









"Legend Guardian Agent - System Architecture"

"Legend Guardian Agent Team"

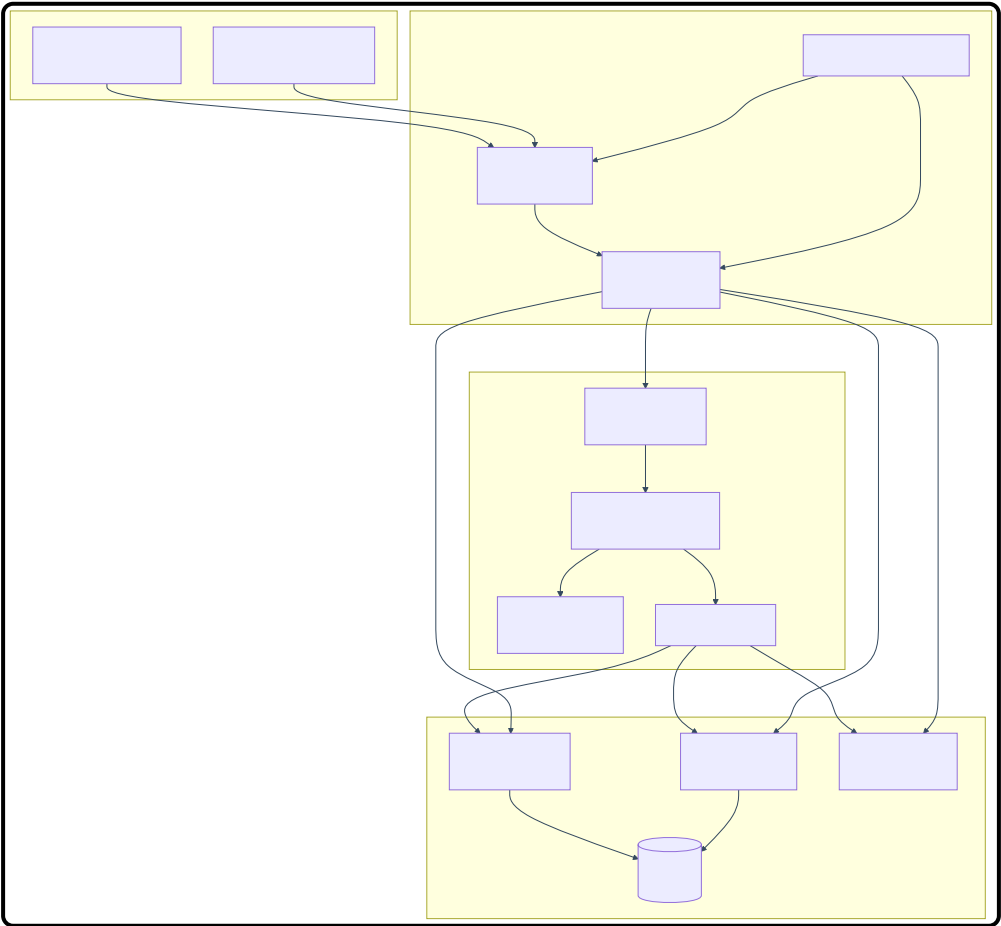
Tue Aug 19 11:07:25 AEST 2025

- **Legend Guardian Agent - System Architecture**

-  **High-Level System Architecture**
-  **Detailed Component Architecture**
-  **Network Architecture & Ports**
-  **Authentication & Security Architecture**
-  **Data Flow Architecture**
-  **Component Details**
 - **Legend Guardian Agent**
 - **Legend Engine**
 - **Legend SDLC**
 - **Legend Studio**
 - **MongoDB**
 - **Azure Ingress**
-  **Deployment Architecture**
-  **Configuration Summary**

