

# Redefining Digital Assessment

Open Source. Open Standards.  
Open Possibilities.



## TAO® - the Leading Assessment Platform for Education, Career, and Industry Advancement.

Redefining digital assessment is about tearing down proprietary data silos, and designing open environments that empower you to combine assessment and learning data, and make it actionable. Thanks to this holistic approach grounded in open technologies and standards, Personalized Learning has become a reality.

To help you build this critical foundation, OAT offers three editions of TAO, each one leveraging the power of Open. Whether you plan to migrate to digital exams, or implement adaptive learning solutions, or simply to reduce cost, there's a TAO Edition that's right for you.

- **TAO Community Edition™**

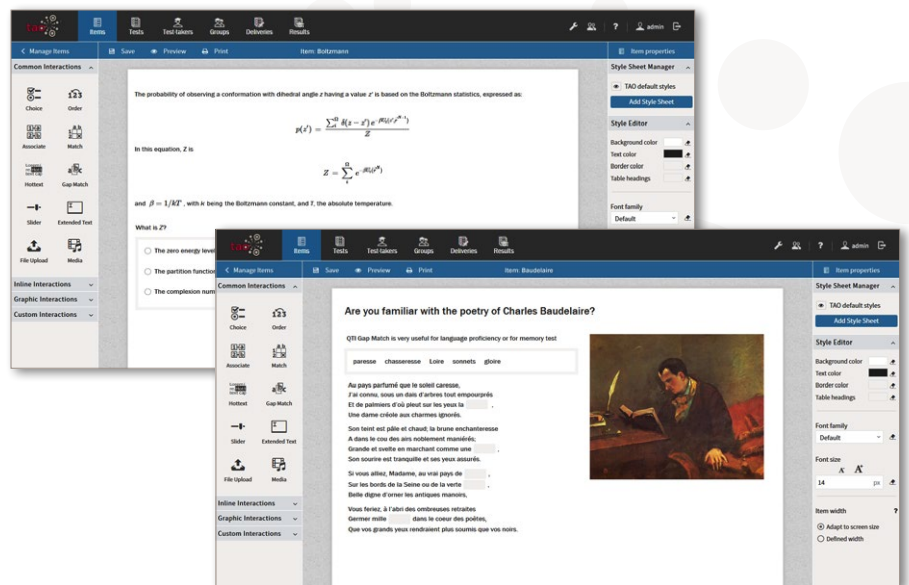
A powerful and completely free assessment solution for those with the ability to implement it themselves

- **TAO Premium Edition™**

A Cloud-based subscription service offering a turn-key assessment solution with value-added extensions and technical support

- **TAO Enterprise Edition™**

A tailor-made, end-to-end assessment solution enhanced to meet your needs. Interoperable, and ready for integration with other components in your learning ecosystem, including enterprise-level support



TAO is available as a free download at [taotesting.com](http://taotesting.com) or as a custom solution from OAT or our Regional Partners.

All three TAO Editions are built around our powerful feature stack, which includes modules for:

- Item Creation, supporting traditional and Technology-Enhanced Items (TEIs)
- Item Banking and Test Creation
- Test-Taker, Group, and Delivery Management
- Access Control and Auditing
- Online Delivery and On-site Proctoring
- Results Reporting

The *TAO Item Creator* module is a powerful WYSIWYG item editor that enables you to create traditional and technology-enhanced items (TEIs). It is IMS QTI certified, ensuring complete content interoperability and investment protection. It supports Portable Custom Interactions (PCIs) that allow you to create items with game-like experiences – potentially even Virtual Reality interactions.

The *TAO Item Bank* module is built on a Web 3.0 foundation and offers the most powerful metadata system in the industry which can be leveraged with TAO's IMS QTI-based Test Creation functionality.

TAO's modules for *Test-Taker & Group Management*, *Online Delivery*, and *Results Reporting* are also available within the three Editions. The modules are interoperable and designed to work together in harmony, giving you full control over the entire assessment cycle.

TAO gives you the flexibility to administer tests on any device from a stand-alone laptop, a server or the Cloud. Alternatively, Tests can be launched from a Learning Management System (LMS) by using the IMS LTI protocol.

Thanks to their built-in NoSQL database, TAO Premium and TAO Enterprise Editions can scale test deliveries to well over 100,000 concurrent users. Item, test, and scoring data are securely stored on the server-side, reducing any risk of compromising or losing critical information.

