# eKoolikott API description

### Introduction

This document describes the API and requirements for providing commercial and non-commercial materials for online usage in eKoolikott.

#### Use cases

There are two main use cases for material provider in order to provide materials to eKoolikott:

- 1. Authorization of eKoolikott user
- 2. Rendering of material in browser window

In order to provide commercial materials to eKoolikott, the material provider must implement both use cases.

In order to provide non-commercial materials, the material provider must implement use case 2 (Rendering).

#### Authorization

Only authenticated users in eKoolikott are able to view commercial materials. Unauthenticated users can use non-commercial materials. The user must login to eKoolikott by using TAAT (<a href="http://taat.edu.ee">http://taat.edu.ee</a>) to be able to view commercial materials.

eKoolikott forwards the authentication information provided by TAAT to material provider. The authentication context is added to EstCORE resource URI when user is opening the material for viewing. Based on that information, the material provider must decide if the user is entitled to access the material or not.

#### Rendering of material

For rendering material, eKoolikott opens the material EstCORE resource URI in user browser. The material provider must guarantee the correct rendering of material by browser. The material provider **must** use https encryption on the material resource website.

#### Authorization

#### Description

eKoolikott uses a JSON object, which contains the **user data**, that is signed with our private key. The JSON object is stringified, then signed with our private key and converted into a byte array and then sent to the material provider as a BASE64 string (**dop\_token**).

Material providers can then decode the BASE64 string (dop\_token) to an encrypted byte array and then decrypt the byte array with the provided public key. Now the material providers have the user data, also they have verified, that the user data was sent by eKoolikott. Then the material provider determines, if the user should have access to the required resource or not, depending on the user data that they have received from eKoolikott.

JSON object (user data)

#### Object fields:

**createdAt** - Creation Time. Identifies the creation time of when the token was created in eKoolikott. The material provider can then decide if or when this token expires in the material provider system. ISO 8601 is used as a format (also known as the JavaScript Date format).

**authProvider** - specifies the authorization data provider. Always "TAAT".

**authCtx** specifies the authorization context passed. Two fields are passed.

**roles** - permitted roles as a comma separated string. User can have multiple roles in institution. Refer to TAAT Technological profile 3.4 Roles

(http://taat.edu.ee/main/wp-content/uploads/Tech\_profile\_1.3.pdf) for further explanation. Allowed values are: student, faculty, staff, affiliate, library-walk-in, alumn, employee, member.

**schacHomeOrganization** - home institution's ID as domain name. Refer to TAAT Technological profile 3.3 TAAT attributes (http://taat.edu.ee/main/wp-content/uploads/Tech\_profile\_1.3.pdf) for further explanation.

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As an example (not signed with the offical eKoolikott key), the encrypted Base64 strin

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## Rendering of material

The materials identified by resource URI must be viewable by a standard internet browser. eKoolikott opens the resource URI in browser window. User navigation stays in eKoolikott.

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Links

TAAT - <a href="http://taat.edu.ee">http://taat.edu.ee</a>

**TAAT Technological Profile** -

http://taat.edu.ee/main/wp-content/uploads/Tech\_profile\_1.3.pdf

ISO8601 https://en.wikipedia.org/wiki/ISO\_8601