

Atlas Forms Architecture

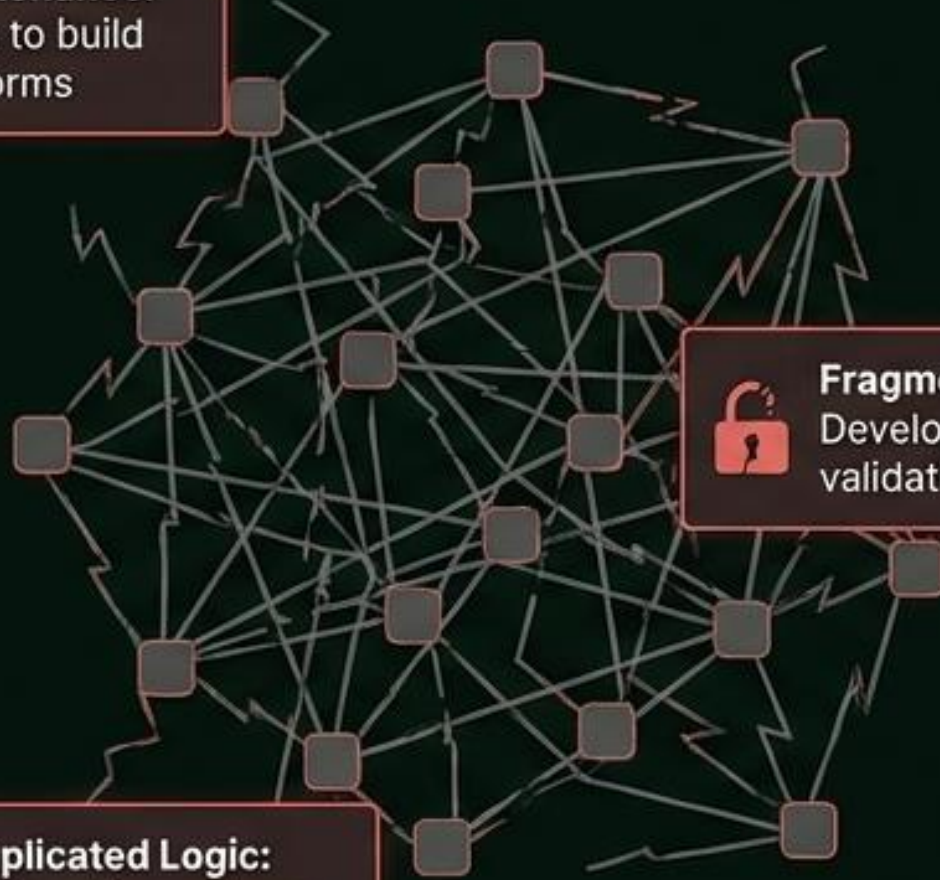
Enterprise-Grade Dynamic Form Management at Scale

