifically. In illustration 1 a brief architecture is seen. The functionality will be explained in section User Manual.

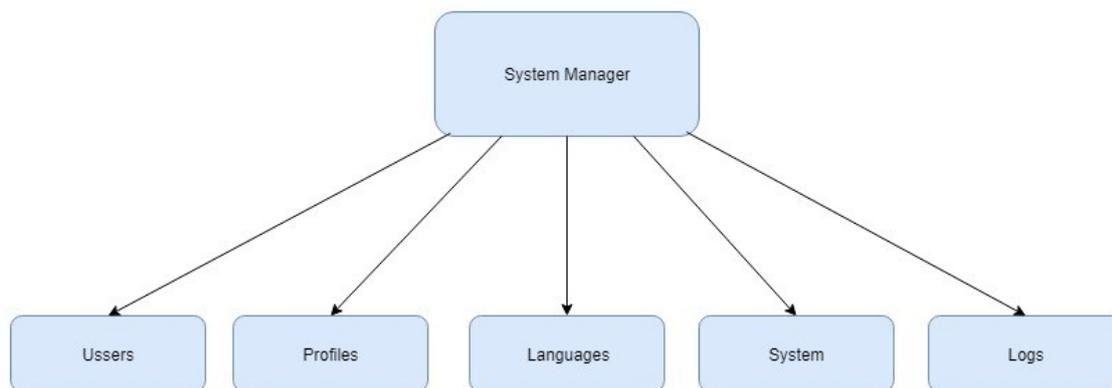


Illustration 1: System Manager Architecture

The Content Manager section is a place with a focus on the management of both the contents needed for the production of the accessibility files as well as the management of the results of the production. Professional users who manage the workflow of the accessibility contents will work in this place.

The detailed functionality of ACM (Accessibility Content Manager) will be presented in section User Manual.

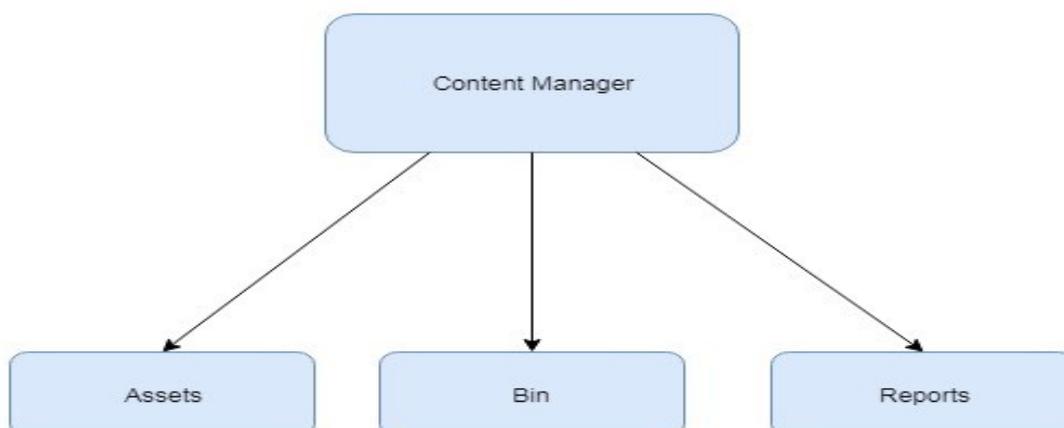


Illustration 2: Content Manager Architecture

3. HOW TO

3.1. INTRODUCTION

This chapter describes the installation process and the user interface of the ACM. The software is not publicly available.

3.2. HOW TO INSTALL THE ACM

- **Access**

In order to install the ImAc Accessibility Content Manager, first we need to access the server via SSH (console)

- **Server:** imac.gpac-licensing.com
- **User & pass:** to be asked from server administrator

- **Installation**

We have installed a Linux operating system, Debian 9 distribution. We have used the 'root' user to install and set everything.

- **Packages**

We need to install some packages into the server in order to have all the tools and programs to run it:

```
apt-get update  
  
apt-get install vim screen rsync ntp less man net-tools apache2 php php7.0-  
mysql php7.0-curl php7.0-gettext php7.0-mbstring php7.0-xml openssl mysql-  
server  
  
php7.0-odbc curl apt-transport-https php7.0-sybase freetds-common libsybdb5  
exim4
```

This will install the main tools for the system:

- Apache Web Server
- MySQL Database (MariaDB)
- PHP 7.0 engine
- System Tools

each package has to be configured.