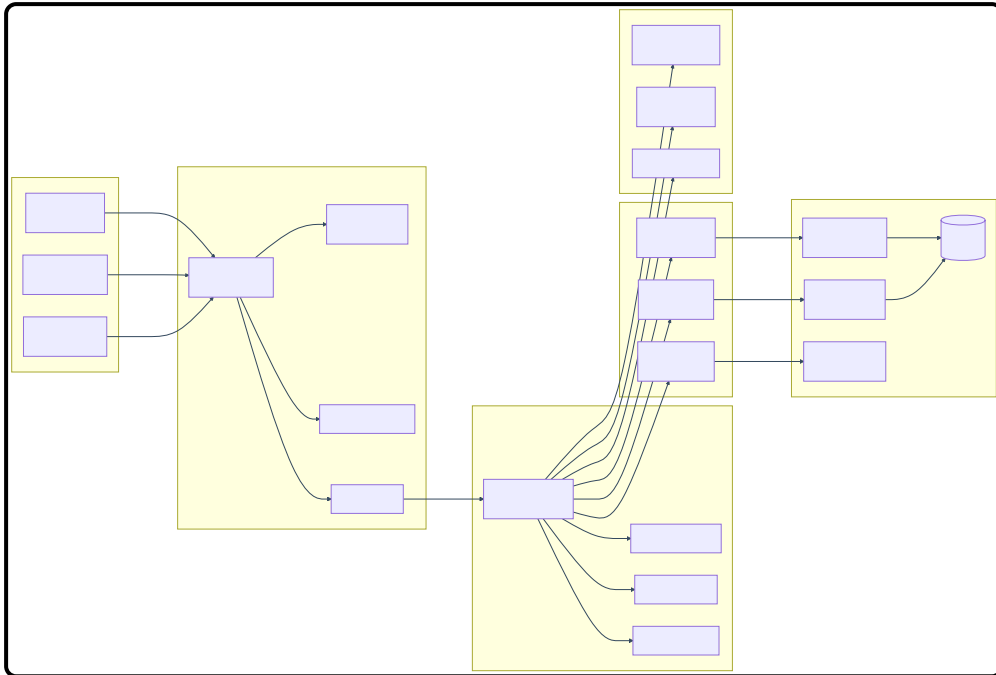
Legend Guardian Agent - System Architecture