The Enterprise Form Dilemma

The Vicious Cycle of Custom Forms



High Maintenance:
3-4 weeks to build
complex forms



Fragmented Security:
Developer-dependent
validation

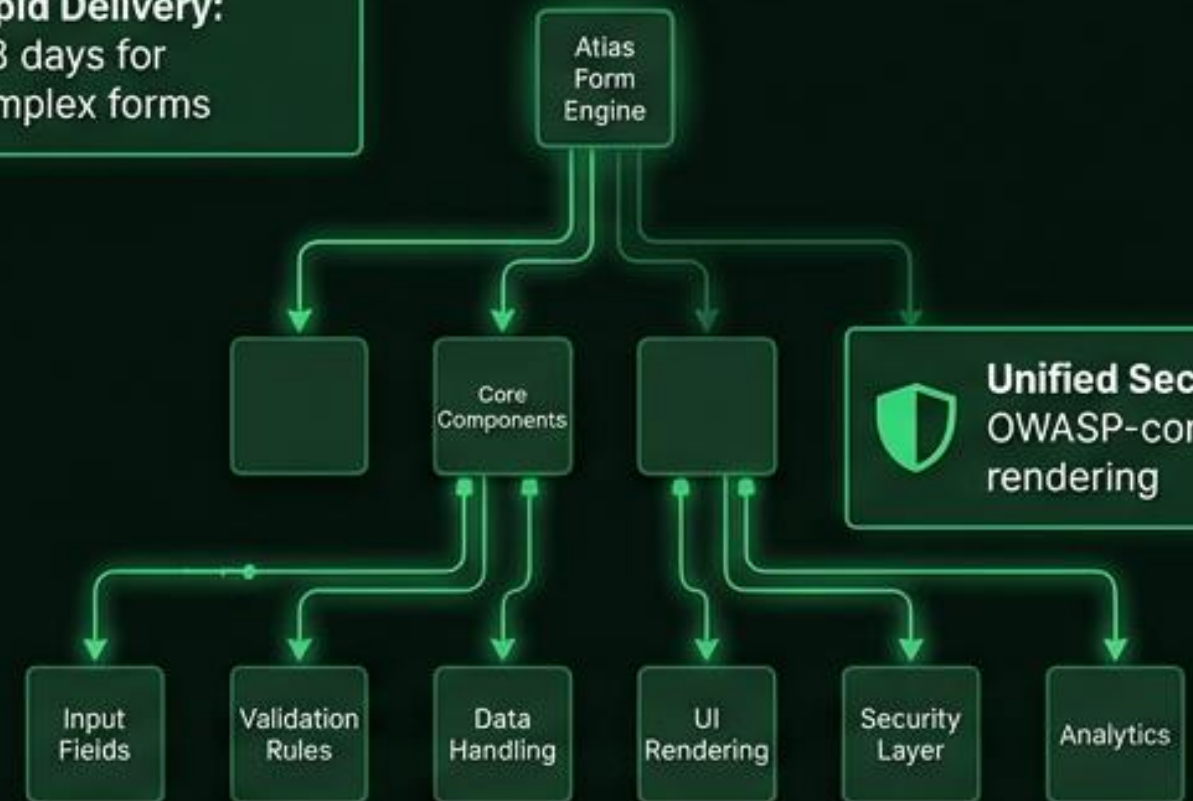


Duplicated Logic:
Re-creating patterns
100s of times

The Atlas Standard



