



AERIESCON
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Session 241-2

*Student Account Integration with OneRoster, API &
Apple School Manager*

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March 08 2024

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Student Account Integration with OneRoster, API & Apple School Manager

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Apple School Manager



The image shows the Apple School Manager login interface. It features a white Apple logo and the word "School" in a large, white, sans-serif font. Below this, the text "Manage your institution's devices, apps, and accounts." is displayed in a smaller white font. The login form consists of two white input fields: "Apple ID" and "Password". The "Password" field has a small circular arrow icon on its right side. Below the password field is a checkbox labeled "Remember me". At the bottom of the screen, there are two lines of text: "Forgot Managed Apple ID or password?" and "Not enrolled? Enroll your institution now >". The background of the login screen is a gradient of green, yellow, and orange.

Apple School

Manage your institution's devices, apps,
and accounts.

Apple ID

Password

Remember me

Forgot Managed Apple ID or password?

Not enrolled? Enroll your institution now >



Apple School Manager

The screenshot displays the Apple School Manager web interface. On the left is a navigation sidebar with categories like Organization, Activity, Locations, People, Accounts, Classes, Roles, Requests, Devices, Assignment History, Content, and Apps and Books. The main content area is titled 'Data Source' and shows the 'SFTP' configuration. The 'SCIM' section has a 'Connect' button. The 'SFTP' section shows the last sync date as 'March 16, 2021 at 11:10 AM', the SFTP URL as 'upload.appleschoolcontent.com', the username as '2138900000539720@sftp.apple.com', and a password field with a 'Generate New Password' button. There is also an 'Edit' button for the Default Managed Apple ID Format and a 'Download' button for templates. A 'Disable and Delete' button is at the bottom.

Apple School

Organization

Activity

Locations

People

Accounts

Classes

Roles

Requests

Devices

Devices

Assignment History

Content

Apps and Books

Settings

Personal Settings

My Profile
JD McKeel

Apps and Books

Organization Settings

Enrollment Information
Aeries Software + SIS

Accounts
12,755 Managed Apple IDs

Data Source
SFTP

Device Management Settings
No Devices

JD

Data Source

SFTP

SCIM [Connect](#)

Disconnect SIS/SFTP if you wish to connect to SCIM. [Learn More](#)

SFTP [Done](#)

Last Data Sync
March 16, 2021 at 11:10 AM

SFTP URL
upload.appleschoolcontent.com

Username
2138900000539720@sftp.apple.com

Password
..... [Generate New Password](#)

Default Managed Apple ID Format
Edit the format used for accounts imported from SIS that will sign in using Apple credentials. [Learn More](#)

[Edit](#)

Download Templates
Export your organization's data from your database following the Apple School Manager CSV Templates.

[Download](#)

[Disable and Delete](#)



Aeries API

- **Usage**

Can be used by 3rd-party vendors as well as internal development in your District, COE, etc.

- **Authentication**

Each API consumer is given an authorization key or “certificate”, which is a unique alphanumeric string

- **Authorization**

Permissions can be set for each API consumer

- **Logging**

Every API request is logged to the Aeries database



Aeries API Available Data

- **School Information**

Ex: School Info, Terms, Calendar, Bell Schedule, Code Sets

- **Student Information**

Ex: Demographics, Contacts, Programs, Authorizations, Test Scores, Discipline, Fees, and more

- **Grades**

Ex: Report cards, Transcripts, Graduation Requirements, GPAs

- **Attendance & Enrollment**

Ex: Student Attendance, Attendance History, Enrollment History

- **Staff Information**

Ex: Staff Demographics, Job Assignments

- **Scheduling**

Ex: Courses, Flex Periods, Class Calendars, Sections, Student Class Schedule, Class Roster, Student Course Requests

