Family Portal SIS Provider API Specification

Cambium Assessment, Inc. (CAI) will provide REST API endpoints to allow secure access to individual student reports to state, district, or school student information system (SIS) applications. CAI will separately produce documentation about the implementation and use of the API, as well as the registration process that a school or district will go through in order to register their SIS and obtain authorization to integrate with these API endpoints. A draft version of the accompanying swagger API specification is hosted at https://apidocs-familyportal.cambiumast.com.

SIS API Specification

The following API endpoints will be supported as part of the SIS application. Please note, the educational organization category and educational organization ID will be scoped and will need to be provided along with the authorization request. Please refer to the Authentication section below for more details about how to construct the scope.

1. GetSchoolYears

- **Endpoint:** <baseurl>/<version>/studentassessment/getschoolyears
  - Returns the list of school years for which a given student has assessment data.

- **Request:**
  - Method — HTTP GET
  - Content type — application/json
  - Header Parameters — Authorization with bearer token
  - Query String Parameters —

    “studentUniqueId” : “xyz1234”

- **Response:**
  - Content type — application/json
  - HTTP Response — 200 OK
  - Body —

```
[
    {
        “year”   : “2018”,
        “name” : “2018-2019”

    },
    {
        “year”   : “2019”,
        “name” : “2019-2020”

    }
]
```

2. GetAssessmentsByTestForSchoolYear

- **Endpoint:** <baseurl>/<version>/studentassessment/getassessmentsbytestforschoolyear
  - Returns the list of student assessment score information grouped by the assessment for a particular school year. Please note that assessmentGrade below is optional. If the assessment grade information is not present then a blank value will be returned.

- **Request:**
  - Method — HTTP GET
  - Content type — application/json
  - Header Parameters — Authorization with bearer token
  - Query String Parameters —

    “studentUniqueId” : “xyz1234”
    “schoolyear” : “2018”

- **Response:**
  - Content type — application/json
  - HTTP Response — 200 OK
  - Body —

```
[
    {
        “assessmentName”      : “Grade 3 Math”,
        “assessmentSubject”   : “Math”,
        “assessmentGrade”     : “”,
        “assessmentPeriod”    : “Fall 2019”,
        “assessmentList”      : [ {
                "assessmentid"      : "631ceefa-b263-ea11-80d8-3863bb338983",
                "administrationDate" : "2019/05/30",
                "score"             : "2450",
                "performanceLevel"  : "Level 4",
            },
            {
                "assessmentid"      : "321ecefa-b263-ea11-80d8-3863bb331234",
                "administrationDate" : "2019/07/21",
                "score"             : "2310",
                "performanceLevel"  : "Level 3",
             },
            ]
    },
    {
        “assessmentName”     : “Grade 3 Math”,
        “assessmentSubject”  : “Math”,
        “assessmentGrade”    : “”,
        “assessmentPeriod”   : “Fall 2019”,
```

```
        “assessmentList”          : [ {
                    "assessmentid"      : "631ceefa-b263-ea11-80d8-3863bb338983",
                    "administrationDate" : "2019/08/29",
                    "score"                  : "1230",
                    "performanceLevel"   : "Level 2",
                  },
                  {
                    "assessmentid"      : "321ecefa-b263-ea11-80d8-3863bb331234",
                    "administrationDate" : "2019/12/05",
                    "score"                  : "1540",
                    "performanceLevel"   : "Level 3",
                  },
                ]
    },

]
```


3. GetAssessmentReport

- **Endpoint:** <baseurl>/<version>/studentassessment/getassessmentreport
  - Returns the individual student report for a particular student ID and assessment ID.

- **Request:**
  - Method — HTTP GET
  - Content type — application/json
  - Header Parameters — Authorization with bearer token
  - Query String Parameters —

    “studentUniqueId” : “xyz1234”
    “studentAssessmentId” : “321ecefa-b263-ea11-80d8-3863bb331234”

- **Response:**
  - Content type — application/pdf
  - HTTP Response — 200 OK
  - Body —

    <pdf file as binary data>

Authentication

The SIS API will be secured using OAuth and JWT. We will use the OAuth 2.0 Client Credentials Grant Flow for authentication, as this will be a server-to-server communication. Once the client is successfully authenticated after verifying the client-ID and client-secret, an encrypted JWT access token is provided, which the client can use to make subsequent API requests.

In order to determine jurisdiction, one or more entities (state, district or school) will be associated with each SIS provider’s client-ID. The SIS provider, at the time of requesting the token, needs to specify the educational organization category and the educational organization ID as the scope separated by a colon in the following format: ***<educational_organization_category>:<educational_organization_id>***. The

educational organization category can be either ‘state’, ‘district’ or ‘school’, and the educational organization ID is the state-specified unique identifier for that educational organization.