High-Level System Architecture



Architecture Diagram

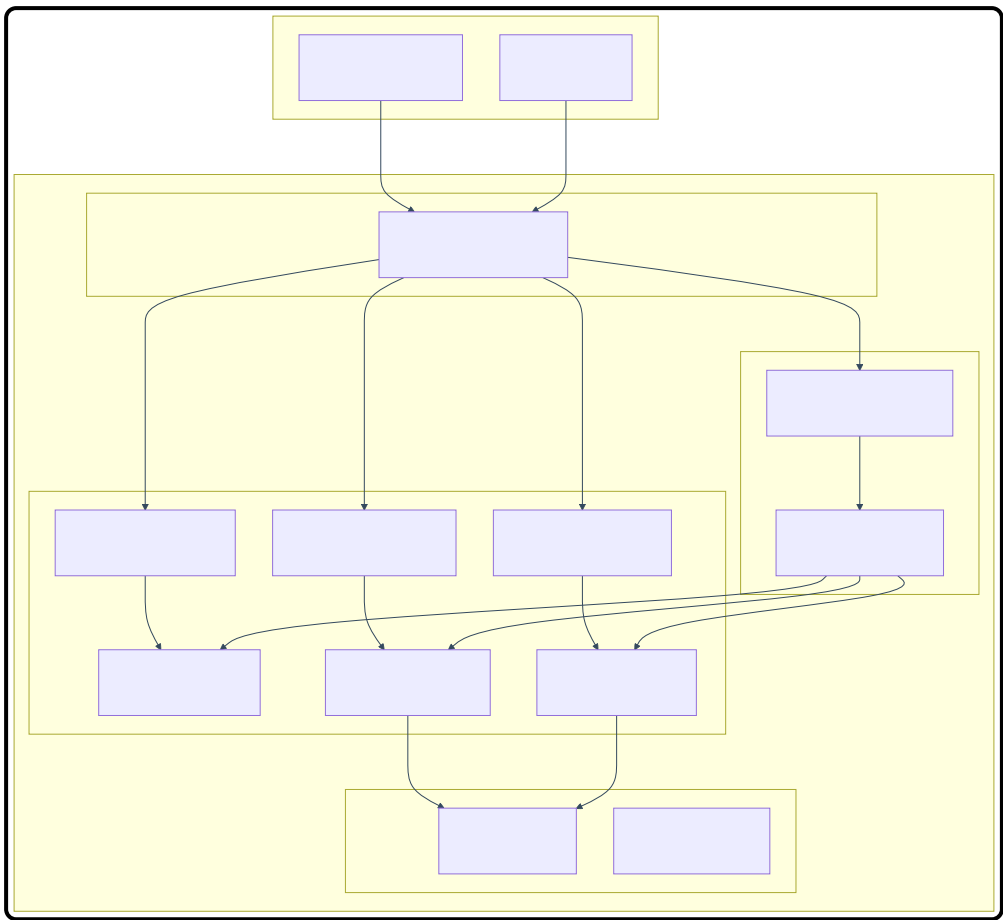
🔌 Detailed Component Architecture



Architecture Diagram

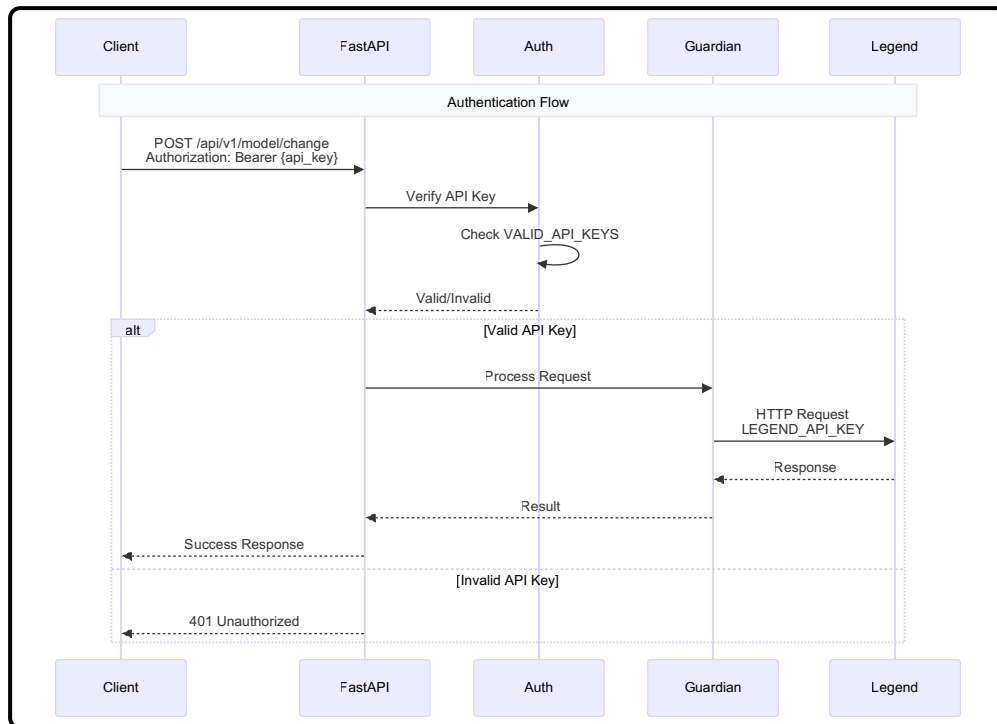


Network Architecture & Ports



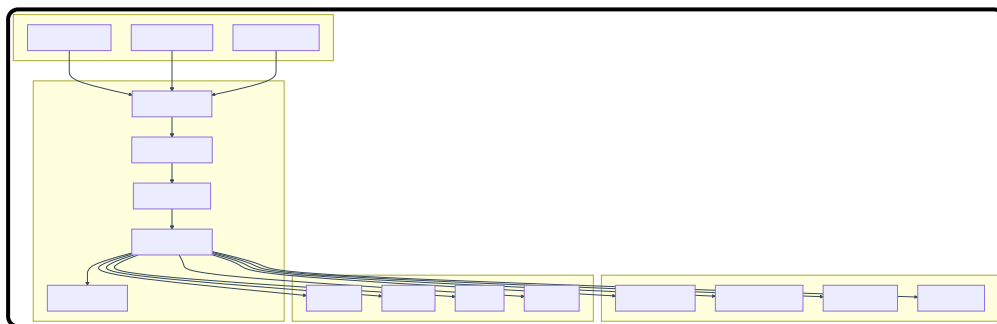
Architecture Diagram

Authentication & Security Architecture



Architecture Diagram

Data Flow Architecture



Architecture Diagram

Component Details

Legend Guardian Agent

- Port: 8000

- **Protocol:** HTTP/HTTPS
- **Framework:** FastAPI (Python)
- **Authentication:** Bearer Token (API Keys)
- **Features:** Model monitoring, validation, automation

