



INNOSLATE

DEVELOPED BY



SPEC
INNOVATIONS



TECHNICAL GUIDE

Innoslate Integration Overview Guide

Integrate with Innoslate

Guide Includes REST APIs, CAD, STK, Repositories, & AI Extensibility

Elevate With Innoslate's REST APIs

Harness the power of Innoslate's Enterprise REST APIs; robust, secure, and built for seamless integration. Key highlights include:

- **RESTful Architecture:** Leverages standard HTTP methods (GET, POST, PUT, DELETE) under a stateless, client-server model for efficient, interoperable service integration.
- **Authorization & Access Control:** Secure endpoints with structured authorization mechanisms, safeguarding your workflows.
- **Comprehensive API Elements:** Full control over your data and processes using Innoslate's rich suite of API components.

Innoslate's APIs are available in self-hosted Innoslate Enterprise environments, providing robust scalability tailored to your organization's infrastructure. The performance matches the demands of enterprise-grade platforms. In a typical self-hosted setup, Innoslate supports high request volumes, ensuring stability for demanding projects, while usage guardrails maintain service quality for all users.

Empower developers to automate tasks, integrate with external tools, and build connected workflows that transform systems engineering efficiency.

Simulate, Automate & Extend With Built-In Scripts

Craft intelligent simulations and automation straight inside Innoslate. Innoslate's simulators include core JavaScript functions that you can override and extend. Enter additional scripts and customize behavior to fit your system's needs. Users can trigger modeling validations, adjust system parameters, and integrate custom logic into simulation flows.

Use Cases:

- Automate validation logic
- Adjust system parameters dynamically
- Embed custom rules into your simulation flows

[View Java SDK Integration Documentation](#)



INNOSLATE

DEVELOPED BY



CAD Model Integration

Visual, Interactive, Insightful

Bring 3D CAD models to life and embed them directly into your systems engineering workflow.

What's Possible:

- **Interactive Visualization:** Upload supported CAD formats (.obj, .stl, .glb, .glTF, .3ds, .ply, and ZIP packages containing .obj + .mtl named with "CAD") and view models within Innoslate's entity interface. Rotate, zoom, and explore right inside the tool.
- **Snapshot & Embed:** Position your model, click "Set Image", and automatically capture the view as an entity image—maintaining fidelity and context.
- **Label-Aware Rendering:** For .obj or .3ds, enable "Render with Labels" to display interactive labels on model parts. Hover reveals component names.
- **Generate Asset Hierarchy:** Use "Create Assets" after rendering labels to auto-generate asset entities and visualize their relationships in a hierarchy chart
- **Switch Rendering Modes:** Return to fast, label-free visualization with the "Render Optimally" option for smooth navigation.



Innoslate CAD Viewer

Integration With STK

Connect Innoslate and AGI's STK seamlessly for advanced modeling. Link Innoslate with STK within your Enterprise environment. Pull critical values from STK or update STK models directly from your Innoslate scripts. Bridge system modeling platforms smoothly, ensuring data consistency and enhancing analytical workflows.

Capabilities:

- **STK Initialization:** Launch and interact with STK models from within Innoslate.
- **Data Interchange:** Retrieve values from STK or update STK entities using Innoslate scripting.

Benefits:

Enable synchronized modeling and simulation across tools for cohesive analysis and performance tracking.

[View Innoslate CAD Integration Documentation](#)

[View STK Integration Documentation](#)

Flexible AI Integration via API Keys

When default AI isn't enough, extend intelligent capabilities on your terms. Featured options include:

- **Organization-Level AI Key Configurations:** Admins configure project-level AI features using either Innoslate's configurations and custom keys like OpenAI, Azure OpenAI, AskSage. Toggle features across projects seamlessly.
- **AskSage Integration:** Connect AskSage's advanced AI by logging into the AskSage platform, obtaining your key, and integrating it at the organizational preference level.
- **OpenAI Integration:** Step-by-step guide to generate OpenAI API keys and utilize cutting-edge language and image models for enhanced automation and content generation.
- **Azure OpenAI (Cloud + Governance Ready):** Use Azure Government's high-security OpenAI services, FedRAMP High and DoD IL4/IL5/IL6 certified, for sensitive or governmental workloads.

Custom AI endpoints give you alignment with compliance, cost control, capability selection, and policy adherence. Ideal for teams ranging from innovation labs to government agencies.

Track, Analyze & Collaborate With Repository Insights

Track engineering progress and integrate seamlessly with developer workflows.

Features:

- Pull Requests & Issues Overview — View active pull requests and issue tracking to monitor project flow.
- Commit Analytics — Visualize commit activity over time for transparency and accountability.
- Contributor Dashboards — Gain insights into who's doing what, helping teams stay aligned.
- GitHub Integration — Connect your Innoslate projects with GitHub repositories to synchronize engineering data, ensuring your systems models and source code stay in lockstep.

Engineering rarely happens in isolation. Innoslate's repository capabilities and GitHub integration ensure models, code, and collaboration all move forward together.

[View GitHub Integration Documentation](#)

Integrate with Innoslate

[Talk to our team today!](#)