Rapid Delivery:
2-3 days for
complex forms

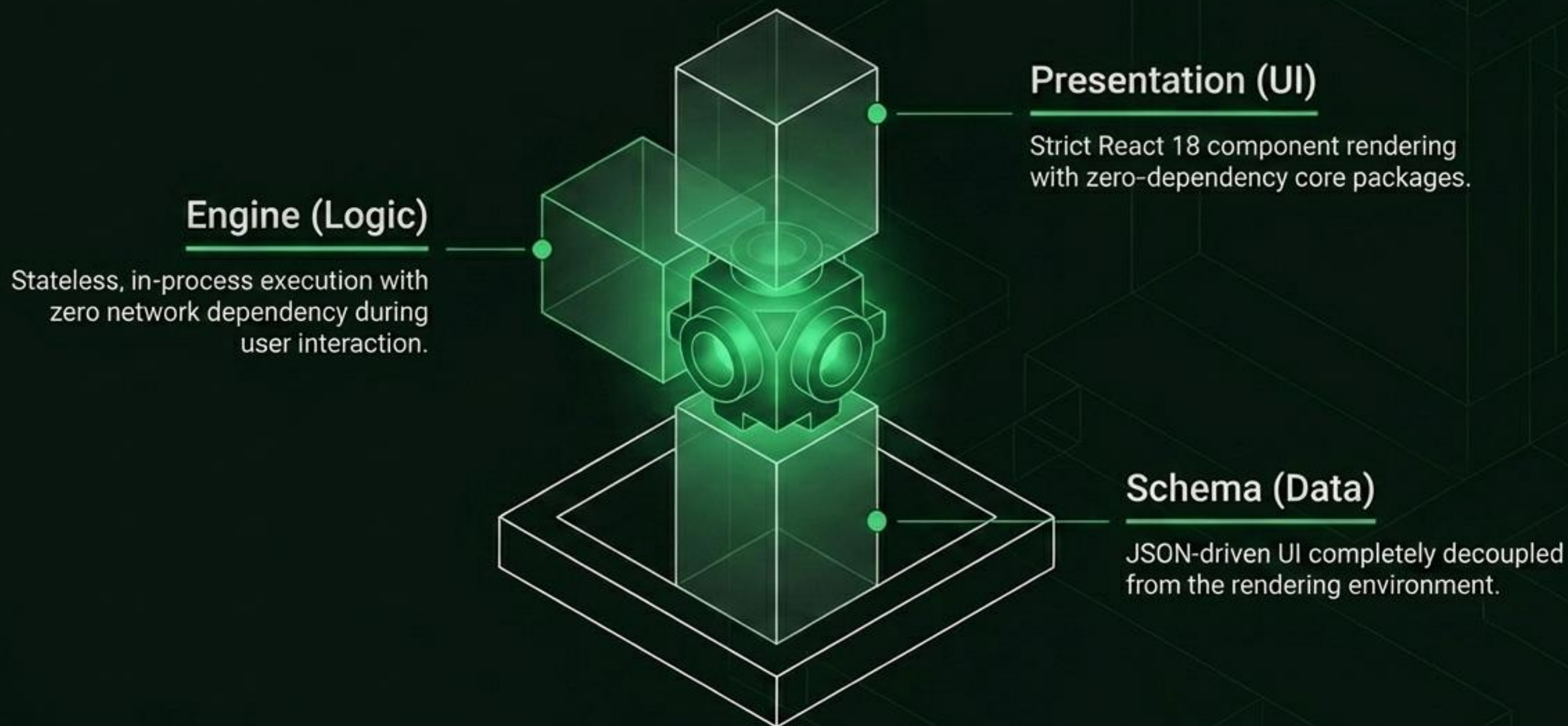


Unified Security:
OWASP-compliant
rendering

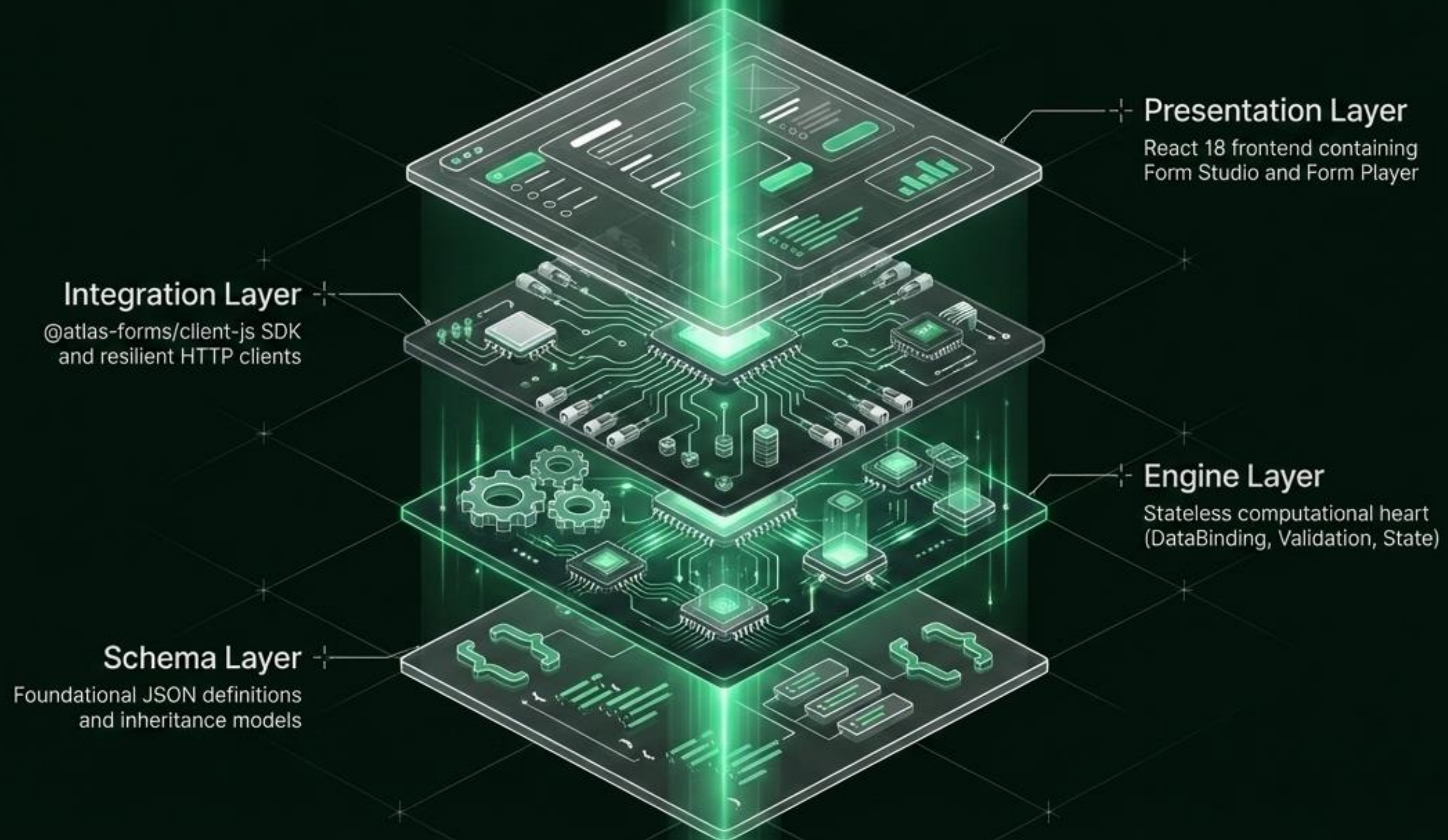


Centralized Governance:
Single source of truth

The Architectural Philosophy: Separation of Concerns



High-Level Architecture: The 4-Tier Stack



Layer 1: Schema & Server-Side Inheritance

Genealogy Tree



- Field overrides at the child level take precedence.
- Updates to the master instantly propagate to hundreds of descendants without code deployments.
- Zero duplicate logic across enterprise ecosystems.

