



Student Data Privacy Consortium



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# *State Interoperability Partnerships - Putting Our Needs Before Marketplace Needs*

**JAY PENNINGTON, IOWA DEPT OF EDUCATION**

**AZIZ ELIA, CPSI**

**ALEX JACKL, BARDIC SYSTEMS**

**MIKE REYNOLDS, CEDAR LABS**

# Purpose

States are working together, and supported by A4L, to build interoperability solutions across standards and constituencies.

This is the states saying what they need and asking the standards groups to align, and NOT the other way around.

This states-driven community is committed to being resources for each other any state interested in building interoperability networks in their states, and regions. Come see how your state can be a part of this growing group working on the tactical work of interoperability within state agencies.

# Why State Partnerships?

- *Consumers should drive the market! A4L is listening!*
- *SIF Unity initiated by state concerns in the cost to adopt SIF 3*
- *Share Lessons Learned in implementations*
- *Decrease the complexity of versions maintained by vendors*
- *Increase leverage with vendors*
- *Look for opportunities for design or code sharing and reuse*
- *Identify candidates for incorporation into SIF and prioritize work*
  
- *Interested in joining? Email:*
  - Danielle Norton, MA Executive Office of Education, [danielle.norton@doe.mass.edu](mailto:danielle.norton@doe.mass.edu).
  - Janell Brandhorst, IA Dept of Education, [janell.brandhorst@iowa.gov](mailto:janell.brandhorst@iowa.gov)

# Activities Thus Far

- Already on board:
  - **Oklahoma**
  - **Iowa**
  - **Massachusetts**
  - **Vermont**
  - **Wyoming**
- In Discussion
  - **North Carolina**
  - **Connecticut**
  - **Minnesota**
  - **Ohio**
  - **Washington**
- Interviews with multiple states on their ecosystem
- More conversations are happening.

# Discussion

# Leveraging SIF Unity for Fully Automated State-wide Data Collections

The **Massachusetts Department of Education, with VSI and CedarLabs**, collects student, course, education professional, and student incident and discipline data via SIF. Student Identifiers (SASIDs) are requested, assigned and returned to the districts automatically via SIF. SIF additionally feeds data to Homeless and Foster Care Applications, the MA SLDS, the Early Warning Indicator System (EWIS), Teacher Candidate Assessment of Performance (CAPS), and the Self-Service BI & Data Analytics Pilot. The Student and Course Data Collections started in SIF 2.0 in 2012 for K-12 Data Collection. MA implemented SIF 2.7 in 2014-2015. Teacher and Student Incident Data Collections implemented in SIF in 2016-2017.

**Lessons learned: SIF provides a rich, extensible standard for Data Collections messaging. Implementation and systems integration choices matter most for implementation success.**

- Statistics:
  - Average: 1.2M transactions per day
  - 422 districts (97%) sending real-time SIF 2.7 data in 18 Objects. Full compliance for FY20
  - In process of moving districts to SIF Unity compliant Messaging Platform, CedarLabs
- Future Plans
  - Transfer of Student Demographic information and potentially Student history between districts based on security rules and policies defined by the state and districts
  - Incorporation of the Student Data Privacy Consortium contracts and policies
  - IEP implementation
  - Redesign of Data Collections Applications to take advantage of cloud serverless design and potential cost savings

# Discussion

# Leveraging SIF for Fully Automated State-wide Data Collections Oklahoma and CPSI

The Oklahoma State Department of Education has automatically assigned STNs and collected data for reporting for over 12 years. This is one of the longest running state level data collections systems in any state in the United States, and one of the only ones that does this full data collection automatically. One of the biggest factors in the long running success of this project has been the use of the real event-driven data framework that is behind the SIF specification. The SIF specification also provides a way for vendors to share and consume data over the common language of SIF.

- *Group Discussion Questions:*

- How much data is moved and how quickly does it move?
- How much effort went into creating this system and how long did it take to go from start to fully functional?
- Is there a lot of maintenance and upkeep? How much time does the staff need to devote to maintaining the system?
- How does the system grow as the needs of the state grow?
- What are the critical components that have made this system such a success?
- What plans are there for future expansion of the system?



