AUTHENTICUS

API

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Table of Contents

Overview

Authenticus Application Programming Interface (API) is an automated service that allows other authorized systems to interact with Authenticus.

This guide describes how interested parties can register with the API to receive the client credentials that allow them to use the API. Furthermore, it describes the main API features and configurations, and it introduces the syntax of API requests and exemplifies its use. This document concludes with a reference to the Authenticus Publication Record (APR) and publication profiles that determine the type of access that users have to the APR.

Support

If you have any questions about the Authenticus API, please send an email to our support team support@authenticus.pt

Changes History

Version	Description	Date
1.0	Authenticus API Release	15-03-2016
2.0	Added new API Operation	08-10-2016
	Technical documentation added, new API operations	01-02-2017
	Added new API Operation	19-11-2020

Table 1: Changes History

Notes

Introduction to Authenticus API

The aim of the Authenticus API is to allow authorized users to interact with Authenticus to request data. It unifies all functionalities in a systematic way and provides them as a service.

REST

Authenticus API is an HTTP-based RESTful Web service, meaning that it uses a base URL along with standard HTTP methods to exchange data/resources. All calls and resources are transferred in a XML format. It is assured that XML requests are valid against the publication XSD schema.

Service endpoint addresses

```
https://www.authenticus.pt/api/v2.0/
```

Authenticus Publication Record XML Schema location

```
https://www.authenticus.pt/docs/api/authenticus-api.xsd
```

User guide location

```
https://www.authenticus.pt/docs/api/Authenticus-API.pdf
```

User technical documentation location

```
https://www.authenticus.pt/docs/api/reference/
```

API Response Statuses

HTTP Status Code	Description
200	Success

All other codes:	Error (additionally with error description) Example: Code 403 - Forbidden
	
	 `<?xml version="1.0" encoding="UTF-8"?>`
	 `<error xmlns="https://www.authenticus.pt/api/v2.0">`
	 `    <description>Requested Forbidden - invalid token.</description>`
	 `</error>`

API Authentication

Authenticus API is available to institutions that register to access it. Successful validation of authentication credentials is required prior to data retrieval.

Authenticus API authentication is based on an API Token. Institutions may request the API token using 'Request API Token' button available at the Institutional Profile interface, under the menu 'Contacts'. Only institution Administrators may request such a token, thus prior to requesting the token the institution must have an administrator associated. Please refer to the section 'Institution Profile Management' and 'Authenticus API requirements' for further instructions.

Authenticus team verifies if the institution can be granted access. The later access to the Authenticus data/resources is restricted based on b-ON license. Please refer to the section ´API Publication Profile´ for more information about publication profiles and access to publication metadata.

API Token Authentication

To invoke the API token authentication, the HTTP post request must contain the following HTTP header:

```
Header name: Authorization
Header value: "Bearer [api_token]"
```

Sample HTTP Header Example

```
Encoding: UTF-8
HTTP Headers:
{
content-length=[636],
Authorization=[Bearer d3NmdXNlcjE6cGFzc3dvcmQ=],
connection=[keep-alive],
pragma=[no-cache],
content-type=[application/xml; charset=UTF-8],
Accept=[*]
}
```

API Operations/Actions Guidelines

Overview

The Authenticus API operations that can be invoked are listed in the table below. Access to different methods depends on the conditions agreed on granting access to the API. For technical details about the methods, please refer to the technical documentation, which can be found here:

```
https://www.authenticus.pt/docs/api/reference/
```

Operation	HTTP method	URL
Search publications	GET	`/publications?[options]`
Retrieve publication metadata	GET	`/publications/{publication-id}`
Retrieve publication venue	GET	`/publications/{publication-id}/venues`
Get researcher profile	GET	`/researchers/{researcher-id}`
Get researcher publications	GET	`/researchers/{researcher-id}/publications`
Get Institution Profile	GET	`/institutions/{institution-id}`
Get Institution Structure	GET	`/institutions/{institution-id}/structure/{year}/{type}`
Search for Institution Researchers	GET	`/institutions/{institution-id}/researchers`
Get list of quartiles for a journal[1].	GET	`/journals/{journal-id}/quartiles`

Table 2: Authenticus API operations/actions.

The user technical documentation allows one to experiment with the operation requests available at Authenticus API and view examples of responses. The following examples demonstrate how to prepare a request. For further information, please refer to the user technical documentation.

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[1] Quartiles are calculated by Authenticus

Examples of Usage

Search publications example

The search publications method allows users to search for a publication by specifying the filter elements. The data returned has XML format.

