

LTI ADVANTAGE: 5 THINGS YOU NEED TO KNOW

Learning Tools Interoperability (LTI) is a standard developed by IMS Global Learning Consortium. It allows instructors and students to launch courseware and learning tools from different vendors from within the same application, and move seamlessly from one tool to the other. LTI has been widely adopted by the education marketplace, enabling unprecedented levels of interoperability and interactive learning experiences.

LTI Advantage provides a way to add extended capabilities of tools and platforms using the core LTI standard. As you consider adopting LTI Advantage, here are 5 things you need to know.

1 LTI ADVANTAGE PAVES THE WAY FOR RICHER TOOL AND APPLICATION LEARNING ENVIRONMENTS.

The new LTI Advantage service extensions allow for more personalization of tools, as well as enhanced adaptability for faculty and students. Through the use of these services, users have more options for innovative tools that work together and result in better integration, better user experience, and better learning.

2 LTI ADVANTAGE PROVIDES MULTIPLE SERVICE EXTENSIONS TO CHOOSE FROM.

The service extensions, including Assignment and Grade Services, Deep Linking, and Name and Role Provisioning Services, will enhance the user experience in the platform for faculty and students while giving them the peace-of-mind resulting from enhanced security and data privacy. These service extensions can be implemented independently or as a group for more customized functionality, depending upon the needs of the organization.

3 LTI 1.3 IS THE PREREQUISITE FOR LTI ADVANTAGE.

LTI 1.3 provides a foundation for the LTI Advantage service extensions. LTI 1.3 is the updated version of LTI 1.1, which is the most commonly adopted LTI specification. "The recommended LTI upgrade path is from LTI 1.1 to LTI 1.3.[...] Future versions will be built upon the updated LTI 1.x framework which provides a compact core, well-defined extensions, a separate security model, and simpler migration from version to version moving forward." (<https://www.imsglobal.org/lti-adoption-roadmap>) Note that LTI versions 1.2 and 2.0 have been designated as legacy, and are not on the recommended upgrade path.

Upgrading to LTI 1.3 will enable your organization to take advantage of the additional service extensions of LTI Advantage to enhance overall user experience now and into the future.

4 LTI 1.3 USES A MORE MODERN SECURITY MODEL.

Educational institutions are invested in the enhancement of security and data privacy, especially in the case of personally-identifiable information (PII). LTI 1.3 employs a more modern security model using JSON Web Tokens (JWT) and OAuth2, enhancing student privacy and security. In addition, LTI 1.3 embraces the OpenID Connect (OIDC) specifications and makes the LTI launch an actual third party initiated OpenID authentication flow. By upgrading to LTI 1.3, and by achieving LTI 1.3 certification, tools (previously known as "tool providers") and platforms (previously known as "tool consumers") will be using the latest security features.

5 UPGRADE HELP IS AVAILABLE.

There are a variety of resources available to help you get started:

- Get to know LTI Advantage video. This provides a good introduction to LTI 1.3 and LTI Advantage.
- Information about OAuth2 and OpenID Connect, the most-up-to-date industry-standard protocols for authentication and identity verification.
- IMS LTI Reference Implementation can simplify the upgrade process. IMS members can test their products using the provided platform and tool with the full set of services and messages. A public version with basic functionality is also available.
- IMS Global website. This provides the latest information from IMS Global including:
 - Important announcements. Stay tuned for IMS Global to announce the public availability of the LTI 1.3 specification and the corresponding LTI Advantage services, as well as platform & tool certifications.
 - Information about IMS's certification process in general, and specifically the LTI certification suite. Currently, IMS certification must be recertified annually to maintain compliance.

Unicon has over 25 years of experience in integrating open source, custom, and proprietary systems, including standards-based integrations with popular LMSs. As a Contributing Member of the IMS Global Learning Consortium, Unicon was an early implementer of LTI Advantage and assisted IMS with the certification testing process. To date, Unicon has been involved in multiple projects that touch all facets of the LTI Advantage effort, including both tool and platform implementations.

If you need assistance with your upgrade or LTI adoption, please reach out to us at www.unicon.net.