ATLASOA LLC

AtlasOA
IT Director
Technical Packet

On-Premise Outcomes Assessment for Higher Education
Version 1.0.0

FOUNDER PARTNER OFFER

First 10 institutions: $1,500/year flat license.

No per-student fees. No cloud. No data leaving your network.

ON-PREMISE . FERPA ALIGNED . WINDOWS SERVER . SQLITE

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Table of Contents

Each document in this packet is also available as a standalone PDF at atlasoa.com. For questions, contact ashleyreddick@atlasoa.com.

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What Is AtlasOA? (5-Minute Read)

THE PROBLEM

Accreditation bodies require colleges to demonstrate that students are meeting program-level outcomes. Most institutions track this with spreadsheets, email, and manual reports. The process is slow, error-prone, and painful during accreditation visits.

WHAT ATLASOA DOES

AtlasOA is an on-premise outcomes assessment platform for small colleges and workforce programs. It imports rubric data from your SIS (Jenzabar, Blackboard, Canvas, Moodle, or CSV), aligns course-level outcomes to program-level outcomes, and generates the reports your accreditors need, all from a single dashboard.

WHO IT IS FOR

- Assessment coordinators who spend weeks compiling accreditation evidence
- Department chairs tracking student proficiency across multiple sections
- IT directors who need a FERPA-compliant solution that stays on their own servers
- Academic deans preparing for HLC, SACSCOC, or programmatic accreditation visits

HOW IT DEPLOYS

- Runs on a Windows Server you already own (no new hardware for most institutions)
- Installs in under 15 minutes with a signed Windows installer
- No cloud account, no SaaS subscription, no Docker, no Linux
- Data never leaves your network. The vendor has no remote access to student records.

KEY FEATURES (v1.0.0)

Feature	Description
176 Endpoints	Dashboards, drilldowns, trend analysis, gap identification, curriculum mapping, and accreditation reporting.
64 Database Tables	Unified data model covering students, courses, outcomes, rubrics, scores, advisory boards, portfolios, and institutional effectiveness.
8 SIS Adapters	Jenzabar (3 variants), Blackboard, Canvas, Moodle, generic CSV/Excel, plus adapter template for custom SIS.
Audit Trail	SHA-256 hash chain logging 22 event types. Append-only, tamper-evident, stored in a separate database.
Role-Based Access	Three roles, six permissions. Every route checks authorization before rendering.
Automatic Backups	Pre-import snapshots, scheduled backups, one-click restore from admin panel.

WHAT MAKES IT DIFFERENT

- On-premise only: your data stays on your server, full stop.
- No per-student pricing: flat annual license regardless of enrollment.
- No cloud lock-in: you own the server, the database, and the backups.
- Built by an instructor who uses it in his own classroom every day.

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Minimum System Requirements

AtlasOA runs entirely on your institution's Windows Server. No cloud services, no external dependencies, no data leaving your network. The specifications below cover the application server only.

Component	Minimum	Recommended
Operating System	Windows Server 2019 or later	Windows Server 2022
Runtime	Python 3.10+	Python 3.12 (bundled with installer)
Database	SQLite 3.35+ (bundled)	SQLite 3.45+ (bundled)
CPU	2 cores, 2.0 GHz	4 cores, 2.5 GHz+
RAM	4 GB	8 GB
Disk	2 GB free	10 GB free (backups)
Web Server	IIS 10 (reverse proxy)	IIS 10 with HTTPS binding
Browser	Chrome 90+, Edge 90+, Firefox 90+	Latest stable release
.NET	Not required	Not required

NETWORK PORTS

- Port 5000 (localhost only): Flask application server
- Port 443 (HTTPS) or 80 (HTTP): IIS reverse proxy to end users
- No outbound internet connections required under normal operation

NOT REQUIRED

- No cloud subscription or SaaS account
- No SQL Server, PostgreSQL, or other external database
- No GPU or specialized hardware
- No Linux, macOS, or Docker
- No Java, .NET, or Node.js runtime

The Windows installer bundles Python, SQLite, and all dependencies. Installation takes under 15 minutes on a clean server.

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Recommended Hardware by Institution Size

AtlasOA is lightweight by design. SQLite handles the database, Python runs the application, and IIS serves as the reverse proxy. The table below shows sizing guidelines for three institution tiers.

Component	Small (under 500 students)	Medium (500 to 2,000 students)	Large (2,000 to 5,000 students)
CPU	2 cores, 2.0 GHz	4 cores, 2.5 GHz	4+ cores, 3.0 GHz
RAM	4 GB	8 GB	16 GB
Disk	2 GB free (SSD preferred)	10 GB free (SSD)	20 GB free (SSD)
OS	Windows Server 2019+	Windows Server 2022	Windows Server 2022
Network	100 Mbps LAN	1 Gbps LAN	1 Gbps LAN
Concurrent Users	Up to 10	Up to 25	Up to 50
Backup Storage	1 GB	5 GB	10 GB
Import Speed	~1,000 rows/sec	~2,500 rows/sec	~5,000 rows/sec

NOTES

- AtlasOA runs on an existing server if capacity is available. A dedicated server is not required for small or medium institutions.
- SQLite performance scales linearly with RAM. Right-size RAM first, then CPU.
- No GPU, Java, .NET, Docker, or Linux required.
- Disk estimates include 50-backup retention. Reduce retention to save space.
- Large institutions (5,000+ students) should contact AtlasOA LLC for sizing assistance.

