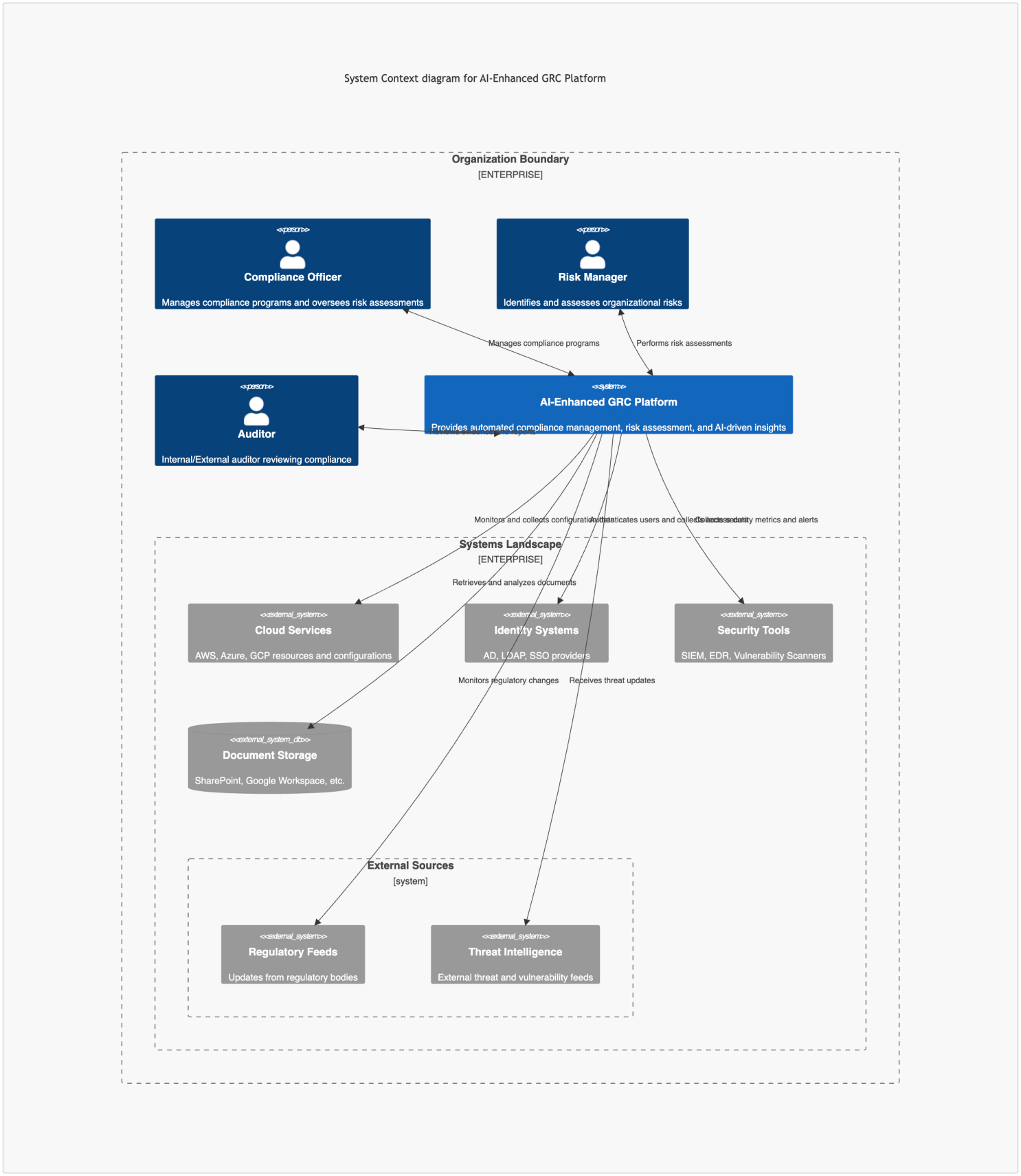
