



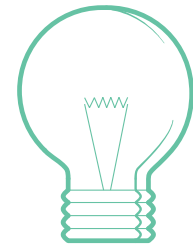
ed-fi[®]
ALLIANCE

Introduction to Ed-Fi

API and Data Standard

What does the Ed-Fi Alliance Provide?

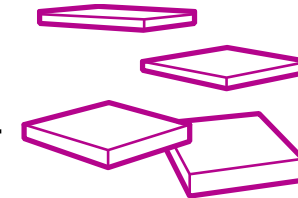
We provide these supports to our members (all Ed-Fi licensees: SEA, LEA, collaboratives, vendors) so they can... personalize instruction, get the full picture of student progress, know more & act quickly, show impact, improve, and focus energy & effort where it counts.



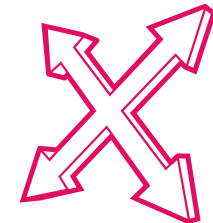
Alliance
Community



Data Standard
& Governance



Technology
Building Blocks



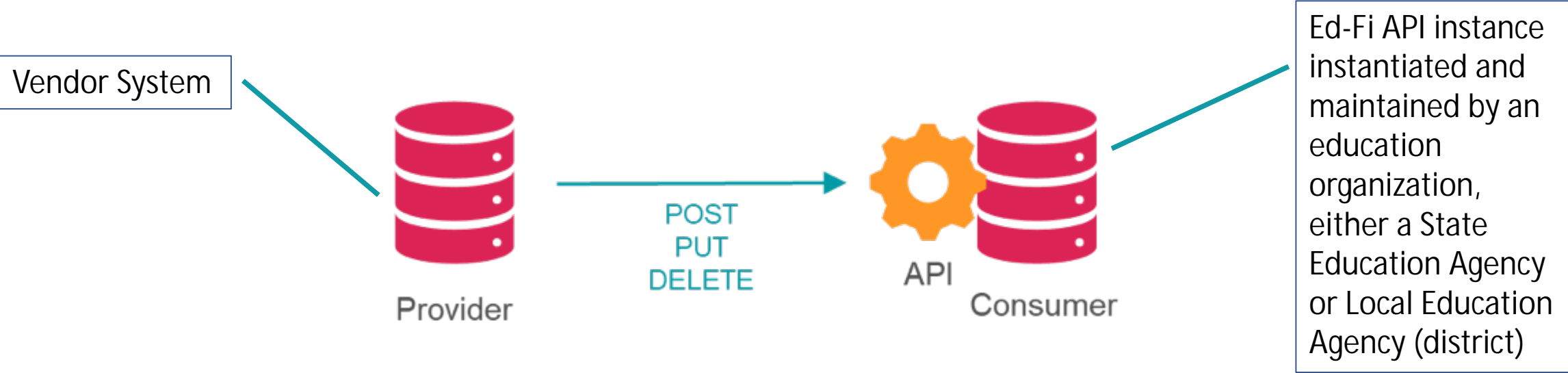
Technology
Exchange

Ed-Fi Technical Suite Versions

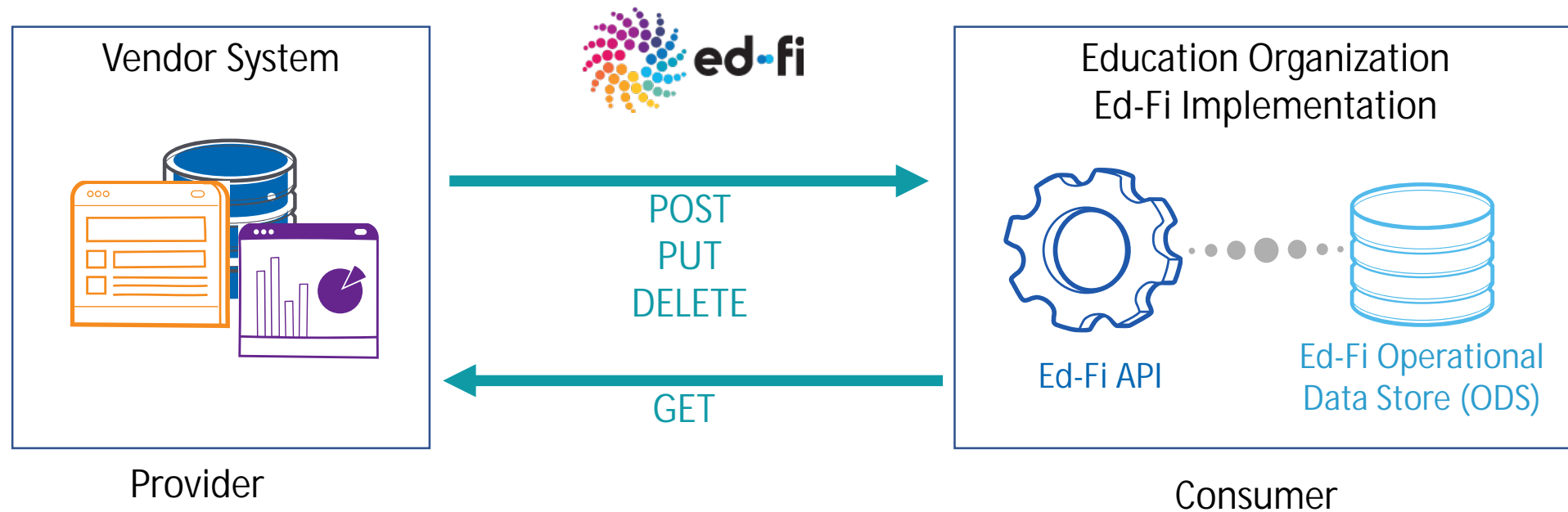
In an attempt to reduce confusion between the Ed-Fi Data Standard version and the versioning of other available Ed-Fi technical artifacts, the Ed-Fi Alliance developed the [Technology Suite Version Matrix](#). References to Suite Versions will be made throughout the training materials.

