A MODEL Connected and Secure Data System from LEA to SEA.

*Turning a statewide data collection from compliance to productive tool*

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Welcome

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The Problem

- State reporting is a significant effort and adding value to this process would improve engagement.
- Modernized infrastructure would eliminate many pain points with state reporting.
- State internal interoperability needs are significant and would benefit from real-time data from districts.
- District reliance on state reporting data for internal needs would improve quality of state reporting data.
The Problem

- District data management is a complex and resource-intensive
- Edtech vendors leverage a variety of rostering standards or proprietary approaches
- Standards are often not implemented with fidelity
- Unique district implementations and scenarios do not translate easily to standards
- Historical rostering solutions do not address privacy requirements
MA EOE Implementation

- Historical picture of district systems
- Historical picture of state reporting
- Evolution & merging of state & district needs
  - Why not address both problem sets at the same time
  - Leverage state technology enhancements for districts
  - Reduce repetitive tasks
The District Perspective
A New Approach

The MA DataHub:
Real-time statewide data integration and privacy management
for SEAs and Districts
Project Goals

• Modernize state reporting
• Implement SIF to automate
• Leverage state reporting infrastructure to address district and state data management needs
• Address inconsistent use and application of standards in ed tech
• Meet individual district unique needs
• Enforce privacy requirements BEFORE sharing any data
• Clearly report out all privacy obligations and data sharing at the element level
The Journey

- 2019: Idea born at A4L Conference
- 2019: Cedar Labs, MA EOE, & Cambridge Public Schools establish partnership and shared goals
- 2020: Meetings with various edtech vendors to understand their implementation of standards
- 2020: Determine best approach and begin design
- 2021: Pilot implementation in Cambridge
- Current: Early release implementation in 8 MA districts
The Costs to States & Districts

- Infrastructure
- Expertise
- Staff Time
- Security
Universal Data Integration

“MEET THEM WHERE THEY ARE”
REDUCE RISK
ENSURE ACCURACY
ENSURE PRIVACY
Key Concepts

- Manage *what* data and *which* students are sent to each vendor
- Transform and anonymize data
  - Connect non-compliant vendors
  - Provide de-identified data for research or to NGOs
  - Go beyond “cookie cutter” rostering
- Work in partnership with SDPC
- Integrated, one-stop experience for data integration & privacy

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Demonstration
### Software Systems Enrolled:

- **Brain Bits**

#### Software System Access

**What Data?**

<table>
<thead>
<tr>
<th>SCHOOL &amp; DISTRICT</th>
<th>Local Id (School)</th>
</tr>
</thead>
<tbody>
<tr>
<td>STUDENT INFORMATION</td>
<td>English Proficiency Code, First Name, Gender, Gifted Talented</td>
</tr>
<tr>
<td></td>
<td>Grade (Student School Enrollment1), Last Name, Local Id (Student Personal)</td>
</tr>
<tr>
<td></td>
<td>School Name (Student School Enrollment1), School State Province Id (Student School Enrollment1)</td>
</tr>
<tr>
<td>CLASS ROSTER INFORMATION</td>
<td>Course Code, Course Section Code, Course Title</td>
</tr>
<tr>
<td>STAFF INFORMATION</td>
<td>First Name, Job Function Code (Staff Assignment1), Last Name, Local Id (Staff Personal)</td>
</tr>
<tr>
<td></td>
<td>School Name (Staff Assignment1)</td>
</tr>
</tbody>
</table>

#### Privacy and Security Obligations

- **Privacy Obligations**: All Privacy Obligations
- **Data Security Requirements**: Assess security controls, Audit logs, Limit failed logins, Password complexity, Protect system media, Sanitize equipment, Sanitize system media
Real-World Impact

- Flexibility (not tied to SIS vendor)
- Managing transformations
  - Provides element level control over all data exchanges
- Transparency to the data flow
- Leveraging most reliable data set via SIF
- Ease of use to integrate any standards or flat files
  - While providing needed control over all data
- Privacy controls and reporting built in
  - Privacy over the wire
  - Privacy reporting
Cambridge Experience

- Benefits
  - No need to sweat the setup
  - Community-developed templates
  - Minimal time investment
  - Fits into existing data flows

- Things to keep in mind
  - Consistency between SIS and State
  - May need to supplement SIF data
Next Steps

- Early adopter implementation
- POD implementation
- Onboarding additional districts
- Continuing to adapt to MA EDU needs
THANK YOU!

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