Prowiz-An Enterprise IntelliAgent ERP

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Outline

System Architecture Layers

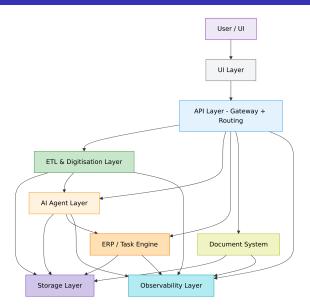


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Section 1

System Architecture Layers

Layer Block Diagram



Layer	Key Functionalities
UI Layer	Provides the user interface for document upload, agent triggering, task management, version review, change history, and analytics dashboards. Interfaces with API layer for all interactions.
API Layer	Acts as the central access point via ingress and API gateway. Handles routing, authentication, rate limiting, versioned API groups (auth, agent, document, ETL, ERP, summary, compliance).

Table: Functional Overview of Core System Layers (Part 1)

Layer	Key Functionalities
ERP Task Engine Layer	Manages projects, tasks, workflows, approvals, assignments. Acts as the orchestrator connecting ETL, AI, and document systems with user workflows and audit logs.
Al Agent Layer	Executes intelligent agents for document generation, compliance review, email understanding, P&ID parsing, semantic diffing, enquiry processing, and task summaries.

Table: Functional Overview of Core System Layers (Part 2)

Layer	Key Functionalities
ETL & Digitisa- tion Layer	Ingests and watches file systems and document uploads. Computes checksums, extracts metadata, invokes Al-based content extraction, and stores structured outputs.
Document System Layer	Manages file uploads, versioning, semantic diffing, review flows, and links documents to tasks. Interfaces with storage and audit layers.

Table: Functional Overview of Core System Layers (Part 3)

Layer	Key Functionalities
Storage Layer	Handles object storage (MinIO/S3), metadata (MongoDB/Postgres), embeddings (vector DB), audit trails (TimescaleDB), and raw file lifecycle APIs.
Observability Layer	Collects metrics (Prometheus), logs (Loki/ELK), distributed traces (Jaeger), alerting (Alertmanager), and agent audit logs. Visualized via Grafana.
Infrastructure Layer	Provides the platform base using Kubernetes, Vault, Prometheus, MinIO, SQL/NoSQL DBs, service mesh, ingress, and network/security policies.

Table: Functional Overview of Core System Layers (Part 4)