Introduction to the Ed-Fi API

When integrating with the Ed-Fi API, the vendor is usually sending information to an existing Ed-Fi API that has been set up by a school district or state education agency.



Once integrated with the Ed-Fi API, the vendor system will be sending data to an Ed-Fi API and retrieving data from that Ed-Fi API



Ed-Fi API Basics

Links to API foundational information

- [API Client Developers Guide](#)
- [Representational state transfer \(REST\) services](#)
- [OAuth2](#)
- [JavaScript Object Notation \(JSON\)](#)

Getting To Know the Ed-Fi Data Standard

Ed-Fi Data Standard Terminology

- Unifying Data Model
- Ed-Fi Data Standard Domains

Ed-Fi Data Standard – UDM

The foundation of the Ed-Fi Data Standard is a Unifying Data Model (UDM), which is an enterprise data model of commonly exchanged and shared K–12 education data.

The model is expressed in Unified Modeling Language (UML), and includes entities such as students, teachers, assessment results, attendance, and many others.

The role of the Ed-Fi UDM is to harmonize the information model and data types across all facets of Ed-Fi technology.

Ed-Fi Data Standard - UDM

- The purpose of the Ed-Fi UDM is to enable information sharing and reuse of education data. The Ed-Fi UDM provides a standard means for:
 - **Data Description** - Provides a uniform means to describe education data, its structure (syntax), and meaning (semantics), thereby supporting its discovery and sharing.
 - **Data Context** - Facilitates discovery based upon the definition of specific education data domains.
 - **Data Sharing** - Supports the access and exchange of data based upon concrete implementation of the Ed-Fi UDM or subsets of the Ed-Fi UDM that provide semantic interoperability between systems.
 - **Data Unification or “Harmonization”**- Provides the capability to compare education data artifacts across systems through a well-defined model that unifies the semantics of data artifacts into “common entities.”

Ed-Fi Data Standard - Domains

The scope of education data is large and its organization is complex.

Domains serve to provide views of the Ed-Fi Unifying Data Model to assist in its understanding and its application.

In many cases, a specific Ed-Fi data exchange schema may only deal with data in a single domain, such as assessment or enrollment. In other cases, it may span several domains, such as with a student transfer record.

Ed-Fi Data Standard - Domains

Domains

The Ed-Fi UDM is organized into domains. Domains serve to provide overlapping views of the data model and assist in its understanding and application. The following are the Ed-Fi Data Standard v2.1 domains:

- Alternative/Supplemental Services
- Assessment
- Bell Schedule
- Discipline
- Education Organization
- Enrollment
- Finance
- Graduation
- Intervention
- School Calendar
- Staff
- Student Academic Record
- Student Attendance
- Student Cohort
- Student Identification and Demographics
- Teaching and Learning

Getting to know the Ed-Fi Data Standard

Links to helpful Ed-Fi resources

- [Ed-Fi Data Standard v2.0](#)
 - [Unifying Data Model](#)
 - [Ed-Fi API Documentation Site](#) (Swagger UI)
- [Ed-Fi Data Standard v3.0](#)
 - [Unifying Data Model](#)
 - [Ed-Fi API Documentation Site \(Version 3.0\)](#) (Swagger UI)