Ready, Set, Roster

Wednesday February 10, 2021 – Interactive Webinar
Welcome!

- 30 minute presentation, 10 minutes of Q&A
- Use the Webex Q&A feature to submit a question at anytime

What We’ll Cover

- Overview of Rostering with Ed-Fi
- What is the Roster Starter kit and how it helps
- Resources to get started
- Where to find us?
Agenda

• Introduction
• Starter Kit on the Ed-Fi Tech Docs
• Wrap Up
• Questions
Introduction

- Ed-Fi Overview
- Webinar Focus
- Ed-Fi Roster Data Flow
Ed-Fi Overview

Ed-Fi Data Standard

Ed-Fi ODS / API Platform

Ed-Fi Tools
The Ed-Fi Data Standard and ODS / API

Ed-Fi Data Standard

The Ed-Fi Data Standard is the widely adopted, CEDS-aligned, open-source data standard developed by the educational community for the betterment of the community. The Ed-Fi Data Standard serves as the foundation for enabling interoperability among secure data systems and contains a Unifying Data Model designed to capture the meaning and inherent structure in the most important information in the K–12 education enterprise. The latest version is the Ed-Fi Data Standard v3.2.

Ed-Fi ODS / API

The Ed-Fi Operational Data Store (ODS) provides a secure, transactional information store that integrates data from multiple source systems and applications. The Ed-Fi ODS API accompanies the Ed-Fi Operational Data Store and provides a developer-friendly interface to create, read, and update information stored in an Ed-Fi powered ODS. The latest version is the Ed-Fi ODS / API v5.1.0.
What is the Enrollment Composite?

Any “composite API” in Ed-Fi is a data out only resource. It is a resource that returns data that is pulled from several separate resources connected through references.

For example, in the Enrollment Composite sections resource, the endpoint pulls a list of students assigned to a section through the studentSectionAssociation resource.

Section->studentSectionAssociation->Student
Webinar Focus

An overview of the steps needed for an education technology provider to pull roster information from the Enrollment API from a district or state level implementation of the Ed-Fi ODS / API
Ed-Fi Roster Data Flow

- **Student Information System**: The student information system pushes roster information into the Ed-Fi API.
- **Ed-Fi API (Hosted by a District)**: This is the central hub for data flow.
- **Roster Consuming Application**: The roster consuming application pulls roster information from the Ed-Fi API.

The student information system pushes roster information into the Ed-Fi API, which is hosted by a district. The roster consuming application pulls roster information from the Ed-Fi API.
Roster Starter Kit Overview

- Analyze
  - Analyze and map the data
- Develop
  - Begin development of the rostering functionality
- Partner
  - Find a partner with an Ed-Fi implementation to partner with
- Badge
  - Apply for and Ed-Fi Badge
Analyze
Analyze and Map Data Elements

• Review what data is available from the Enrollment Composite in the Ed-Fi API
• Determine what data is needed to provision the software application
• Match what is needed for your software application to what is available from the Enrollment Composite
• Help refine the Enrollment Composite by submitting Ed-Fi Tracker tickets for data gaps
Ed-Fi Data

Map Data
Map the Ed-Fi data fields to the data needs of the software application

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<th>Property</th>
<th>Requirement</th>
<th>Description</th>
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<tbody>
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<td>Id</td>
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<td>A unique identifier of the student</td>
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<td>The student’s birth date</td>
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<tr>
<td>studentSchoolEnrollments[]</td>
<td>Optional</td>
<td>The student’s school enrollments</td>
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Detailed information is available on the v5.1.0 Enrollment Composite API Documentation site.

See the ED-FI RFC 19 - ENROLLMENT API FOR SUITE 3 for more documentation.
Develop
Begin Development

• SDK Generation
• Best Practices and Information
• Roster Sample Application
# SDK Generation

List of [SDK generators](#) for OpenAPI specification files

## SDK Generators

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<th>v3</th>
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SDK Generation

The **Swagger Editor** offers a UI for generating SDKs.
SDK Generation Tutorial

USING CODE GENERATION TO CREATE AN SDK

This section outlines how to use code generation to create an Ed-Fi ODS / API Client SDK using a Windows environment targeting C#. The high-level steps are:

- Step 1. Install Latest Version of Java
- Step 2. Download the Swagger Codegen JAR file
- Step 3. Generate the SDK Source Files
- Step 4. Use the SDK in a Sample C# Program

Each step is outlined in detail below.
Best Practices and Considerations

• Pagination
  • Ed-Fi API calls have limit and offset parameters
  • Paging is limited in the API
  • Version v5.0.0 and above it is configurable, previously the limit is 100 records

• Descriptors
  • Descriptors are enumeration sets in Ed-Fi

• UX Considerations
  • API configuration (url, key, secret) and test connection
  • Logs (transfer and error)
  • Other UI utility features to reduce support incidents
Partner
Partner with a Client

• Find a client that will partner with you and help you solidify the functionality.

• Make sure to set the expectations of an iterative process

• Find a partner that is familiar with Ed-Fi for this phase
Apply for an Ed-Fi Badge

• Join the Ed-Fi Partner Program
• **Ed-Fi Badges**
• Apply for the **API Consumer Badge**
  • Developing a roster consumer badge
Wrap Up

• What other webinars would you like to see?
• Roster Starter Kit Phase 2
  • Change Queries
• Feedback
ANY QUESTIONS?
Resources

- Create an Ed-Fi Account
- Sign Up for the Newsletter
- Ed-Fi Tech Docs
- Ed-Fi Tracker
- Ed-Fi Roster Starter Kit
- Ed-Fi ODS / API v5.1.0 Online Documentation (with sample data)
- API Client Developers’ Guide
- Ed-Fi RFC 19 - Enrollment API for Suite 3
- Cy.Jones@Ed-Fi.org and Cesare.Tise@Ed-Fi.org