TAO solutions are compliant with industry standards such as IMS QTI, PCI, LTI, MathML and OpenID, which, combined with TAO's extensive library of REST-based open Application Programming Interfaces (APIs), enable seamless integration with third party components, including Computer Adaptive Testing (CAT) engines.

Which of these features and benefits does TAO offer?

	TAO	Proprietary Solutions
Free to use ?	<input type="checkbox"/>	<input type="checkbox"/>
Free to modify ?	<input type="checkbox"/>	<input type="checkbox"/>
Free to redistribute ?	<input type="checkbox"/>	<input type="checkbox"/>
Customizable ?	<input type="checkbox"/>	<input type="checkbox"/>
QTI compliant ?	<input type="checkbox"/>	<input type="checkbox"/>
APIs ?	<input type="checkbox"/>	<input type="checkbox"/>
A user community ?	<input type="checkbox"/>	<input type="checkbox"/>
Sustainable ?	<input type="checkbox"/>	<input type="checkbox"/>
Reliable ?	<input type="checkbox"/>	<input type="checkbox"/>
Scalable ?	<input type="checkbox"/>	<input type="checkbox"/>

Common Interactions:

- Choice
- Order
- Associate
- Match
- Hottext
- Gap Match
- Slider
- Extended Text
- File Upload
- Media

TAO supports a wide range of QTI-compliant interaction types, from simple to complex.

# Product Features

## TAO Item Creator and Item Bank modules allow you to:



- Import existing QTI 2.X or APIP items or tests directly into TAO
- Create simple or complex items by combining one or more QTI interaction types; TAO supports virtually all interactions, including upload-interactions
- Design Technology Enhanced Items (TEIs) using QTI-PCI; OAT-built samples include formula editing for test-takers and speech recording
- Define responses processing rules, including options for partial credit and defining variables for manual scoring
- Define rules for item- or interaction-level feedback for use in formative tests
- Include images, audio and video-files, either embedded or externally hosted (e.g. on YouTube)
- Define shared stimuluses for reading passages, which can easily be included in multiple items or through the TextReader PCI, allowing multiple tabs of rich content
- Insert mathematical formulas through the built-in WYSWYG formula editor
- Instantly preview items on a wide range of test-taker devices and verify proper scoring processing

## TAO Test Creator allows you to:



- Select and arrange items to create QTI-compliant tests
- Create, import and export QTI 2.X and APIP 1.X compliant content
- Integrate third-party CAT engines via the IMS Standard on CAT
- Define test sections by grouping items according to shared contexts
- Define time-limits at the test, test part, section and/or the individual item level
- Define ordering and selection rules at the section-level
- Define weights and scoring categories for items in specific tests
- Define cut scores for instant reporting on multiple categories and display results to the test-taker right after test-completion
- Define multiple linear or nonlinear sections in a test and allow mark-for-review and skipping where appropriate
- Allow test-taker commenting and (accessibility) tools on specific sections or even items

## TAO Test-Taker Registry allows you to:



- Enter test-taker data directly into TAO
- Import test-taker data from CSV files
- Define profiles and properties to classify test-takers
- Assign tests to target groups of test-takers
- Verify identity of test-takers based on user names and passwords via TAO, or
- Use LTI to launch TAO from your Learning Management (or other IMS LTI-compatible) System

## TAO Access Control and Auditing allow you to:



- Define user profiles based on roles and responsibilities
- Assign and restrict access to any TAO function or test content according to user profiles or roles
- Record audit trails and restore content to previous versions
- Use basic authoring workflows and workspaces

