





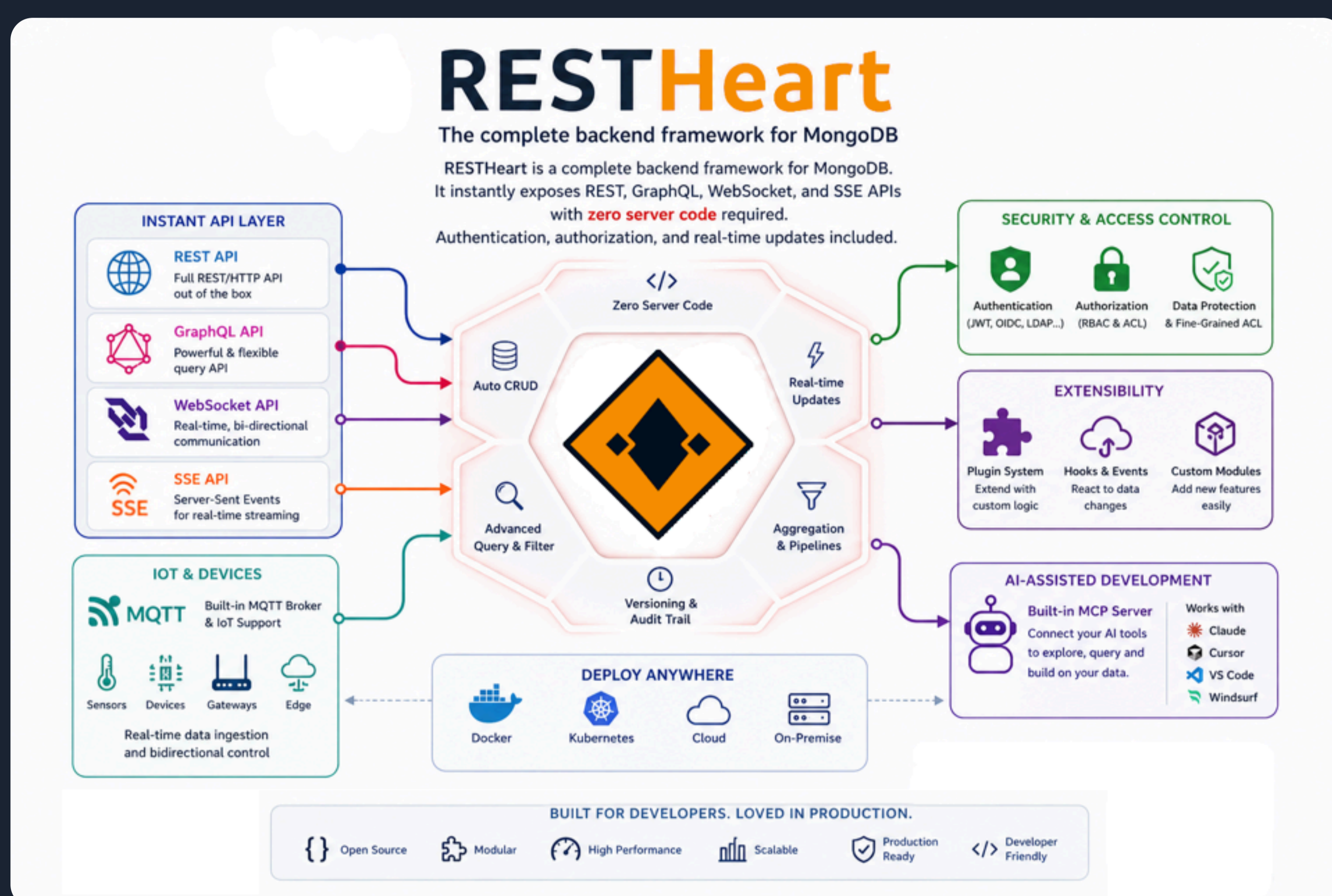
The Agent-Ready Backend for MongoDB

Native MCP server, REST, GraphQL and WebSocket APIs, built-in security. No backend code required.