# SIF Objects Included

- AttendanceCodeInfo
- CalendarDate
- CalendarSummary
- DisciplineIncident
- LEAInfo
- RoomInfo
- RoomType
- SchoolCourseInfo
- SchoolInfo
- SectionInfo
- StaffAssignment
- StaffPersonal
- StudentAttendanceSummary

- StudentContact
- StudentDailyAttendance
- StudentParticipation
- StudentPersonal
- StudentSchoolEnrollment
- StudentSectionEnrollment
- TermInfo
- MarkInfo
- MarkValueInfo
- SectionMarkInfo
- StudentSectionMarks
- GradingCategory

Total Number of Records Updated and Entered to the Wave ODS on a Weekly bases both via Real Time Events and the Request Response Process.

46,000,000 +

# WAVE ODS Validation State

## Number of Validations by Object

- 141 Student Personal
- 44 Student School Enrollment
- 30 Staff Personal
- 27 Section Info
- 26 Staff Assignment
- 25 Calendar Summary
- 21 School Info
- 20 School Course Info
- 17 LEA Info
- 17 Student Attendance Summary
- 14 Term Info
- 11 Student Contact
- 8 Student Daily Attendance
- 8 Help Desk
- 8 Calendar Date
- 7 Student Section Enrollment
- 4 Attendance Code Info
- 2 Student Section Marks
- 2 Validation Errors
- 1 Student Academic Record

**433** Total Validations

971,492 Student Personal Records x 141 Validations =

**136,980,372**

Validation Checks for Student Personal

1,558,145 Student School Enrollment Records x 44 Validations =

**65,558,380**

Validation Checks for Student School Enrollment

1,488,723 Student Section Marks Records x 2 Validations =

**2,977,446**

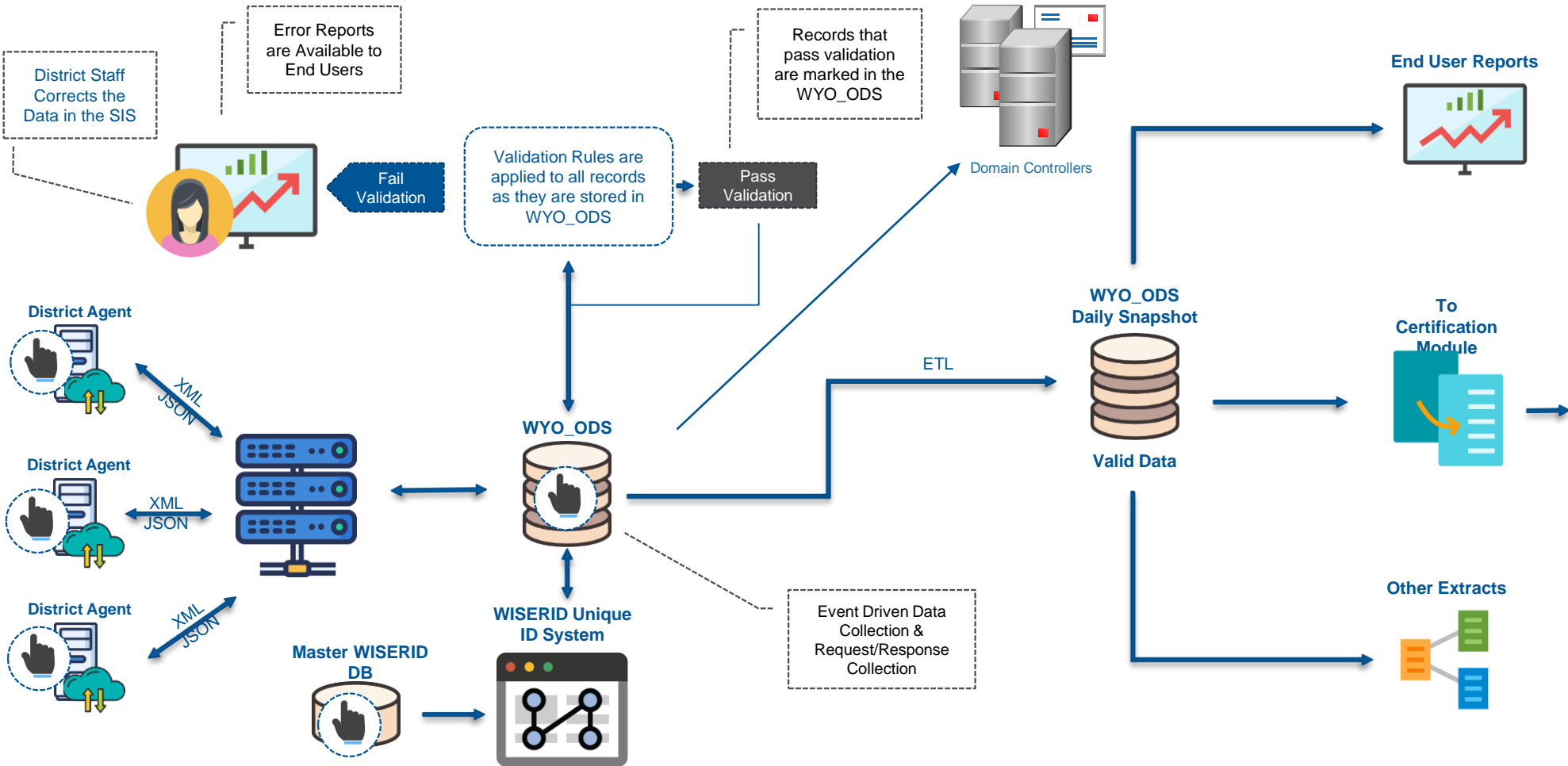
Validation Checks for Student Section Marks