## TAO Online Delivery and Online Proctoring allow you to:

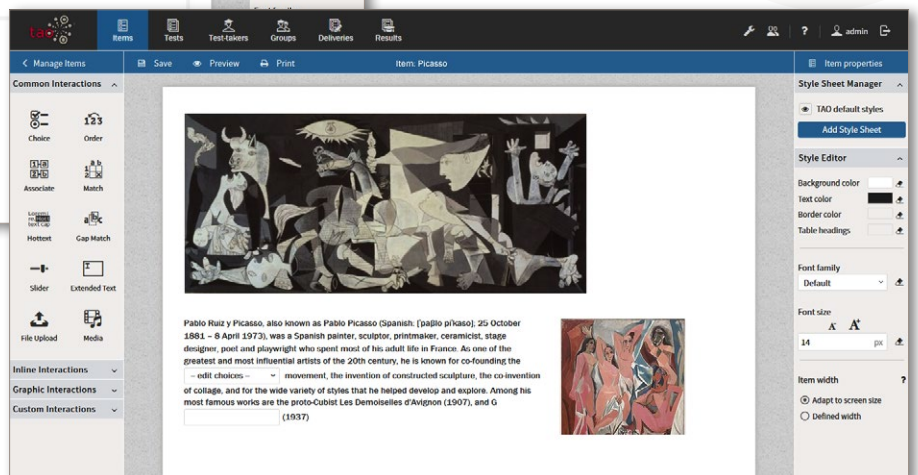
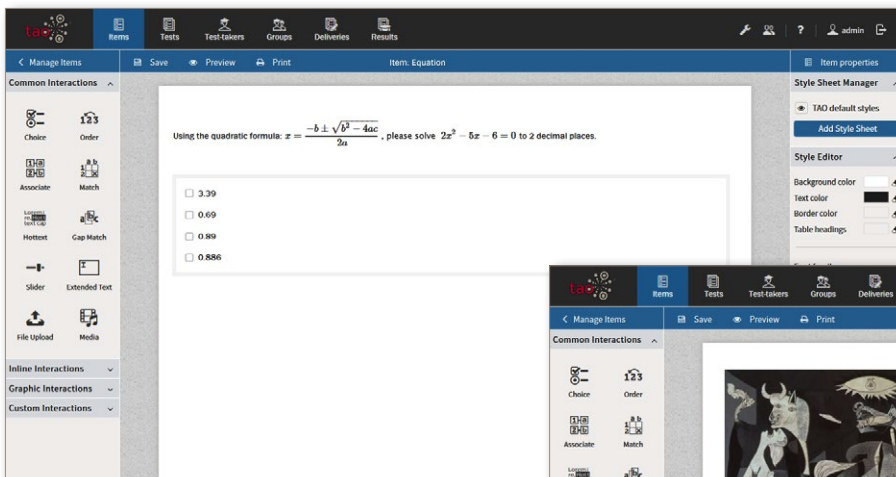


- Leverage NoSQL-based test engine on TAO Premium or Enterprise for maximum performance
- Schedule test delivery for designated groups of test-takers/candidates
- Set constraints for test availability, timing, and maximum number of attempts
- Run diagnostic tests to check readiness of the testing devices and environment
- Permit authorized test takers to access a test through any standard web browser
- Override the standard-web browser access to integrate with a lockdown browser such as Safe Exam Browser when a restricted environment for high stakes testing is required
- Permit authorized test takers to test using iPad and Android mobile devices
- Proctor online tests: start, pause and stop delivery from the proctor dashboard
- Offer accommodations to students with disabilities, including color contrast, zooming and third party text-to-speech tools

## TAO Results Reporting allows you to:



- View, filter and export test taker results and data collected during test execution
- Provide reports to various stakeholders from custom designed data sets
- Create score reports for individual test-takers and designated groups
- Export raw test results to CSV files for use in third party statistical analysis and reporting tools
- Use TAO's Open APIs to extract results data in QTI Results Reporting format



# TAO Editions at a Glance: What's the Difference?

Whichever TAO Edition you choose, rest assured it's a sound investment for your future.

	TAO Community Edition™	TAO Premium Edition™	TAO Enterprise Edition™
<b>Description</b>	Full open source feature stack	Full open source feature stack plus OAT value-added extensions	Full open source feature stack plus OAT value-added extensions plus client-specific enhancements
<b>Ideal for...</b>	Organizations who want to completely in-source their assessment solution.	Organizations that want the simplicity of TAO in the cloud: just add content and deliver your tests in no time.	Ideal for organizations that need a deeply integrated assessment solution augmented with features unique to their needs.
<b>Hosting Method</b>	Have your IT department host TAO for you, or work with a third party provider of your choice.	High availability and high security out of the box. Thanks to the TAO Cloud™.	Your Enterprise Edition will be deployed on a private TAO Cloud, and configured to your exact needs. Alternatively, you can deploy it in your own environment, if you prefer.
<b>Support</b>	Online manuals and help forums available through the TAO user community with best-effort response times.	Dedicated online helpdesk for a dedicated contact to access OAT technical Level-3 support. Response time: within 8 hours.	Three OAT support levels are available to match the scale of your deployment. Offered as annual subscriptions, they include the Open Source Assurance for maximum peace of mind.
<b>Cost</b>	The Community Edition is completely free. All you need to budget for are internal or external resources that you may require.	Tiered, annual subscription pricing based on the number of users.	Pricing based on custom quotes for a solution tailored to your specific needs.