Note: we will use “Vim” editor to edit each file. In order to save and exit: “ESC → :wq”

- **Apache**

Configure the project, its locations and parameters:

```
vim /etc/apache2/sites-available/acm_deliverable.conf
```

```
Alias /acm_deliverable/ /var/www/content_manager_deliverable/html/

<Location /acm_deliverable/>
  order deny,allow
  deny from all
  allow from 172.19.192.0/255.255.255.0
  allow from 127.0.0.1/255.255.255.0
  allow from all
  Options Indexes FollowSymLinks MultiViews
  php_flag magic_quotes_gpc Off
  php_flag short_open_tag Off
  php_flag register_globals Off
  php_value upload_max_filesize 5G
  php_value post_max_size 5G
  php_value memory_limit 2G
  php_value max_execution_time 600
  php_value max_input_time 60
  php_value max_file_uploads 50
  AddDefaultCharset UTF-8
  php_value session.gc_maxlifetime 14400
  ErrorDocument 404 /acm_deliverable/404_not_found.php
</Location>
```

```
vim /etc/apache2/sites-available/editor_deliverable.conf
```

```
Alias /editor_deliverable/ /var/www/content_manager_deliverable/html/ed/

<Location /editor_deliverable/>
  order deny,allow
  deny from all
  allow from 172.19.192.0/255.255.255.0
  allow from 127.0.0.1/255.255.255.0
  allow from all
  Options Indexes FollowSymLinks MultiViews
  php_flag magic_quotes_gpc Off
  php_flag short_open_tag Off
```

```
php_flag register_globals Off
php_value upload_max_filesize 5G
php_value post_max_size 5G
php_value memory_limit 2G
php_value max_execution_time 600
php_value max_input_time 60
php_value max_file_uploads 50
AddDefaultCharset UTF-8
php_value session.gc_maxlifetime 14400
ErrorDocument 404 /editor_deliverable/404_not_found.php
</Location>
```

Now we have to reload the Apache Web Server in order to apply this configuration.

```
a2ensite acm
a2ensite editor
service apache2 reload
```

- **PHP**

Just in order to disable some logs from the Apache server log trace.

```
vim /etc/php/7.0/apache2/php.ini
```

```
error_reporting = E_ALL & ~E_DEPRECATED & ~E_STRICT & ~E_NOTICE
```

- **CODE**

A zipped file will be provided for the installation:

```
content_manager_r20.tgz
```

Navigate to the web server code folder:

```
cd /var/www/
sudo mkdir content_manager_deliverable
sudo chown www-data:www-data content_manager_deliverable
sudo chmod 775 content_manager_deliverable
cd content_manager_deliverable
```

Unzip the code file:

```
tar xvfz content_manager_rXX.tgz
```

Configure the path in the following file

```
vim html/includes.inc.php
```

```
<?php
require_once("/var/www/content_manager_deliverable/includes/connection.inc.
php");?>
```

Configured paths and database parameters in the following file:

```
vim includes/config-local.inc.php
```

```
//PATHS
define("PATH_ROOT", "/var/www/content_manager_deliverable");
//ROOT
define("ROOT_PAGES", "/acm_deliverable");
define("ROOT_PAGES_ED", "/editor_deliverable");
//BBDD
$bbdd_usuario='imac';
$bbdd_pwd='aYooph8ietoo';
$bbdd_servidor='localhost';
$bbdd_bbdd='content_manager_deliverable';
$bbdd_driver='mysqli';
```

- **MYSQL**

It's actually a MariaDB 10.1.26. We need to add the user "imac" and import the database:

```
mysql -u root -p
```

```
GRANT ALL PRIVILEGES ON *.* To 'imac'@'%' IDENTIFIED BY 'aYooph8ietoo';
FLUSH PRIVILEGES;
exit;
```

```
cd /var/www/content_manager/bbdd
```

```
mysql -u imac -p content_manager < content_manager_r20.sql
```

Type the password in order to import.

- **Crontab**

In this file we will Configure the Linux Task Manager to execute periodically some scripts:

```
vim /etc/crontab
```

```
#CONTENT_MANAGER
* * * * * root /var/www/content_manager/scripts/generate_transcoding.php
0 0 * * * root /var/www/content_manager/scripts/clean_transcodings.php
```

3.3. HOW TO ACCESS THE INSTALLED ACM INTERFACE

Once we have everything installed and set, we should be able to access the web interface normally. To access the current installed version for this delivery:

1. Open your preferred browser (Chrome and Firefox work better with the interface).
2. Browse to the path where the it has been installed.
3. A login page will appear:

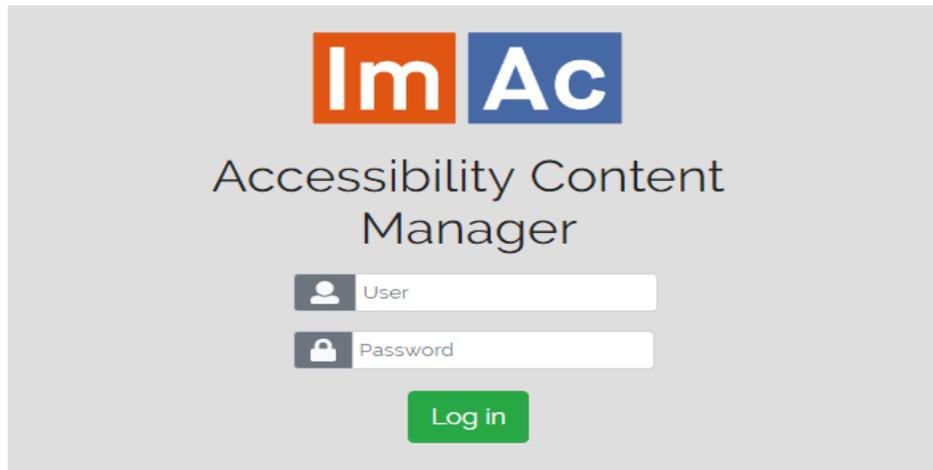


Illustration 3: ACM login page

4. USER MANUAL

In this section, we introduce a detailed user manual of the ACM.

