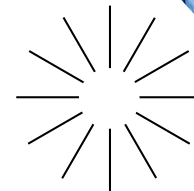




Technical Overview

Clever is the global identity platform for education, connecting application partners to any school through one integration.

This guide provides technical and implementation leaders a technical summary of Clever's integrations data standards, and support capabilities for Application Partners.



1 Integrations and Systems

Clever acts as a unified integration layer, replacing the need for fragile, one-off connections. We maintain the infrastructure to connect with over 111,000 schools globally.

- **SIS Connectivity:** We handle data synchronization via SFTP or API-driven integrations.
 - We support [any student information system](#) that can export CSV files and 40+ Automated API syncs for Clever Schools.
 - For schools not currently using Clever, we support ClassLink, Infinite Campus, Blackbaud, and Skyward - and we're always building more.
 - Please note: Requests to Clever are rate-limited to 1200 requests per minute per Bearer Token (instant login or district). These limits are not averages; rather, the allowed count of requests resets every minute.
- **LMS Interoperability:** Through Clever LMS Connect, we facilitate integrations with Canvas, Schoology, and Google Classroom. This supports LTI 1.3 standards for SSO launches and assignment syncs.
- **Single Sign-On:** In addition to LTI 1.3, we support OIDC, OAuth 2.0, and SAML.

2 Data Standards

We normalize data sources into a standardized format, ensuring consistent consumption for your application regardless of the district's source system.

- **Clever ID:** Every district user is mapped to a Clever ID, even if sourced outside Clever, to ensure strong identity verification and reduce reliance on manual processes.
- **Standardized Schema:** We do not enforce a single data standard because we want to make Clever accessible to you and schools. We accept data in any format from a target system, including open, standardized formats, such as OneRoster.
- **Privacy & Compliance:** Our platform is "Secure by Design." We mandate that all partners comply with federal and state privacy laws, including FERPA and COPPA. We employ a data minimization philosophy and ask that all partners only request the data necessary for their app to work; keeping student data private, and reducing your risk of handling sensitive data.
- **Granular Data Access:** We support complex data requirements, including specific fields like IEP status, FRL, State IDs, and staff contacts required for assessments or safety platforms.

3 Clever Data

Our infrastructure ensures your application has access to accurate, up-to-date information.

- **Nightly syncs:** We perform nightly syncs through the Clever API so that syncs and data are accurate and predictable, reducing access errors and your support costs.
- **Attendance and grade sync:** We also support attendance data retrieval and grade sync via Clever LMS Connect.
- **Sync Notifications:** Your system can subscribe to sync notifications to trigger updates immediately when new district data is available.

4 Certification Steps

We guide your team through a structured process to ensure a stable, scalable integration.

1. **Sandbox Environment:** We provide sandbox applications populated with realistic sample data for development and testing against our API without risking live student data.
2. **Integration Build:** You build against a single Clever API rather than maintaining custom logic for individual SIS providers. The build takes approximately 40 hours for one developer, and most applications complete it within 2-4 weeks.
 - **Partner Engineering:** Our Partner Engineering team (integrations@clever.com) is available Monday–Friday and responds within one business day to support your integration build and certification.
 - **Dev docs:** Our Developer Documentation (dev.clever.com) has all of the technical details your team needs for both building and certifying your integration.
 - **Certification:** You get a dedicated partner engineer to validate that your integration works and that the outputs are readable. Read more about certification in the [Secure Sync Certification Guide](#).
 - **Rollout:** Once certified, you can enable immediate access for districts. Our robust school network and automated onboarding allows for rapid activation, with 61% of deployments rolling out on the same day.
3. **Post Go-Live Support:** Our Support team is available Monday–Friday, 4am–5pm PT, to assist with day-to-day troubleshooting and investigations.
 - **Fast support:** With an average first-reply time of three business hours, you can count on timely, reliable support.
 - **Efficient resolution:** 30% of cases are resolved with a single reply.
 - **AnySchool:** In addition to our robust documentation at support.clever.com and [dev docs](#), our team is available for the rare occasions additional support is needed to resolve issues with data ingestion for schools off-Clever. We are available to work directly with you and your customer to get them up and running.

5 Support Tools

We provide your team with visibility and tooling to resolve implementation issues without escalating to engineering.

- **Impersonation:** Your support and implementation teams can securely "impersonate" a specific user (administrator, teacher, or student) to reproduce bugs and verify fixes instantly, reducing back-and-forth communication.
- **Error Reporting:** We provide detailed error logs and sync status reports, allowing you to proactively identify data quality issues originating from the district.
- **Automated Provisioning:** Clever automates the account creation process, eliminating manual CSV handling and significantly reducing support ticket volume (average reduction of 27%).

Next steps

- Bring this document to the Technical Overview call with the Clever Team
- If you have questions in the meantime, email: solutions-engineering@clever.com