

# Welcome! 2ND ANNUAL Technical Congress



### **SEA Implementation - Best Practices**

April 2018

## **Start Communicating Early with Vendors**

- Vendors need time to plan integrations and time to code
- Vendors use agile development method
- Field evidence shows that messaging at least 6 months before on State's API plans or on annual changes
- Benefits for vendors:
  - Plan resources, get started and work iteratively

- What are the problems involved in starting the communication early?
- o What internal processes need to be in place to help with this?



## Start Online Meetings/Calls with Vendors

- 1. Aid in better experience for the Vendors & the SEAs
- 2. Unblock vendors
- 3. SEAs understand community readiness for API usage.

- How often should SEAs have this meeting?
- o Time commitment from SEAs?



## SEAs should publish Vendor Sandboxes

- 1. State provided sandboxes to support vendor development.
- 2. Sandboxes should have the same functionality as production
- 3. Vendors have the ability to reset Sandboxes
  - Problems
    - > Low quality test data
    - ➤ Inefficient and poor API client quality

- What is stopping from publishing the sandboxes on-time?
  - ➤ Infrastructure Cost incurred by SEAs
  - ➤ Vendor Permissions



## SEAs should provide data portal for Vendors

### All our leaders have done a great job in this respect!

- WISE Dash Public Portal <a href="https://dpi.wi.gov/wisedash">https://dpi.wi.gov/wisedash</a>
- AZEDS for Developers <a href="https://www.azed.gov/aelas/azeds/">https://www.azed.gov/aelas/azeds/</a>
- Ed-Fi TechDocs is available also. Provide specific links in TechDocs rather than the home page link

- Time commitment
- Staff assignment



# SEAs avoid creating entities that are part of the model already

### **Avoid creating duplicate entities**

- Problems
  - Confusion among API developers
  - Poor data quality
  - Increase in API errors

- Understand & Analyze the Ed-Fi data model thoroughly
- Business Analyst time commitment



## SEAs should ask for granular data not aggregate data

- 1. Granular data is inherently more useful and informative
- 2. Aggregate rules are often state specific which results in complexity
- 3. Lack of API client standardization across state boundaries
- 4. Ecosystem does not like Standardization in that case which results in lower data quality for SEAs.
- 5. Example: Number of days student is in attendance.
  - Do you count medical release? Do you count early release? Or Do you count home-bound day?

### **Discussion:**

Understand & Analyze the Ed-Fi data model thoroughly

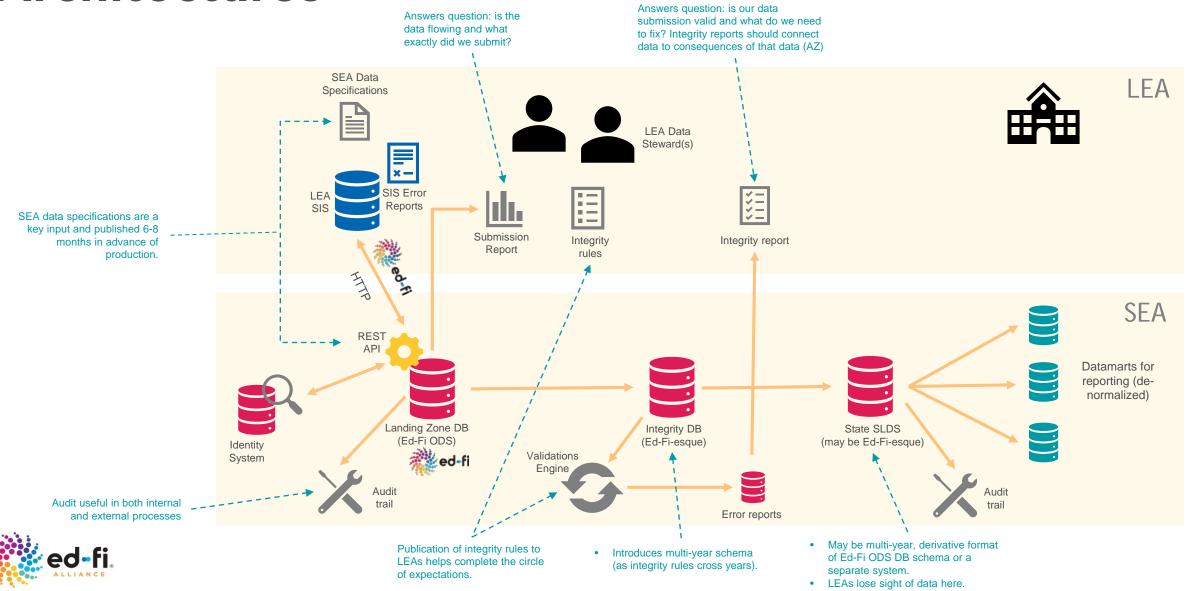




## **Key Observations from SEA Implementation(s)**

## Successful State Architectures

Successful state architectures look similar in terms of technical processes, but they also share communications and governance processes often not obvious at first glance.



## **Key Observations**

- For states the Ed-Fi ODS is an "API landing zone" and not the state ODS. Further it is not likely to become the state ODS.
  - The state ODS inherits many new requirements
  - It is also often managed by a separate team or person
- However, the SLDS may be "Ed-Fi-esque" in schema (e.g. AZ and WI), and this makes it very complex for a state to take on new Ed-Fi data model versions
  - Ed-Fi model changes "ripple" throughout the entire SEA data pipeline



## **Key Observations**

- There is a HUGE amount of missing process and infrastructure that states need to put in place to make Ed-Fi work, mostly around validation and communication
  - This is largely invisible to many new SEAs
  - The Alliance and its community provides little to no guidance this is a HUGE gap for us



## **Key Questions**

- The SEA experience suggests that LEAs will have the similar problems with data quality, validation, and data governance
  - What does the LEA architecture look like? SEA experience suggests it is not a single Ed-Fi ODS.
- SEA experience also suggests that downstream data is not fed from an API "landing zone"
  - We have increasing focus on data out strategies (e.g. bulk, Change Events), yet are we sure that the ODS will even be the source of data out?



What are the other things that made you successful?