- **Gradebook**

Ex: Gradebook Info, Assignments, Scores



Sample – Get Sections

GET <https://demo.aeries.net/aeries/api/v5/schools/894/sections>

Params Authorization **Headers (9)** Body Pre-request Script Tests Settings

Headers 7 hidden

KEY	VALUE
<input checked="" type="checkbox"/> AERIES-CERT	477abe9e7d27439681d62f4e0de1f5e1
<input checked="" type="checkbox"/> Accept	application/json

Body 200 OK 3.92 s 1.67 MB Save Response

Pretty Raw Preview Visualize JSON

```
1 {
2   "SchoolCode": 894,
3   "SectionNumber": 43,
4   "Period": "P0",
5   "PeriodBlock": 0,
6   "Semester": "Y",
7   "ClassCalendar": "P0",
8   "CourseID": "0304",
9   "SectionStaffMembers": [
10    {
11      "StaffID": 894816,
12      "SequenceNumber": 1,
13      "LastName": "Hogan",
14      "FirstName": "Alejandra",
15      "IsPrimaryTeacher": true,
16      "StaffRoleCode": "",
17      "TeacherPositionCode": "",
18      "AttendancePermission": "",
19      "GradebookPermissionCode": "",
20      "GradeReportingAccess": "",
21      "StudentAccess": "",
22      "IncludeInStateReporting": "",
23      "StartDate": null,
24      "EndDate": null,
25      "InactiveStatusCode": ""
26    }
27  ],
28   "Room": "CD3",
29   "Credit": 5.0000,
30   "GenderRestriction": "",
31   "LowGrade": 11,
32   "HighGrade": 12,
33   "MaxStudents": 38,
34   "TotalStudents": 37,
35   "TotalBoys": 20,
36   "TotalGirls": 17,
37   "TotalOtherGender": 0,
38   "InactiveStatusCode": "",
39   "ProgramCode": "",
40   "HourlyAttendanceProgramCode": "",
41   "ExclusionCode": "",
42   "CountsForADA": "",
43   "MultiTeacherCode": "",
44   "SchedulingGroup": ""
45 }
```



Sample – Create Assignment

```
POST https://demo.aeries.net/aeries/api/v5/gradebooks/4487750/assignments

Params Auth Headers (12) Body Pre-req. Tests Settings

raw JSON

1 {
2   "Description": "Test the Aeries API",
3   "AssignmentCategoryCode": "A",
4   "DateAssigned": "2022-03-10",
5   "DateDue": "2022-03-24",
6   "NumberCorrectPossible": 50,
7   "PointsPossible": 50,
8   "Comment": "Make sure the Gradebook end points work",
9   "FormativeSummativeIndicator": "S",
10  "RubricAssignment": false,
11  "ExternalID": "",
12  "CreateInLinkedGradebooksToo": true
13 }
```

```
Body 201 Created 156 ms 1.14 KB

Pretty Raw Preview Visualize JSON

1 {
2   "AssignmentCategory": {
3     "GradebookNumber": 4487750,
4     "Code": "A",
5     "Description": "Vocab",
6     "PercentageOfGrade": 0.0,
7     "Color": ""
8   },
9   "Standards": [],
10  "NarrativeGradeSet": [],
11  "IsFinalAssignment": false,
12  "GradebookNumber": 4487750,
13  "AssignmentNumber": 105,
14  "Description": "Test the Aeries API",
15  "DateAssigned": "2022-03-10T00:00:00",
16  "DateDue": "2022-03-24T00:00:00",
17  "NumberCorrectPossible": 50.0,
18  "PointsPossible": 50.0,
19  "GradingCompleted": false,
20  "Comment": "Make sure the Gradebook end points work",
21  "DueTime": "0001-01-01T00:00:00",
22  "AllowStudentDropBox": false,
23  "VisibleToParents": false,
24  "ScoresVisibleToParents": false,
25  "FormativeSummativeIndicator": "S",
26  "AeriesAnalyticsExamID": 0,
27  "AeriesAnalyticsExamTestAdmin": 0,
28  "RubricAssignment": false,
29  "InputScoresByStandard": false,
30  "NarrativeGradeSetID": 0,
31  "UniqueID": "962a873d-2eff-4ef0-ae74-6bfe4b0a7ef3",
32  "ExternalID": ""
33 }
34
35
```