Example of usage:

```
GET
https://www.authenticus.pt/api/v2.0/publications?filter.doi=10.1007/9
78-3-319-25017-5_1
```

Retrieve Publication Metadata Example

This action allows users to retrieve the publication metadata from Authenticus database. The data returned has XML format.

Example of usage:

To obtain the metadata for the Authenticus publication with identifier P-00G-SD4, the request should be:

```
GET https://www.authenticus.pt/api/v2.0/publications/P-00G-T5A
```

The answer to this request is a page with the metadata of the publication.

Search Researcher Publications Example

This action returns a page with a list of publications of the researcher.

Example of usage:

To obtain the list of publications of researcher with identifier R-000-46M, the request should be:

```
                            GET
https://www.authenticus.pt/api/v2.0/researchers/R-000-46M/publication
                             s
```

Search for Institution Researchers

The search institution researcher's endpoint returns a page with a list of researchers of the institution.

To obtain the list of researchers associated with the institution I-000-1F8, the request should be:

```
                            GET
https://www.authenticus.pt/api/v2.0/institutions/I-000-1f8/researcher
                             s
```

Authenticus API requirements

In order to use the functionality of the Authenticus API and correctly extract data, we require that institution meet the following requirements.

1. The institution must have a profile at Authenticus and its profile must be updated.
2. The institution must have associated an institutional administrator.
3. The institutional administrator must have the API Token. API Token may be requested using the 'Request API Token' button available at the Institutional Profile interface, under the menu 'Contacts' or by sending emails to Authenticus support team.
4. By having an "updated profile" for an institution, we mean:
   a. Data at institution profile, contacts, address, founded year are up-to-date,
   b. Data about institution organizational structure is validated for the last 3 years
   c. Institution has associated researchers for the last 3 years.
   d. Members of an institution must have validated publications. Publications can be validated by members themselves or by the institution Administrator/Editor.

Please note that by using the Authenticus API, the institutions are able to retrieve the publications that are validated and associated with their members/researchers. Authenticus API does not export non validated publications. Furthermore, only the publications of the current team will be exported.

API Publication Profile

In Authenticus, access to publication's metadata is controlled by b-On (Online Knowledge Library) license. According to this license only aggregated institutions and their members have access to the full publication metadata record. To make Authenticus available for any kind of users and control metadata displays, publication data profiles were defined.

Authenticus Publication Data Profile is a configuration of metadata of publication, where each configuration contains a set of fields which describe publication. Some profile contains all publication metadata fields, other has only basic, publically available fields.

Authenticus API provides publication metadata with fields defined in a 'Public Publication Data Profile'. Public publication data profile is the default profile available for general public and users without valid B-on license. The public profile provides access to basic publication metadata, not more than what is publically available all over the Internet. Read more about Public Publication Data Profile and b-on limitations in documentation about the subject:

```
https://www.authenticus.pt/docs/manuals/Authenticus-Publication-Profi
                                le.pdf
```

Institution Profile Management

A user of Authenticus may request to be associated with an institution. This feature is preserved for users that have institutional permission to manage the profile of their institutions. To manage an institution profile means being able to:

- edit the institution basic information data,
- associate researchers to the institution team, i.e. make researchers part of team in a certain year or period,
- validate publications of the researchers in institution team,
- edit metadata of a publication of a researcher that belongs to the institution team *(planned),*
- request modifications/updates in the institution structure
- etc.

Institution Managers Types

There are two types of association that a user can have with the institution in order to manage it.

Institution Editor – it is the default association type. An editor inherits permissions in a top-down manner, meaning, that the editor can edit data of an institution and of every sub-institution in its lower structure tree.

Institution Administrators – is the most important type of association. An administrator has the same permissions as an editor, but additionally has access to extra functionalities such as: can edit the institution structure, nominate editors for an institution and for every sub-institution in its lower structure tree, and can request an API Token to access Authenticus API.

How to become Administrator/Editor?

A user can request to become an institution administrator or editor using an interface available at user profile. After authentication in Authenticus, users should go to: Groups → Institution Admin/Editor → Request to be Admin/Editor of an Institution.

The request is sent to Authenticus Managers that decide whether or not the permissions for this institution should be granted. Authenticus Managers verify the request, eventually by enquiring directly the institutions whether the user is credible to manage the institution profile.

In case the institution has associated an institutional administrator, then he/she can delegate a new editor for an institution and of every sub-institution in its lower structure tree.