# Discussion

# Wyoming Data Collection, Identity Management, and Data Modernization Project

- WDE leverages the CPSI toolsets and SIF to automate the data collection, data validation, to manage identities, and to manage directory information for individuals in 48 school districts, 8 higher education institutions, state and local government – including students, employees, staff
- WDE combines the newly implemented and modernized infrastructure along with a REST-based API methodology to connect the diverse participants in Wyoming education
- WDE modernized and replaced several legacy systems including the Statewide Registration System, Directory Manager, and Student Locator Framework
- Future – enhanced data collection and validation and expansion of the current processes for more data

# Wyoming Solution Architecture



# Discussion

# Leveraging SIF for Fully Automated State-wide Data Collections - IA

- Re-vamp data infrastructure
- Result will be a modernized enterprise framework based on standards
  - Phase 1
    - ✦ Student data collection
    - ✦ State identifier assignment
    - ✦ Early warning
    - ✦ Transcripts
  - Future Phases
    - ✦ At-risk students such as foster, migrants,
    - ✦ Student records
    - ✦ Other assessment systems
    - ✦ Generate/CEDS

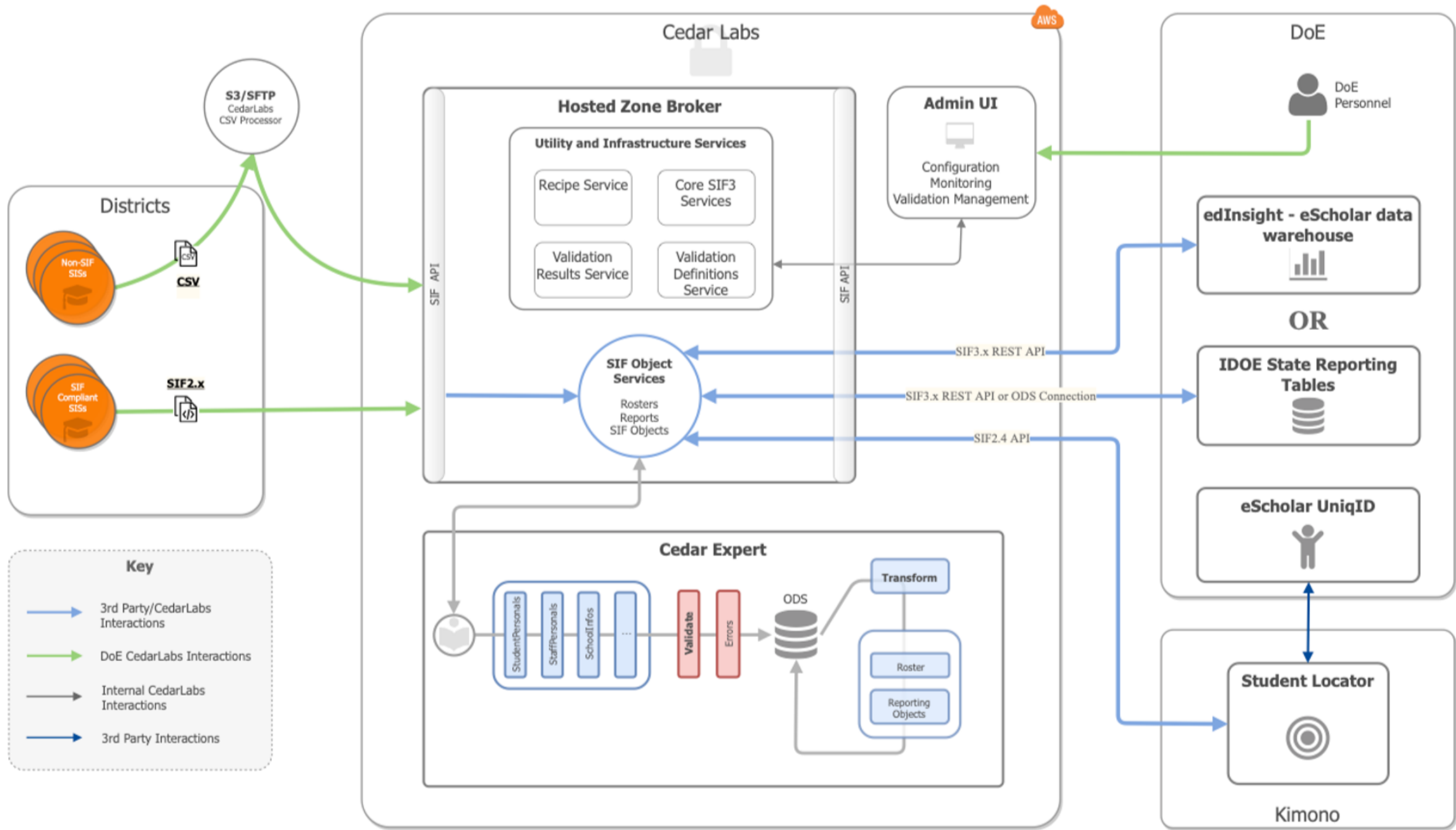


Figure 2: Solution architecture



# Discussion

# To Find Out More.....

- Danielle Norton, MA Dept of Education [danielle.norton@doe.mass.edu](mailto:danielle.norton@doe.mass.edu)
- Janell Brandhorst, IA Dept of Education , [janell.brandhorst@iowa.gov](mailto:janell.brandhorst@iowa.gov)
- Leslie Zimmerschied, WY Dept of Education, [leslie.zimmerschied@wyo.gov](mailto:leslie.zimmerschied@wyo.gov)
- Jay Pennington, IA Dept of Education [jay.pennington@iowa.gov](mailto:jay.pennington@iowa.gov)
- Peter Drescher, VT Agency of Education, [peter.drescher@vermont.gov](mailto:peter.drescher@vermont.gov)
  
- Aziz Elia, CPSI [aelia@cpsiltd.com](mailto:aelia@cpsiltd.com)
- Alex Jackl, Bardic Systems [alex@bardicsystems.com](mailto:alex@bardicsystems.com)
- Mike Reynolds, Cedar Labs [mike.reynolds@cedarlabs.com](mailto:mike.reynolds@cedarlabs.com)
  
- Access 4 Learning [www.a4l.org](http://www.a4l.org)
- John Lovell, Access For Learning, [jlovell@a4l.org](mailto:jlovell@a4l.org)