OneNote Class Notebook

Math 301

Welcome to the OneNote Class Notebook

OneNote is your very own digital notebook

Your OneNote Class Notebook is organized into three parts:

1. **Student Notebooks** -- a private notebook shared between the teacher and each individual student. Teachers can access every student notebook, while students can see only their own.
2. **Content Library** -- a read-only notebook where teachers can share handouts with students.
3. **Collaboration Space** -- a notebook for everyone in your class to share, organize, and collaborate.

Content Library Student Notebooks Collaboration Space

Hands on in the classroom: [OneNoteinEducation.com](#)

Office 365

Work or school, or personal Microsoft account

teacher@pineviewpublicschool.onmicrosoft.com

Keep me signed in

Sign in

Can't access your account?

Manage Connections

Connect to:

Sign In Cancel

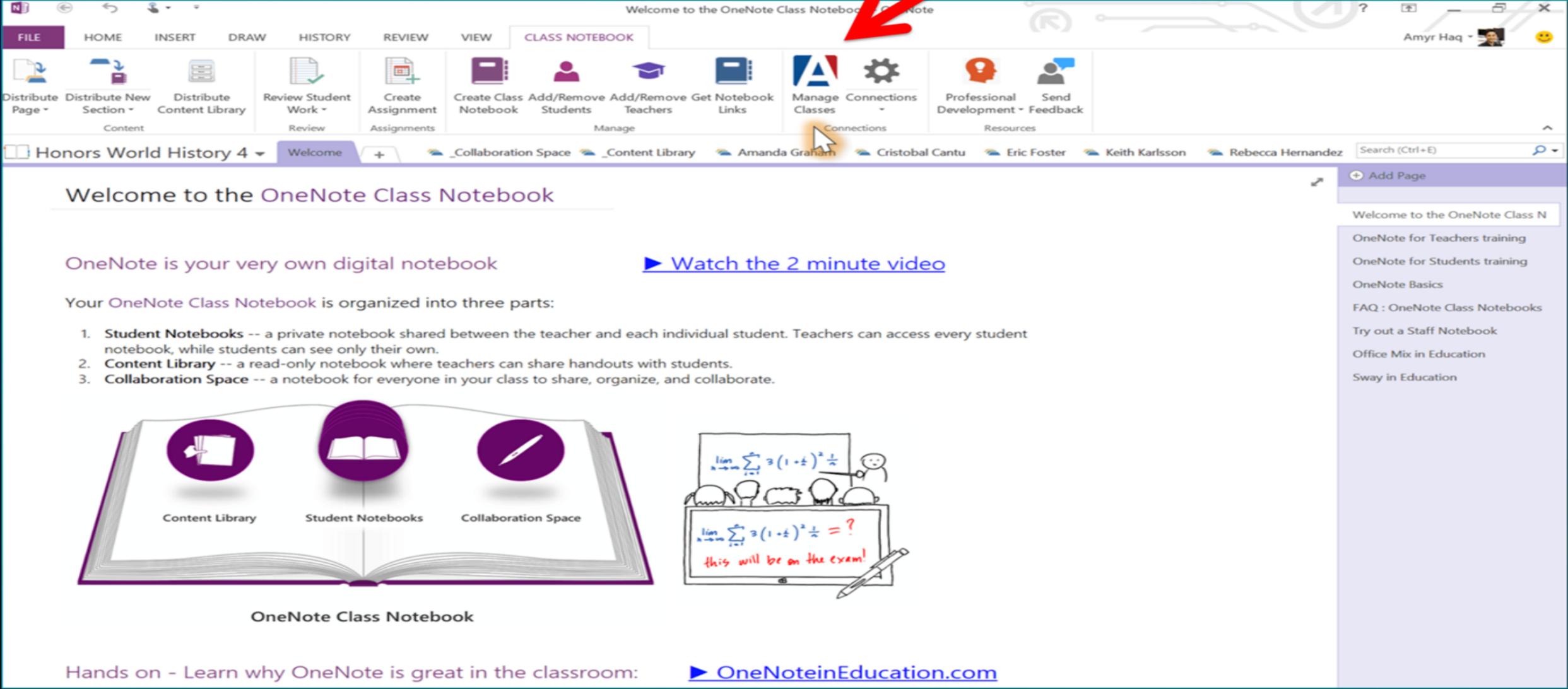
How to connect to a series

Watch the 2 minute video

OneNoteinEducation.com



OneNote Class Notebook

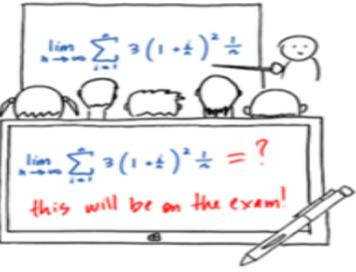
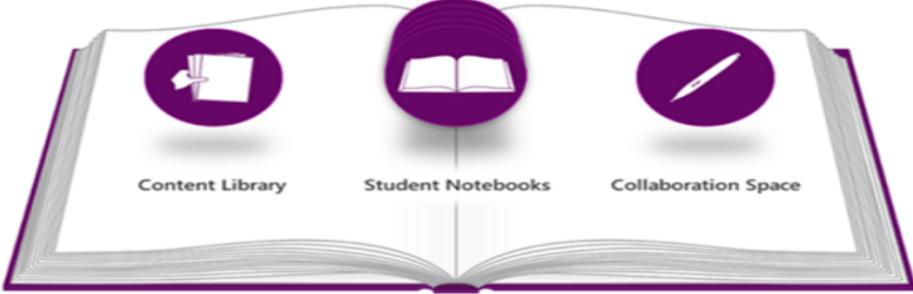


Welcome to the OneNote Class Notebook

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Your OneNote Class Notebook is organized into three parts:

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2. **Content Library** -- a read-only notebook where teachers can share handouts with students.
