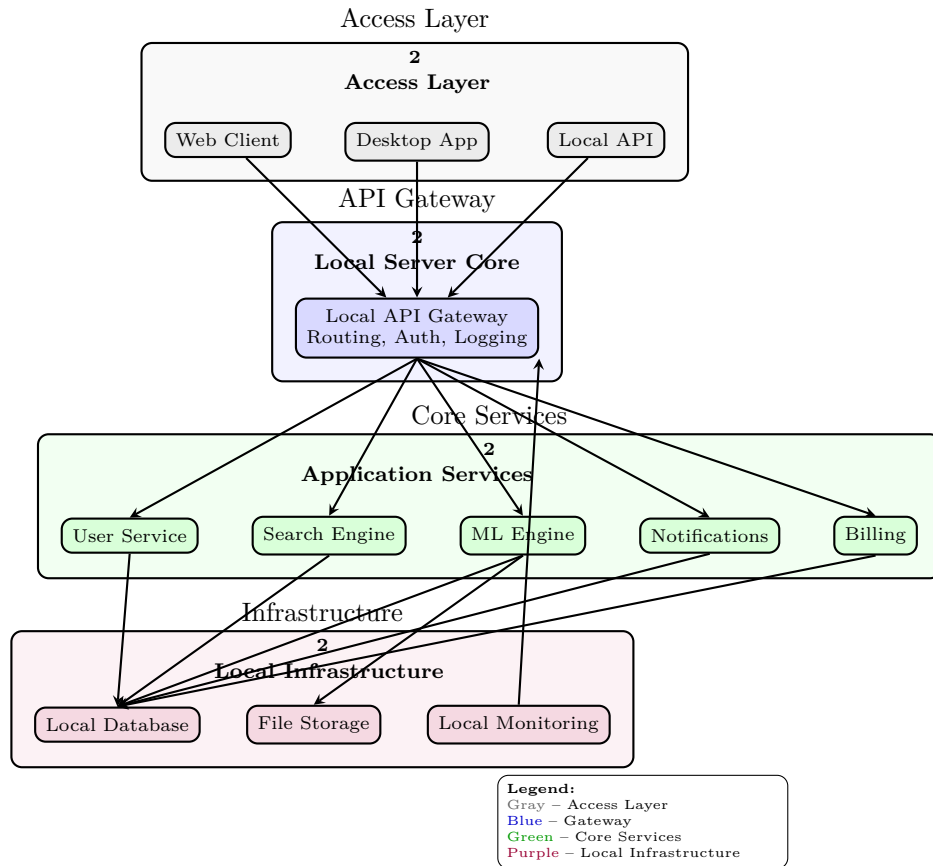


# DeepSeek – Local Architecture

Simplified On-Premise Deployment Model



---

## Description of the Local Architecture:

The *local architecture* of DeepSeek is designed for small-scale environments, such as research labs, offline deployments, or development testing. All system components run on a single physical or virtual server, ensuring simplicity, minimal latency, and ease of control without distributed infrastructure.

**Access Layer:** Provides direct access through web, desktop, or local API clients, allowing users to interact with the system locally. **Local API Gateway:** Handles all internal routing, authentication, and logging within a single node, without cloud-based load balancing. **Core Services:** Each service (User, Search, ML, Notifications, Billing) operates as a local process or container. Communication occurs via internal network calls or IPC (inter-process communication). **Local Infrastructure:** The database, file system, and monitoring tools are hosted locally. Data storage, logs, and models are maintained within the same machine or LAN network.

This architecture prioritizes **simplicity, fast prototyping, and offline availability**. It avoids the complexity of distributed orchestration while retaining modularity, making it ideal for development, demonstration, or low-resource environments.