



Transforming Research through Innovative
Practices for Linked Interdisciplinary Exploration

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Advancing Open Scholarship

D6.6 – APIs DEVELOPMENT - RP2

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APIs DEVELOPMENT - RP2

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Acronyms

API	Application Programming Interface
RI	Research Infrastructure
REST API	An API which respects the REST architecture constraints (Representational State Transfer).

Publishable Summary

The GOTRIPLE API of the TRIPLE project allows anyone to search through the enriched TRIPLE objects: documents, projects and researcher profiles, i.e. the three main categories of data harvested by the platform.

It also gives access to specific objects by their identifiers. The content is indexed using the Elasticsearch engine¹, which is an open-source software that allows simple queries to be built in order to search and retrieve the content required.

Our publicly available REST API exposes the metadata that are enriched and indexed by the TRIPLE Core Pipeline.

This deliverable is the first version² of the GOTRIPLE API documentation available to technical users in swagger format at the URL <https://api-alpha.gotriple.eu/doc>.

1. ACCESS

The API is available on <https://api-alpha.gotriple.eu>

2. SCHEMA

The API response uses the same schema as the Elasticsearch mapping listed in Annex 1.

3. AUTHENTICATION

GOTRIPLE API is free to use.

¹<https://www.elastic.co>

²A second version is planned for September 2022 and will be the subject of the deliverable 6.3 "APIs development-RP3"

4. ENDPOINTS

TABLE 1 GET /authors

Description	Provides the full search on author index up to 50 records per page (30 by default).
Accepts	<ul style="list-style-type: none"> · q : The text to search for · page : The page number · size : The number of items per page · aggs : The facets to construct
Returns	An array of results. Three formats are available, depending on Accept HTTP Header.
Example	https://api-alpha.gotriple.eu/authors?page=1&size=30&q=bourdieu

TABLE 2 GET /authors/{id}

Description	Get an author resource
Accepts	A valid author Id
Returns	Author Object
Example	

TABLE 3 GET /documents

Description	Provides the full search on document index up to 50 records per page (30 by default).
Accepts	<ul style="list-style-type: none"> · q : The text to search for · page : The page number · size : The number of items per page · aggs : The facets to construct (available for topic, additional_type, author, knows_about, spatial_coverage, project)
Returns	An array of results. Three formats are available, depending on Accept HTTP Header.

Example	https://api-alpha.gotriple.eu/documents?page=1&size=30&aggs=topic,size=3,sort=count,order=desc&q=feminicide
----------------	---

TABLE 4 GET /documents/{id}

Description	Get a document resource
Accepts	A valid document Id
Returns	Document Object
Example	https://api-alpha.gotriple.eu/documents/10670/1.poksvs

TABLE 5 GET /projects

Description	Provides the full search on project index up to 50 records per page (30 by default).
Accepts	<ul style="list-style-type: none"> · q : The text to search for · page : The page number · size : The number of items per page · aggs : The facets to construct (available for topic, organization, knows_about)
Returns	An array of results. Three formats are available, depending on Accept HTTP Header.
Example	https://api-alpha.gotriple.eu/projects?page=5&size=5&q=h2020

TABLE 6 GET /projects/{id}

Description	Get a project resource
Accepts	A valid project Id
Returns	Project Object
Example	

Annex 1 – Elasticsearch mapping

Elasticsearch mapping³ of the TRIPLE objects are related to the TRIPLE data model presented in the WP2 D2.1 (link?)

In the following table, we provide the available fields linked to the TRIPLE object metadatas (document, project, profile). We also supply in the *structures* column the field data type⁴ of each property.

Some textual properties are copied into the full_text field to be globally indexed and accessible in a simple search.

Document

Metadata	Properties	Structures	Fulltext				
Abstract	abstract	lang keyword text text detected_lang boolean translated boolean	x				
Type	additional_type	id keyword label <table> <tr> <td>lang</td> <td>keyword</td> </tr> <tr> <td>text</td> <td>text</td> </tr> </table>	lang	keyword	text	text	x
lang	keyword						
text	text						

³ <https://www.elastic.co/guide/en/elasticsearch/reference/current/mapping.html>

⁴ <https://www.elastic.co/guide/en/elasticsearch/reference/current/mapping-types.html>

Author	author	<table border="1"> <tr><td>family_name</td><td>text</td></tr> <tr><td>given_name</td><td>text</td></tr> <tr><td>id</td><td>keyword</td></tr> <tr><td colspan="2">identifier</td></tr> <tr><td>idhal</td><td>keyword</td></tr> <tr><td>idref</td><td>keyword</td></tr> <tr><td>isni</td><td>keyword</td></tr> <tr><td>orcid</td><td>keyword</td></tr> </table>	family_name	text	given_name	text	id	keyword	identifier		idhal	keyword	idref	keyword	isni	keyword	orcid	keyword	x
family_name	text																		
given_name	text																		
id	keyword																		
identifier																			
idhal	keyword																		
idref	keyword																		
isni	keyword																		
orcid	keyword																		
	contributor	text	x																
Date	date_published	text																	
Title	headline	<table border="1"> <tr><td>lang</td><td>keyword</td></tr> <tr><td>text</td><td>text</td></tr> <tr><td>detected_lang</td><td>boolean</td></tr> <tr><td>translated</td><td>boolean</td></tr> </table>	lang	keyword	text	text	detected_lang	boolean	translated	boolean	x								
lang	keyword																		
text	text																		
detected_lang	boolean																		
translated	boolean																		
ID	id	keyword	x																
Other IDs	identifier	keyword	x																
Full Text Language	in_language	keyword																	
Source	is_based_on_url	keyword																	