3. **Collaboration Space** -- a notebook for everyone in your class to share, organize, and collaborate.



OneNote Class Notebook

Hands on - Learn why OneNote is great in the classroom: [▶ OneNoteinEducation.com](#)



OneNote Class Notebook

The image displays three overlapping OneNote windows. The background window is 'Map Class Notebooks', which has a table for mapping class notebooks to Aeries courses. The middle window is 'Create New Assignment for Math 801', showing assignment details like title, description, due date, and a calendar. The foreground window is 'Review Student Work', displaying a list of students and their scores for a specific assignment.

Map Class Notebooks

Class Notebook	Aeries Course
Biology A Notebook	
AP Physics Notebook	
Honors World History 4	Hon World Hst 4

Create New Assignment for Math 801

Title: #1 - PoW

Description: The Smith family was going to buy a car for \$5800.00. The car dealer two options for buying the car. They could pay the full amount in cash pay \$1000.00 down and \$230.00 a

Due date: 6/ 3/2016 Time (optional) 3:00 PM

Create in: **June 2016**

Sun	Mon	Tue	Wed	Thu	Fri	Sat
29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	1	2
3	4	5	6	7	8	9

Today: 6/2/2016

An assignment will be created in Google Classroom and the page distributed to a

Review Student Work

Sort students by last name

Expand all

Enter grades

#1-PoW

Cheryl Garner	100 / 100
Ella Taylor	90 / 100
James Hobbs	80 / 100
Samuel Perkins	70 / 100
William Hunt	60 / 100

