



# NARRATE

Needs for Digital Recording and Documentation of Ecclesiastical Cultural Treasures in Monasteries and Temples



## Project Information

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The purpose of NARRATE project is to codify the actual recording and documentation needs for the ecclesiastical cultural treasures, through a systematic study of the users' needs.

## Consortium partners



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Needs for Digital Recording and Documentation of Ecclesiastical Cultural Treasures in Monasteries and Temples



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Contract no: 2022-1-EL01-KA220-HED-000089867



### Main Authors

Name	Organization
Argyris Constantinides, Mario Belk	COGNITIVE UX GMBH
Aikaterini Stamou	ARISTOTLE UNIVERSITY OF THESSALONIKI
Stella Sylaiou, Konstantinos Evangelidis	INTERNATIONAL HELLENIC UNIVERSITY

### Contributing Partners

Organization
SOFIA UNIVERSITY ST KLEMENT OHRIDSKI
ASSOCIATION FOR THE PROTECTION OF CULTURAL HERITAGE (KMKD)



## Abbreviations

<b>API</b>	Application Programming Interface
<b>CH</b>	Cultural Heritage
<b>CSS</b>	Cascading Style Sheets
<b>HTML</b>	Hypertext Mark-up Language
<b>WP</b>	Work Package



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## Executive Summary

The EU Erasmus+ “NARRATE: Needs for Digital Recording and Documentation of Ecclesiastical Cultural Treasures in Monasteries and Temples” (2022-1-EL01-KA220-HED-000089867) aims at identifying and promoting the needs and priorities concerning ecclesiastical Cultural Heritage (CH) documentation.

The current study is being performed to codify the actual recording and documentation needs for the ecclesiastical cultural treasures, through a systematic study of the users’ needs. NARRATE reflects an emphasis on documenting ecclesiastic CH treasures in ways that will enable stakeholders to narrate their intertwined histories, functions, and spiritual importance throughout time.

This document summarizes and reports the activities and outcomes of *Activities 3.1 (Design of Data Models and Reference Ontologies)* and *3.2 (Development and Integration of an Ecclesiastical-centered Data Repository and Data Discovery Service)*. This software report focuses on the development and integration of the ecclesiastical-centered data repository and data discovery service based on open-source tools and standard data exchange mechanisms.



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## 1. Introduction

The role of this document is to report the activities on the development and integration of the NARRATE ecclesiastical-centered data repository and data discovery service. This software report initially provides an overview of the implemented NARRATE framework solution, followed by the architectural design and the technology stack. Next, we provide a detailed description of the implemented functionalities and the realization of the interactive dashboard, which is based on the design mockups that were introduced at an earlier stage in the project. Finally, the appendices at the end of the report provide information on how to access the online NARRATE framework, as well as a detailed description of the application programming interfaces (APIs). The outcome of this report constitutes the basis for the summative evaluation user study of the NARRATE framework.



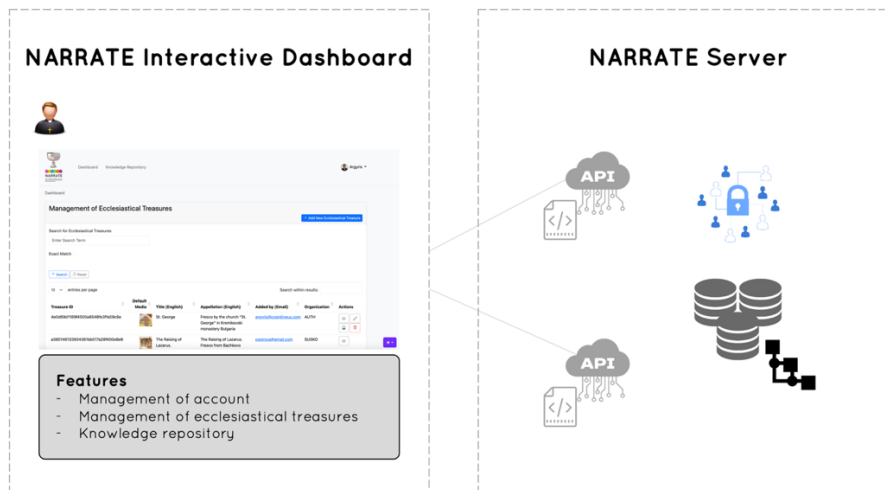
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## 2. Overview of the NARRATE Framework

This section provides an overview of the implemented NARRATE framework, illustrated in **Figure 1**. At a high-level, the NARRATE Framework consists of two main components: *i) NARRATE Interactive Dashboard*; and *ii) NARRATE Server*. The *NARRATE Interactive Dashboard* acts as the main source of end-users' interactions, allowing end-users to manage their accounts and the ecclesiastical treasures, as well as get access to the project's educational and dissemination material regarding the digital recording and documentation of ecclesiastical treasures. The NARRATE Server comprises a Web application that exposes the implemented APIs through which end-users or third-party services can interact with and exchange data.



*Figure 1: Overview of NARRATE Framework components.*

The realized solution was based on the conceptual design (**Figure 2**) described in the published report *R7 - Production of a conceptual framework that will identify the key characteristics, functionalities affordances, and modalities of the digital tools NARRATE will develop* [6]. Next, we describe the architectural design of the realized NARRATE framework, along with the technology stack and the implementation details.

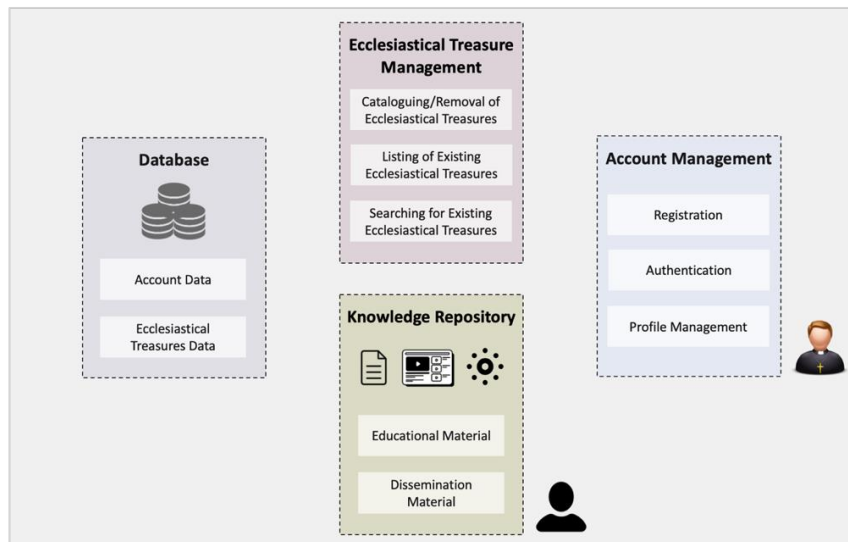


Figure 2: High-level representation of the NARRATE conceptual framework.

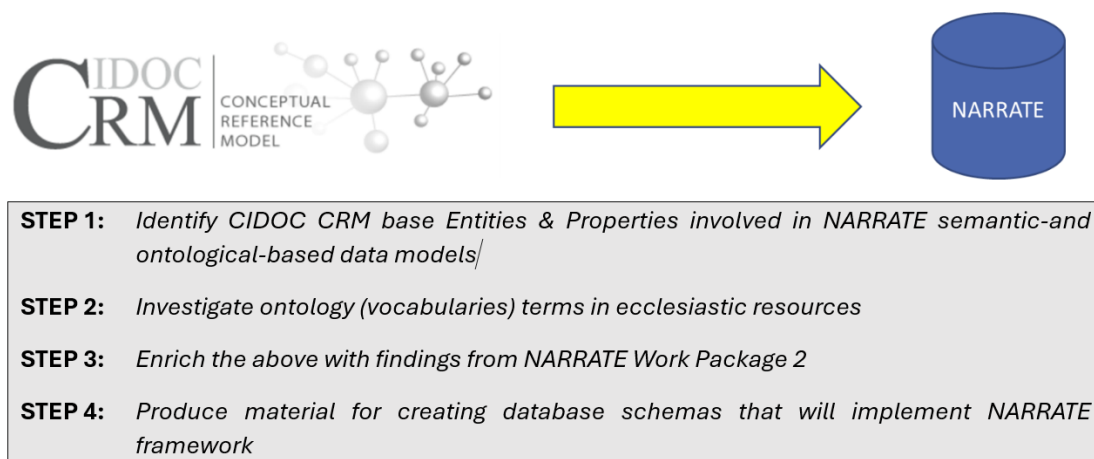
### 3. Design of data models and reference ontologies

In order to implement the core NARRATE framework a critical component is a semantic based data model. The term semantics is related to information possessing a well-defined meaning [1]. This is considered of paramount importance because this information will have to be discoverable when served by the NARRATE data discovery service that will be implemented. The data discovery service will have to be capable of assisting users in finding, accessing, and exploring data [2] within the NARRATE project for analysis, reporting, or other purposes. What is expected is to deliver data models and reference ontologies that will assist the development of database schemas, which will describe the ecclesiastical cultural treasures based on a semantic metadata description. The semantic metadata description refers to a method of describing data or information using standardized vocabularies and ontologies that provide explicit meanings and relationships between terms [3].

An extensive review of recognized data models in terms of their implementation in various projects led to the choice of the CIDOC Conceptual Reference Model (CRM) a theoretical and practical tool for information integration in the field of cultural heritage [4]. CIDOC CRM is a formal ontology for the integration, mediation, and interchange of heterogeneous cultural heritage information. It is pivotal in enabling the exchange and integration of data from diverse sources, facilitating the reconstruction and interpretation of historical narratives on a human scale. This ontology aims to furnish the semantic definitions and clarifications necessary to harmonize disparate, localized information

sources into a cohesive global resource. By delineating, through a formal ontology, the underlying semantics of database schemata and structured documents, it establishes a common understanding and framework for interpreting and exchanging cultural heritage information across domains and disciplines.

The methodological approach adopted towards implementing NARRATE framework is illustrated in **Figure 3**.



**Figure 3:** Towards implementing NARRATE framework

The most demanding Step 2 required:

- a) A thorough literature review of ecclesiastic resources, including religious texts, theological studies, historical documents, and academic papers. Special attention was paid to the terminology used to describe concepts, doctrines, rituals, and practices within ecclesiastic contexts,
- b) Guidance from experts in ecclesiastic studies, such as theologians, religious scholars, or historians specializing in religious traditions, that provided valuable insights into the terminology and concepts specific to ecclesiastic vocabularies and
- c) Exploration on digital databases and repositories that focus on ecclesiastic texts and resources, from institutions and academic organizations providing online access to historical documents, theological treatises, and religious texts

The major ENTITIES of the CIDOC CRM data model that were selected to be adopted in NARRATE database development are depicted in blue rectangles with yellow letters in Figure 2 and are presented in Table 1.

Table 1: Major CIDOC-CRM entities adopted in NARRATE data model

ENTITY	Description – application in NARRATE project
<b>TITLE</b>	<i>comprises textual strings that within a cultural context can be clearly identified as titles</i>
<b>APELLATION</b>	<i>identifies a specific instance or category within a certain context</i>
<b>LANGUAGE</b>	<i>Represents multiple language support</i>
<b>IDENTIFIER</b>	<i>identifies instances uniquely and permanently within the context of one or more organizations</i>
<b>INFORMATION OBJECT</b>	<i>includes the description of the ecclesiastical treasure with no word limits, and provides a short and an extended version</i>
<b>DOCUMENT</b>	<i>provides different descriptions according to the different user profiles, includes photos, creates specifications for the image creation, e.g., image resolution</i>
<b>TIME-SPAN</b>	<i>comprises abstract temporal extents, having a beginning, an end and a duration</i>
<b>TYPE</b>	<i>includes information about the kind of an object</i>
<b>HUMAN-MADE THING</b>	<i>includes information about the creator of an object</i>
<b>BEGINNING OF EXISTENCE</b>	<i>includes information about the beginning of existence of an object and its biography, which is accessible only by the ecclesiastical treasure owner/s</i>
<b>MATERIAL</b>	<i>includes information about the materials an object was created</i>
<b>DIMENSION</b>	<i>includes information about the dimensions of an object</i>
<b>INSCRIPTION</b>	<i>includes information about object's inscription</i>
<b>EVENT</b>	<i>includes information about pertinent religious events or rituals, e.g., litanies (photos and videos would be desirable to be included) as well as its previous documentation/s and its relevant bibliography</i>
<b>PLACE</b>	<i>include information about an object's place in a church or a museum</i>
<b>CONDITION ASSESSMENT</b>	<i>provides information about an object's state of preservation</i>
<b>MODIFICATION</b>	<i>provides information about an object's conservation and includes photos before and after its conservation</i>
<b>CURATION ACTIVITY</b>	<i>includes information concerning curation activities</i>

All these entities identified to be adopted in NARRATE data model may be connected through the whole CIDOC CRM Entities diagram. However, there are entities that need to be added for connectivity reasons. These entities act like a glue between the previously selected entities and are represented in yellow rectangles and blue letters. These entities include the initial CRM ENTITY of the CIDOC-CRM model which is directly connected with 3 of the above selected entities, the TEMPORAL and PERIOD entity which completes the EVENTS related to the history of an object, the ACTIVITY entity which connects the EVENT entity with its potential MODIFICATIONS and CURATION activities and the ATTRIBUTE ENTITY with its CONDITION ASSESSMENT. The PERSISTENT ITEM entity and the THING entity relate to the HUMAN MADE THING



entity which is subsequently connected with the INFORMATION OBJECT entity via CONCEPTUAL OBJECT and SYMBOLIC OBJECT entities. Finally, the LINGUISTIC ENTITY is associated with the inscription of an object.