- For example, if the SIS provider is requesting data for a district with identifier 999999, then the scope that is passed will be ***district:999999***. This information will be used by the application to verify the jurisdictional access of that particular student with the associated educational organization.

We will maintain a single client-ID and client-secret for each SIS provider, as well as a mapping of the SIS provider client-ID with one or more entities (state, district or school) as scopes that can be used for jurisdictional checks.

- For example, if Clever is the SIS provider for both District A and District B in the state of Florida, then we will have a single client-ID for Clever, as well as a mapping of this client-ID to District A and District B. The SIS provider then obtains a token by specifying if they are representing District A or District B. Every subsequent API request will then use this scope from the token to check the jurisdictional access.

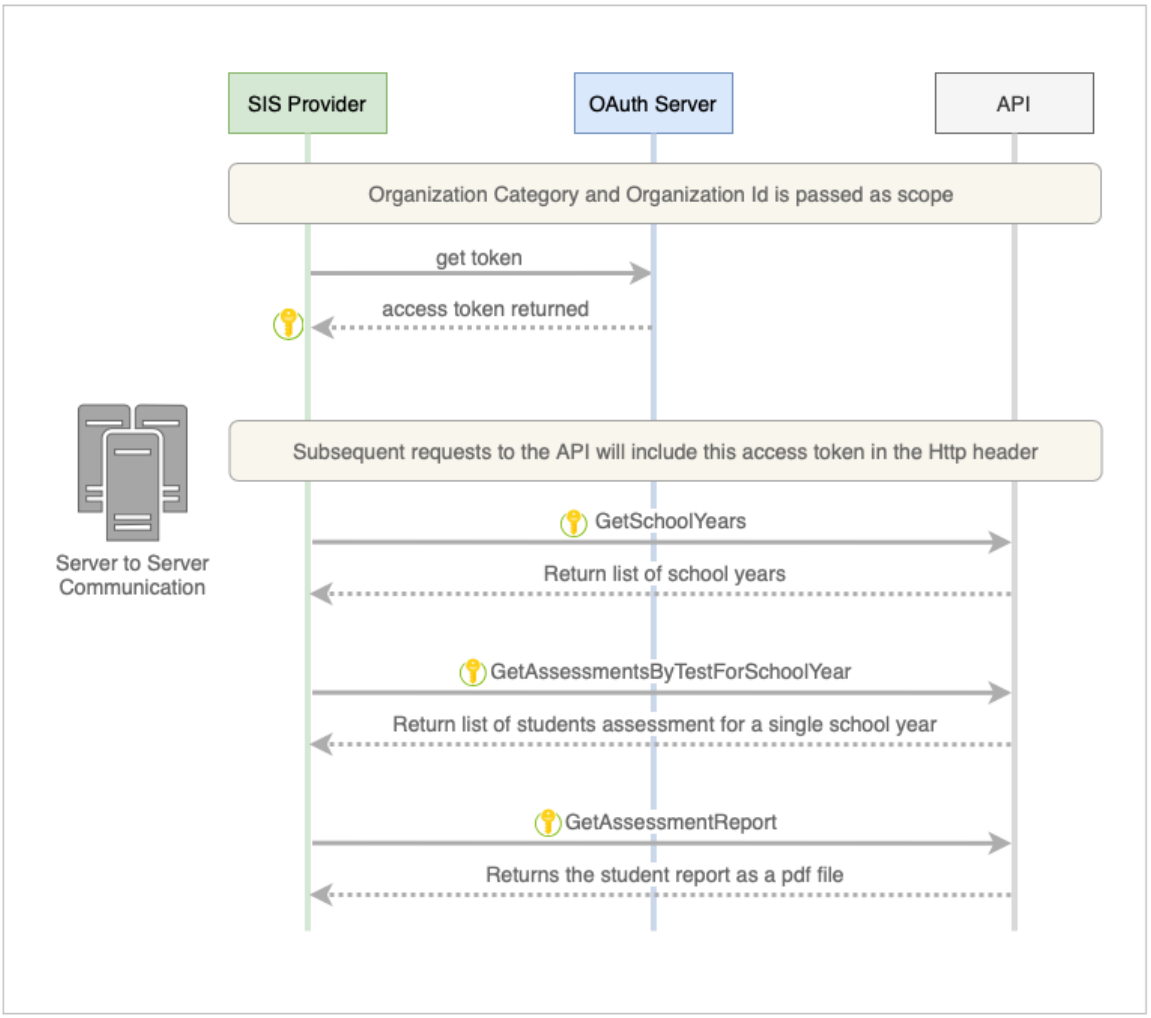

Figure 1: Request flow diagram for the SIS Provider API calls