Approval Hub (HR & Ops Suite)

Technical & Security Architecture

Version 1.0

https://ltaddins.com +84 946 579 539 support@ltaddins.com

1. Executive Summary

The app is a modern, enterprise-grade Model-Driven Application engineered specifically for the Microsoft ecosystem. It empowers organizations to digitize complex approval workflows while maintaining absolute data sovereignty. The solution is built with a **Zero-Egress Architecture**, ensuring it meets the strictest compliance and data privacy regulations.

2. Absolute Data Sovereignty (Zero-Egress Architecture)

- **100% Native Dataverse:** The application operates entirely within the customer's Microsoft tenant. There are no external databases, no third-party cloud storage, and no hidden telemetry.
- **No External API Calls:** The custom logic and Power Apps Component Framework (PCF) controls do not make any outbound requests to LTAPPS servers or any third-party endpoints. All data processing occurs locally within your securely bounded Power Platform environment.
- **Data Ownership:** The customer retains exclusive ownership and control over all data, configurations, and file attachments processed by the application.

3. Identity and Access Management (IAM)

- **Entra ID SSO:** Authentication is natively handled by Microsoft Entra ID (Azure AD). Users log in using their existing corporate credentials, inheriting all Multi-Factor Authentication (MFA) and Conditional Access policies configured by your IT department.
- **Role-Based Access Control (RBAC):** Granular security is enforced at the Dataverse platform level using Business Units and Security Roles. Users can only access the records and sub-grids explicitly permitted by their assigned roles.

4. Front-End Architecture & Performance

- **Fluent UI v9 & Griffel Engine:** The user interface is constructed using the latest Microsoft Fluent UI v9 design system powered by the Griffel CSS-in-JS engine. This ensures a seamless, native "Microsoft look and feel" while providing optimal rendering performance.
- **Optimized Rendering:** Legacy rendering methods like VirtualizerScrollView have been fully replaced. The unified PCF controls are optimized for high-volume data retrieval, ensuring rapid load times even when querying extensive historical approval records.

5. Extensibility and Integration

Because the underlying architecture utilizes standard Dataverse tables, IT teams are not locked into a closed system.

- **Open Access:** Internal developers can securely query the data using standard OData endpoints, Power BI, or Logic Apps.
- **Seamless Integration:** The workflow engine can be easily extended to trigger actions in existing ERP systems (e.g., SAP, Dynamics 365 F&O) utilizing standard Microsoft connectors, all within the secure perimeter of the customer's tenant.