As mentioned in the previous sections, there are 2 sections to be explained in this deliverable. We start with SM (system manager) and continue with the CM (content manager).

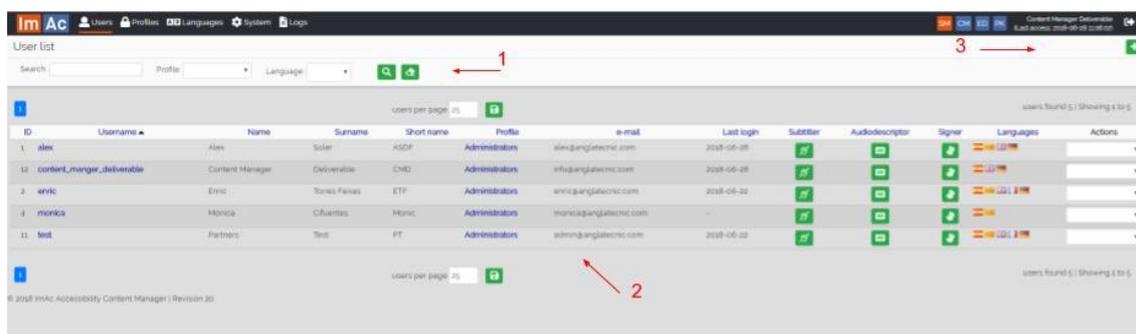
4.1. SYSTEM MANAGER

As known from previous sections, System Management is defined for technicians who make sure the functionality of the environment and required settings and permissions for professional users working in ACM.

This section is comprised of six parts, the first five parts go through the subsections of the SM, and the final part gives a scenario as an example for clarification.

4.1.1. Users

As the name of the section demonstrates, the functionality of this part is focused on users administration and creation.



ID	Username	Name	Surname	Short name	Profile	e-mail	Last login	Subtitle	Audiodescriptor	Signer	Languages	Actions
1	alex	Alex	ASDF	Administrators	alex@anglatecnic.com	2018-06-28						
12	content_manager_deliverable	Content Manager	Deliverable	CMD	Administrators	info@anglatecnic.com	2018-06-28					
7	eric	Eric	Tomas Pallas	ETP	Administrators	eric@anglatecnic.com	2018-06-22					
8	monica	Mónica	Chuanes	Honic	Administrators	monica@anglatecnic.com	-					
11	test	Partners	Test	PT	Administrators	admin@anglatecnic.com	2018-06-22					

Illustration 4: Users List

In Illustration 4 we can see the following points:

1. Search bar, it allows searching through users using different filters and settings
2. List of users showing their information, their profile type and their specific skill (language, AD, AST, SD)
3. The plus sign is aimed to create new users
4. To edit the user data, delete the user or block the user access select the corresponding action from the drop-down on the right.

At the moment of creating/editing a user, illustration 5 appears, in this case the description is clear.