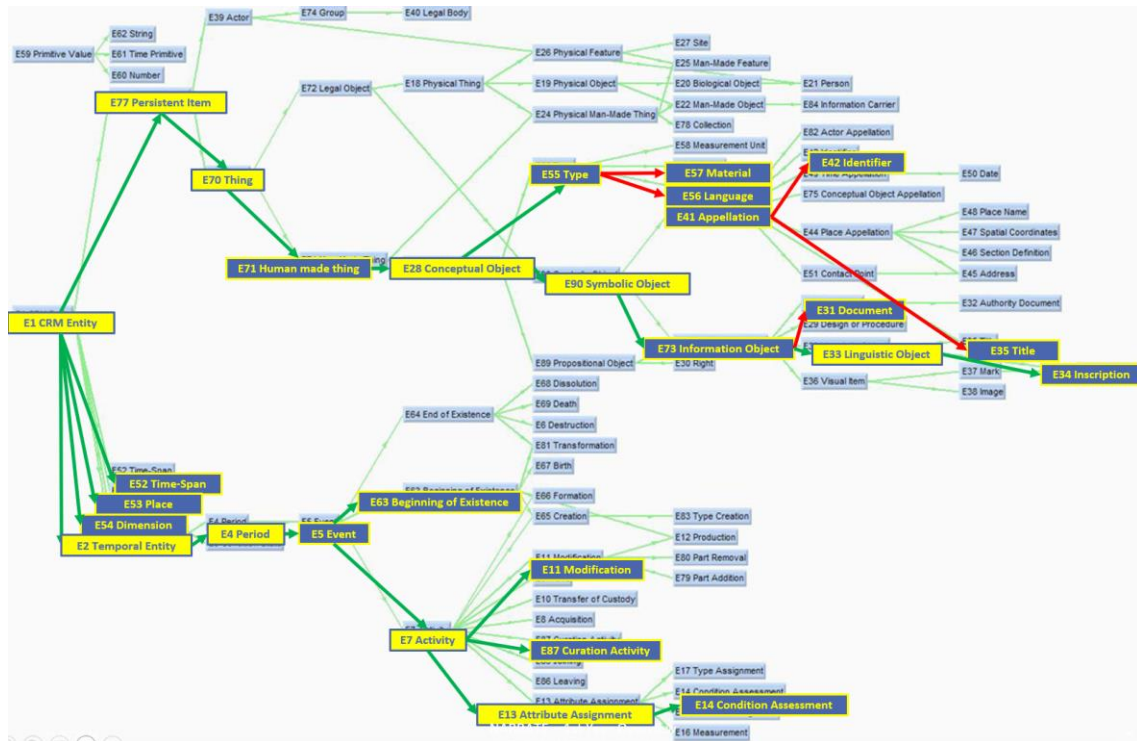


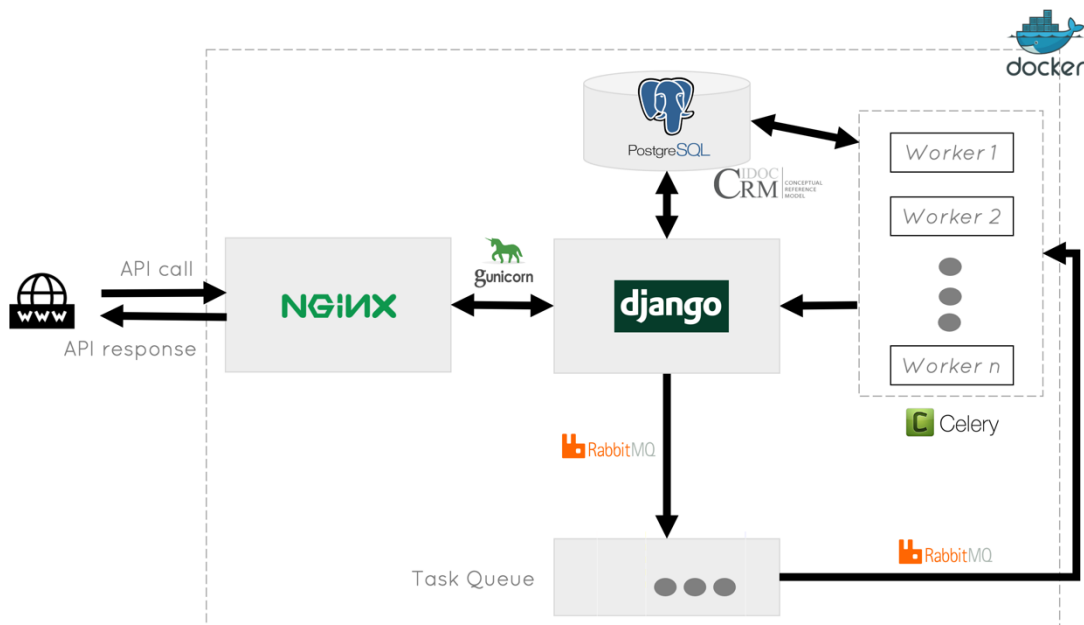
Figure 4: Selected entities of CIDOC-CRM model

To conclude, the result was practically a subset of the CIDOC reference model. However, CIDOC-CRM is a high-level data model and its transformation to a low-level relational data base model is not unique and was based on design rules for such transformation with the aim to support future interoperability with other CIDOC – CRM compliant projects.



#### 4. Architectural Design and Technology Stack

This section describes the architecture of the NARRATE server-side Web API, which is illustrated in **Figure 5**. The architectural design has been introduced in the published report *R5 – Production of a framework for best practices guides*. The server-side Web API is implemented in Python 3.10.8, using the Django REST Framework, which is an open-source Python and Django library used for building Web APIs. Furthermore, NGINX is utilized to deploy the server-side Web API. It acts as a versatile Web server, which could also be used as a reverse proxy and load balancer. Additionally, we employ the Gunicorn application server, which translates the HTTP requests into a format Python can process. Gunicorn implements the Web Server Gateway Interface, which is a standard interface between Web server software and Web applications.



**Figure 5:** Architecture design of NARRATE Framework.

For certain time-consuming or blocking tasks (e.g., sending emails with account verification during user registration), ideally we would like the request and response cycle to be fast. To address such time-consuming or blocking situations, we employ the Celery asynchronous task queue, which is based on distributed message passing. Celery requires an external solution for sending and receiving messages. For this purpose, we also use RabbitMQ, which is an open-source message-broker software that implements the Advanced Message Queuing Protocol.





### WP3 - R3.1. Open-source and Semantic-based Ecclesiastical Data Repository

The NARRATE Interactive Dashboard front-end is developed using the Django's template language, which contains the following: *i*) variables, which take values upon rendering of the Hypertext Mark-up Language (HTML) template file; and *ii*) tags, which control the logic in the rendering process. HTML is the primary language for creating web pages, providing a means for describing the structure of text information in a document. It defines the content and structure of web content, and is often used in combination with other technologies, such as, Cascading Style Sheets (CSS) which describe the appearance of the web page, and JavaScript that controls the functionality and behavior of the web page. The NARRATE Interactive Dashboard front-end was implemented utilizing the latest version of HTML5 to leverage its enhanced features and ensure compatibility with modern standards of web browsers. With regards to the styling of the NARRATE Interactive Dashboard front-end, we utilized the latest version of CSS to leverage advanced styling features and improvements for enhanced web presentation, while conforming to the latest design standards of the World Wide Web Consortium. To handle the interactions of the NARRATE Interactive Dashboard front-end, we utilized JavaScript, which is the most commonly used client-side scripting language. JavaScript is used to handle end-users' interactions, as well as for communication and exchange of data with the NARRATE server in an asynchronous manner (*i.e.*, without the need for reloading the web page).



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## 5. Interactive Dashboard

This section presents the realization of the NARRATE Interactive Dashboard, which is based on the design mockups that have been introduced in the published report *R7* [6]. Next, we describe the implemented functionalities in each page of the NARRATE Interactive Dashboard. The Uniform Resource Locators (URLs) for accessing the NARRATE Framework can be found in the *APPENDIX A – Access URLs to the NARRATE Framework*, while the complete list of the implemented APIs can be found in the *APPENDIX B – Application Programming Interfaces*.

### 5.1 Account Management

This section describes the implementation details for the management of end-users accounts, which follows state-of-the-art approaches in user authentication, and includes the following functionalities: *i)* sign up to the NARRATE framework using a valid email address; *ii)* account activation via an activation code received in the email address; *iii)* reset password via a reset code received in the email address; *iv)* update of basic profile details; and *v)* update of password.

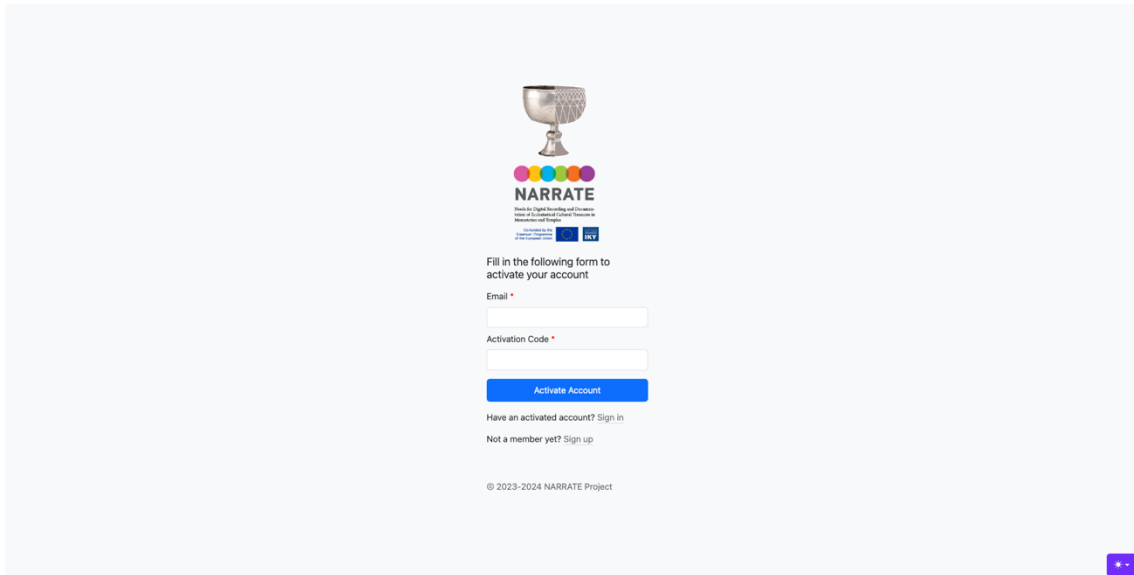
#### 5.1.1 Sign up

The sign up page (**Figure 7**) of the NARRATE Interactive Dashboard allows individuals to create an end-user account in order to get access to the platform. The individual is requested to fill in the required fields (*i.e.*, email, password, confirm password, first name, last name, organization) in the sign up form. In case of unsuccessful action, the end-user is informed through an error message displayed on the screen. Upon successful completion of the action, an activation email is sent to the provided email address. The activation email includes an activation code which is required for activating the end-user account through the activate account page.

*Figure 7: Sign up page allows individuals to create an end-user account.*

### 5.1.2 Activate account

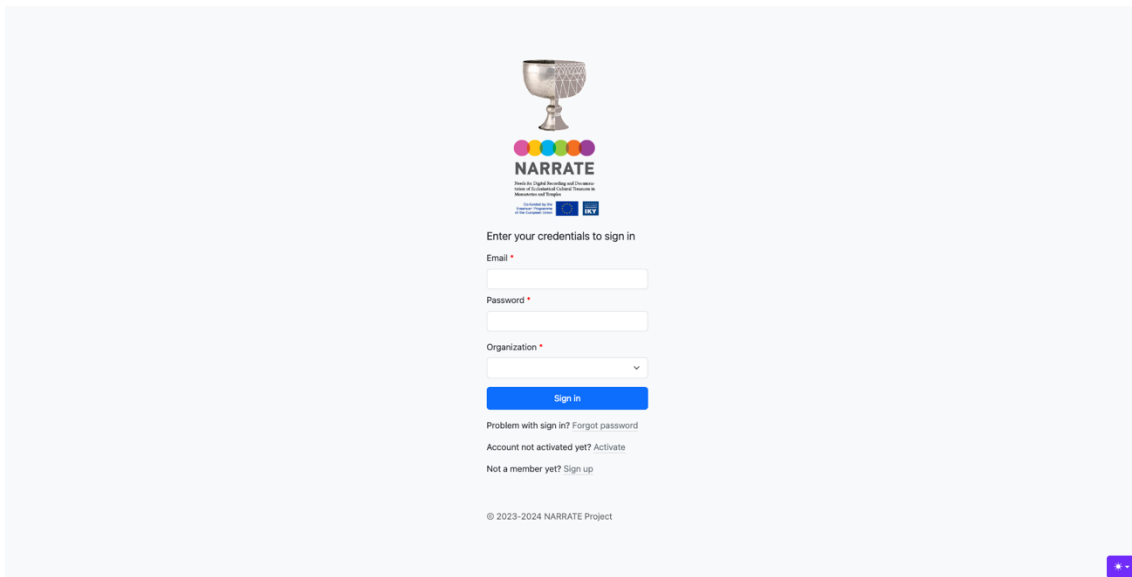
The activate account page (**Figure 8**) of the NARRATE Interactive Dashboard allows individuals to activate their account prior to getting access to the platform. The individual is requested to fill in the required fields (*i.e.*, email, activation code received in the email address) in the activate account form. In case of unsuccessful action, the end-user is informed through an error message displayed on the screen. Upon successful completion of the action, the end-users’s account gets activated and the end-user can access the platform through the sign in page.



