



# Session 241-2

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

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**March 08 2024**

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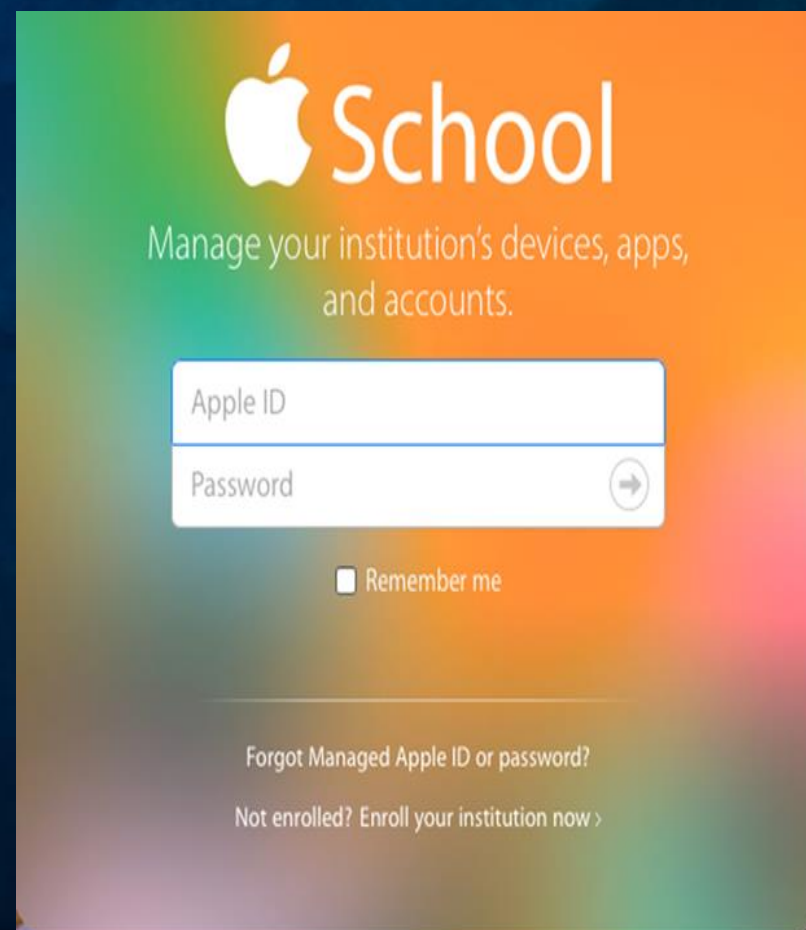
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# Apple School Manager



The login screen for Apple School Manager features a gradient background transitioning from green to orange. At the top, the Apple logo is followed by the word "School". Below this, the text "Manage your institution's devices, apps, and accounts." is displayed. The login fields consist of an "Apple ID" input box and a "Password" input box with a right-pointing arrow icon. A "Remember me" checkbox is located below the password field. At the bottom, there are two links: "Forgot Managed Apple ID or password?" and "Not enrolled? Enroll your institution now >".

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 >](#)



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# Apple School Manager

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

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

Connect

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



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# 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



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# 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

The image is a collage of screenshots from the Microsoft OneNote Class Notebook application. A large red arrow points from the title 'OneNote Class Notebook' to the 'Class Notebook' button in the ribbon. Another red arrow points from the 'Watch the 2 minute video' link on the welcome page to the same link on the right-hand side of the collage. The screenshots include:

- The OneNote ribbon with the 'Class Notebook' tab selected, showing options like 'Distribute Page', 'Distribute New Section', 'Distribute Content Library', 'Review Student Work', 'Create Class Notebook', 'Add/Remove Students', 'Add/Remove Teachers', 'Get Notebook Links', 'Connections', 'Professional Development', and 'Send Feedback'.
- The 'Welcome to the OneNote Class Notebook' page, which explains that OneNote is a digital notebook and describes the three parts of a Class Notebook: Student Notebooks, Content Library, and Collaboration Space. It includes a 'Watch the 2 minute video' link.
- The 'Sign In' dialog box for Office 365, showing the email address 'teacher@pineviewpublicschool.onmicrosoft.com' and a password field.
- A 'Manage Connections' dialog box with a 'Connect to' dropdown and 'Sign In' and 'Cancel' buttons.
- A sidebar on the right with links to 'OneNote for Teachers training', 'OneNote for Students training', 'OneNote Basics', 'FAQ: OneNote Class Notebooks', 'Try out a Staff Notebook', 'Office Mix in Education', and 'Sway in Education'.