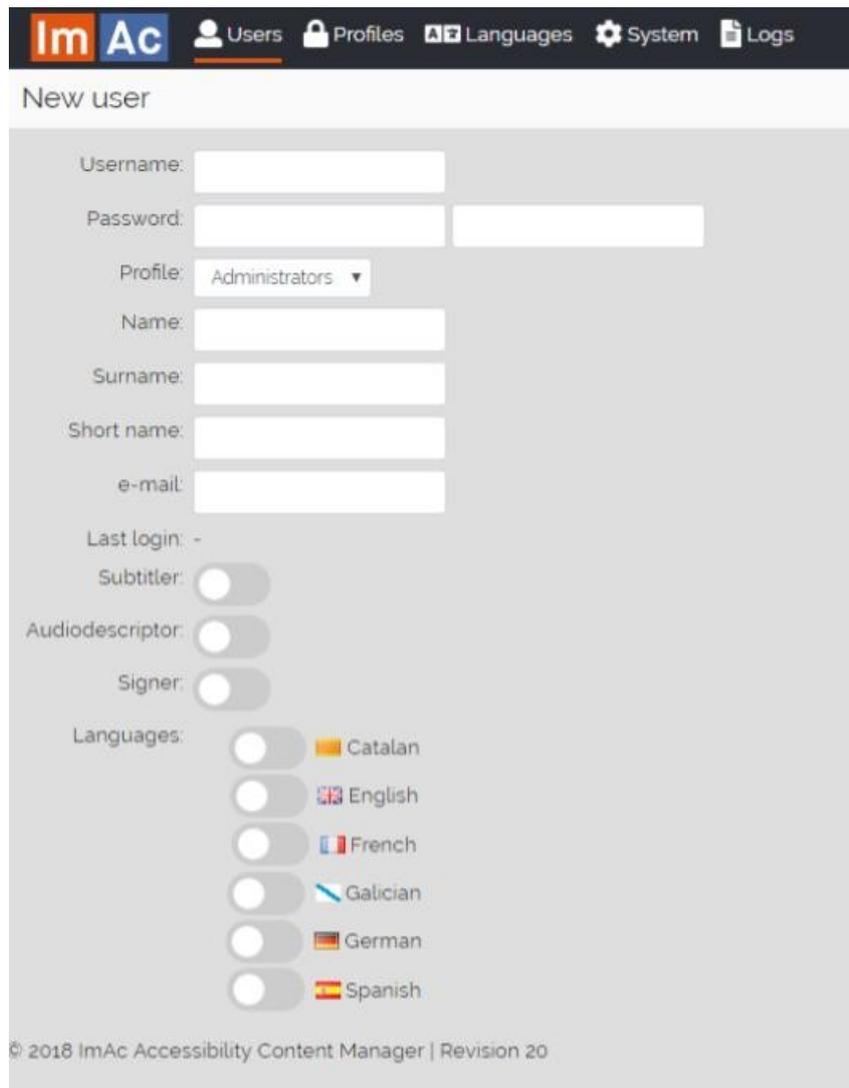


Illustration 5: User create/edit dialogue

4.1.2. Profiles

Profiles contain the different available profiles with different permissions to the ACM.



Illustration 6: Profile list

In Illustration 6 we can see the following points:

1. Search bar, it allows searching through users using different filters and settings

2. List of available profiles, showing their name and their capabilities and permissions
3. The plus sign is aimed to create new profiles
4. To edit or delete the profile select the corresponding action from the drop-down on the right.

At the moment of creating or editing a new profiles, illustration 7 appears, in this environment, the technician can choose different capabilities and access for the profile (reading, editing, deleting, etc.)

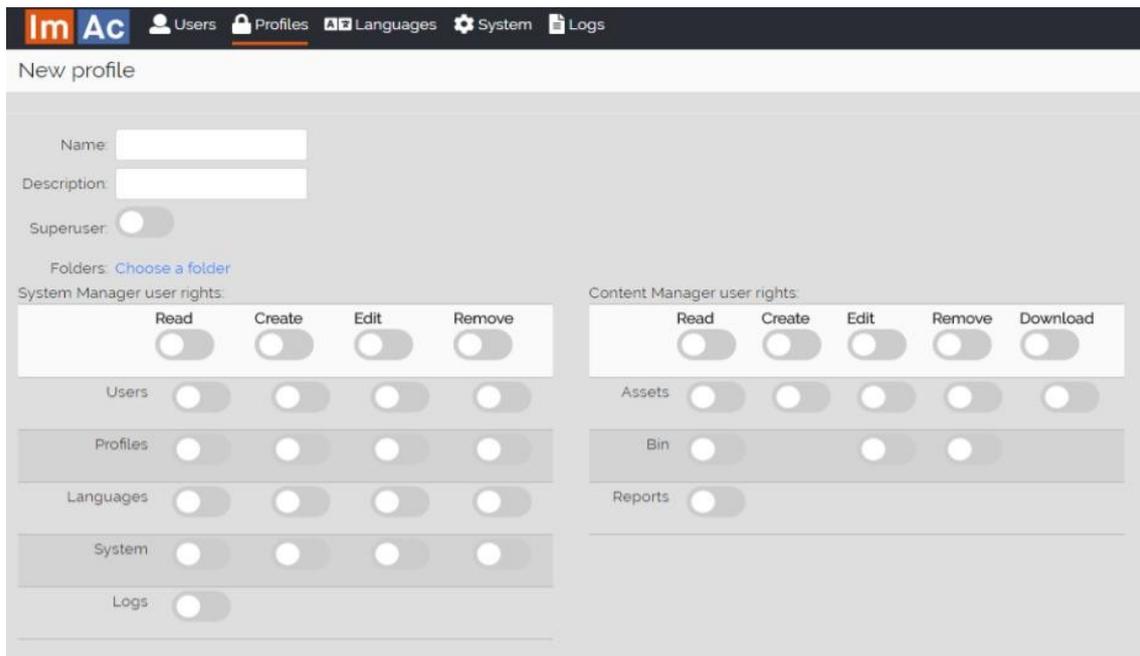


Illustration 7: Profile creation/editing dialogue

4.1.3. Languages

In this section, new languages for the accessibility contents can be created or existing ones can be edited.