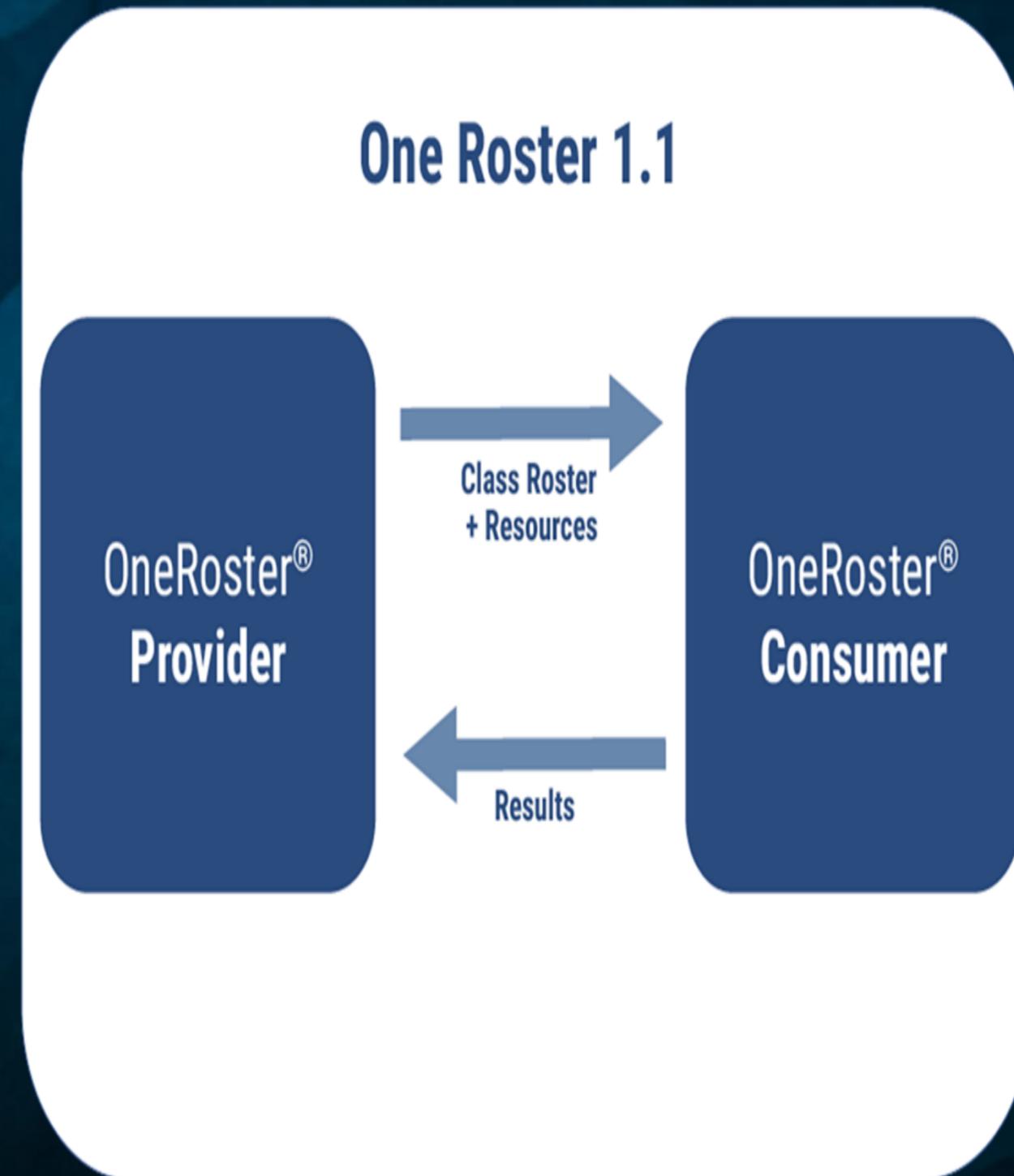
Untitled page

Submit Cancel



OneRoster

- Roster data comes from Aeries and is retrieved by OneRoster consumers (usually LMS or some other 3rd-party application)
- Gradebook (aka “Results”) data comes from the LMS and is pushed into Aeries Gradebook



Aeries & OneRoster

- Aeries is OneRoster 1.1 certified!
- <https://site.imsglobal.org/certifications/aeries-software/aeries-sis>

1EdTech Certifications

Aeries Software has 1 certifications for this product.

v9



Aeries SIS v9 has completed conformance testing for the following 1EdTech Standards ...