Layer 2: The Stateless Form Engine

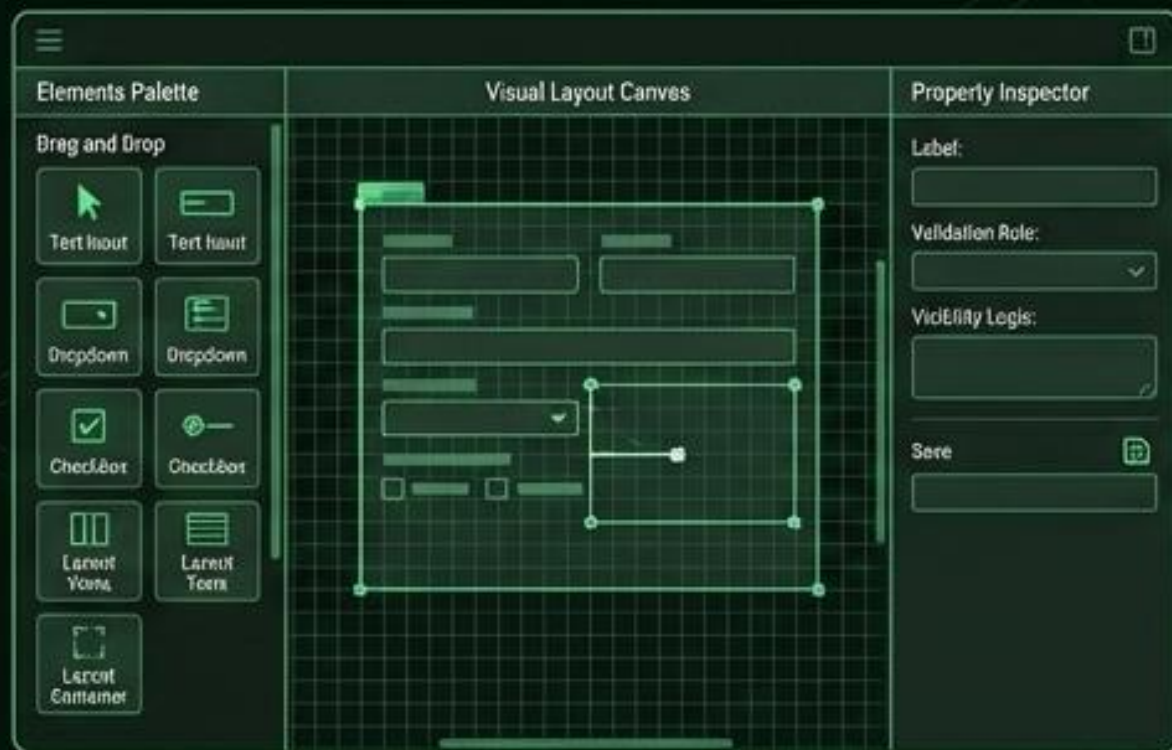


Core Insight: All field interactions, conditional evaluations, and validation assessments occur in-process, eliminating round-trip server latency.

Layer 3: Presentation (Studio vs. Player)