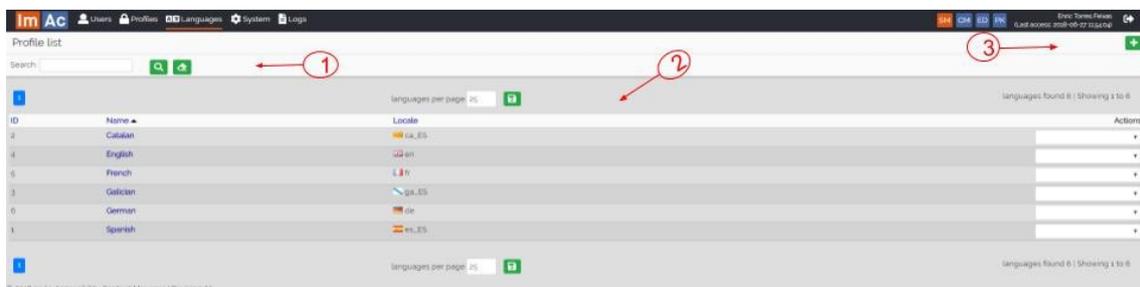


Illustration 8: Languages list

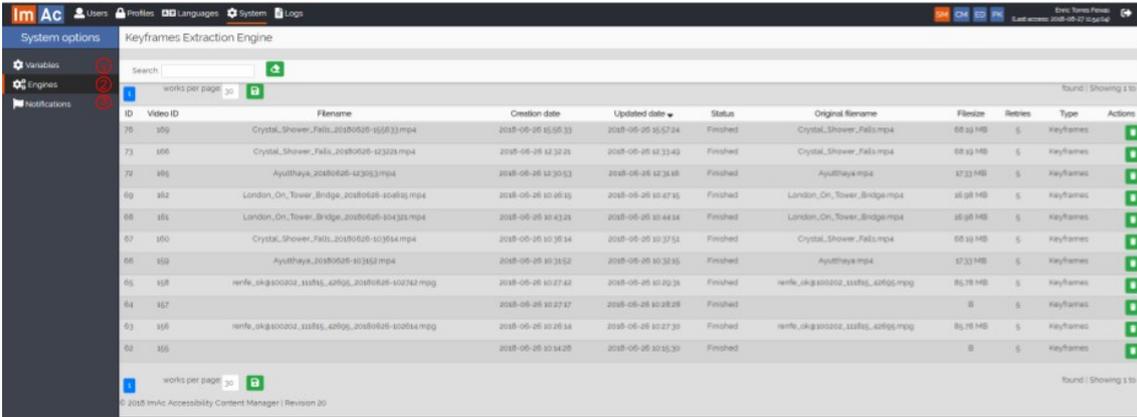
In Illustration 8 we can see the following points:

1. Search bar, allows searching through languages
2. List of existing languages with their locale
3. Creating a new language using the plus icon.
4. To edit or delete a language select the corresponding action from the drop-down on the right.

Note: It is important to know the language locale at the moment of creation or edition.

4.1.4. System

System section corresponds to administrative actions done by technicians. illustration 9 shows the page.



The screenshot displays the 'System' section of the Accessibility Content Manager. It features a search bar at the top, a 'works per page' dropdown set to 30, and a table listing keyframes extraction tasks. The table columns are: ID, Video ID, Filename, Creation date, Updated date, Status, Original filename, Filesize, Retries, Type, and Actions. The table contains 15 rows of data, all with a 'Finished' status. The 'Actions' column for each row contains a green plus icon and a green minus icon.

ID	Video ID	Filename	Creation date	Updated date	Status	Original filename	Filesize	Retries	Type	Actions
76	169	Crystal_Shower_Falls_20180529-162331.mp4	2018-05-29 15:50:33	2018-05-29 15:57:24	Finished	Crystal_Shower_Falls.mp4	68.12 MB	5	Keyframes	[+]
73	168	Crystal_Shower_Falls_20180529-162323.mp4	2018-05-29 15:32:28	2018-05-29 15:33:40	Finished	Crystal_Shower_Falls.mp4	68.12 MB	5	Keyframes	[+]
72	165	Ayutthaya_20180528-142303.mp4	2018-05-28 14:30:53	2018-05-28 14:36:16	Finished	Ayutthaya.mp4	17.33 MB	5	Keyframes	[+]
69	162	London_On_Tower_Bridge_20180528-140819.mp4	2018-05-28 14:08:19	2018-05-28 14:07:16	Finished	London_On_Tower_Bridge.mp4	18.98 MB	5	Keyframes	[+]
68	161	London_On_Tower_Bridge_20180528-140321.mp4	2018-05-28 14:03:21	2018-05-28 14:04:14	Finished	London_On_Tower_Bridge.mp4	18.98 MB	5	Keyframes	[+]
67	160	Crystal_Shower_Falls_20180528-140354.mp4	2018-05-28 14:03:14	2018-05-28 14:07:51	Finished	Crystal_Shower_Falls.mp4	68.12 MB	5	Keyframes	[+]
66	159	Ayutthaya_20180528-140312.mp4	2018-05-28 14:03:12	2018-05-28 14:03:16	Finished	Ayutthaya.mp4	17.33 MB	5	Keyframes	[+]
65	158	verfe_ukg20202_118f1s_42f9g_20180528-102742.mpg	2018-05-28 10:27:42	2018-05-28 10:29:38	Finished	verfe_ukg20202_118f1s_42f9g.mpg	85.78 MB	5	Keyframes	[+]
64	157		2018-05-28 10:27:17	2018-05-28 10:28:28	Finished		0	5	Keyframes	[+]
63	156	verfe_ukg20202_118f1s_42f9g_20180528-102814.mpg	2018-05-28 10:28:14	2018-05-28 10:27:39	Finished	verfe_ukg20202_118f1s_42f9g.mpg	85.78 MB	5	Keyframes	[+]
62	155		2018-05-28 10:14:25	2018-05-28 10:15:39	Finished		0	5	Keyframes	[+]