✓ OneRoster 1.1

Certified on 2023-07-28 • Registration Number: IMSM2ae2023W1

OneRoster 1.1 Details:

- CSV Rostering Export Bulk
- CSV Gradebook Export Bulk
- REST Data Provider Rostering Core
- REST Data Provider Rostering Optional
- REST Data Provider Gradebook Push Core
- REST Data Provider Gradebook Push Optional
- REST Data Provider Gradebook Pull Core
- REST Data Provider Gradebook Pull Optional



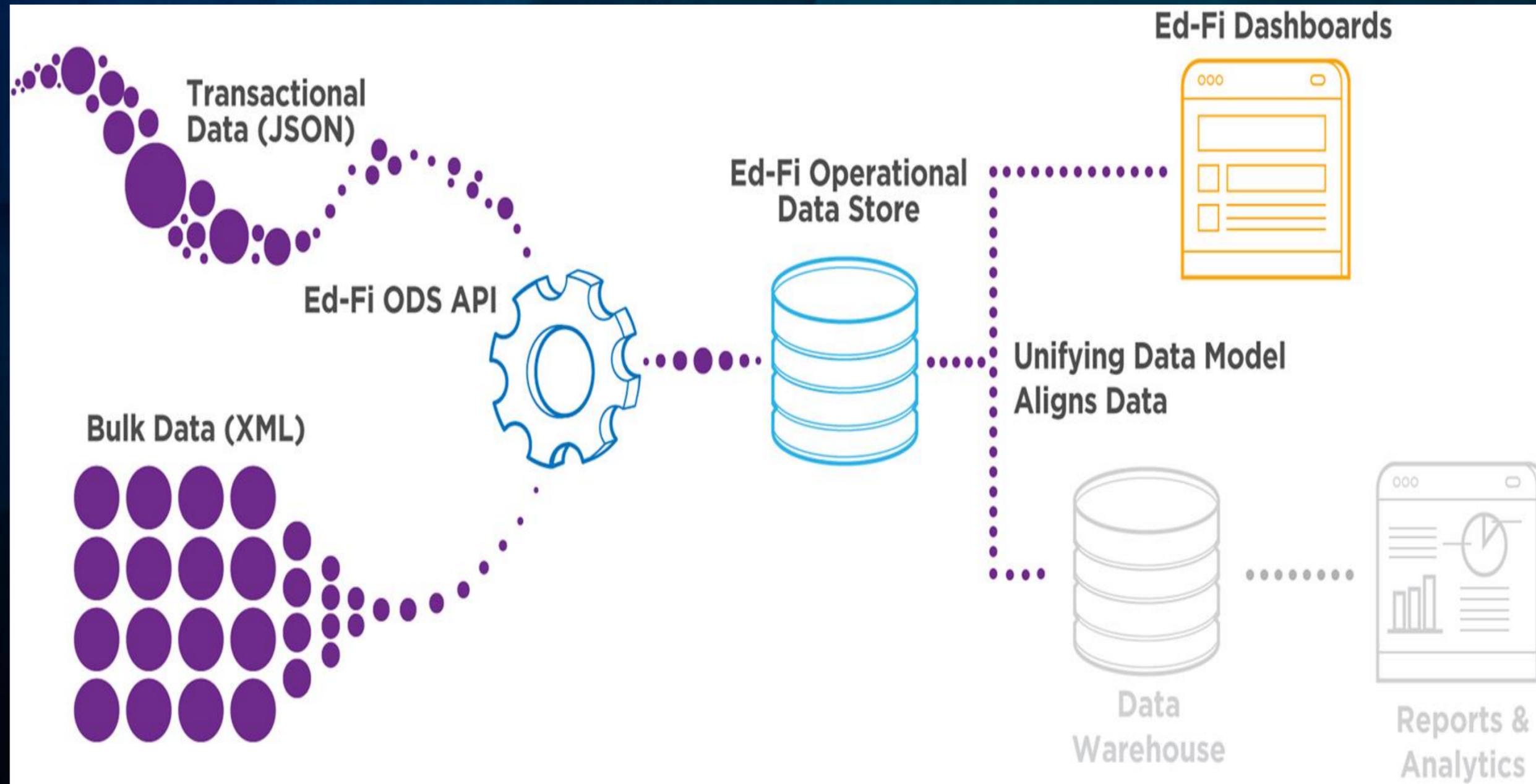
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OneRoster Example Data