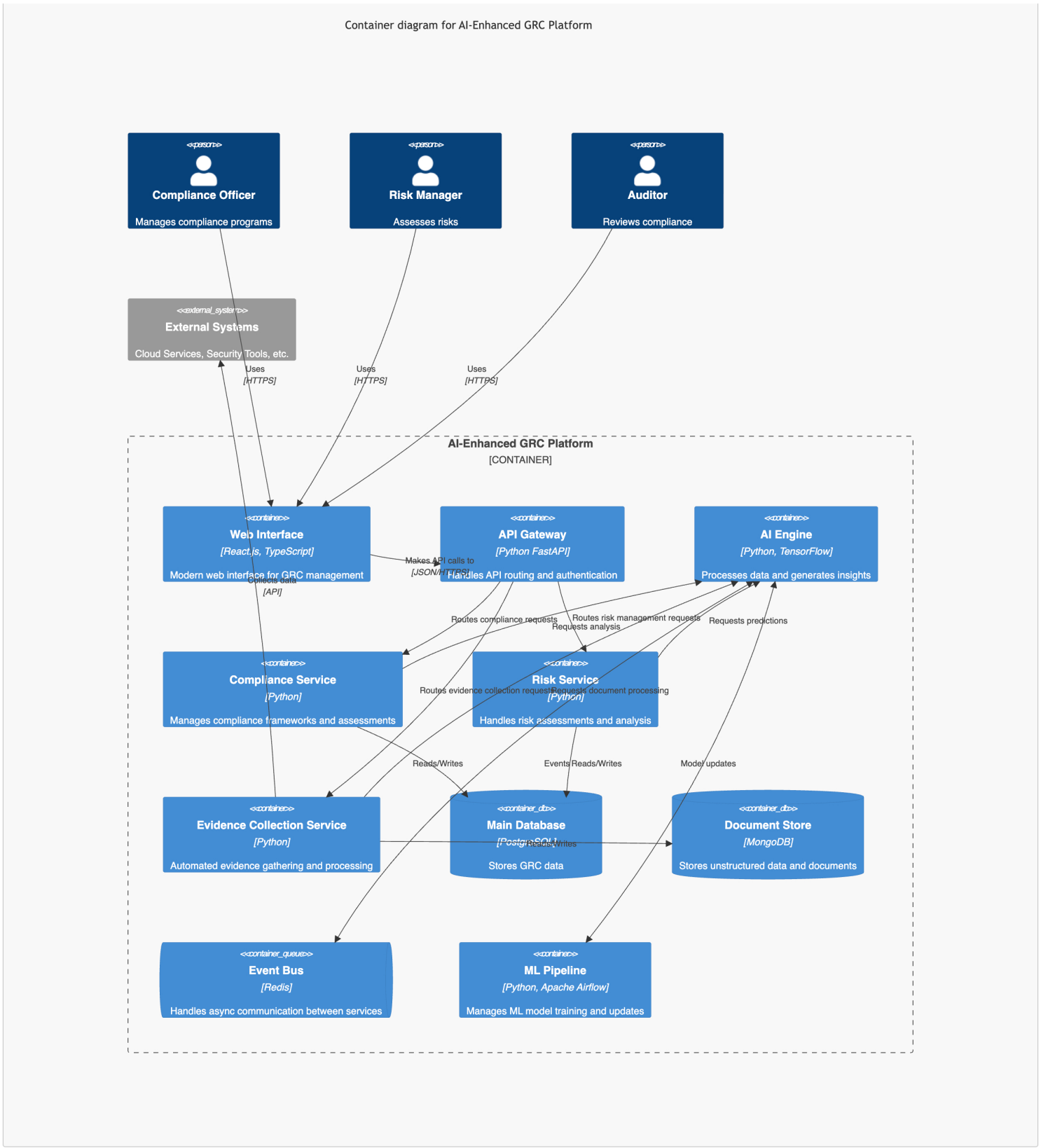
GRC Platform Architecture