Form Studio

For Business Analysts & Operations



- No-code authoring
- Visual layout canvas
- Advanced property inspector

Form Player

For End Users



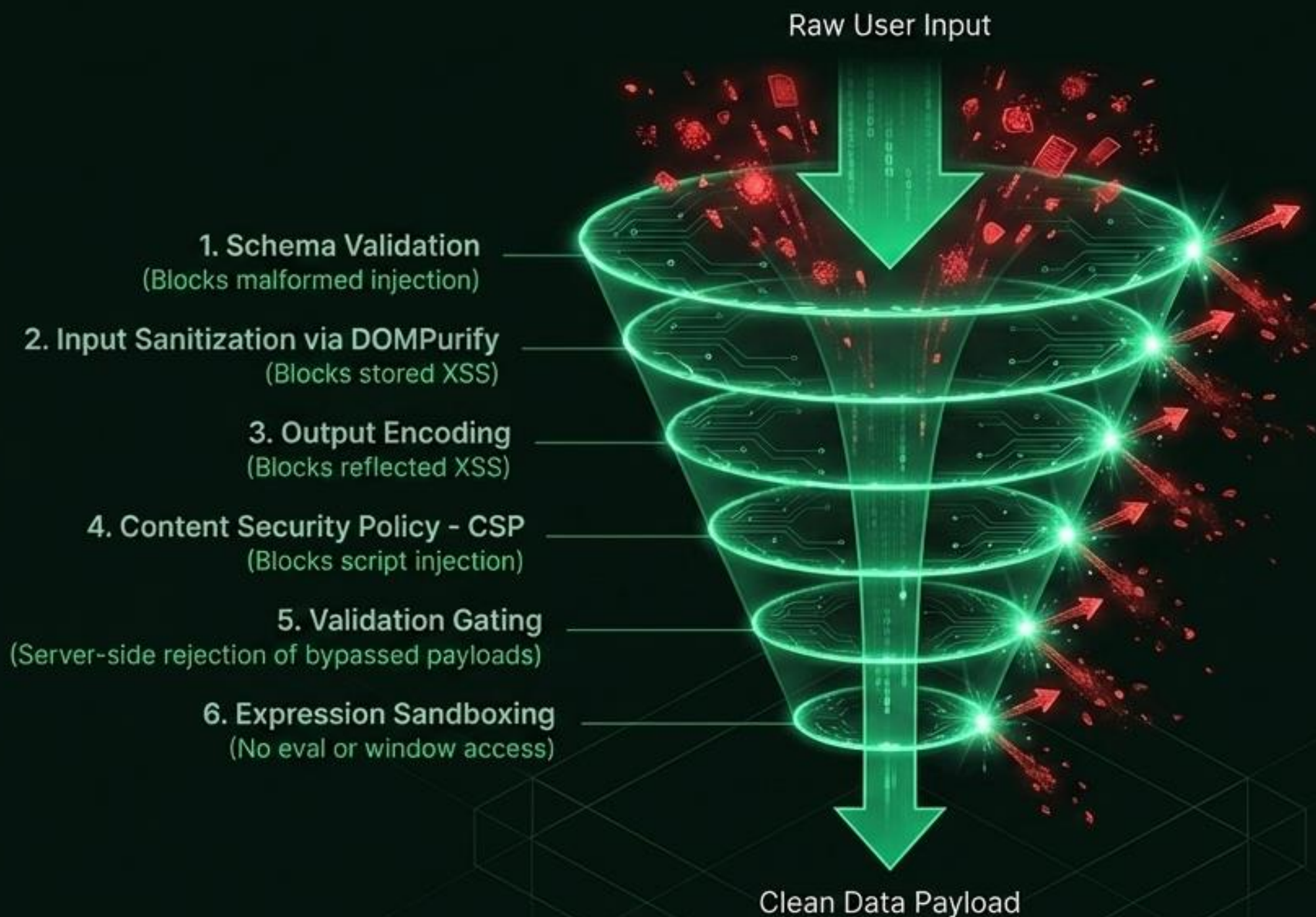
- 89+ built-in controls across 6 categories
- Strict WCAG accessibility compliance
- Responsive, fluid grid system