Keyword	keywords	<table border="1"> <tr> <td>lang</td><td>keyword</td></tr> <tr> <td>text</td><td>text</td></tr> </table>	lang	keyword	text	text	x				
lang	keyword										
text	text										
TRIPLE concept	knows_about	<table border="1"> <tr> <td>id</td><td>keyword</td></tr> <tr> <td>label</td><td></td></tr> <tr> <td>lang</td><td>keyword</td></tr> <tr> <td>text</td><td>text</td></tr> </table>	id	keyword	label		lang	keyword	text	text	x
id	keyword										
label											
lang	keyword										
text	text										
Licence	licence	keyword	x								
URL	main_entity_of_page	keyword	x								
Source	mentions	keyword	x								
Link to project	project	keyword									
Primary source	provider	<table border="1"> <tr> <td>id</td><td>keyword</td></tr> <tr> <td>label</td><td>text</td></tr> </table>	id	keyword	label	text	x				
id	keyword										
label	text										
Publisher	publisher	keyword	x								
Spatial location	spatial_coverage	<table border="1"> <tr> <td>id</td><td>keyword</td></tr> <tr> <td>label</td><td></td></tr> <tr> <td>lang</td><td>keyword</td></tr> </table>	id	keyword	label		lang	keyword	x		
id	keyword										
label											
lang	keyword										

		<table border="1"> <tr><td>text</td><td>text</td></tr> </table>	text	text									
text	text												
Temporal period	temporal_coverage	<table border="1"> <tr><td>label</td><td>text</td></tr> </table>	label	text	x								
label	text												
Category	topic	<table border="1"> <tr><td>id</td><td>keyword</td></tr> <tr><td>confidence</td><td>float</td></tr> <tr><td>label</td><td></td></tr> <tr><td>lang</td><td>keyword</td></tr> <tr><td>text</td><td>text</td></tr> </table>	id	keyword	confidence	float	label		lang	keyword	text	text	x
id	keyword												
confidence	float												
label													
lang	keyword												
text	text												
URL of full text	url	keyword	x										

Project							
Metadata	Properties	Structures	Fulltext				
Acronym	alternate_name	<table border="1"> <tr><td>lang</td><td>keyword</td></tr> <tr><td>text</td><td>text</td></tr> </table>	lang	keyword	text	text	x
lang	keyword						
text	text						

Description	description	<table border="1"> <tr><td>lang</td><td>keyword</td></tr> <tr><td>text</td><td>text</td></tr> <tr><td>detected_lang</td><td>boolean</td></tr> <tr><td>translated</td><td>boolean</td></tr> </table>	lang	keyword	text	text	detected_lang	boolean	translated	boolean	x
lang	keyword										
text	text										
detected_lang	boolean										
translated	boolean										
End date	end_date	date									
Project ID	id	keyword									
Other IDs	identifier	keyword	x								
Keyword	keywords	<table border="1"> <tr><td>lang</td><td>keyword</td></tr> <tr><td>text</td><td>text</td></tr> </table>	lang	keyword	text	text	x				
lang	keyword										
text	text										
Link to author(s)	member	keyword	x								
Name	name	<table border="1"> <tr><td>lang</td><td>keyword</td></tr> <tr><td>text</td><td>text</td></tr> <tr><td>detected_lang</td><td>boolean</td></tr> <tr><td>translated</td><td>boolean</td></tr> </table>	lang	keyword	text	text	detected_lang	boolean	translated	boolean	x
lang	keyword										
text	text										
detected_lang	boolean										
translated	boolean										
Organization	organization	keyword	x								
Funder	sponsor	keyword	x								
Start date	start_date	date									
Link to document(s)	subject_of	keyword									

Category	topic	<table border="1"> <tr><td>id</td><td>keyword</td></tr> <tr><td>confidence</td><td>float</td></tr> <tr><td>label</td><td></td></tr> <tr><td>lang</td><td>keyword</td></tr> <tr><td>text</td><td>text</td></tr> </table>	id	keyword	confidence	float	label		lang	keyword	text	text	x
id	keyword												
confidence	float												
label													
lang	keyword												
text	text												
Page Web URL	url	keyword	x										

Profiles

Metadata	Properties	Structures	Fulltext								
Link to document(s)	author_of	keyword									
Last Name	family_name	text	x								
Firstname	given_name	text	x								
ID	id	keyword	x								
Other IDs	identifier	<table border="1"> <tr><td>idhal</td><td>keyword</td></tr> <tr><td>idref</td><td>keyword</td></tr> <tr><td>isni</td><td>keyword</td></tr> <tr><td>orcid</td><td>keyword</td></tr> </table>	idhal	keyword	idref	keyword	isni	keyword	orcid	keyword	x
idhal	keyword										
idref	keyword										
isni	keyword										
orcid	keyword										
Link to project(s)	member_of	keyword									

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