












Project Unicorn Interoperability Rubric 2018

STUDENT DATA				
	1	2	3	4
Data Quality	Linguistic student identifiers (e.g. first name, last name)	Linguistic plus numeric student identifiers (e.g. last name and grade level)	Unique numeric student identifiers used over time (e.g. one permanent product-assigned ID)	Integrate or import unique numeric student identifiers used by schools and other tools (e.g. SIS ID)
Data Granularity	1 unit of data (e.g. section) is available for immediate export or import	2 units of data (e.g. section, school) are available for immediate export or import	3 units of data (e.g. section, school, district) are available for immediate export or import	4 or more units of data (e.g. section, school, district, student) are available for immediate export or import
Export Process	No export; or export a non-editable, non-machine-readable file type (e.g. PDF);	Manually download a machine-readable file (e.g. CSV, XML, Excel)	Scheduled SFTP to a shared location; or direct database access; or third-party product integration with industry aligned data descriptors (CSV, XML, Excel, API access)	Industry standard aligned API with certification of APIs from appropriate industry standards body (e.g. Ed-Fi or IMS)
Export Security	Unencrypted transfer with minimal data restrictions (e.g. limited account permissions and data filters)	Encrypted transfer with minimal data restrictions (e.g. limited account permissions and data filters)	Encrypted transfer with data restrictions (e.g. several account permissions and data filters)	Encrypted transfer with data restrictions and procedural safeguards (e.g. VPN, authentication)
Export Frequency	On request	Weekly	Daily	Real time
Export Format	No file format; or a non machine-readable file format	Custom, consistent file format unique to the tool	Custom, consistent file format unique to the tool with updated documentation	Industry standard file format (e.g. QTI, Ed-Fi, OneRoster) with certification of APIs from appropriate industry standards body (e.g. Ed-Fi or IMS)
Import Process	No import; or email a file	Manually upload a machine-readable file (e.g. CSV, XML, Excel)	Scheduled SFTP to a shared location' or third-party product integration	Industry standard aligned API with certification of data formats from appropriate industry standards body (e.g. Ed-Fi or IMS)
Import Security	Unencrypted transfer with minimal data restrictions (e.g. limited account permissions and data filters)	Encrypted transfers with no data restrictions, account permissions, and/or data filters.	Encrypted transfer with minimal data restrictions (e.g. limited account permissions and data filters)	Encrypted transfer with data restrictions and procedural safeguards (e.g. VPN, authentication)
Import Frequency	On Request	Weekly	Daily	Real time
Import Format	No file format; or an inconsistent file format	Custom, consistent file format unique to the tool	Custom, consistent file format unique to the tool with updated documentation	Industry standard file format (e.g. QTI, Ed-Fi, OneRoster) with certification of data formats from appropriate industry standards body (e.g. Ed-Fi or IMS)
Technical Descriptions and Examples	Vendor-defined data is extracted from a tool using tool-specific interfaces (tool-specific file, database, or programmatic interface) Example: Downloading a PDF file of assessment data from a LMS or Assessment tool	Vendor/Client-defined data is extracted from a tool using tool-specific interfaces (tool-specific file, database, or programmatic interface) that may or may not leverage standards-based formats across products Example: Downloading/uploading a CSV or XML roster file from/to a third party app	Data is exchanged securely via a documented file format and/or via an API, but not in real time (ie, once a day, once a week, etc.). Example: Using OneRoster Gradebook Services with periodic sync or Ed-Fi summative Assessment Outcomes composite	Data is exchanged using standards-based formats and APIs in real-time Example: Using LTI gradebook and assignment services or Ed-Fi formative Assessment Outcomes composite

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A4L Community Specifications get you to level 4!

	Level accomplished	A4L Specifications	Things to Consider
Data Quality	 1, 2, 3, 4	When it comes to student identifiers, SIF has you covered at the application, local, and state level. Add to that our student locator (state ID lookup) services and all the parts are present to align your integration to levels 1, 2, 3, 4, and more.	Just because something is included in a standard, does not necessarily mean it is utilized by your software.
Data Granularity	 1, 2, 3, 4	Whether you go with our xPress Roster or enterprise objects: section, school, district, and student are normally supported and ready for export. Levels 1 through 4 are easily attainable here with the SIF Standards. With 140 data objects in the SIF North American 2.8 Data Model you can accomplish much, much more.	
Export Process	 1, 2, 3, 4	By combining SIF Infrastructure and Data Model we provide a set of industry standard APIs. It will be hard for you integration to be anything but the highest level (4) in this area.	
Export Security	 1, 2, 3, 4	The SIF infrastructure can operate without encryption where desired. It utilizes the standard encryption and authentication methods used to power Internet commerce, apply filters, and we even have members encrypting payloads to create secure cloud solutions. We will be happy to help you use these pieces to hit any level (1, 2, 3, or 4) in this area.	SIF Certified products have demonstrated their ability to do this.
Export Frequency	 1, 2, 3, 4	From on request to real time, the SIF Standards have the pieces and parts to design you integration the way you want. Feel free to power real time back office synchronization (4) to on demand (1) interfaces with the same set of standards.	When building apps on demand data is common. Simple data integration falls in the middle. While real time events keep your servers synchronized.
Export Format	 1, 2, 3, 4	SIF has an amazing on the wire data model that covers all of these within our standards. Need something more? Consider becoming a member and helping us make that happen.	
Import Process	 1, 2, 3, 4	By combining SIF Infrastructure and Data Model we provide a set of industry standard APIs. It will be hard for your integration to be anything but the highest level (4) in this area.	
Import Security	 1, 2, 3, 4	The SIF infrastructure can: use nothing, utilizes the standard encryption and authentication methods used to power Internet commerce, apply filters, and we even have members encrypting payloads to create secure cloud solutions. We will be happy to help you use these pieces to hit any level (1, 2, 3, or 4) in this area.	SIF Certified products have demonstrated their ability to do this.
Import Frequency	 1, 2, 3, 4	From on request to real time, the SIF Standards have the pieces and parts to design you integration the way you want. Feel free to power real time back office synchronization (4) to on demand (1) interfaces with the same set of standards.	When building apps on demand data is common. Simple data integration falls in the middle. While real time events keep your servers synchronized.
Import Format	 1, 2, 3, 4	SIF has an amazing on the wire data model that covers all of these within our standards. Need something more? Consider becoming a member and helping us make that happen.	
Technical Descriptions and Examples	 1, 2, 3, 4	SIF has an amazing on the wire data model that covers all of these within our standards. Need something more? Consider becoming a member and helping us make that happen.	