# Benefits of TAO



## Choice of Three TAO Editions

Whether you choose TAO's Community, Premium, or Enterprise Edition, you'll have a powerful assessment solution that's completely Open Source, and future-proofed by OAT – a sound investment in every way.

- Choose the TAO Community Edition if you are technically savvy and just want the TAO code base to in-source your organization's assessment solution
- Choose the TAO Premium Edition if you want the simplicity of a ready-made assessment solution delivered from the TAO Cloud
- Choose the TAO Enterprise Edition if you want the power of the open source TAO assessment solution, customized your own way



## The Power of Open Source

From completely free access to the open source code base in the TAO Community Edition to a completely custom system built for you, you'll appreciate the power of open source and open standards.



## Full Range of Hosting Options

Based on the TAO Edition you select, the hosting options range from do-it-yourself, using a third-party provider, to deployment from the shared TAO Cloud. TAO Enterprise Edition users can take advantage of a private TAO Cloud, if desired.



## Varying Support Levels

From minimal to enterprise, OAT offers a range of support solutions. Leverage the TAO User Community for free support, or opt for complete peace of mind with the Open Source Assurance pack designed for TAO Enterprise Edition users. The choice is yours.



## Modular Design to Give You Flexibility

TAO is designed to be modular, with feature sets that support the full range of testing activities, from item creation to test delivery, to results retrieval. With the TAO Community Edition and TAO Enterprise Edition, you'll have complete flexibility to choose which modules and functions to deploy. Or, keep it simple and choose the TAO Premium Edition for access to the full suite of assessment functions in the Cloud, without having to build the infrastructure yourself.



## Ability to Customize

With TAO's Community Edition, simply download the latest open-source release and configure your own solution. Have fun and be creative!

With the TAO Enterprise Edition, OAT's team delivers the system you want. Specify your custom requirements and let OAT's engineers do the rest!



## Standards-Compliance

Adherence to Open Source and Open Standards means flexibility for you. Our Open APIs allow you to easily integrate existing components — so you don't need to reinvent the wheel. Protect your investment in test content with a standards-based solution that puts you in control. Create your own unique item types with PCIs or integrate your own adaptive engine using the Standard for CAT.



## Industrial-Strength Scalability

With TAO's proven assessment solutions you can scale your test deliveries from a single classroom to a nationwide implementation with complete confidence. [Check out some of our customers at taotesting.com.](http://taotesting.com)

**o.a.t.** **Ongoing Upgrades,  
Courtesy of OAT**

Not content with standing still, we actively follow our roadmap, regularly introducing new features and upgrades to keep TAO well in the lead. You can rest assured the TAO application stack will stay at the forefront of innovation, giving you a future-proofed solution.



**Cost Reduction**

TAO has native support for QTI, which means no data-loss through import/export and built-in innovation. From multiple-choice to TELs and custom interactions, your assessments will be interoperable and portable across QTI-compliant delivery systems, thus reducing costs and eliminating proprietary barriers.

With TAO, you get all the benefits of a robust platform at a much lower price than a proprietary or home-grown system. Please [contact us](#) to discuss your needs.

# System Requirements

If you need assistance with TAO installation and deployment, please contact us for [Support & Maintenance](#) packages and [TAO Cloud™](#) Managed Services.

**Server Side**

Your web server must have the following software components in order to manage and deliver TAO tests:

- Apache 2.2/2.4
- PHP 5.6 or newer version
- MySQL 5.7, Maria DB 10.0, or PostgreSQL 9.0 and newer

We recommend using a Linux distribution such as Ubuntu, Debian, CentOS, Red Hat Enterprise Linux, or similar. We also support macOS and macOS Server.

TAO runs on Windows as well, but community support is limited.

**Client Side**

The TAO platform requires a modern web browser. We support the following:

- Internet Explorer 11
- Chrome – most recent version
- Firefox – most recent version
- Safari – most recent version
- Edge – most recent version

You can deliver tests on a wide range of iOS and Android devices. For optimal experience, we recommend using a 7-inch screen or larger.