ACL
Administration for Community Living

API Authentication Process

As part of application programming interface (API) submissions into STARS, proprietary systems will be required to manage the authentication of API submissions.

Once ACL confirms the submission of a signed Interconnected Security Agreement (ISA), Booz Allen will contact the lead developer of each proprietary vendor. Separate emails will be sent containing the following information:

1. A username and password to the API test environment. A test account will be created for developers to log into the test environment and review API submissions.
2. A Client ID and Client Secret.
    - As a part of the OAuth2 Authorization workflow, the lead developer for each proprietary system will be provided with a set of client credentials in the form of the Client ID and Client Secret. The credentials will be used in the authentication process to generate an access_token to be attached as an authorization header in the record's API request.
    - The access tokens are temporary passwords that last for three minutes and are included in the submission as a security measure.
    - Tokens are overwritten once the subsequent one is generated, only one access_token can be active at any time.

Below you will find information required for the path, headers, and body of the API request:

<u>Token Request</u>

1. The header to the token path (/auth/oauth/token?grant_type=client_credentials) is as follows:
    - "Authorization" : "*Basic Base64Encoded*('*clientID*:*clientSecret*')"
2. The body of the request is as follows:
    - "{grant_type: client_credentials}"
    - Note: The request should return an access token if successful

<u>Record Submission</u>

3. The header to the record's path is as follows:
    - "Authorization" : "Bearer *access_token*"

4. The body of the request consists of the Json formatted record.

It is important to understand these necessary steps to successfully submit a record. The process for generating tokens and applying them to the request allows for a variety of possible implementations. Below are a few token management suggestions, however, it is possible to implement and optimize the process however any proprietary system's development team sees fit.

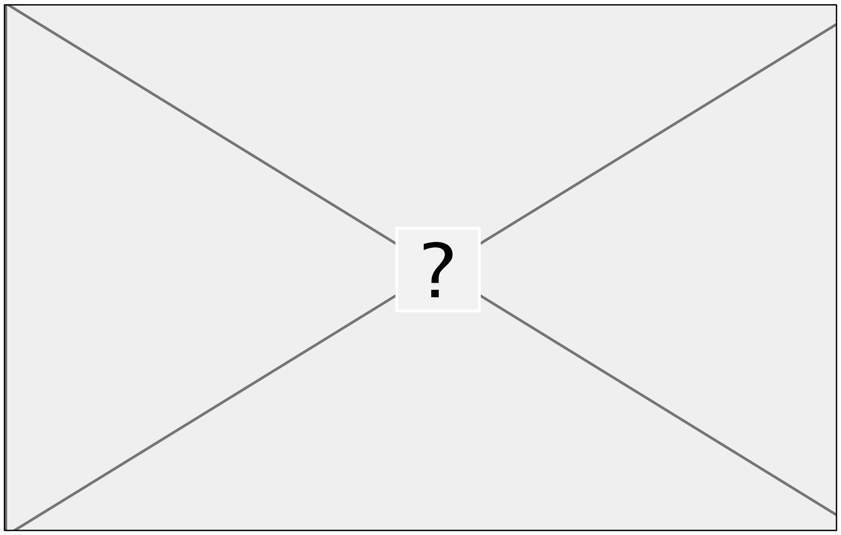
1. API Token Management Alternative 1: API Record Queue

Suggested workflow in managing the token:

1. Proprietary System users log records into their system.
2. The records become aggregated into a single queue.
3. Each API submission request generates its own token.

Figure 1: Alternative 1, API Record Queue

4. 1 : 1 | Token/Request



2. API Token Management Alternative 2: Token Auto-Generation

Suggested workflow in managing the token:

1. Proprietary System users log records into their system.
2. Proprietary System generates new token every 3 minutes.
3. As records are made, they grab the current token and API to STARS.
4. 1 : Many | Token/Requests

Figure 2: Alternative 2, API Record Queue