*Figure 8: Activate account page allows individuals to activate their account prior to getting access to the platform.*

### 5.1.3 Sign in

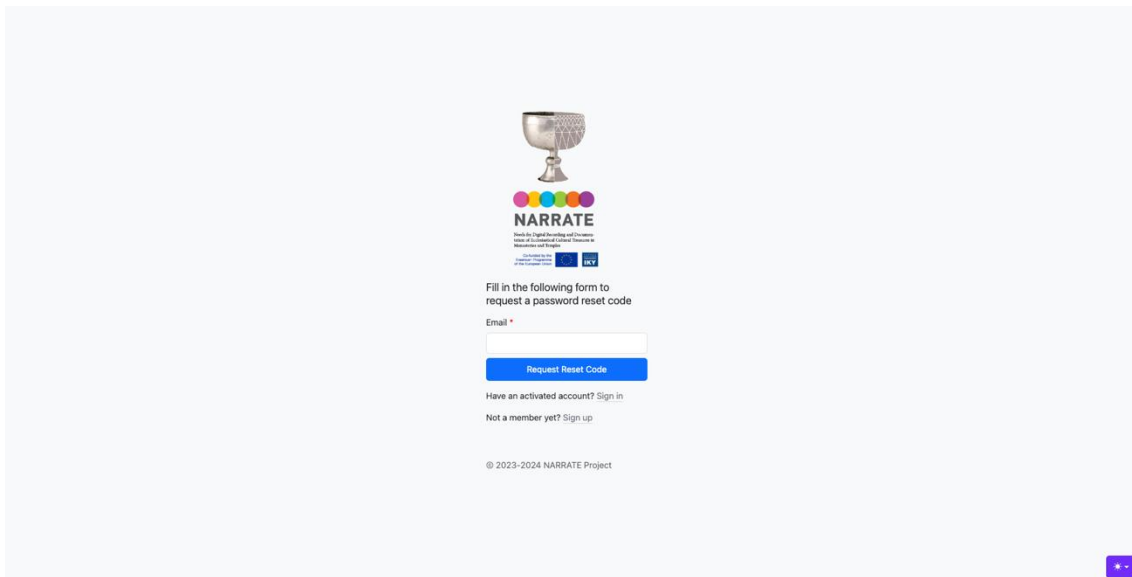
The sign in page (**Figure 9**) of the NARRATE Interactive Dashboard allows individuals to get access to the functionalities of the platform and the catalogued ecclesiastical treasures. The individual is requested to fill in the required fields (*i.e.*, email, password, organization) in the sign in form. In case of unsuccessful action, the end-user is informed through an error message displayed on the screen. Upon successful completion of the action, the end-user can access the functionalities regarding the management of ecclesiastical treasures and the material found in the knowledge repository.



**Figure 9:** Sign in page allows individuals to get access to the functionalities of the platform and the catalogued ecclesiastical treasures.

#### 5.1.4 Forgot password

The forgot password page (**Figure 10**) of the NARRATE Interactive Dashboard allows individuals to request a password reset code via email in cases they forgot their password and are not able to access the platform. The individual is requested to fill in the required field (*i.e.*, email) in the forgot password form. In case of unsuccessful action, the end-user is informed through an error message displayed on the screen. Upon successful completion of the action, a password reset email is sent to the provided email address. The password reset email includes a reset code which is required for resetting the end-user's password through the reset password page.



*Figure 10: Forgot password page allows individuals to request a password reset code via email.*

### 5.1.5 Reset password

The reset password page (**Figure 11**) of the NARRATE Interactive Dashboard allows individuals to reset their password by using the reset code received via email by clicking on an expiring password reset URL (**Figure 12**). The individual is requested to fill in the required fields (*i.e.*, email, reset code received in the email address, password) in the reset password form. In case of unsuccessful action, the end-user is informed through an error message displayed on the screen. Upon successful completion of the action, the password gets reset and the end-user can sign in through the sign in page.



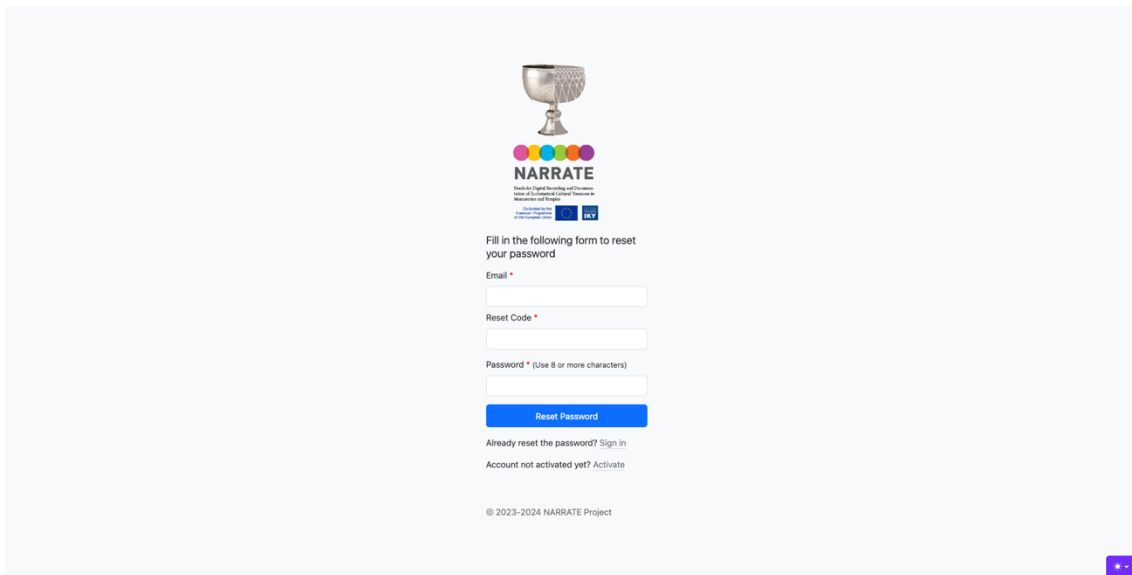


Figure 11: Reset password page allows individuals to reset their password.

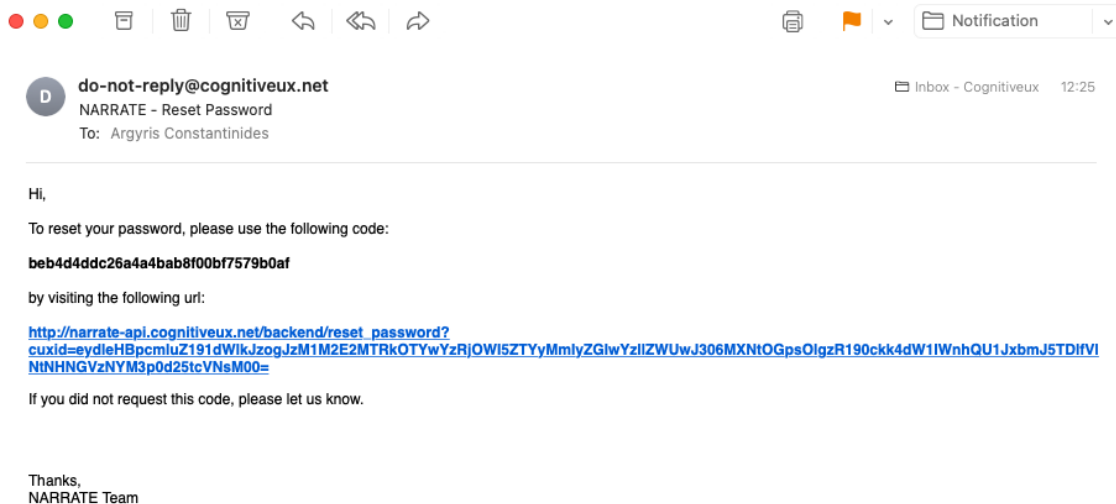
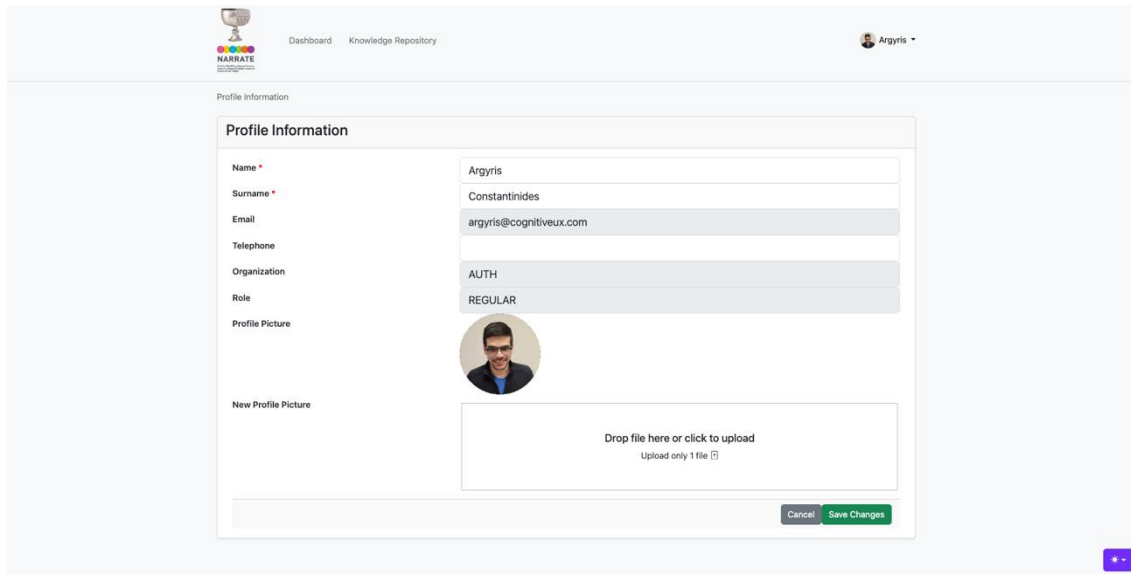


Figure 12: End-users receive the reset code via email and they should click on the expiring password reset URL in order to access the password reset page.

### 5.1.6 Update profile details (requires Sign in)

The update profile page (**Figure 13**) of the NARRATE Interactive Dashboard allows individuals to update their profile information. The individual is requested to fill in the required fields (*i.e.*, name, surname), as well as any of the non-required fields (*i.e.*, telephone, new profile picture), in the update profile details form. In case of unsuccessful action, the end-user is informed through an error message displayed on the screen. Upon successful completion of the action, the profile details of the end-user are updated.

This functionality is available by clicking at the top right of the page (*i.e.*, where the name of the signed in user is displayed), and then by selecting the option “My Profile”.



The screenshot shows the NARRATE user interface. At the top, there is a navigation bar with 'Dashboard' and 'Knowledge Repository' links, and a user profile dropdown for 'Argyris'. The main content area is titled 'Profile Information' and contains a form with the following fields:

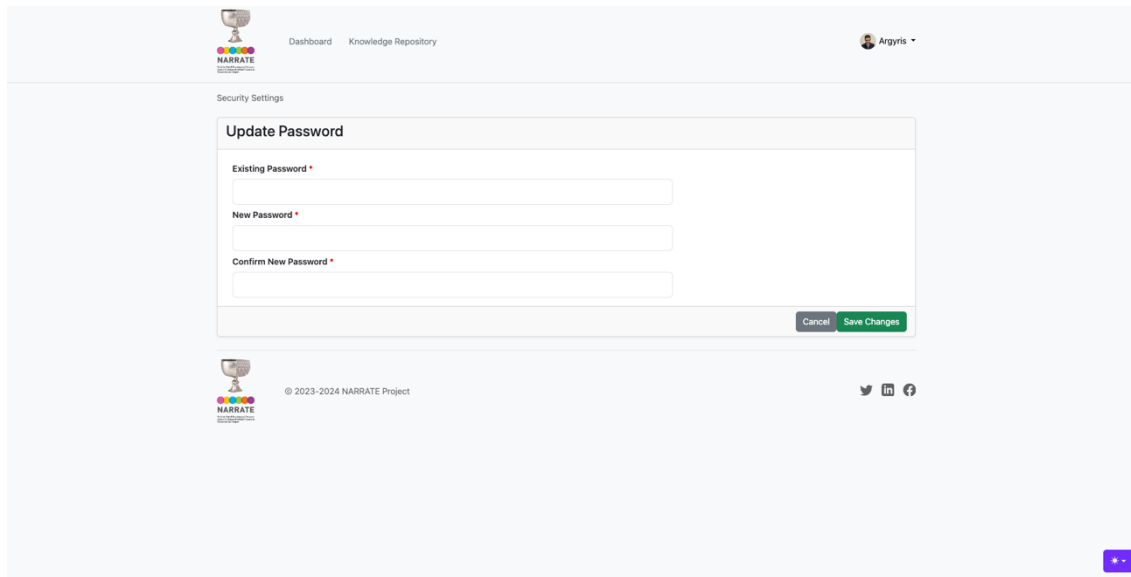
- Name: Argyris
- Surname: Constantinides
- Email: argyris@cognitiveux.com
- Telephone: (empty)
- Organization: AUTH
- Role: REGULAR
- Profile Picture: A circular profile picture of a man with glasses.
- New Profile Picture: A file upload area with the text 'Drop file here or click to upload' and 'Upload only 1 file'.

At the bottom of the form, there are 'Cancel' and 'Save Changes' buttons.

**Figure 13:** Update profile page allows individuals to update their profile information.

### 5.1.7 Update password (requires Sign in)

The update security settings page (**Figure 14**) of the NARRATE Interactive Dashboard allows individuals to update their password. The individual is requested to fill in the required fields (*i.e.*, existing password, new password, confirm new password) in the update password form. In case of unsuccessful action, the end-user is informed through an error message displayed on the screen. Upon successful completion of the action, the password gets updated and the end-user can sign in to the system using the updated password. This functionality is available by clicking at the top right of the page (*i.e.*, where the name of the signed in user is displayed), and then by selecting the option “Security Settings”.



**Figure 14:** Update security settings page allows individuals to update their password.

### 5.1.8 Sign out (requires Sign in)

The sign out functionality of the NARRATE Interactive Dashboard allows individuals to terminate their signed in session and sign out of the system. This functionality is available by clicking at the top right of the page (*i.e.*, where the name of the signed in user is displayed), and then by selecting the option “Sign out”.