Standardized
JSON Schema

Layer 4: Resilient Integration & Extensibility

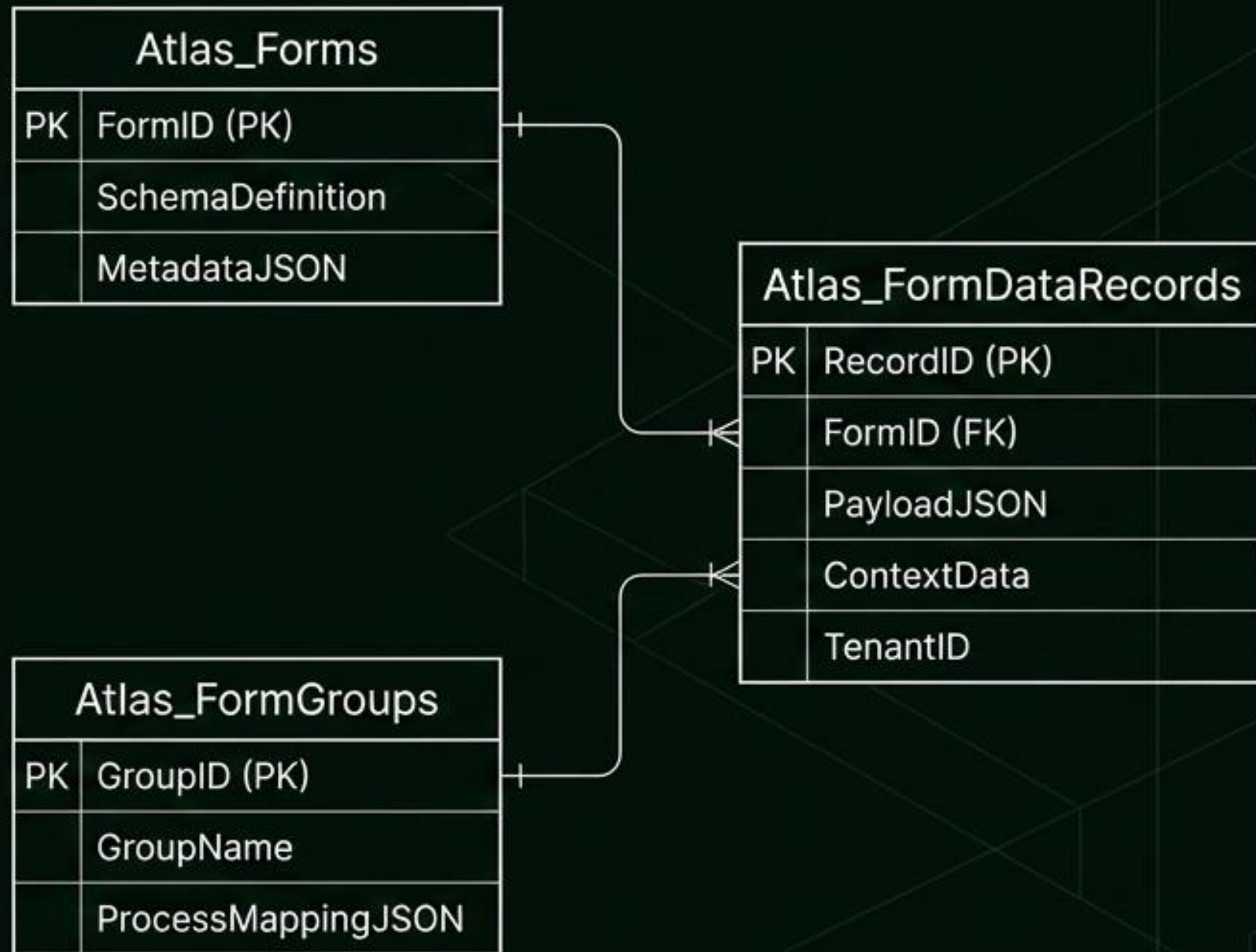


Security Posture: The 6-Layer Defense Architecture



Platform blocks
28+ OWASP XSS
vectors out-of-
the-box.

Data Persistence: BizFirst Data Ocean



Multi-Tenant Isolation

TenantID keys enforce strict boundary logic directly at the database layer.