Illustration 9: System section

In Illustration 9 we can see the following points:

1. Variables: shows different variables of the environment that can be added edited or deleted
2. Engines: this section will show all the working queue of the ACM engines (software without user interaction), in current version it is only done for the engine that extracts the keyframes once a video has been uploaded.
3. Notifications: this section lets the user edit the templates for automatic notifications, in current version the edition of the e-mail template.

4.1.5. Logs

Logs section can be significant for administrative tasks. illustration 10 shows the menu.

Id	Date	To	From	Subject	Body
40	2018-06-26 14:35:12	enric@anglatecnic.com	monica@anglatecnic.com	New Subtitle file assigned to you	
39	2018-06-26 14:37:53	enric@anglatecnic.com	monica@anglatecnic.com	New Subtitle file assigned to you	
38	2018-06-26 14:37:35	enric@anglatecnic.com	monica@anglatecnic.com	New Subtitle file assigned to you	
37	2018-06-26 14:37:30	enric@anglatecnic.com	monica@anglatecnic.com	New Subtitle file assigned to you	
36	2018-06-26 14:37:30	enric@anglatecnic.com	monica@anglatecnic.com	New Subtitle file assigned to you	
35	2018-06-26 13:05:17	admin@anglatecnic.com	monica@anglatecnic.com	New Subtitle file assigned to you	
34	2018-06-26 12:21:05	ale@anglatecnic.com	monica@anglatecnic.com	New Subtitle file assigned to you	
33	2018-06-26 11:01:46	ale@anglatecnic.com	monica@anglatecnic.com	New Subtitle file assigned to you	
32	2018-06-26 08:54:30	admin@anglatecnic.com	monica@anglatecnic.com	New Subtitle file assigned to you	
31	2018-06-26 13:25:07	enric@anglatecnic.com	monica@anglatecnic.com	New Subtitle file assigned to you	
30	2018-06-24 18:50:29	admin@anglatecnic.com	monica@anglatecnic.com	New Subtitle file assigned to you	
29	2018-06-24 11:57:25	ale@anglatecnic.com	monica@anglatecnic.com	New Subtitle file assigned to you	
28	2018-06-24 11:57:17	ale@anglatecnic.com	monica@anglatecnic.com	New Subtitle file assigned to you	
27	2018-06-24 09:21:52	ale@anglatecnic.com	monica@anglatecnic.com	New Subtitle file assigned to you	
26	2018-06-23 15:00:05	admin@anglatecnic.com	monica@anglatecnic.com	New Subtitle file assigned to you	
25	2018-06-23 17:54:08	ale@anglatecnic.com	monica@anglatecnic.com	New Subtitle file assigned to you	
24	2018-06-23 15:35:42	admin@anglatecnic.com	monica@anglatecnic.com	New Subtitle file assigned to you	
23	2018-06-23 10:43:43	admin@anglatecnic.com	monica@anglatecnic.com	New Subtitle file assigned to you	
22	2018-06-23 10:43:35	enric@anglatecnic.com	monica@anglatecnic.com	New Subtitle file assigned to you	
21	2018-06-23 10:43:08	admin@anglatecnic.com	monica@anglatecnic.com	New Subtitle file assigned to you	
20	2018-06-23 09:54:03	ale@anglatecnic.com	monica@anglatecnic.com	New Subtitle file assigned to you	
19	2018-06-22 17:51:49	ale@anglatecnic.com	monica@anglatecnic.com	New Subtitle file assigned to you	

Illustration 10: Logs screen

In Illustration 10 we can see the following points:

1. Notification logs, shows the status of the recent notifications sent.
2. Logs, shows the system logs i.e. warnings and errors that might have happened

4.1.6. Scenario

In this section, we elaborate the following scenario to clarify SM functionality:

- We enter illustration 7 and we create a new profile named “subtitling manager”.
- This profile aims to people who want to manage the subtitling workflow.
- Illustration 11 shows the specifications of this profile, note the permissions this profile has.
- Next move, we go to User creation page to create a new user, now it is possible to assign the profile we just created to the new user, illustration 12 shows how it is done

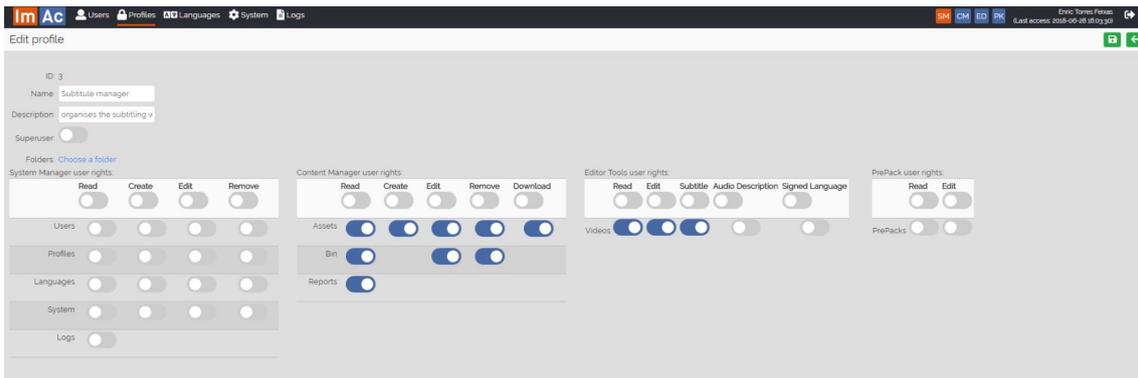


Illustration 11: Creating the “Subtitle manager” profile

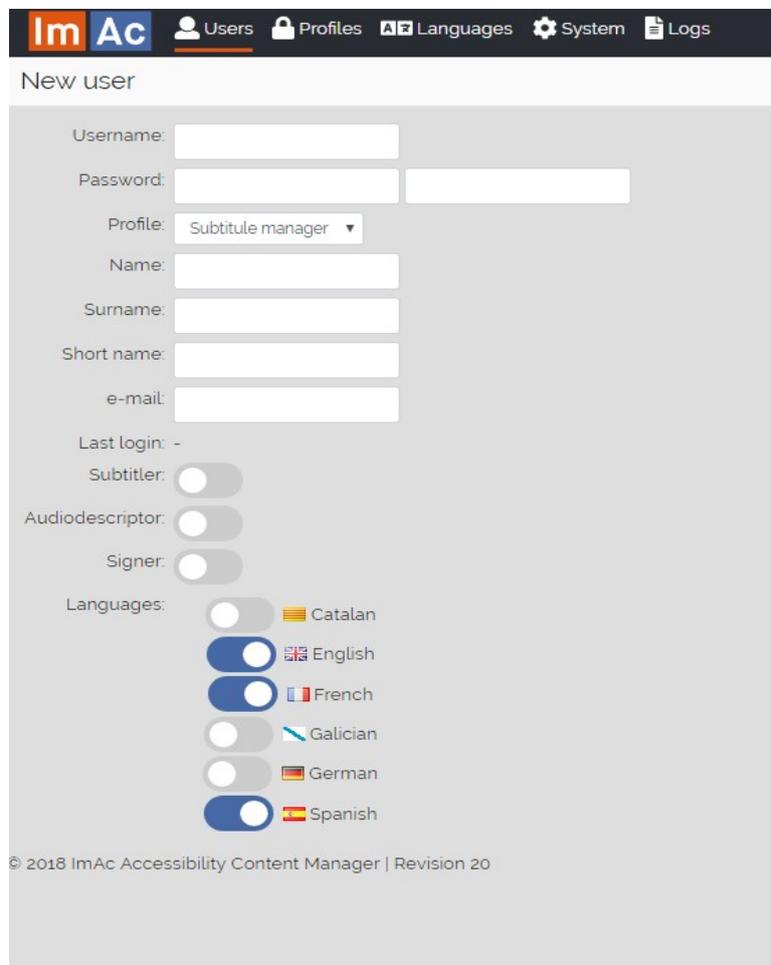


Illustration 12: Creating a user with “Subtitling manager” profile

4.2. CONTENT MANAGER

Content Manager is the place where all the accessibility contents can be found and managed. It is divided into 3 subsections:

4.2.1. Assets

The contents are organised in Assets. Each asset has all the contents that are related to a programme and required for both producing the accessibility contents and managing the results of the production.

This section allows the user to manage and catalogue the assets and also their properties individually.

There are two ways to catalogue assets:

- By metadata, so to find an asset the user needs to use the search bar.
- By folder, so assets are catalogued in a hierarchical order.

To change between the two mentioned ways, the user needs to click on the folder icon on the top left of the page (see left red arrow in Illustration 12). When the icon shows a closed folder the metadata way is selected, when it is an open folder the hierarchical way is selected.

We will explain how it works through a given scenario. Imagine creating an asset from the scratch:

- In illustration 12, we can see a clear view, first we click the positive sign to create a new asset, we even can choose a specific folder for the asset:
- User can choose a title, put some comments and finally upload a video file. In the top right of the page, there are some other signs too, they help the user to change the view, move asset to bin, copy or link the asset or sort them alphabetically.

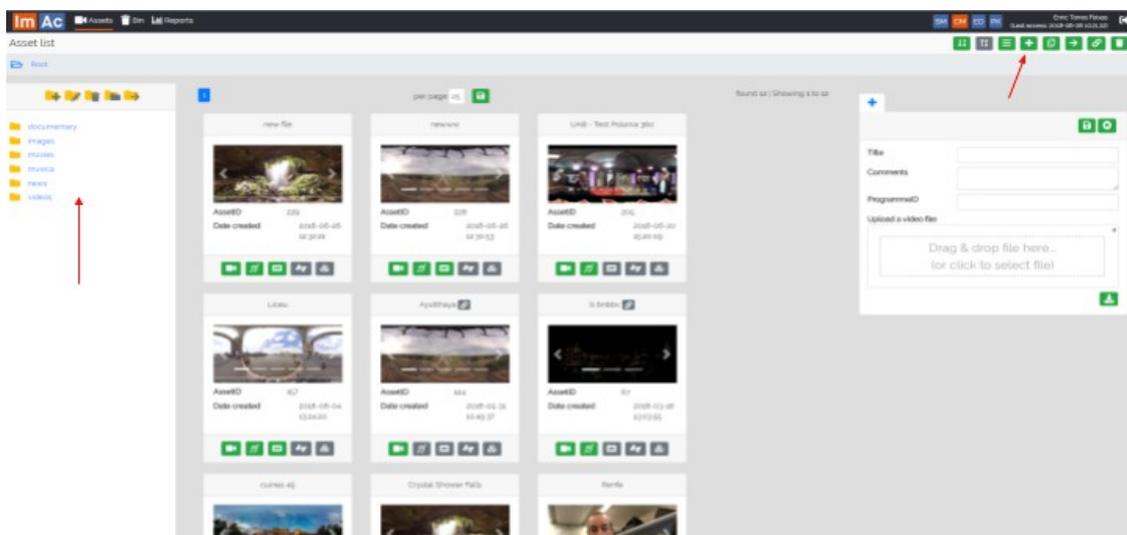


Illustration 13: Asset creation

- After creation, the user clicks on one of the asset's icons and they see illustration 14:
- The red circle shows the options we have that will be explained later in this document

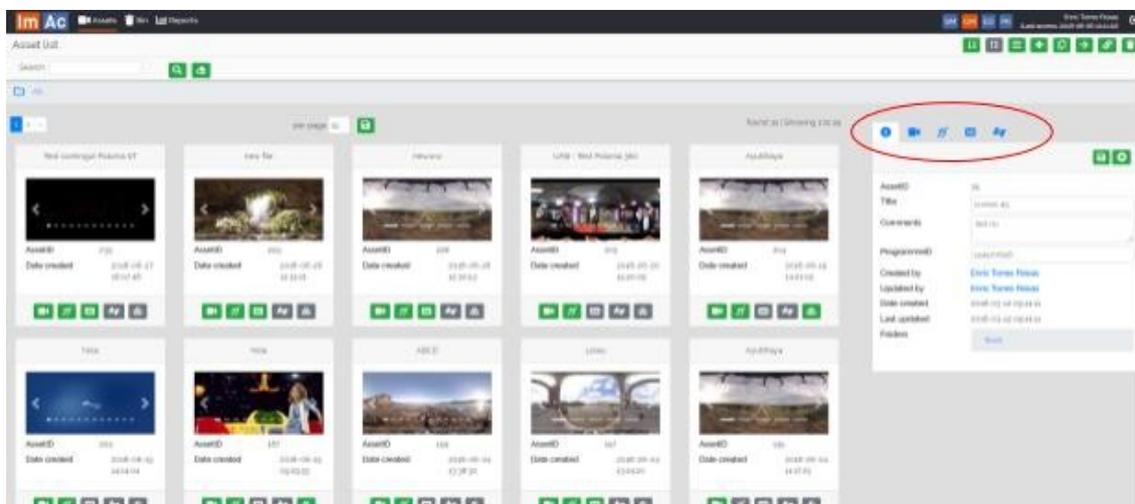


Illustration 14: Asset properties

- The first one from the left shows the general information of the asset which is visible in the above illustration.
- Illustration 15 shows the view when we click on the next one (video), in this view, we see different previews of the video and also some buttons to play it, below the player, general information of the video can be found.
- Illustration 16 shows the properties of the subtitle files, here you can upload and download a subtitle files for each language, create a new subtitle file for a language and assign each subtitle file to subtitles for its edition, below information and a preview of the subtitle file is seen.
- Illustration 17 shows the properties of sign language files with the same features as the previous subtitle case.
- Illustration 18 shows the properties of audio description files with the same features as the previous subtitle case.



Illustration 15:
Video properties



Illustration 16:
Subtitle properties



Illustration 17:
Audio description
properties



Illustration 18:
Sign language
properties

4.2.2. Bin

Bin acts like a recycle bin for the system. Contents which have been moved to bin cannot be edited or changed but it can be recovered back into Assets.

4.2.3. Reports

In this subsection, we can check out the statistical data and information showed in an interactive manner that can be understood by all of the workers. To this date, 3 graphs are displayed:

- Downloaded files
- New files
- Finished files

we can search through this data by date. illustration 19 shows the page clearly:



Illustration 19: Reports

<END OF DOCUMENT>