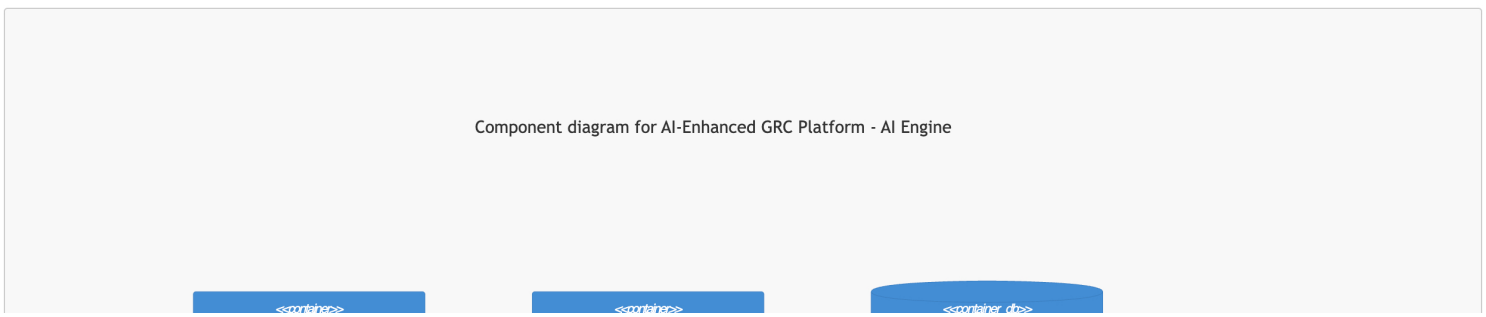
System Context Diagram

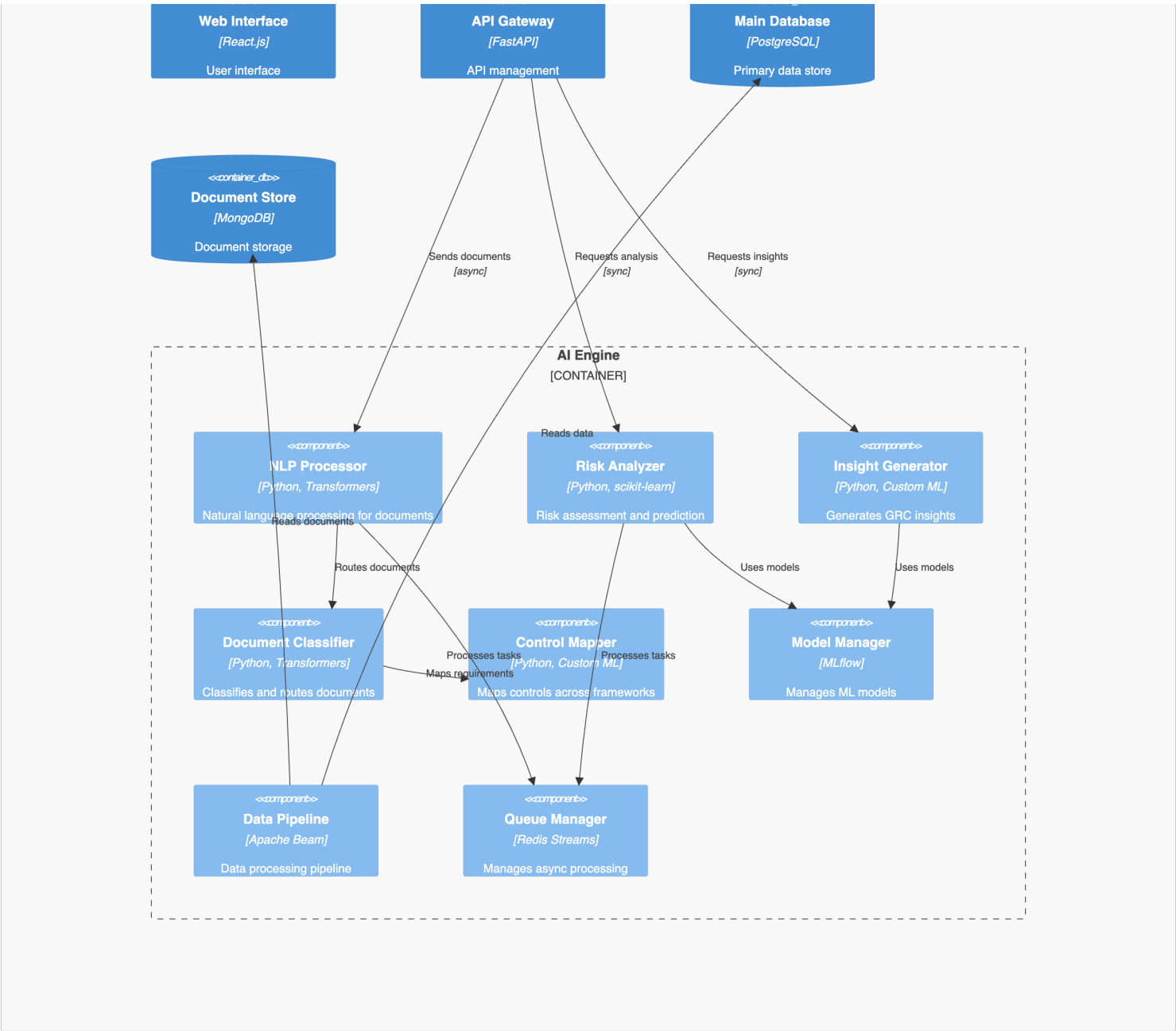


Container Diagram



Component Diagram





The architecture presented above shows a modern, microservices-based GRC platform with integrated AI capabilities. Here's a brief explanation of each diagram:

1. **System Context Diagram**:
    - Shows how the platform interacts with external systems and users
    - Highlights data collection from various sources
    - Demonstrates the broad scope of automation
2. **Container Diagram**:
    - Details the major services and their interactions
    - Shows the separation of concerns between different components
    - Highlights how AI is integrated throughout the system
3. **Component Diagram (AI Engine Focus)**:
    - Detailed view of the AI Engine internals
    - Shows how different ML models work together
    - Demonstrates data processing flow

Key architectural decisions:

1. **Microservices Architecture**:
    - Each major function is a separate service
    - Services communicate via API Gateway
    - Event-driven architecture for async operations
2. **AI Integration**:
    - Centralized AI Engine for reusable ML capabilities

- Centralized AI Engine for reusable ML capabilities
- Separate ML Pipeline for model training
- Multiple specialized ML components for different tasks

3. **Scalability & Performance**:
   - Event bus for async operations
   - Separate databases for structured and unstructured data
   - Containerized deployment support
4. **Security & Compliance**:
   - API Gateway for centralized security
   - Separate services for better access control
   - Audit-friendly architecture