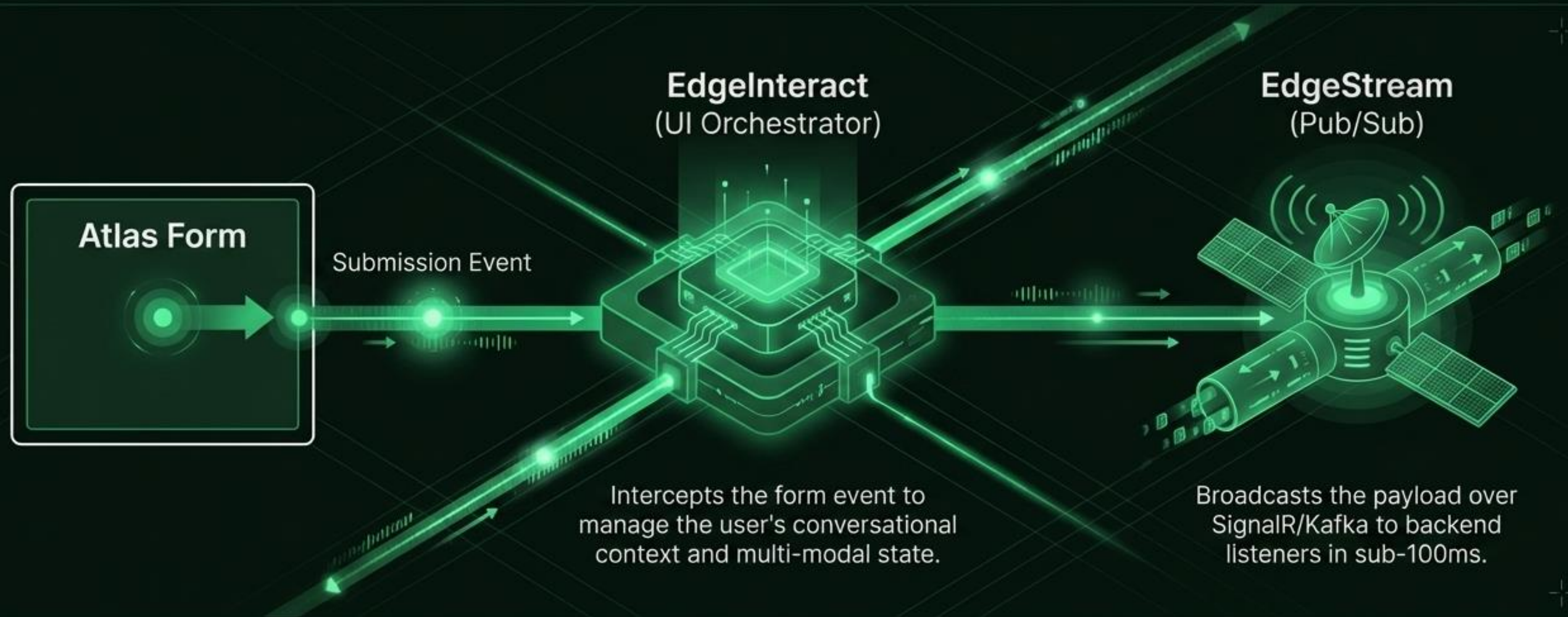
Audit Trails

Immutable logging for SOC 2 and HIPAA enterprise compliance requirements.

Soft-Delete Strategy

Ensures complete data recovery, regulatory retention, and safe archival.

The EdgeInteract & EdgeStream Bridge



Core Insight: Passive forms become active, real-time participants in complex ecosystem orchestrations.

Architectural Comparison Matrix

	Traditional Custom Forms	SaaS Builders (Typeform, etc.)	Atlas Forms
Data Sovereignty	High sovereignty	Low sovereignty (Cloud locked)	On-Prem/Cloud Data Sovereignty
Custom Extensibility	High extensibility	Low extensibility (Walled garden)	Full React/TypeScript Extensibility
Security Integration	Fragmented security	Basic security	6-Layer OWASP Security
Schema Inheritance	No inheritance (Manual updates)	Limited inheritance	Native Server-Side Inheritance

Scale & Performance Diagnostics

100k+

Forms Capacity

Scaling enterprise architectures infinitely without localized performance degradation.

<100ms

Load Time

Driven entirely by a stateless, in-process engine and aggressive API caching.

89+

Built-in Controls

Zero core dependencies spanning across 17 specialized npm architecture packages.

100%

Strict TypeScript

End-to-end type safety mapping seamlessly from JSON schema out to the SDK integration.

Ecosystem Synthesis: The UI Nervous System

FlowStudio (Workflows)

Form submissions instantly trigger complex visual business process orchestrations.

Atlas Forms (UI Node)

ANCP (AI Agents)

Forms serve as Human-In-The-Loop configuration and interaction interfaces for autonomous LLM agents.

DataOcean (Analytics)

Structured, strictly schema-validated data feeds directly into the enterprise data lake.

Atlas Forms does not just collect data; it is the structured intake layer for enterprise-wide hyperautomation.

Build the Enterprise Standard



Access the SDK

Pull @atlas-forms/client-js directly from the package registry.

Read the Documentation

Explore the comprehensive 22-package monorepo architecture.

Deploy the Containers

Spin up the complete developer environment instantly via Docker.