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Security and Compliance Summary

AtlasOA v1.0.0 ships with the security controls listed below. All features are built today, verified in code, and available on first install. No cloud components, no telemetry, no data leaving your server.

Category	What is built today
Authentication	Local account authentication with PBKDF2-SHA256 password hashing. 8-hour session timeout. Brute-force lockout. HttpOnly, SameSite=Lax, Secure cookies (when HTTPS enabled).
Authorization	Role-based access control with three roles (admin, editor, viewer) and six granular permissions: read, modify, delete, admin, import, export. Every route checks permissions before rendering content.
Data at Rest	All data stored in a local SQLite database on the institution's server. Credentials (SMTP, SFTP, S3 keys) encrypted with Fernet AES-128 using PBKDF2-HMAC-SHA256 key derivation (200,000 iterations).
Data in Transit	HTTPS via IIS reverse proxy with institution-managed TLS certificate. No data transmitted to any external server under normal operation.
Audit Log	Tamper-evident SHA-256 hash chain in a separate SQLite database. 22 event types logged across authentication, data operations, and system events. Append-only design: no update or delete operations. Survives database restores.
HTTP Security	X-Frame-Options: SAMEORIGIN, X-Content-Type-Options: nosniff, nonce-based Content-Security-Policy, HSTS (when HTTPS enabled), Referrer-Policy: strict-origin-when-cross-origin. CSRF tokens on all POST routes.
Compliance	FERPA school-official exception (34 CFR 99.31(a)(1)(i)(B)). On-premise architecture satisfies data residency requirements. DPA with shared responsibility model (Section 4A) available on request.
Incident Response	Shared responsibility model: vendor handles codebase vulnerabilities (7-day critical, 30-day high severity disclosure). 72-hour breach notification scoped to vendor-side incidents only. Institution manages host OS, network, and physical security.
Backup	Automatic database snapshots before every import operation. Scheduled background backups with configurable retention (default: 50). One-click restore from admin panel.

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How AtlasOA Connects to Your SIS

AtlasOA imports assessment data from your Student Information System through file-based imports or direct database sync. No cloud middleware, no API keys to manage, no data leaving your network.

SUPPORTED IMPORT METHODS

SIS Platform	Method	Status
Jenzabar (J1/JICS)	Direct SQL sync or Excel rubric report import	Production (v1.0)
Jenzabar EX	Excel file import	Production (v1.0)
Jenzabar CX	Excel file import	Production (v1.0)
Blackboard Learn	REST API adapter (OAuth2)	Production (v1.0)
Canvas LMS	REST API adapter (Bearer token)	Production (v1.0)
Moodle	REST API adapter (web service token)	Production (v1.0)
Generic CSV/Excel	Column-mapped file import	Production (v1.0)
Custom SIS	Adapter template provided for self-service	Template included

DATA FLOW

Step	What Happens
1. Export	IT staff exports rubric data from SIS as Excel/CSV, or configures direct sync credentials.
2. Import	AtlasOA reads the file (or queries the SIS database directly) and maps columns to its internal data model.
3. Transform	Proficiency scores are normalized to your institution's scale. The default scale (EXE/MEE/NIM/DNM) can be changed to match your existing model through the admin panel. Courses, sections, enrollments, and outcomes are created or matched automatically.
4. Store	All data lands in the local SQLite database on your server. Nothing leaves the network.
5. Report	Dashboards, drilldowns, trend analysis, and accreditation reports are available immediately after import.

INTERNAL DATA MODEL

AtlasOA maps all imported data into a unified model: students, semesters, courses, sections, enrollments, assessments, rubric criteria, and scores. Course-Level Outcomes (CLOs) align to Program-Level Outcomes (PLOs). This structure enables cross-SIS reporting even if your institution migrates platforms.