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|  <p>MCP Server. Connect AI agents directly to MongoDB with one line of config</p> |  <p>REST, GraphQL, WebSocket, SSE. Full API layer out of the box</p> |  <p>Built-in auth, real-time updates, file storage. Zero boilerplate</p> |  <p>Plugin framework. Extend with Java, Kotlin, JavaScript, TypeScript, Python</p> |
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|-------------------------|-------------------------|--------------------------|-----------------------------------|
| 2M+ Downloads | 240+ Releases | MongoDB Native | 10+ Years Battle-Tested |
|-------------------------|-------------------------|--------------------------|-----------------------------------|







Platform Architecture



Built for Every Stage

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|  <h3>Development Time</h3> <ul style="list-style-type: none"> Native MCP Server: connect Claude, Cursor, VS Code directly to your data Instant APIs: REST, GraphQL, zero boilerplate needed Declarative security: roles and permissions in config, no code Polyglot plugins: Java, Kotlin, JavaScript, TypeScript or Python Open source core: inspect, contribute, self-host |  <h3>Runtime</h3> <ul style="list-style-type: none"> High performance: Undertow NIO + Java Virtual Threads, 10K+ concurrent connections Real-time: WebSocket, SSE, and Change Streams out of the box Stateless architecture: scales horizontally, runs on VMs, containers, Kubernetes Production-grade security: JWT, OAuth2, LDAP, RBAC IoT ready: native MQTT client support |
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Database Compatibility

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|  MongoDB Full support |  MongoDB Atlas Full support |  Percona Server Full support |  FerretDB PostgreSQL-backed |  AWS DocumentDB Compatible |  Azure Cosmos DB MongoDB API |
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AI-Assisted Development, Built In


The first backend designed for AI agents as first-class users.

RESTHeart ships with a native MCP server that makes MongoDB directly accessible to any AI agent without custom integration. Claude, Claude Code, Cursor, VS Code connect out of the box with one line of config.


Describe your app, and the AI builds it against the real API. No stale training data. No guessing. No backend code.

```
claude mcp add --transport http sophia-restheart \
https://sophia-api.restheart.com/mcp/restheart
```

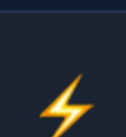
[Read more about Vibe Coding with RESTHeart Cloud →](#)

 Describe your app

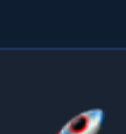
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 AI connects via MCP to real API docs

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 AI configures backend + generates frontend

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 Your app is live

Build Your Custom Logic

Write plugins only when you need custom business logic. RESTHeart handles everything else.





```
GreeterService.java

@registerPlugin(name = "greetings")
public class GreeterService implements JsonService {
    @Override
    public void handle(JsonRequest req, JsonResponse res) {
        res.setContent(object()
            .put("message", "Hello World!")
            .put("timestamp", Instant.now()));
    }
}
```

Also supports Kotlin, JavaScript, TypeScript, Python. [Documentation →](#)

Platform Modules

Ready-to-use modules that extend RESTHeart beyond core APIs

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|  <h3>Sophia AI</h3> <p>Knowledge-base and RAG engine that powers RESTHeart's native MCP server. Every Sophia Instance exposes one MCP endpoint per context, making your data accessible to any MCP-compatible AI client. RAG-powered responses with Agentic Mode for complex reasoning.</p> <ul style="list-style-type: none"> ✓ Native MCP Server (one endpoint per context) ✓ Retrieval-Augmented Generation (RAG) ✓ Agentic Mode for autonomous reasoning ✓ Works with Claude, Cursor, VS Code, Windsurf <p>Learn more →</p> |  <h3>Webhook Integration</h3> <p>Connect your API to the world with intelligent webhook automation. Trigger external systems when your data changes, creating seamless event-driven workflows.</p> <ul style="list-style-type: none"> ✓ Trigger external systems on data changes ✓ Customizable triggers with predicates ✓ Body transformation with Mustache templates ✓ Automatic retry logic and logging <p>Learn more →</p> |  <h3>Facet</h3> <p>Transform your API into server-rendered HTML with zero backend code. Same endpoint serves JSON to clients and HTML to browsers using convention-based templates.</p> <ul style="list-style-type: none"> ✓ Server-side rendering without code ✓ Convention-based path templates ✓ Content negotiation (JSON/HTML) ✓ Progressive enhancement with HTMX <p>Learn more →</p> |  <h3>IoT Gateway</h3> <p>Connect devices and sensors directly to your backend via MQTT. Ingest telemetry data into MongoDB in real-time, bridging the IoT world with your application APIs.</p> <ul style="list-style-type: none"> ✓ Native MQTT client support ✓ Real-time data ingestion to MongoDB ✓ Bridge between MQTT and REST, WebSocket and SSE ✓ Scalable device connectivity <p>Learn more →</p> |
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Get Started

Start building in minutes with RESTHeart Cloud, or deploy on your infrastructure

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