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Single Sign-on Requirements

The district is **requiring** support for the following methods of Single Sign-On at no additional cost to the district.

Auto-provisioning: For all systems that do not require roster data, the district is **requiring** users are automatically provisioned on first launch.

Method 1 - SAML support

Security Assertion Markup Language (SAML, pronounced *sam-el*⁽¹⁾) is an XML-based, open standard data format for exchanging authentication and authorization data between parties, in particular, between an identity provider and a service provider. SAML is a product of the OASIS Security Services Technical Committee. SAML dates from 2001; the most recent major update of SAML was published in 2005, but protocol enhancements have steadily been added through additional, optional standards.

Method 2 - LTI Basic Launch Links version 1.1.2 or higher - 1.3 is Preferred.

<https://www.imsglobal.org/activity/learning-tools-interoperability>

The principal concept of LTI is to establish a standard way of integrating rich learning applications (often remotely hosted and provided through third-party services) with platforms like learning management systems, portals, or other educational environments. In LTI these learning applications are called Tools (delivered by Tool Providers) and the LMS, or learning platforms, are called Tool Consumers. The basic use case behind the development of the LTI specification is to allow the seamless connection of web-based, externally hosted applications and content, or Tools (from simple communication applications like chat, to domain-specific learning environments for complex subjects like math or science) to platforms that present them to users. In other words, if you have an interactive assessment application or virtual chemistry lab, it can be securely connected to an educational platform in a standard way without having to develop and maintain custom integrations for each platform.

Please refer to the LTI primer: <https://www.imsglobal.org/specs/litv1p1p1/implementation-guide> for a detailed explanation.

Specification Documents: <https://www.imsglobal.org/activity/learning-tools-interoperability>

Rostering Requirements

Vendors have the option of supporting the OneRoster v1.1 csv templates for the current school year. The district is requesting support for IMS Global OneRoster v1.1 REST API by the following school year. Rostering must be provided at no additional cost.



What is OneRoster?

<http://www.imsglobal.org/IMSOneroster.pdf>

IMS OneRoster Specification Details

The OneRoster specification has two parts. Part 1 is a set of roster services that allow rosters to be exchanged between an SIS and a Digital Learning Platform or an SIS and a Publisher Platform or Tool. The roster services are defined as a RESTful API.

Part 2 is a set of CSV definitions that can be used to standardize the exchange of roster information for those implementations that do not currently implement a services model.

The OneRoster v.1.1 specification can be found here:

<https://www.imsglobal.org/oneroster-v11-final-csv-tables>

Integration Checklist

#	Requirement	Yes/No	Comments
1	Does your system require roster data? If not, go to section 2.		
1.a	Do you currently support the OneRoster REST API?		
1.b	<ul style="list-style-type: none"> If no to 1.a, Will you support OneRoster REST API by Fall 2020? 		
1.c	<ul style="list-style-type: none"> If you do not support the OneRoster REST API, will you accept OneRoster v1.1 csv files to an SFTP site where we can automatically upload these files? 		
1.d	<ul style="list-style-type: none"> Are you able to directly receive the OneRoster API or CSV files, or do you use a third-party rostering partner, such as Clever? 		
1.e	<ul style="list-style-type: none"> If a third-party is used, please list their name. 		
1.f	<ul style="list-style-type: none"> Do you have the ability to provision course resources using the OneRoster v1.1 resources file? 		
1.g	<ul style="list-style-type: none"> Do you use any roster data that is an optional field in the OneRoster spec? If so please list the field. 		
2	Our district requires single sign-on for all users, do you have any methods for single sign-on?		
2.1	<ul style="list-style-type: none"> Do you support ADFS or SAML? 		
2.2	<ul style="list-style-type: none"> Do you support LTI v1.1.2 (or higher) basic launch links? 		
2.3	<ul style="list-style-type: none"> If other single sign-on methods are used, please list them 		
3	Are you familiar with IMS Global?		
3.1	<ul style="list-style-type: none"> Are you a member of IMS Global? 		
3.2	<ul style="list-style-type: none"> Is your solution certified by IMS Global? If so, please include a link to certification. 		
4	Do you support an LTI connection from your platform to the Canvas Learning Management system that provides federated search of your content?		

4.1	<ul style="list-style-type: none"> • If you support an LTI connection, do you support LTI 1.3 through Canvas? 		
4.2	<ul style="list-style-type: none"> • Do you provide grade passback to the Canvas grade book through the Canvas Learning Management System? 		
4.3	<ul style="list-style-type: none"> • Do you provide the ability to roster through Canvas? 		
5	Does your platform require a local installation of software on the computer or any browser plugins or ports to be opened?		
5.1	<ul style="list-style-type: none"> • If so please provide a link to your specifications or list the items needed. 		
6	Please provide a technical contact for questions that may arise from our rostering team or IT department.		

System Requirements

System REQUIREMENTS	Meets	Does Not Meet	VENDOR RESPONSE Please describe
1. Content must be fully accessible through a web browser, and available 24/7 outside of regularly-scheduled maintenance and/or update windows			
2. Authentication of Users is done through the district LMS (Canvas) or Portal (ClassLink)			
3. Content Provider must conform to and deliver access to content via IMS Global Learning Tools Interoperability v1.1 (or higher) standard.			
4. Content must be accessible via mobile device browsers including iOS and Android.			

Technical Requirements

In addition to the functional requirements, the vendor’s solution shall provide users with a wide variety of readily available and user-friendly interfaces to access the system, as well as provide an environment that allows for reliable and timely use of the content. In addition, the vendor’s solution will integrate with third-party materials and software. Conforming to IMS standards the vendor must maintain the highest levels of security in order to preserve and protect the confidentiality of data. The vendor is expected to employ leading edge and proven security solutions and protocols in order to fulfill this goal.

These are custom parameters with specified names to represent a best practice when launching content using the IMS Global Learning Tools Interoperability standard

System and Integration/Extensibility REQUIREMENTS	Meets	Does Not Meet	VENDOR RESPONSE – Please describe
Support Windows, Chrome, MacOS, and iPadOS operating systems. Vendor will specify which versions of these operating systems the vendor’s solution supports.			
Support scalable enterprise configurations such as load balancing and clustering of servers and downloading of data based and content based delivery for school districts with one-to-one or BYOD programs.			
Support Chrome on Windows devices and Safari browser on iOS devices. Vendor will specify which versions of these browsers the vendor’s solution supports.			

Notes:

Several references are made to the LMS (Learning Management System) and Portal. This verbiage may differ from district to district, but they all refer to the district learning platform that is the primary vehicle for aggregating and presenting instructional resources.

References are made to LDAP but the intent is to integrate into the district directory services which for Orange County requires ADFS or LTI. Districts can no longer dedicate resources to customize export files that conform to individual publisher schema. The ability to use directory services prevents students and teachers from having multiple logins for multiple providers, allowing for the seamless access to resources and maximizing instructional time.