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Frequently Asked Questions

Question	Answer
Where is student data stored?	All data resides in a SQLite database file on your institution's server. AtlasOA makes no outbound network connections under normal operation. The vendor has no remote access to your data.
Who can access the system?	Access is controlled through local accounts with three roles: admin, editor, and viewer. Each role has six granular permissions (read, modify, delete, admin, import, export). All access is logged in a tamper-evident audit trail.
How are backups handled?	AtlasOA automatically creates database snapshots before every import. A background scheduler can create additional periodic backups (configurable). Restore is one click from the admin panel. Default retention: 50 snapshots.
What happens if the server goes down?	AtlasOA uses SQLite with WAL mode, which is crash-resistant. On server restart, the application resumes automatically if configured as a Windows Service. The most recent backup can be restored in under a minute from the admin panel.
Does AtlasOA phone home or send telemetry?	No. AtlasOA makes no outbound network connections under normal operation. No usage data, analytics, or telemetry of any kind is transmitted. License validation is offline.
What about FERPA compliance?	AtlasOA operates under the FERPA school-official exception (34 CFR 99.31(a)(1)(i)(B)). Because all data stays on your server and the vendor has no remote access, data residency requirements are inherently satisfied.
How are credentials protected?	SMTP, SFTP, and API credentials stored in the database are encrypted with Fernet AES-128 using PBKDF2-HMAC-SHA256 key derivation with 200,000 iterations. User passwords are hashed with PBKDF2-SHA256 and never stored in plaintext.
How long does installation take?	The Windows installer bundles Python, SQLite, and all dependencies. A clean install takes under 15 minutes. IIS reverse proxy setup adds another 10 to 15 minutes. No Linux, Docker, or cloud accounts needed.
Can we use our own TLS certificate?	Yes. AtlasOA runs behind IIS, which handles TLS termination with your institution's certificate. When HTTPS is enabled, the application sets HSTS headers and Secure cookies automatically.
What SIS platforms are supported?	Production adapters exist for Jenzabar (J1, EX, CX), Blackboard Learn, Canvas LMS, and Moodle. A generic CSV/Excel importer and adapter template are included for any other platform.

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ROI Calculator: Time and Cost Savings

Most institutions track outcomes assessment manually using spreadsheets, email chains, and shared drives. AtlasOA automates the collection, alignment, and reporting process. The table below estimates time savings for a typical small college.

Task	Manual (hours/year)	With AtlasOA (hours/year)	Savings
Collect rubric data from faculty	80	4 (auto-import)	76 hours
Align CLOs to PLOs	40	2 (auto-alignment on import)	38 hours
Build accreditation reports	120	8 (one-click reports)	112 hours
Track student proficiency trends	60	0 (real-time dashboards)	60 hours
Manage annual assessment plans	30	4 (built-in planner)	26 hours
Respond to ad-hoc data requests	50	2 (drilldown + export)	48 hours
Coordinate advisory board evidence	20	2 (portfolio module)	18 hours

Metric	Value
Total manual hours per year	400 hours
Total hours with AtlasOA	22 hours
Annual time savings	378 hours (94.5%)
Cost of manual labor at $45/hr	$18,000/year
AtlasOA license (year 1)	Starting at $1,500
Net savings (year 1)	$16,500+

These estimates assume a single assessment coordinator at a college with 500 to 2,000 students and 4 to 8 academic programs. Larger institutions or those preparing for accreditation visits will see proportionally greater savings.

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AtlasOA vs HelioCampus

HelioCampus is a cloud-based analytics and outcomes platform used by larger universities. AtlasOA is an on-premise alternative built specifically for small colleges and workforce programs. The table below compares key decision factors for IT directors.

Factor	AtlasOA	HelioCampus
Deployment	On-premise. Runs on your Windows Server. Data never leaves your network.	Cloud-hosted (AWS). Data stored on vendor servers. Requires internet access.
Data Ownership	Institution owns the server, the database, and all backups. Full control.	Vendor hosts and manages data. Export available but data resides in vendor cloud.
Pricing Model	Flat annual license. No per-student fees. Founder partners: $1,500/year.	Custom quote, typically $25,000 to $100,000+/year depending on enrollment and modules.
Target Audience	Small colleges (under 5,000 students), workforce programs, career-tech centers.	Mid-size to large universities. Enterprise analytics focus.
Implementation	15-minute installer. No professional services required. Self-service setup.	Multi-month implementation with vendor-led onboarding and data integration projects.
SIS Integration	8 adapters included (Jenzabar, Blackboard, Canvas, Moodle, CSV). Adapter template for custom SIS.	Pre-built connectors for major SIS platforms. Custom integrations may require vendor professional services.
FERPA Compliance	On-premise architecture inherently satisfies data residency. No cloud subprocessors.	Cloud-hosted with BAA/DPA. Data crosses network boundaries to vendor infrastructure.
Audit Log	SHA-256 hash chain, append-only, separate database. Institution controls the log.	Vendor-managed audit logging. Access may require support requests.
Vendor Lock-in	None. SQLite database is a single file. Export everything at any time.	Cloud platform dependency. Migration requires data export and re-integration.
Support	Email support included. Founder partners get direct access to the developer.	Tiered support plans. Premium support available at additional cost.

HelioCampus serves a different market segment. If your institution has 10,000+ students and an enterprise analytics budget, it may be the right fit. If you are a small college looking for an affordable, private, self-hosted solution, AtlasOA was built for you.

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