Data Element Name	Multiplicity	Notes
sourcedId	1	For example: 772891-A-0001
status	1	See subsection 4.13.8 for the enumeration list.
dateLastModified	1	2012-04-23T18:25:43.511Z
metadata	0..1	
title	1	For example: Maths Test 1
description	0..1	For example: Simple addition test
assignDate	1	For example: 2012-01-01T18:25:43.511Z
dueDate	1	For example: 2012-01-05T18:25:43.511Z
class	1	Link to class i.e. the class 'sourcedId'.
category	1	Link to item category i.e. the Line Item Category 'sourcedId'.
gradingPeriod	1	Link to grading period i.e. the AcademicSession 'sourcedId'
resultValueMin	1	A floating point number defining (inclusive) the minimum value for the result. For example: 0.0.
resultValueMax	1	A floating point number defining (inclusive) the maximum value for the result. For example: 10.0



Ed-Fi Data Standard



Data Event Triggers

- Allow the system to execute a custom SQL stored procedure
- Can accomplish anything that is possible with SQL
 - Update data in the Aeries database
 - Populate a custom table in the Aeries database
 - Connect to an external SQL database to retrieve and/or populate data

Currently, the system supports the following Data Event Triggers:

Table Name	Table Description	Trigger
STU	Student Data	Record Added
		Record Updated
STF	Staff Data	Record Added
		Record Updated

More tables and triggers will be added in the future.

Trigger – Record added to the STU table

```
1 CREATE PROCEDURE [STU_RecordAdded] (@TID int, @SC smallint, @SN int)
2 AS
3 BEGIN
4 -- Your code here
5 END
```

Trigger – Record updated in the STU table

```
1 CREATE PROCEDURE [STU_RecordUpdated] (@TID int, @SC smallint, @SN int)
2 AS
3 BEGIN
4 -- Your code here
5 END
```



Key Takeaways

- Investigate all possibilities for 3rd party integrations
- Contact Aeries Support if you run into difficulties in the integration process
- Aeries has a dedicated team of Data Integration Engineers to support, develop, and maintain solutions for integrations with the Aeries SIS platform



Additional Sessions

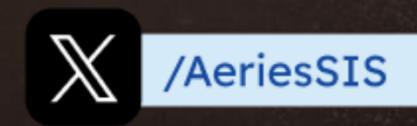
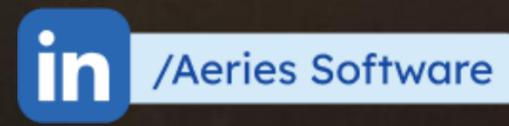
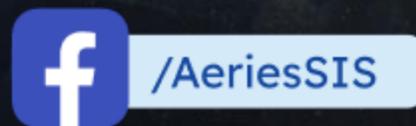
- 241-1 – Student & Staff Account Automation with G Suite
- 243 – The Ed-Fi Data Standard
- 1001 – Data Extracts & Automation
- 1008 – Querying a REST API with Posh API



THANK YOU!

Please take a moment to complete our session survey.

<http://surveys.aeries.com/s3/AeriesCon-Session-Feedback-Survey-Spring-2024>



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Share your Feedback:

