

Your Path to Trusted Student Privacy and Data Security

LTI Advantage is the foundation for building an innovative, flexible, and extensible digital ecosystem with industry-standard security. Adopting this groundbreaking approach for integrating platforms and learning applications ensures the protection of your institution's sensitive student data and personally identifiable information (PII).

Learn more at imglobal.org/TakeAdvantage.

LTI Advantage Security

- Ensures users access only the data permitted by their role
- Protects against eavesdropping and tampering with communications between your platform and tools
- Enables IT leaders to be proactive in limiting the number of tools that can access PII
- Continues to protect data as your digital ecosystem grows

LTI Advantage is yet another opportunity to utilize agile technology to enhance learning in secure, timely and cost-effective ways.

Nowhere else can partners, educational institutions, and suppliers innovate and benefit together. This is so true for the secure integration of digital content made easy with IMS standards, especially LTI. This is why Penn State requires the adoption (certified) of LTI Advantage, with the enhanced security of LTI 1.3, by its partners. Yes...build once, use many is the right way to go.

—Terry O'Heron, Director of Operations, Teaching and Learning with Technology, Pennsylvania State University

LTI Advantage Leverages Industry Leading Security

LTI Advantage builds on the core **Learning Tools Interoperability® (LTI) 1.3** standard, which requires a set of security patterns defined in the new **IMS Security Framework**. Adopting LTI 1.3 promotes consistent and compatible integrations and simplifies use of other IMS standards.



The IMS Security Framework adopts the industry-standard protocol IETF OAuth 2.0 for authenticating services along with JSON Web Tokens (JWT) for secure message signing. Features include:

- Authorization servers separated from resource servers to fit enterprise authorization schemes
- Additional verification of tool and platform authenticity to protect against on-path or in-transfer attacks
- A flexible and granular approach to access PII, such as defining application-specific authorization following best practices and regional and national legislative/regulatory requirements
- Multiple authorization grant types, each with its protocol flow that makes OAuth 2.0 adaptable for multiple use cases and client types
- A design that allows for easier upgrades to future security features like new access token types, grant types, and protocol parameters

IMS Certification for LTI Advantage is a Top Priority for Higher Ed

The strength of the market demand for increased security with OAuth 2.0/JWT is strong. **Institutional leaders** are indicating LTI 1.3 and LTI Advantage are their minimum requirement for implementing products that exchange PII.

Only LTI Advantage Certified Products Promise

- Operational compliance with OAuth 2.0 and JWT message signing protocols
- Interoperability with other LTI Advantage certified tools and platforms
- Accurate implementation of LTI Advantage prescribed standards and services

View all **LTI Advantage certified** products.

How IMS Certification Works

The IMS community-owned and governed certification process tests a product's code in action. Each product must pass a series of situational and operational test conditions, including actual security operations, to earn the designation of IMS certified and be included in the **IMS Product Directory ([imscert.org](https://www.imscert.org))**.

Be confident that your data is secure and fully interoperable. With IMS certified products, you get reliable and consistent integrations and avoid the roadblocks and extra costs of customization.

Find **procurement resources** to help your institution adopt LTI Advantage certified products.