Legend Engine

- **Port:** 6060
- **Protocol:** HTTP
- **Purpose:** Model execution and validation
- **Database:** MongoDB (Port 27017)

Legend SDLC

- **Port:** 7070
- **Protocol:** HTTP
- **Purpose:** Source control and lifecycle management
- **Database:** MongoDB (Port 27017)

Legend Studio

- **Port:** 9000
- **Protocol:** HTTP
- **Purpose:** Web-based modeling interface
- **Authentication:** GitLab OAuth

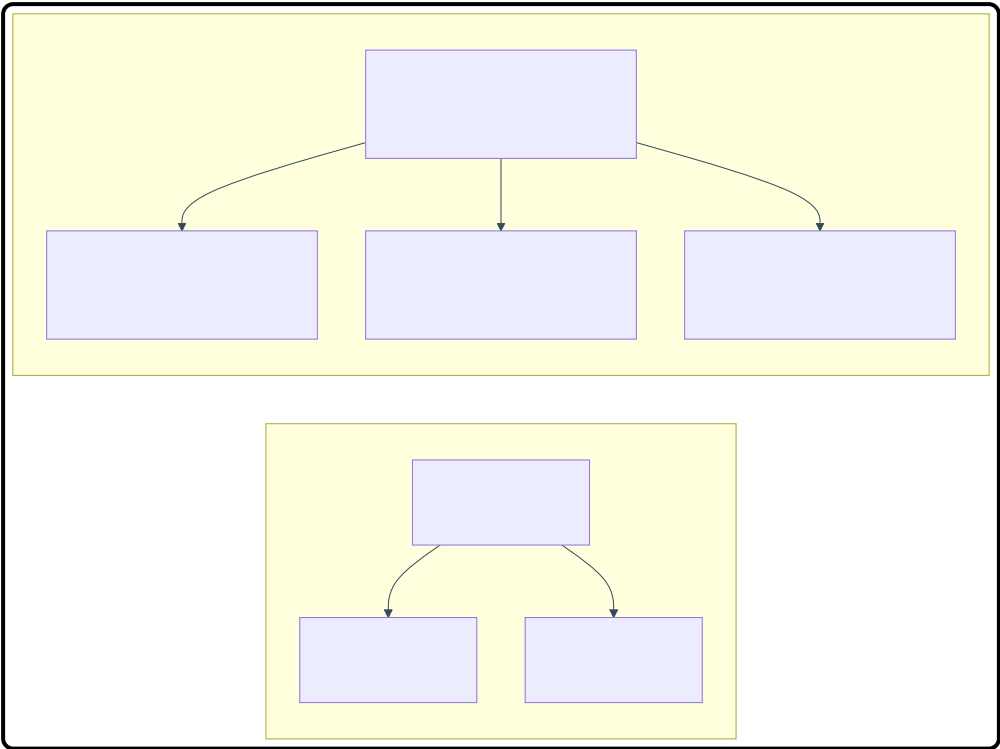
MongoDB

- **Port:** 27017
- **Protocol:** MongoDB Wire Protocol
- **Purpose:** Data persistence for all Legend services

Azure Ingress

- **Ports:** 80 (HTTP), 443 (HTTPS)
- **Protocol:** HTTP/HTTPS
- **Purpose:** External access and load balancing

Deployment Architecture



Architecture Diagram

Configuration Summary

| Component | Port | Protocol | Purpose | Authentication |
|----------------|-------|----------|-----------------|------------------|
| Guardian Agent | 8000 | HTTP | API Server | API Key (Bearer) |
| Legend Engine | 6060 | HTTP | Model Execution | Internal |
| Legend SDLC | 7070 | HTTP | Source Control | GitLab OAuth |
| Legend Studio | 9000 | HTTP | Web Interface | GitLab OAuth |
| MongoDB | 27017 | MongoDB | | Internal |

| Component | Port | Protocol | Purpose | Authentication |
|---------------|--------|------------|-----------------|----------------|
| | | | Data Storage | |
| Azure Ingress | 80/443 | HTTP/HTTPS | External Access | Load Balancer |

This architecture provides a scalable, secure, and maintainable system for monitoring and managing the FINOS Legend platform through the Legend Guardian Agent.