

OneRoster API Consumer Guidelines

Last Modified on 10/22/2022 9:29 am CDT

The Campus OneRoster API is used to integrate core elements from the Campus SIS with other 3rd party systems. Districts are advised to share the following recommendations with their vendors to ensure successful implementations and mitigate performance concerns. Districts integrating with multiple vendors should ensure proper communication across all vendors to avoid requests that will negatively impact others.

General Synchronization Recommendations

- Perform full syncs weekly.
- Perform differential syncs on a nightly basis, filtering on dateLastModified values.
- Perform all syncs during off-peak hours, as defined by the district.
 - Consumers should ensure that syncs complete prior to the end of the off-peak window.
- Utilize Campus-defined core endpoints and override the default page size to optimize performance (See the [Optimizing Data Pulls](#) section below).
- Make no concurrent requests during peak hours (serial requests only).
 - Make no more than 5 concurrent requests during off-peak hours.
 - Districts should coordinate with their vendors to ensure that they are not all hitting the same objects at the same time.

Optimizing Data Pulls

The following is a recommended sequence of endpoint calls and pagination limits to pull the data in the most efficient way. If you are encountering performance issues, please be sure that district support contacts are aware of the full request URL with district app and API path, including parameters values for sorting, filtering, paging...etc.

Please note that Campus has exposed additional endpoints that are not included in the original OneRoster v1.0 specifications. These endpoints are intended to supplement or replace contextual or aggregate endpoints for the purpose of syncing large sets of data. For example, Results only exist in the specification with respect to a class (e.g. `/learningdata/v1/classes/<classSourcedId>/results`). Campus also breaks down User and Enrollment types into separate endpoints. By using these endpoints, a sync's performance can be improved by loading more records in a single request and ultimately issuing less requests.

1. Orgs (Districts and Schools)
 - `/learningdata/v1/orgs [limit=50K]`
2. AcademicSessions
 - `/learningdata/v1/terms [limit=50K]`
 - `/learningdata/v1/gradingPeriods [limit=50K]`
3. Demographicis (Optional)
 - `/learningdata/v1/demographics [limit=50K]`
4. Users (Utilize granular endpoint where possible, else `/learningdata/v1/users [limit=50K]`)
 - `/learningdata/v1/students [limit=50K]`

- /learningdata/v1/teachers [limit=50K]
 - /learningdata/v1/relatives [limit=50K]
 - /learningdata/v1/guardians [limit=50K]
 - /learningdata/v1/administrators [limit=50K]
5. Courses and Classes
- /learningdata/v1/courses [limit=50K]
 - /learningdata/v1/classes [limit=50K]
6. Enrollments (Utilize granular endpoint where possible, else /learningdata/v1/enrollments [limit=50K])
- /learningdata/v1/studentEnrollments [limit=50K]
 - /learningdata/v1/teacherEnrollments [limit=50K]
7. Categories
- /learningdata/v1/categories [limit=100]
8. LineItems (Utilize core endpoint where possible, else /learningdata/v1/classes/<classSourcedId>/lineitems (for each class) [limit=100])
- /learningdata/v1/lineitems [limit=50K]
9. Results (Utilize core endpoint where possible, else /learningdata/v1/classes/<classSourcedId>/results (for each class) [limit=100])
- /learningdata/v1/results [limit=50K]
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