# OneNote Class Notebook



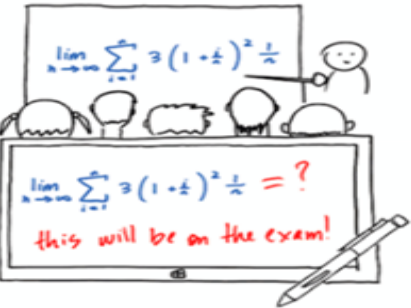
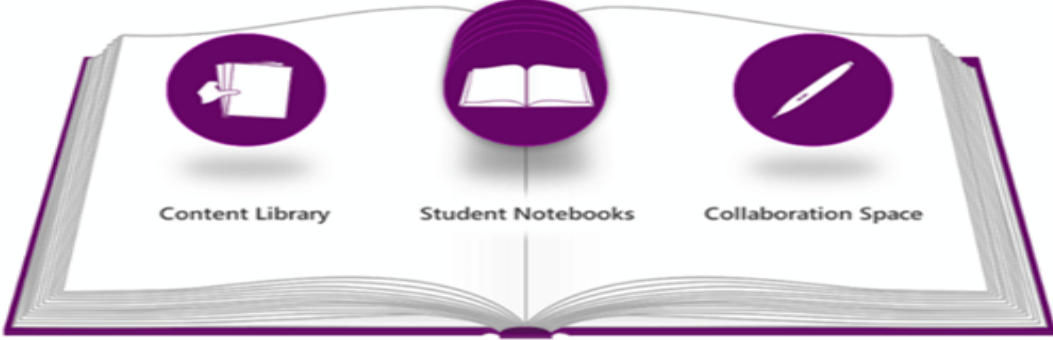
Welcome to the OneNote Class Notebook

OneNote is your very own digital notebook

[▶ Watch the 2 minute video](#)

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.



OneNote Class Notebook

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

FILE HOME INSERT DRAW HISTORY REVIEW VIEW CLASS NOTEBOOK

Distribute Page Distribute New Section Distribute Content Library Review Student Work Create Assignment Create Class Notebook Add/Remove Students Add/Remove Teachers Get Notebook Links Manage Classes Connections Professional Development Send Feedback

Honors World History 4 Welcome Collaboration Space Content Library Amanda Graham Cristobal Cantu Eric Foster Keith Karlsson Rebecca Hernandez Search (Ctrl+E)

Add Page

Welcome to the OneNote Class N

OneNote for Teachers training

OneNote for Students training

OneNote Basics

FAQ : OneNote Class Notebooks

Try out a Staff Notebook

Office Mix in Education

Sway in Education





# OneNote Class Notebook

Map Class Notebooks

Map your class notebooks to your Aeries courses:

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

OK

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

Create

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

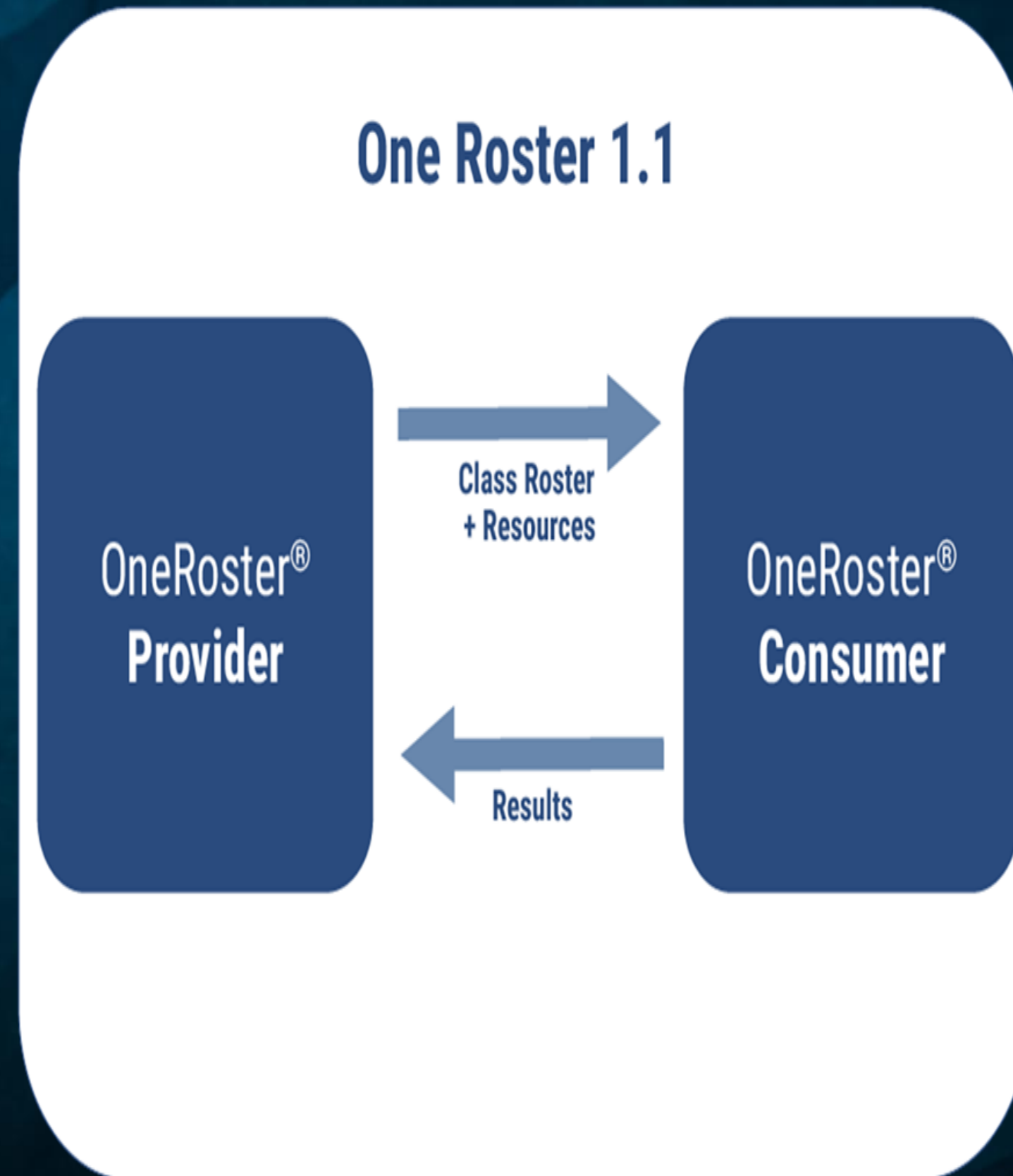
Cancel



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# 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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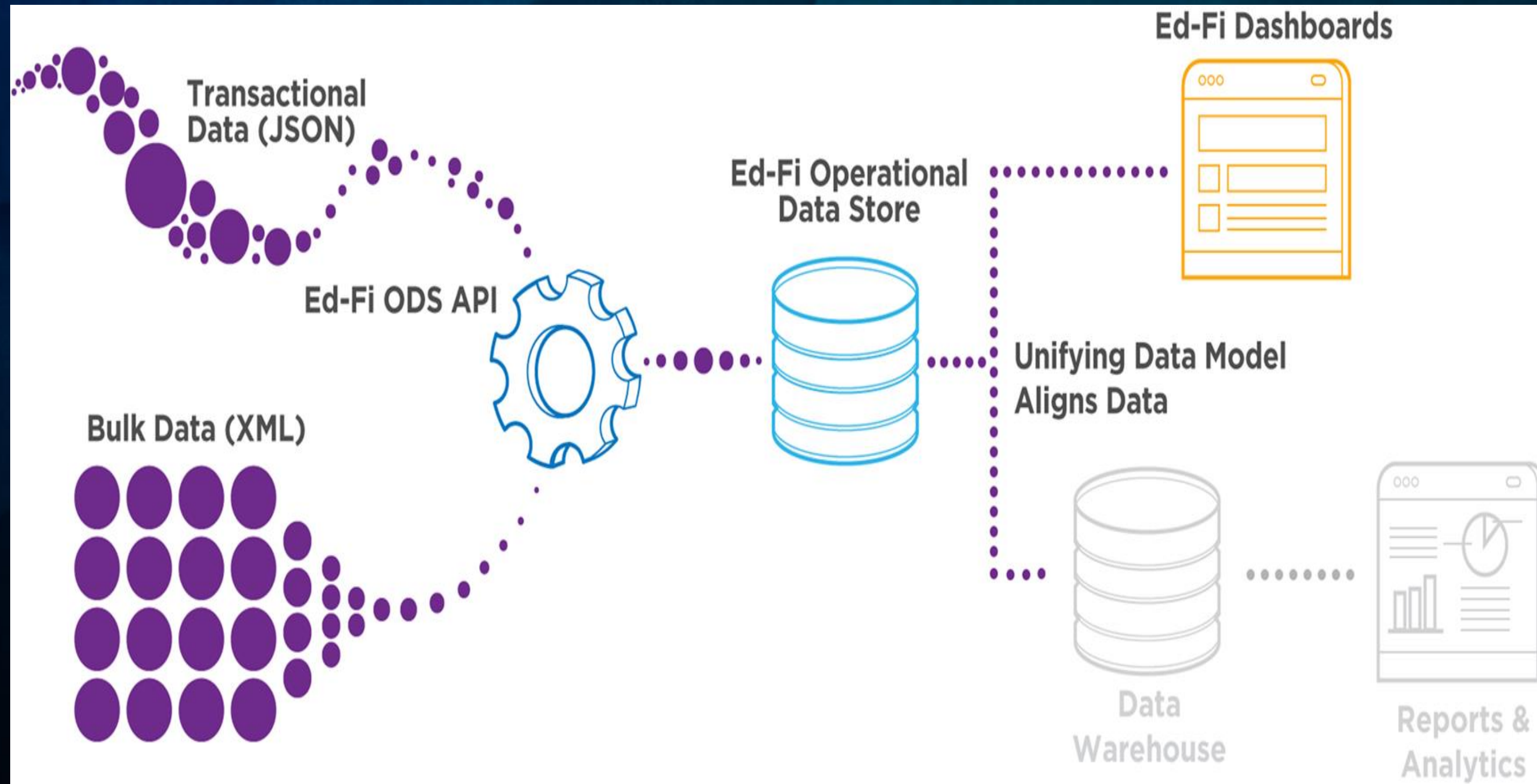
# OneRoster Example Data

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

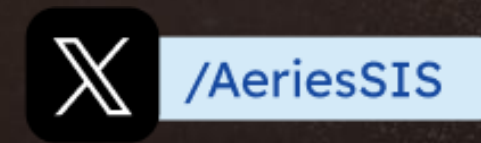
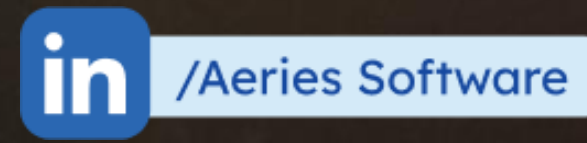
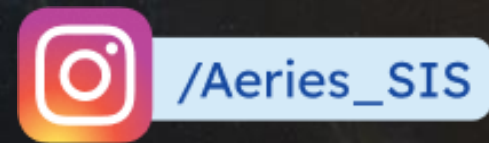
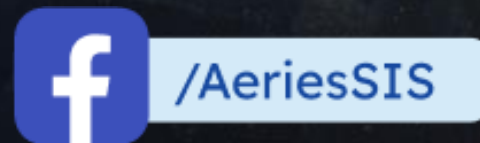




# THANK YOU!

*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:



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