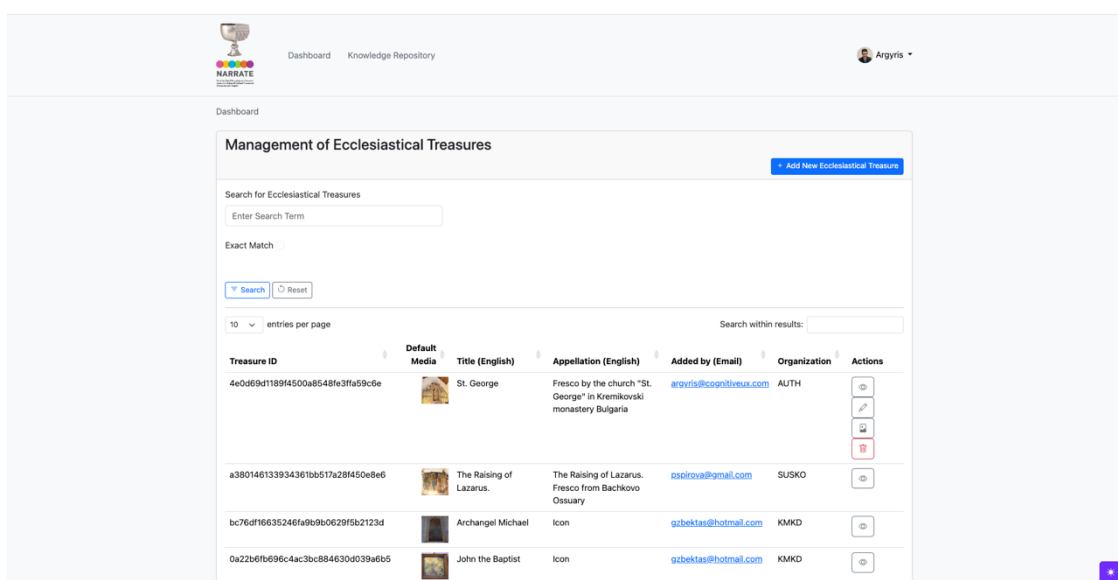
## 5.2 Ecclesiastical Treasures Management











This section describes the implementation details for the management of the ecclesiastical treasures, which includes the following functionalities: *i)* View existing ecclesiastical treasures; *ii)* Add new ecclesiastical treasure; *iii)* Update existing ecclesiastical treasure; *iv)* Delete existing ecclesiastical treasure; *v)* Advanced search (*e.g.*, free text search, exact match search); and *vi)* Basic access control (*i.e.*, end-users can see all the ecclesiastical treasures but can update/delete only the ecclesiastical treasures added by them). The functionalities *i) – iv)* and *vi)* include both the descriptive details and the media files of the ecclesiastical treasures.

### 5.2.1 View existing ecclesiastical treasures (requires Sign in)

The view existing ecclesiastical treasures page (**Figure 15**) of the NARRATE Interactive Dashboard is the landing page in which the end-user is redirected after sign in to the

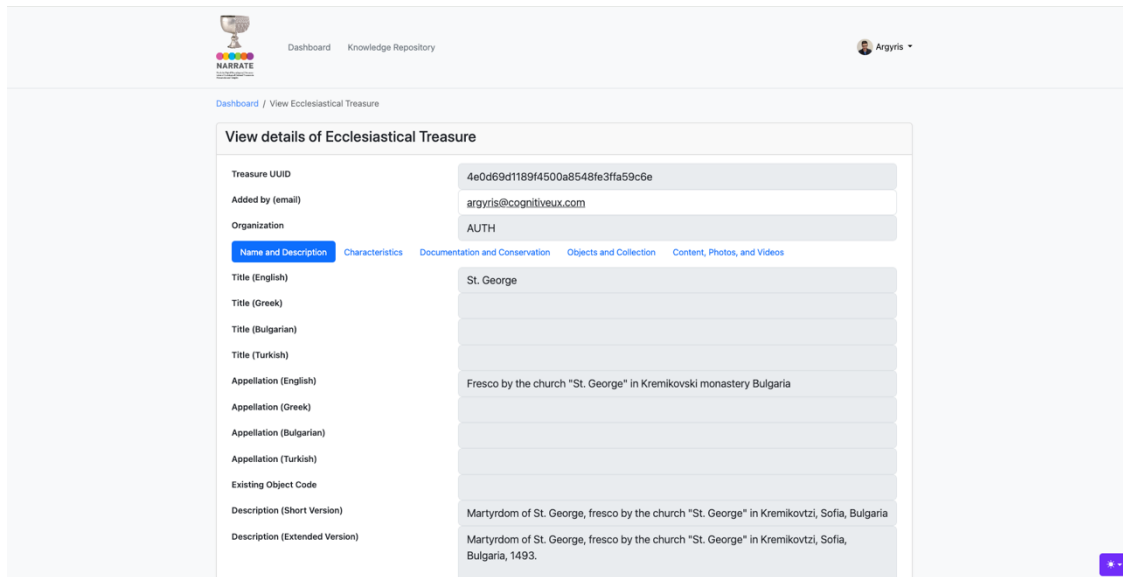
platform. This page displays the basic information of all the catalogued ecclesiastical treasures in a tabular format. For each ecclesiastical treasure listed in the table, there are available actions based on the access control. For instance, for the ecclesiastical treasures added by the signed in user, there are four available actions as follows: *i)* view the descriptive details and the media files of the ecclesiastical treasure; *ii)* update the descriptive details of the ecclesiastical treasure; *iii)* manage the media files (*i.e.*, view/add/update/delete) of the ecclesiastical treasure; and *iv)* delete the ecclesiastical treasure. For the ecclesiastical treasures added by other end-users (*i.e.*, not the signed in user), there is only one available action, which is viewing the descriptive details and the media files of the ecclesiastical treasure. The view existing ecclesiastical treasures page also contains the “Add New Ecclesiastical Treasure” button, which redirects end-users to another screen that allows them to catalogue a new ecclesiastical treasure.



Treasure ID	Default Media	Title (English)	Appellation (English)	Added by (Email)	Organization	Actions
4e0d69d1189f4500a8548fe3fa59cde		St. George	Fresco by the church "St. George" in Kremikovski monastery Bulgaria	argyris@coontheux.com	AUTH	  
a380146133934361b517a28f450e8e6		The Raising of Lazarus.	The Raising of Lazarus. Fresco from Bachkovo Ossuary	osicriva@gmail.com	SUSKO	
bc76df1663524fa9b9b0629f5b2123d		Archangel Michael	Icon	ozbektas@hotmail.com	KMKD	
0a22b6f696c4ac3bc884630d039e6b5		John the Baptist	Icon	ozbektas@hotmail.com	KMKD	

**Figure 15:** View existing ecclesiastical treasures page displays the basic information of all the catalogued ecclesiastical treasures.

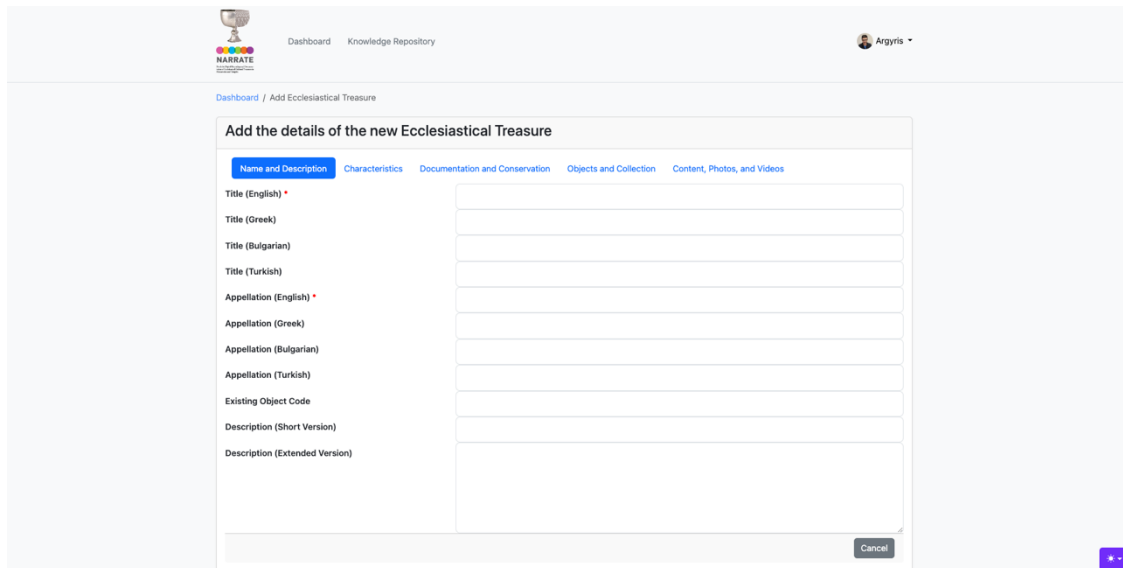
Upon clicking the eye icon in the Actions area for a specific ecclesiastical treasure, the end-user is redirected to another screen that displays all the descriptive details and the media files of the ecclesiastical treasure, as illustrated in **Figure 16**.



*Figure 16: View-only page that displays all the descriptive details and the media files of the ecclesiastical treasure.*

## 5.2.2 Add new ecclesiastical treasure (requires Sign in)

The add new ecclesiastical treasure page (**Figure 17, Figure 18**) of the NARRATE Interactive Dashboard allows individuals to catalogue a new ecclesiastical treasure. This is conducted through a series of steps, which are grouped at higher levels of abstraction, such as, “Name and Description”, “Characteristics”, “Documentation and Conservation”, “Objects and Collection”, and “Content, Photos, and Videos”.



Dashboard / Knowledge Repository Argyris

Dashboard / Add Ecclesiastical Treasure

### Add the details of the new Ecclesiastical Treasure

**Name and Description** | Characteristics | Documentation and Conservation | Objects and Collection | Content, Photos, and Videos

Title (English) \*

Title (Greek)

Title (Bulgarian)

Title (Turkish)

Appellation (English) \*

Appellation (Greek)

Appellation (Bulgarian)

Appellation (Turkish)

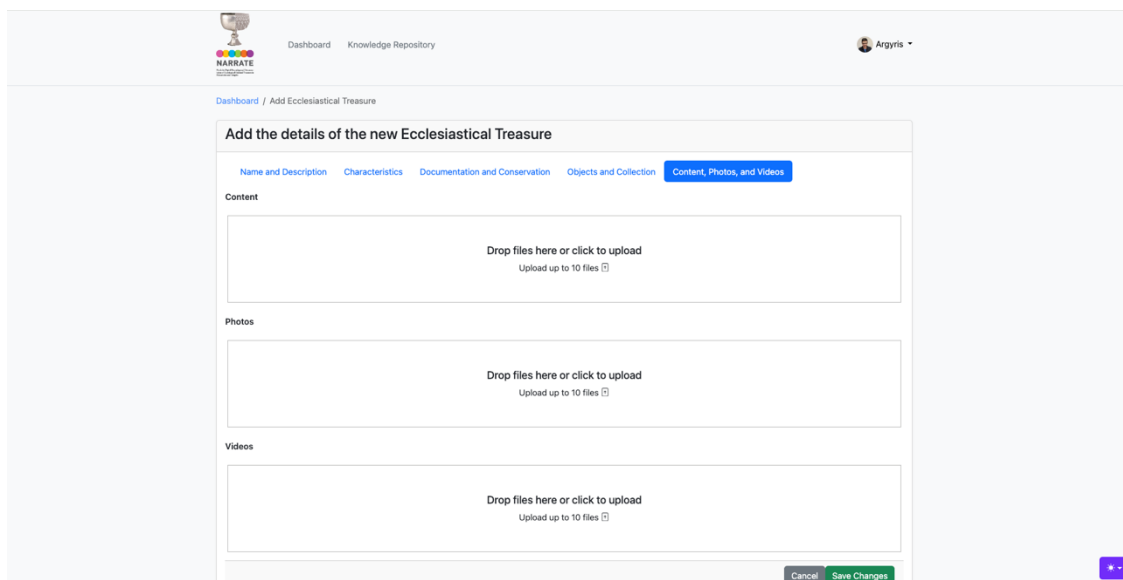
Existing Object Code

Description (Short Version)

Description (Extended Version)

Cancel

**Figure 17:** Add new ecclesiastical treasure page allows individuals to catalogue the details of a new ecclesiastical treasure.



Dashboard / Knowledge Repository Argyris

Dashboard / Add Ecclesiastical Treasure

### Add the details of the new Ecclesiastical Treasure

Name and Description | Characteristics | Documentation and Conservation | Objects and Collection | **Content, Photos, and Videos**

**Content**

Drop files here or click to upload  
Upload up to 10 files

**Photos**

Drop files here or click to upload  
Upload up to 10 files

**Videos**

Drop files here or click to upload  
Upload up to 10 files

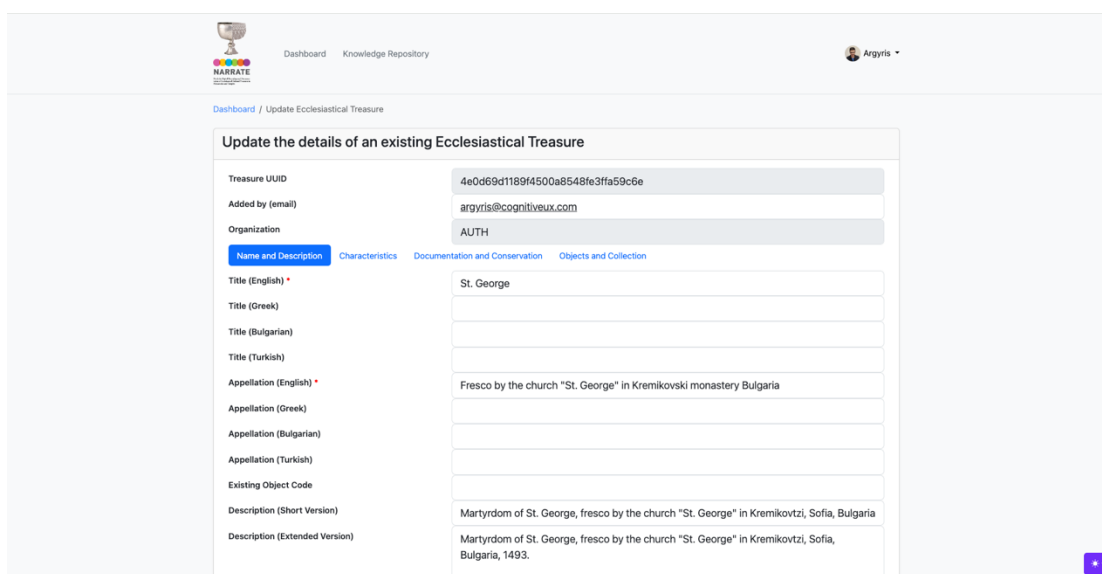
Cancel Save Changes

**Figure 18:** Add new ecclesiastical treasure page also allows individuals to catalogue the media files associated with the new ecclesiastical treasure.

The individual is requested to fill in the required fields (*i.e.*, title in English, appellation in English) in the add new ecclesiastical treasure form. In case of unsuccessful action, the end-user is informed through an error message displayed on the screen. Upon successful completion of the action, the descriptive details and any media associated with the ecclesiastical treasure are catalogued in the platform.

### 5.2.3 Update existing ecclesiastical treasure (requires Sign in)

The update existing ecclesiastical treasure page (**Figure 19**) of the NARRATE Interactive Dashboard allows individuals to update the descriptive details of the ecclesiastical treasure. To reach this page, an end-user must first visit the view existing ecclesiastical treasures page (**Figure 15**) and click the pencil icon under the “Actions” of the respective treasure they wish to update. Then, the individual is requested to fill in the required fields (*i.e.*, title in English, appellation in English) in the update existing ecclesiastical treasure form. In case of unsuccessful action, the end-user is informed through an error message displayed on the screen. Upon successful completion of the action, the descriptive details of the ecclesiastical treasure are updated in the platform.



Dashboard Knowledge Repository Argyris

Dashboard / Update Ecclesiastical Treasure

Update the details of an existing Ecclesiastical Treasure

Treasure UUID: 4e0d69d1189f4500a8548fe3ffa59c6e

Added by (email): argyris@cognitveux.com

Organization: AUTH

Name and Description Characteristics Documentation and Conservation Objects and Collection

Title (English): St. George

Title (Greek):

Title (Bulgarian):

Title (Turkish):

Appellation (English): Fresco by the church "St. George" in Kremikovski monastery Bulgaria

Appellation (Greek):

Appellation (Bulgarian):

Appellation (Turkish):

Existing Object Code:

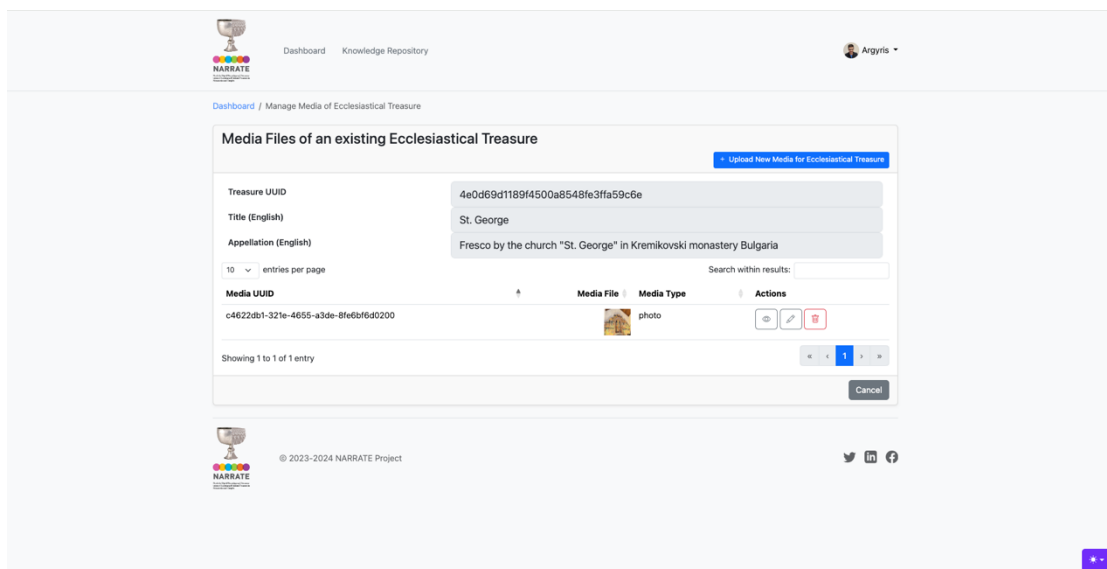
Description (Short Version): Martyrdom of St. George, fresco by the church "St. George" in Kremikovtzi, Sofia, Bulgaria

Description (Extended Version): Martyrdom of St. George, fresco by the church "St. George" in Kremikovtzi, Sofia, Bulgaria, 1493.

**Figure 19:** Update existing ecclesiastical treasure page allows individuals to update the descriptive details of the ecclesiastical treasure.

Regarding the management of the media of an ecclesiastical treasure, an end-user must first visit the view existing ecclesiastical treasures page (**Figure 15**) and click the media icon under the “Actions” of the respective treasure for which they wish to manage its media files. The end-user is then redirected to the media management page (**Figure 20**), through which they can perform the following actions: *i*) view directly a thumbnail of the media associated with the ecclesiastical treasure or view it in its original size by clicking the eye icon under the “Actions”; *ii*) Update the media by clicking the pencil icon under the “Actions”; and *iii*) delete the media by clicking the bin icon under the “Actions”. By selecting action *ii*), the end-user will be redirected to the update media page (**Figure 21**),

through which they are requested to fill in the required fields (*i.e.*, new media file) in the update media form. In case of unsuccessful action, the end-user is informed through an error message displayed on the screen. Upon successful completion of the action, the media gets updated. By selecting action *iii*), the end-user will be redirected to the delete media page (**Figure 22**), through which they are requested to review and confirm the deletion of the media. In case of unsuccessful action, the end-user is informed through an error message displayed on the screen. Upon successful completion of the action, the media gets permanently deleted.



**Figure 20:** Media management page through which end-users can view/update/delete the media associated with the ecclesiastical treasure.



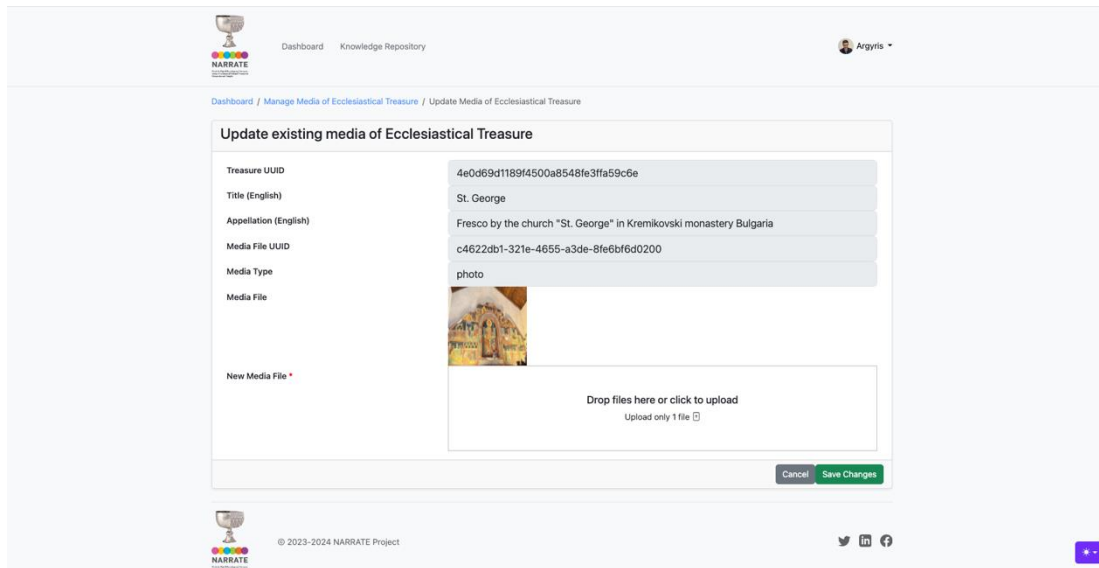


Figure 21: Update media page allows end-users to update existing media files of a particular ecclesiastical treasure.

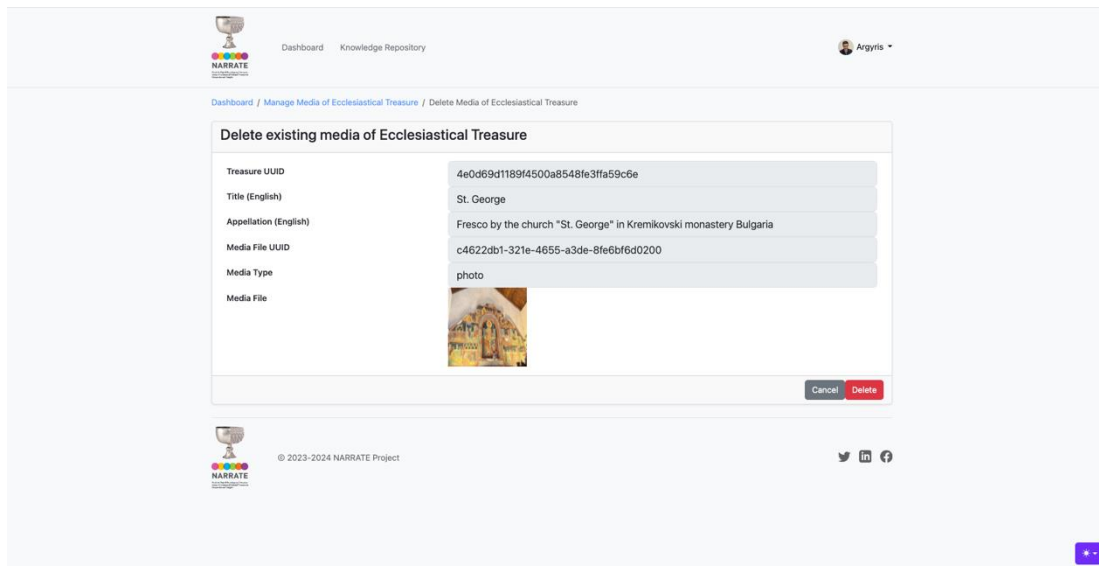
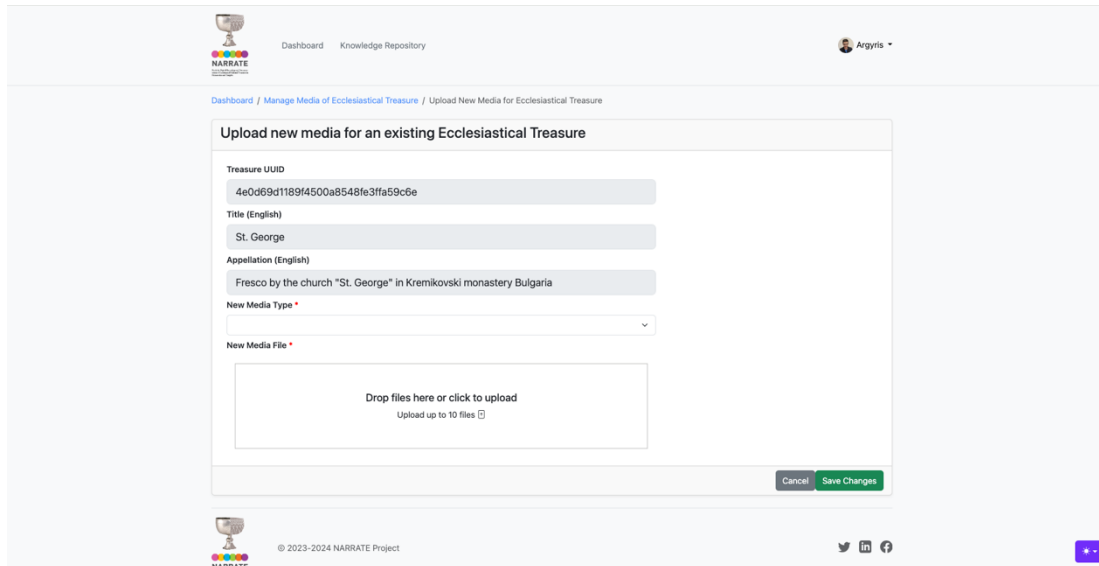


Figure 22: Delete media page allows end-users to review and confirm the deletion of the media file of a particular ecclesiastical treasure.

The media management page also contains the “Upload New Media for Ecclesiastical Treasure” button, which redirects end-users to another page that allows them to upload new media files for an existing ecclesiastical treasure (**Figure 23**). The individual is requested to fill in the required fields (*i.e.*, new media type, new media file) in the upload

new media form. In case of unsuccessful action, the end-user is informed through an error message displayed on the screen. Upon successful completion of the action, the newly uploaded media file gets stored and becomes associated with the respective ecclesiastical treasure.



The screenshot shows a web interface for uploading media. At the top, there is a navigation bar with 'Dashboard' and 'Knowledge Repository' links, and a user profile 'Argyris'. Below the navigation, the breadcrumb trail reads 'Dashboard / Manage Media of Ecclesiastical Treasure / Upload New Media for Ecclesiastical Treasure'. The main form is titled 'Upload new media for an existing Ecclesiastical Treasure' and contains the following fields:

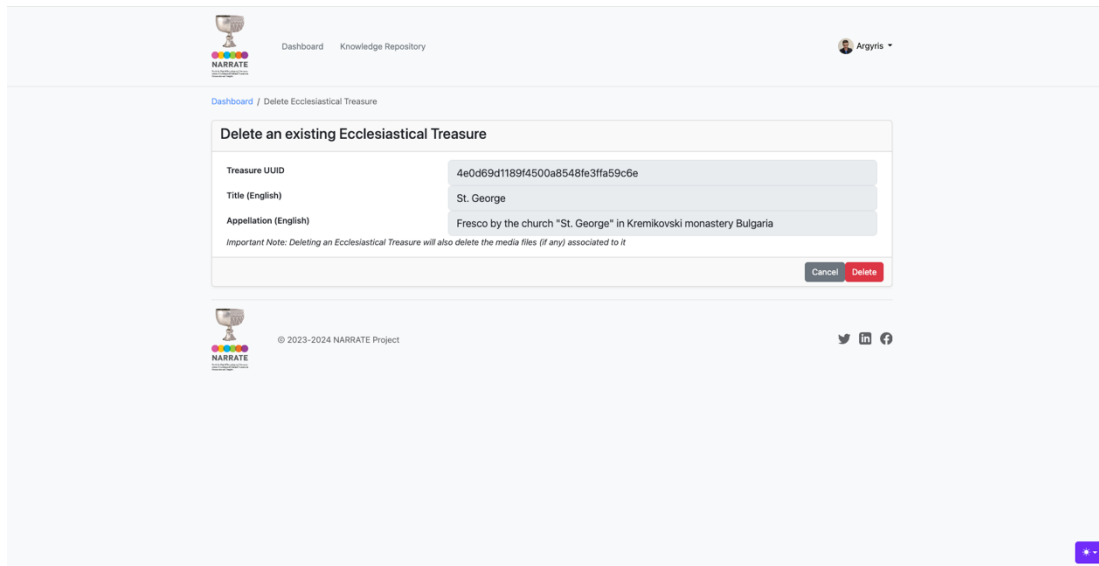
- Treasure UUID:** 4e0d69d1189f4500a8548fe3ffa59c6e
- Title (English):** St. George
- Appellation (English):** Fresco by the church "St. George" in Kremikovski monastery Bulgaria
- New Media Type:** A dropdown menu.
- New Media File:** A file upload area with the text 'Drop files here or click to upload' and 'Upload up to 10 files'.

At the bottom of the form, there are 'Cancel' and 'Save Changes' buttons. The footer of the page includes the NARRATE logo, copyright information '© 2023-2024 NARRATE Project', and social media icons for Twitter, LinkedIn, and Facebook.

*Figure 23: Upload new media page allows end-users to upload new media files for an existing ecclesiastical treasure.*

#### 5.2.4 Delete existing ecclesiastical treasure (requires Sign in)

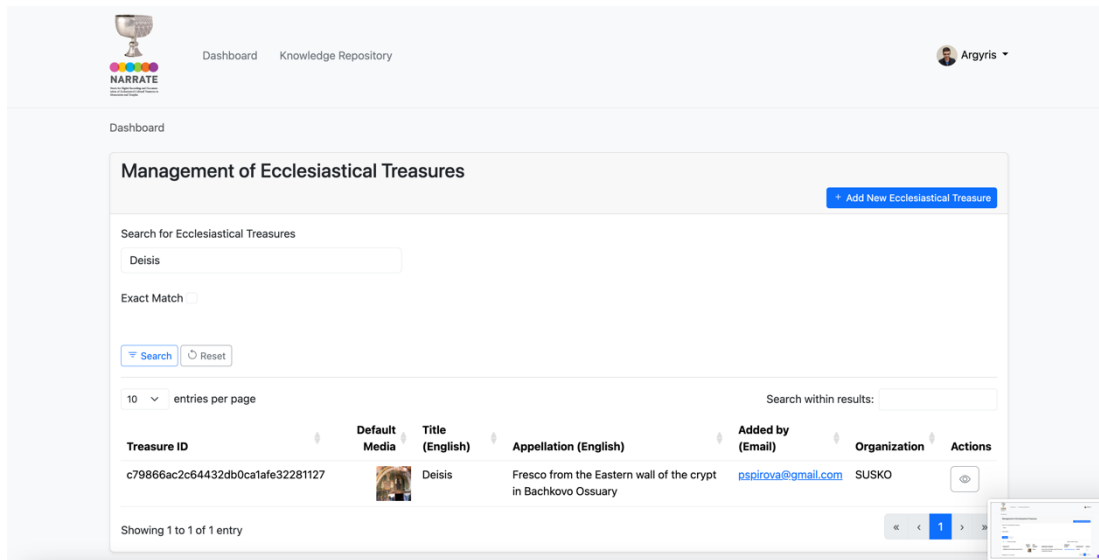
The delete existing ecclesiastical treasure page (**Figure 24**) of the NARRATE Interactive Dashboard allows individuals to review and confirm the deletion of the ecclesiastical treasure and its associated media. In case of unsuccessful action, the end-user is informed through an error message displayed on the screen. Upon successful completion of the action, the ecclesiastical treasure and its associated media get permanently deleted.



**Figure 24:** Delete existing ecclesiastical treasure page allows individuals to review and confirm the deletion of the ecclesiastical treasure and its associated media.

### 5.2.5 Advanced search for ecclesiastical treasures (requires Sign in)

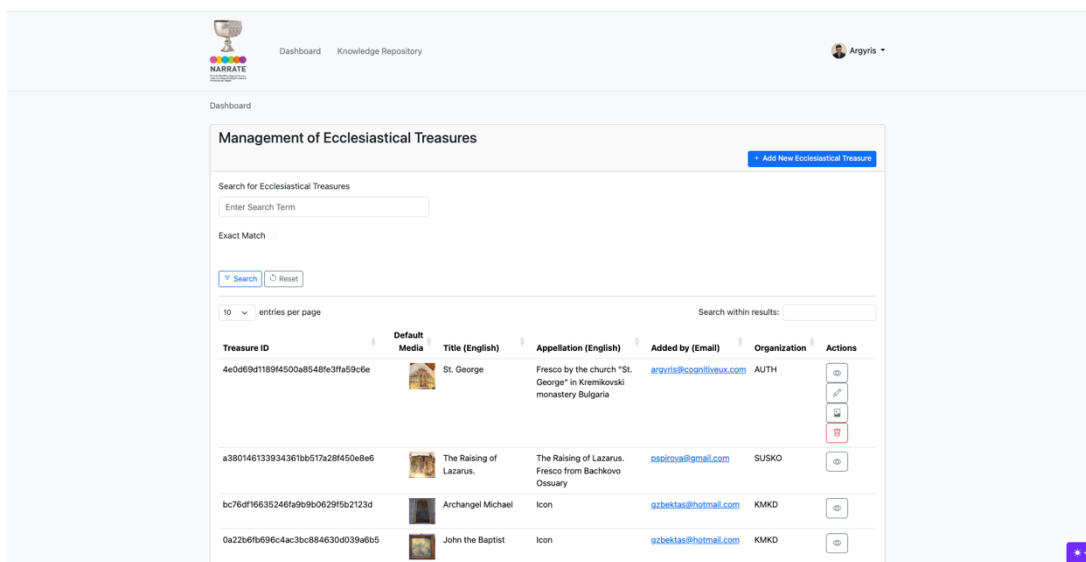
The functionality of advanced search for ecclesiastical treasures (**Figure 25**) of the NARRATE Interactive Dashboard allows individuals to perform search operations by entering free text queries, which will search for a potential search result across all the descriptive details of the ecclesiastical treasures. The end-users also have the ability to tick the “Exact Match” checkbox, which will apply an exact matching for the keywords used in the search area.



**Figure 25:** Advanced search for ecclesiastical treasures allows individuals to perform search operations by entering free text queries or performing exact match for the keywords used in the search area.

### 5.2.6 Basic access control for ecclesiastical treasures (requires Sign in)

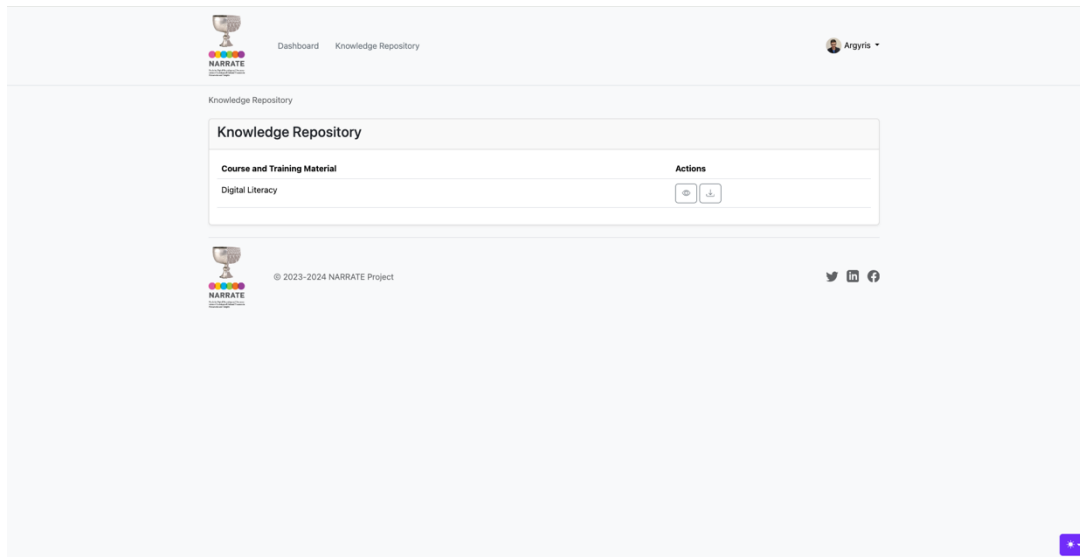
The functionality of basic access control for the management of ecclesiastical treasures (**Figure 26**) of the NARRATE Interactive Dashboard handles the actions allowed to be performed by each signed in end-user. The access control mechanism allows end-users to see all the ecclesiastical treasures (including their descriptive details and their associated media) but they are allowed to update/delete only the ecclesiastical treasures (including their descriptive details and their associated media) that were added by them.



**Figure 26:** Basic access control for the management of ecclesiastical treasures, allowing end-users to see all the ecclesiastical treasures but update/delete only the ecclesiastical treasures that were added by them.

### 5.3 Knowledge Repository (requires Sign in)

The knowledge repository page (**Figure 27**) of the NARRATE Interactive Dashboard serves as the hub for the project's educational and dissemination material regarding the digital recording and documentation of ecclesiastical treasures. Example resources available through this component will include: *i*) Course material, which will offer curated content to support knowledge acquisition; *ii*) Training material, which will provide a systematic approach to learning and will aim to ensure competence; *iii*) Recorded webinars, which will offer in-depth insights and expertise; *iv*) Demonstration videos, which will provide practical demonstrations and will aim to enhance understanding and acceptance of the digital tools; and *v*) Dissemination material, which will act as the channel for sharing insights and expertise, promoting collaborations, and fostering a culture of continuous learning and knowledge exchange. End-users can either view or download the material provided in the knowledge repository page.



*Figure 27: Knowledge repository page serves as the hub for the project’s educational and dissemination material regarding the digital recording and documentation of ecclesiastical treasures.*

## 5.4 Analytics (requires Administrator account & Sign in)

The analytics functionality is responsible for logging certain actions that occur within the system. Example actions include the management of: *i)* end-users accounts (e.g., account creation, sign in to the system, reset/update of password, update of profile details, sign out); *ii)* ecclesiastical treasures (e.g., viewing, adding, updating, deleting, and searching for ecclesiastical treasures); and *iii)* errors that occurred during end-users’ interactions. The analytics functionality was implemented as an API (i.e., /system-logs/list/), and is accessible only to signed in administrator accounts. For this purpose, an additional script was implemented, which facilitates the setup and creation of administrator accounts. The analytics API is accessible via the interactive demo page (see APPENDIX B – Application Programming Interfaces) and returns all the logged entries. **Figure 28** illustrates an example of the logged actions returned to the system administrator by the analytics API.

200 Response body

```

{
  "message": "Success",
  "resource_array": [
    {
      "id": 1,
      "user_fk_id": null,
      "api": "registerUser",
      "action": "CREATE",
      "data": "{\"email\": \"argyris@cognitieux.com\", \"name\": \"Argyris\", \"surname\": \"Constantinides\", \"organization\": \"Other / Not listed\"}",
      "error_data": null,
      "ip_address": "172.18.0.1",
      "is_error": false,
      "ts_added": "2024-09-13T07:29:56.081842Z",
      "ts_last_updated": "2024-09-13T07:29:56.081849Z"
    },
    {
      "id": 2,
      "user_fk_id": null,
      "api": "Login",
      "action": "CREATE",
      "data": "{\"email\": \"argyris@cognitieux.com\"}",
      "error_data": null,
      "ip_address": "172.18.0.1",
      "is_error": false,
      "ts_added": "2024-09-13T07:30:02.477510Z",
      "ts_last_updated": "2024-09-13T07:30:02.477517Z"
    }
  ]
}

```

Download

Figure 28. Example of the logged actions returned to the system administrator by the analytics functionality.



## 6. Conclusions

The aim of this software report is to present the activities on the development and integration of the NARRATE ecclesiastical-centered data repository and discovery service. The report begins with an overview of the NARRATE framework solution, followed by a discussion of its architectural design and the technology stack used. Then, it provides a detailed description of the implemented functionalities, along with the creation of the interactive dashboard, which was developed based on earlier design mockups. Finally, the appendices provide information regarding accessing the online NARRATE framework and offer a detailed description of the application programming interfaces. The findings of this report will serve as the basis for the summative evaluation user study of the NARRATE framework.



## References

- [1] Stuckenschmidt, H., & Van Harmelen, F. (2005). Information sharing on the semantic web. Springer Science & Business Media.
- [2] Czerwinski, S. E., Zhao, B. Y., Hodes, T. D., Joseph, A. D., & Katz, R. H. (1999, August). An architecture for a secure service discovery service. In Proceedings of the 5th annual ACM/IEEE international conference on Mobile computing and networking (pp. 24-35).
- [3] Duval, Erik, Wayne Hodgins, Stuart Sutton, and Stuart L. Weibel. "Metadata principles and practicalities." D-lib Magazine 8, no. 4 (2002): 1-10.
- [4] CIDOC Conceptual Reference Model (CRM). <https://www.cidoc-crm.org/>
- [5] NARRATE Project (2023). Project Result WP2 R5 – Production of a framework for best practices guides.
- [6] NARRATE Project (2023). Project Result WP2 R7 – Production of a conceptual framework that will identify the key characteristics, functionalities affordances, and modalities of the digital tools NARRATE will develop.

## APPENDIX A – Access URLs to the NARRATE Framework

**NARRATE Interactive Dashboard (Web Application):** <https://narrate-api.cognitiveux.net/backend/login/>

**NARRATE Project Open-source Software Code Repository:**  
<https://github.com/cognitiveux/narrate-service>

## APPENDIX B – Application Programming Interfaces

**Interactive demo page:** <https://narrate-api.cognitiveux.net/backend/demo/>

**Documentation page:** <https://narrate-api.cognitiveux.net/backend/doc/>

The endpoints for interacting with the NARRATE service

Contact Info: [admin@cognitiveux.com](mailto:admin@cognitiveux.com)

Version: v2

BasePath: /backend

BSD License

<http://apache.org/licenses/LICENSE-2.0.html>

### Access

1. APIKey KeyParamName:Authorization KeyInQuery:false KeyInHeader:true

### Methods

[ Jump to [Models](#) ]

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- [DELETE /ecclesiastical-treasures/delete/](#)
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- [POST /ecclesiastical-treasures/update/](#)

## FileManagement

- [POST /file-management/media/temp/add/](#)
- [DELETE /file-management/media/temp/delete/](#)

## SystemLogs

- [GET /system-logs/list/](#)

# AccountManagement

## Up

[POST /account-management/login/](#)

### (accountManagementLoginCreate)

Creates a JSON Web Token for login purpose if the provided credentials are correct

### Consumes

This API call consumes the following media types via the Content-Type request header:

- application/json

### Request body

data [Login](#) (required)

Body Parameter –

### Return type

[Response body for status code 201](#)

### Example data

Content-Type: application/json

```
{"empty": false}
```

### Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

## Responses

## 201

JSON Web Token has been created successfully. The value is returned in `resource_obj`. [Response body for status code 201](#)

## 400

Bad request (Invalid data) - Any missing, already existing or bad formatted fields will be returned [Response body for status code 400](#)

## 401

Unauthorized - The request lacks valid authentication credentials. [Response body for status code 401](#)

## 403

Forbidden. User is not activated. You must activate it to proceed. [Response body for status code 403](#)

## 404

User not found [Response body for status code 403](#)

## 405

Method not allowed [Response body for status code 401](#)

## 415

Unsupported media type [Response body for status code 401](#)

## 500

Internal server error [Response body for status code 401](#)

## Up

```
GET /account-management/poll_reset_email_status/
```

### (accountManagementPollResetEmailStatusList)

Polls the status of the reset code `email`

### Consumes

This API call consumes the following media types via the Content-Type request header:

- `application/json`

### Query parameters

#### email (required)

*Query Parameter* – Email

### Return type

[Response body for status code 200](#)

### Example data

Content-Type: `application/json`

```
{"empty": false}
```

### Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- `application/json`

### Responses

200

Success. The status is returned in `task_status`. [Response body for status code 200](#)

400

Bad request (Invalid data) - Any missing, already existing or bad formatted fields will be returned [Response body for status code 400](#)

404

Celery task ID for reset code not found or User not found [Response body for status code 404](#)

405

Method not allowed [Response body for status code 401](#)

415

Unsupported media type [Response body for status code 401](#)

500

Internal server error [Response body for status code 401](#)

## Up

POST `/account-management/refresh_token/`

(`accountManagementRefreshTokenCreate`)

Uses the longer-lived refresh token to obtain another access token

### Consumes

This API call consumes the following media types via the Content-Type request header:

- `application/json`

### Request body

data [RefreshToken](#) (required)

*Body Parameter* –

### Return type

[Response body for status code 201\\_1](#)

### Example data

Content-Type: `application/json`

```
{"empty": false}
```

### Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- `application/json`

### Responses

201

JSON Web Token has been created successfully. The value is returned in `resource_str`. [Response body for status code 201\\_1](#)

400

Bad request (Invalid data) - Any missing, already existing or bad formatted fields will be returned [Response body for status code 400\\_1](#)

401

Unauthorized - The request lacks valid authentication credentials. [Response body for status code 401](#)

405

Method not allowed [Response body for status code 401](#)

415

Unsupported media type [Response body for status code 401](#)

500

Internal server error [Response body for status code 401](#)

## Up

POST /account-management/register\_user/

(accountManagementRegisterUserCreate)

Creates a new NARRATE user instance

**Consumes**

This API call consumes the following media types via the Content-Type request header:

- application/json

**Request body**

data [RegisterUser](#) (required)

*Body Parameter* –

**Return type**

[Response body for status code 403](#)

**Example data**

Content-Type: application/json

```
{"empty": false}
```

**Produces**

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

**Responses**

200

Success [Response body for status code 403](#)

400

Bad request (Invalid data) - Any missing, already existing or bad formatted fields will be returned [Response body for status code 400](#)

405

Method not allowed [Response body for status code 401](#)

415

Unsupported media type [Response body for status code 401](#)

500

Internal server error [Response body for status code 401](#)

Up

POST /account-management/request\_password\_reset\_code/

(accountManagementRequestPasswordResetCodeCreate)

Request a reset code for reset password of account via email

### Consumes

This API call consumes the following media types via the Content-Type request header:

- application/json

### Request body

data [RequestPasswordResetCode](#) (required)

Body Parameter –

### Return type

[Response body for status code 403](#)

### Example data

Content-Type: application/json

```
{"empty": false}
```

### Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

### Responses

200

Success [Response body for status code 403](#)

400

Bad request (Invalid data) - Any missing, already existing or bad formatted fields will be returned [Response body for status code 400](#)

404

User not found [Response body for status code 403](#)

405

Method not allowed [Response body for status code 401](#)

415

Unsupported media type [Response body for status code 401](#)

422

Request limit exceeded. Try again in <Integer> minutes. [Response body for status code 403](#)

500

Internal server error [Response body for status code 401](#)

## Up

POST /account-management/reset\_password/

### (accountManagementResetPasswordCreate)

Resets the password if the provided password reset code matches the latest password reset code received via email

#### Consumes

This API call consumes the following media types via the Content-Type request header:

- application/json

#### Request body

data [ResetPassword](#) (required)

Body Parameter –

#### Return type

[Response body for status code 403](#)

#### Example data

Content-Type: application/json

```
{"empty": false}
```

#### Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

#### Responses

200

Success [Response body for status code 403](#)

400

Bad request (Invalid data) - Any missing, already existing or bad formatted fields will be returned [Response body for status code 400](#)

404

User not found [Response body for status code 403](#)

405

Method not allowed [Response body for status code 401](#)

415

Unsupported media type [Response body for status code 401](#)

422

Reset code has expired or Reset code is incorrect or Reset code not requested [Response body for status code 422](#)

500

Internal server error [Response body for status code 401](#)

## Up

POST /account-management/update\_password/



### (accountManagementUpdatePasswordCreate)

Updates the user's password

#### Consumes

This API call consumes the following media types via the Content-Type request header:

- application/json

#### Request body

data [UpdatePassword](#) (required)

Body Parameter –

#### Return type

[Response body for status code 403](#)

#### Example data

Content-Type: application/json

```
{"empty": false}
```

#### Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

#### Responses

200

Success [Response body for status code 403](#)

400

Bad request (Invalid data) - Any missing, already existing or bad formatted fields will be returned [Response body for status code 400](#)

401

Unauthorized - The request lacks valid authentication credentials. [Response body for status code 401](#)

404

User not found [Response body for status code 403](#)

405

Method not allowed [Response body for status code 401](#)

415

Unsupported media type [Response body for status code 401](#)

422

Password is incorrect [Response body for status code 403](#)

500

Internal server error [Response body for status code 401](#)

Up

POST /account-management/update\_profile/

### (accountManagementUpdateProfileCreate)

Updates the user's profile details

## Consumes

This API call consumes the following media types via the Content-Type request header:

- application/json

## Request body

data [UpdateProfile](#) (required)

Body Parameter –

## Return type

[Response body for status code 403](#)

## Example data

Content-Type: application/json

```
{"empty": false}
```

## Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

## Responses

200

Success [Response body for status code 403](#)

400

Bad request (Invalid data) - Any missing, already existing or bad formatted fields will be returned [Response body for status code 400](#)

401

Unauthorized - The request lacks valid authentication credentials. [Response body for status code 401](#)

405

Method not allowed [Response body for status code 401](#)

415

Unsupported media type [Response body for status code 401](#)

500

Internal server error [Response body for status code 401](#)

# EcclesiasticalTreasures

Up

POST /ecclesiastical-treasures/create/

(ecclesiasticalTreasuresCreateCreate)

Creates a new ecclesiastical treasure

## Consumes

This API call consumes the following media types via the Content-Type request header:

- application/json

### Request body

data [EcclesiasticalTreasuresCreate](#) (required)

Body Parameter –

### Return type

[Response body for status code 403](#)

### Example data

Content-Type: application/json

```
{"empty": false}
```

### Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

### Responses

200

Success [Response body for status code 403](#)

400

Bad request (Invalid data) - Any missing, already existing or bad formatted fields will be returned [Response body for status code 400](#)

401

Unauthorized - The request lacks valid authentication credentials. [Response body for status code 401](#)

405

Method not allowed [Response body for status code 401](#)

415

Unsupported media type [Response body for status code 401](#)

500

Internal server error [Response body for status code 401](#)

## Up

**DELETE** /ecclesiastical-treasures/delete/

(ecclesiasticalTreasuresDeleteDelete)

Delete data of an ecclesiastical treasure based on the `treasure_id`

### Consumes

This API call consumes the following media types via the Content-Type request header:

- application/json

### Query parameters



### treasure\_id (required)

*Query Parameter* – The uuid of the ecclesiastical treasure you would like to delete

### Return type

[Response body for status code 403](#)

### Example data

Content-Type: application/json

```
{"empty": false}
```

### Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

### Responses

200

Success [Response body for status code 403](#)

400

Bad request (Invalid data) - Any missing, already existing or bad formatted fields will be returned [Response body for status code 400](#)

401

Unauthorized - The request lacks valid authentication credentials. [Response body for status code 401](#)

403

Forbidden. You are not allowed to access this resource. [Response body for status code 401](#)

404

Ecclesiastical Treasure not found [Response body for status code 403](#)

405

Method not allowed [Response body for status code 401](#)

415

Unsupported media type [Response body for status code 401](#)

500

Internal server error [Response body for status code 401](#)

## Up

GET /ecclesiastical-treasures/fetch/

### (ecclesiasticalTreasuresFetchList)

Returns the data of a specific ecclesiastical treasure based on the `treasure_id`

### Consumes

This API call consumes the following media types via the Content-Type request header:

- application/json

### Query parameters



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### treasure\_id (required)

*Query Parameter* – The uuid of the ecclesiastical treasure you would like to fetch

### Return type

[Response body for status code 200 1](#)

### Example data

Content-Type: application/json

```
{"empty": false}
```

### Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

### Responses

200

Success [Response body for status code 200 1](#)

400

Bad request (Invalid data) - Any missing, already existing or bad formatted fields will be returned [Response body for status code 400](#)

401

Unauthorized - The request lacks valid authentication credentials. [Response body for status code 401](#)

404

Ecclesiastical Treasure not found [Response body for status code 403](#)

405

Method not allowed [Response body for status code 401](#)

415

Unsupported media type [Response body for status code 401](#)

500

Internal server error [Response body for status code 401](#)

## Up

GET /ecclesiastical-treasures/list/

### (ecclesiasticalTreasuresListList)

Returns the list of all ecclesiastical treasures based on the `search_keyword` and `exact_match` if given

### Consumes

This API call consumes the following media types via the Content-Type request header:

- application/json

### Query parameters

#### search\_keyword (optional)

*Query Parameter* – The search keyword to filter ecclesiastical treasures

### exact\_match (optional)

*Query Parameter* – Whether the search keyword to be exact match or not when filtering ecclesiastical treasures

### Return type

[Response body for status code 200 2](#)

### Example data

Content-Type: application/json

```
{"empty": false}
```

### Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

### Responses

200

Success [Response body for status code 200 2](#)

400

Bad request (Invalid data) - Any missing, already existing or bad formatted fields will be returned [Response body for status code 400](#)

401

Unauthorized - The request lacks valid authentication credentials. [Response body for status code 401](#)

405

Method not allowed [Response body for status code 401](#)

415

Unsupported media type [Response body for status code 401](#)

500

Internal server error [Response body for status code 401](#)

## Up

DELETE /ecclesiastical-treasures/media/delete/

(ecclesiasticalTreasuresMediaDeleteDelete)

Delete media file of an ecclesiastical treasure based on the `uuid`

### Consumes

This API call consumes the following media types via the Content-Type request header:

- application/json

### Query parameters

**treasure\_id (required)**

*Query Parameter* – The uuid of the ecclesiastical treasure

**media\_id (required)**

*Query Parameter* – The uuid of the media file you would like to delete

### Return type

### [Response body for status code 200\\_3](#)

#### Example data

Content-Type: application/json

```
{"empty": false}
```

#### Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

#### Responses

200

Success [Response body for status code 200\\_3](#)

400

Bad request (Invalid data) - Any missing, already existing or bad formatted fields will be returned [Response body for status code 400](#)

401

Unauthorized - The request lacks valid authentication credentials. [Response body for status code 401](#)

403

Forbidden. You are not allowed to access this resource. [Response body for status code 401](#)

404

Ecclesiastical Treasure not found or Media File not found [Response body for status code 200\\_3](#)

405

Method not allowed [Response body for status code 401](#)

415

Unsupported media type [Response body for status code 401](#)

500

Internal server error [Response body for status code 401](#)

## Up

GET /ecclesiastical-treasures/media/list/

### (ecclesiasticalTreasuresMediaListList)

Returns the list of all media for the given ecclesiastical treasure based on the `treasure_id`

#### Consumes

This API call consumes the following media types via the Content-Type request header:

- application/json

#### Query parameters

##### treasure\_id (required)

*Query Parameter* – The uuid of the ecclesiastical treasure for which you would like to get its media files

## Return type

[Response body for status code 200\\_2](#)

## Example data

Content-Type: application/json

```
{"empty": false}
```

## Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

## Responses

200

Success [Response body for status code 200\\_2](#)

400

Bad request (Invalid data) - Any missing, already existing or bad formatted fields will be returned [Response body for status code 400](#)

401

Unauthorized - The request lacks valid authentication credentials. [Response body for status code 401](#)

404

Ecclesiastical Treasure not found [Response body for status code 403](#)

405

Method not allowed [Response body for status code 401](#)

415

Unsupported media type [Response body for status code 401](#)

500

Internal server error [Response body for status code 401](#)

## Up

POST /ecclesiastical-treasures/media/update/

(ecclesiasticalTreasuresMediaUpdateCreate)

Updates the media file of an ecclesiastical treasure

## Consumes

This API call consumes the following media types via the Content-Type request header:

- application/json

## Request body

data [EcclesiasticalTreasuresMediaUpdate](#) (required)

Body Parameter —

## Return type

[Response body for status code 200\\_3](#)

## Example data

Content-Type: application/json



```
{"empty": false}
```

## Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

## Responses

200

Success [Response body for status code 200\\_3](#)

400

Bad request (Invalid data) - Any missing, already existing or bad formatted fields will be returned [Response body for status code 400](#)

401

Unauthorized - The request lacks valid authentication credentials. [Response body for status code 401](#)

403

Forbidden. You are not allowed to access this resource. [Response body for status code 401](#)

404

Ecclesiastical Treasure not found or Media File not found [Response body for status code 200\\_3](#)

405

Method not allowed [Response body for status code 401](#)

415

Unsupported media type [Response body for status code 401](#)

500

Internal server error [Response body for status code 401](#)

## Up

POST /ecclesiastical-treasures/media/upload\_new/

(ecclesiasticalTreasuresMediaUploadNewCreate)

Uploads new media for an ecclesiastical treasure

## Consumes

This API call consumes the following media types via the Content-Type request header:

- application/json

## Request body

data [EcclesiasticalTreasuresMediaUploadNew](#) (required)

Body Parameter –

## Return type

[Response body for status code 200\\_3](#)

## Example data

Content-Type: application/json

```
{"empty": false}
```

### Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

### Responses

200

Success [Response body for status code 200\\_3](#)

400

Bad request (Invalid data) - Any missing, already existing or bad formatted fields will be returned [Response body for status code 400](#)

401

Unauthorized - The request lacks valid authentication credentials. [Response body for status code 401](#)

403

Forbidden. You are not allowed to access this resource. [Response body for status code 401](#)

404

Ecclesiastical Treasure not found or Media File not found [Response body for status code 200\\_3](#)

405

Method not allowed [Response body for status code 401](#)

415

Unsupported media type [Response body for status code 401](#)

500

Internal server error [Response body for status code 401](#)

## Up

POST /ecclesiastical-treasures/update/

(ecclesiasticalTreasuresUpdateCreate)

Updates an ecclesiastical treasure

### Consumes

This API call consumes the following media types via the Content-Type request header:

- application/json

### Request body

data [EcclesiasticalTreasuresUpdate](#) (required)

Body Parameter –

### Return type

[Response body for status code 403](#)

### Example data

Content-Type: application/json

```
{"empty": false}
```

### Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

### Responses

200

Success [Response body for status code 403](#)

400

Bad request (Invalid data) - Any missing, already existing or bad formatted fields will be returned [Response body for status code 400](#)

401

Unauthorized - The request lacks valid authentication credentials. [Response body for status code 401](#)

403

Forbidden. You are not allowed to access this resource. [Response body for status code 401](#)

404

Ecclesiastical Treasure not found [Response body for status code 403](#)

405

Method not allowed [Response body for status code 401](#)

415

Unsupported media type [Response body for status code 401](#)

500

Internal server error [Response body for status code 401](#)

## FileManagement

### Up

POST /file-management/media/temp/add/

(fileManagementMediaTempAddCreate)

Creates a new temp media entry based on the file received

### Consumes

This API call consumes the following media types via the Content-Type request header:

- application/x-www-form-urlencoded
- multipart/form-data

### Form parameters

file\_src (optional)

Form Parameter —

### uuid (optional)

*Form Parameter* –

### file\_ext (optional)

*Form Parameter* –

### Return type

[Response body for status code 200\\_1](#)

### Example data

Content-Type: application/json

```
{"empty": false}
```

### Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

### Responses

200

Success [Response body for status code 200\\_1](#)

400

Bad request (Invalid data) - Any missing, already existing or bad formatted fields will be returned [Response body for status code 400](#)

401

Unauthorized - The request lacks valid authentication credentials. [Response body for status code 401](#)

404

User not found

405

Method not allowed [Response body for status code 401](#)

500

Internal server error [Response body for status code 401](#)

## Up

`DELETE /file-management/media/temp/delete/`

(fileManagementMediaTempDeleteDelete)

Deletes data of a temp media file based on the `file_id`

### Consumes

This API call consumes the following media types via the Content-Type request header:

- application/json

### Query parameters

#### file\_id (required)

*Query Parameter* – The uuid of the temp media file you would like to delete

### Return type

[Response body for status code 403](#)

## Example data

Content-Type: application/json

```
{"empty": false}
```

## Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

## Responses

200

Success [Response body for status code 403](#)

400

Bad request (Invalid data) - Any missing, already existing or bad formatted fields will be returned [Response body for status code 400](#)

401

Unauthorized - The request lacks valid authentication credentials. [Response body for status code 401](#)

404

Media File not found [Response body for status code 403](#)

405

Method not allowed [Response body for status code 401](#)

500

Internal server error [Response body for status code 401](#)

## SystemLogs

### Up

GET /system-logs/list/

(systemLogsListList)

Returns the list of all system logs

## Consumes

This API call consumes the following media types via the Content-Type request header:

- application/json

## Return type

[Response body for status code 200\\_2](#)

## Example data

Content-Type: application/json

```
{"empty": false}
```

## Produces

This API call produces the following media types according to the Accept request header; the media type will be conveyed by the Content-Type response header.

- application/json

## Responses

200

Success [Response body for status code 200 2](#)

401

Unauthorized - The request lacks valid authentication credentials. [Response body for status code 401](#)

403

Forbidden. You are not allowed to access this resource. [Response body for status code 401](#)

405

Method not allowed [Response body for status code 401](#)

415

Unsupported media type [Response body for status code 401](#)

500

Internal server error [Response body for status code 401](#)

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Details for updating media of ecclesiastical treasures -[Up](#)

treasure\_id (optional)

[String](#)

old\_media\_id (optional)

[String](#)

new\_media\_id (optional)

[String](#)

Details for updating the user profile -[Up](#)

name (optional)

[String](#)

surname (optional)

[String](#)

telephone (optional)

[String](#)

media\_type\_id (optional)

[String](#)

type (optional)

[String](#)

Details for uploading new media for the ecclesiastical treasures -[Up](#)

treasure\_id (optional)

[String](#)

media\_type\_id (optional)

[String](#)

type (optional)

[String](#)

EcclesiasticalTreasuresCreate -[Up](#)

title\_en

[String](#)

title\_gr (optional)

[String](#)  
title\_bg (optional)  
[String](#)  
title\_tk (optional)  
[String](#)  
appellation\_en  
[String](#)  
appellation\_gr (optional)  
[String](#)  
appellation\_bg (optional)  
[String](#)  
appellation\_tk (optional)  
[String](#)  
existing\_obj\_code (optional)  
[String](#)  
desc\_short\_version (optional)  
[String](#)  
desc\_extended\_version (optional)  
[String](#)  
time\_span (optional)  
[String](#)  
kind (optional)  
[String](#)  
creator (optional)  
[String](#)  
beginning\_of\_existence (optional)  
[String](#)  
was\_in\_church (optional)  
[Boolean](#)  
was\_in\_another\_country (optional)  
[Boolean](#)  
was\_lost\_and\_found (optional)  
[Boolean](#)  
dimension (optional)  
[String](#)  
material (optional)  
[String](#)  
inscription (optional)  
[String](#)  
manuscript\_text (optional)  
[String](#)  
event\_information (optional)  
[String](#)  
previous\_documentation (optional)  
[String](#)  
relevant\_bibliography (optional)  
[String](#)  
preservation\_status (optional)



String

conservation\_status (optional)

String

group\_of\_objects (optional)

array[String]

collection\_it\_belongs (optional)

String

position\_of\_treasure (optional)

String

people\_that\_help\_with\_documentation (optional)

array[String]

EcclesiasticalTreasuresMediaUpdate - The details of the ecclesiastical treasure media you would like to update Up

updating\_data (optional)

[Details for updating media of ecclesiastical treasures](#)

EcclesiasticalTreasuresMediaUploadNew - The details of the ecclesiastical treasure media you would like to upload Up

uploading\_data (optional)

[Details for uploading new media for the ecclesiastical treasures](#)

EcclesiasticalTreasuresUpdate - Up

uuid

String

title\_en

String

title\_gr (optional)

String

title\_bg (optional)

String

title\_tk (optional)

String

appellation\_en

String

appellation\_gr (optional)

String

appellation\_bg (optional)

String

appellation\_tk (optional)

String

existing\_obj\_code (optional)

String

desc\_short\_version (optional)

String

desc\_extended\_version (optional)

[String](#)

time\_span (optional)

[String](#)

kind (optional)

[String](#)

creator (optional)

[String](#)

beginning\_of\_existence (optional)

[String](#)

was\_in\_church (optional)

[Boolean](#)

was\_in\_another\_country (optional)

[Boolean](#)

was\_lost\_and\_found (optional)

[Boolean](#)

dimension (optional)

[String](#)

material (optional)

[String](#)

inscription (optional)

[String](#)

manuscript\_text (optional)

[String](#)

event\_information (optional)

[String](#)

previous\_documentation (optional)

[String](#)

relevant\_bibliography (optional)

[String](#)

preservation\_status (optional)

[String](#)

conservation\_status (optional)

[String](#)

group\_of\_objects (optional)

[array\[String\]](#)

collection\_it\_belongs (optional)

[String](#)

position\_of\_treasure (optional)

[String](#)

people\_that\_help\_with\_documentation (optional)

[array\[String\]](#)

Login -[Up](#)

email

[String](#)

password



[String](#)

RefreshToken -[Up](#)

refresh

[String](#)

access (optional)

[String](#)

RegisterUser -[Up](#)

email

[String](#) format: email

name

[String](#)

organization

[String](#)

Enum:

AUTH

IHU

KMKD

SUSKO

Other / Not listed

password

[String](#)

surname

[String](#)

RequestPasswordResetCode -[Up](#)

email

[String](#) format: email

ResetPassword -[Up](#)

email

[String](#) format: email

password

[String](#)

reset\_code

[String](#)

Response body for status code 200 -[Up](#)

Following keys are returned as json

message (optional)

[String](#) A general message description



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**task\_status (optional)**

**String** The status of the task: ['PENDING', 'SUCCESS', 'FAILURE']

Response body for status code 200\_1 -[Up](#)

Following keys are returned as json

**message (optional)**

**String** A general message description

**resource\_obj (optional)**

**Object** A dictionary that contains the JWT in the form of key-value pairs. The key `access` is a string that corresponds to the JWT access token and the key `refresh` is a string that corresponds to the JWT refresh token.

Response body for status code 200\_2 -[Up](#)

Following keys are returned as json

**message (optional)**

**String** A general message description

**resource\_array (optional)**

**array[String]** An array with all the available data

Response body for status code 200\_3 -[Up](#)

Following keys are returned as json

**message (optional)**

**String** A general message description

**resource\_name (optional)**

**String** The name of the resource

**Enum:**

*ecclesiastical\_treasure*

*media\_file*

Response body for status code 201 -[Up](#)

Following keys are returned as json

**message (optional)**

**String** A general message description

**resource\_name (optional)**

**String** The name of the resource

**resource\_obj (optional)**

**Object** A dictionary that contains the JWT in the form of key-value pairs. The key `access` is a string that corresponds to the JWT access token and the key `refresh` is a string that corresponds to the JWT refresh token.

Response body for status code 201\_1 -[Up](#)

Following keys are returned as json

**message (optional)**

[String](#) A general message description

**resource\_name (optional)**

[String](#) The name of the resource

**resource\_str (optional)**

[String](#) A string value associated with the resource\_name

Response body for status code 400 -[Up](#)

Following keys are returned as json

**message (optional)**

[String](#) A general message description

**bad\_formatted\_fields (optional)**

[array\[String\]](#) Any field that is not in the correct format will be returned in the list

**missing\_required\_fields (optional)**

[array\[String\]](#) The missing required fields are returned as a list

**already\_exists\_fields (optional)**

[array\[String\]](#) Any field that is unique and already exists, will be returned in the list

**error\_details (optional)**

[Object](#) A dictionary that contains descriptive information about the validation errors in the form of key-value pairs. Each key is a string that corresponds to the problematic field and the associated value is a list of strings that contains the error details. If a JSON parse error occurred, there will be only one key named `json`.

Response body for status code 400\_1 -[Up](#)

Following keys are returned as json

**message (optional)**

[String](#) A general message description

**bad\_formatted\_fields (optional)**

[array\[String\]](#) Any field that is not in the correct format will be returned in the list

**missing\_required\_fields (optional)**

[array\[String\]](#) The missing required fields are returned as a list

**error\_details (optional)**

[Object](#) A dictionary that contains descriptive information about the validation errors in the form of key-value pairs. Each key is a string that corresponds to the problematic field and the associated value is a list of strings that contains the error details. If a JSON parse error occurred, there will be only one key named `json`.

Response body for status code 401 -[Up](#)

Following keys are returned as json

**message (optional)**

[String](#) A general message description

Response body for status code 403 - [Up](#)

Following keys are returned as json  
**message (optional)**

[String](#) A general message description

**resource\_name (optional)**

[String](#) The name of the resource

Response body for status code 404 - [Up](#)

Following keys are returned as json  
**message (optional)**

[String](#) A general message description

**resource\_name (optional)**

[String](#) The name of the resource

**Enum:**

*c\_reset\_task\_id*

*user*

Response body for status code 422 - [Up](#)

Following keys are returned as json  
**message (optional)**

[String](#) A general message description

**resource\_name (optional)**

[String](#) The name of the resource

**reason (optional)**

[String](#) The reason behind this error message

**Enum:**

*expired\_reset\_code*

*incorrect\_reset\_code*

*not\_requested\_reset\_code*

UpdatePassword - [Up](#)

**current\_password**

[String](#)

**new\_password**

[String](#)

UpdateProfile - The details of the user profile you would like to update [Up](#)

**updating\_data (optional)**

[Details for updating the user profile](#)