

Project Design Phase

Solution Architecture

DATE	NOVEMBER 2, 2025
TEAM ID	NM2025TMID00396
PROJECT TITLE	Optimizing User, Group, and Role Management with Access Control and Workflows

Solution Architecture:

Workflow for Role-Based Access Control and Task Management

- User Identification and Role Assignment:**
 - Each team member is assigned a role upon onboarding (e.g., Project Manager, Team Member).
 - Roles determine the level of access and control over project resources and tasks.
- Task Creation and Allocation:**
 - The Project Manager creates tasks and assigns them to specific team members based on their roles.
 - Tasks are categorized by priority, deadline, and required skills.
- Access Control Implementation:**
 - Role-based permissions ensure that users only access relevant tools, documents, and information.
 - Admin rights remain with the Project Manager, while members access only assigned task zones.
- Task Execution and Status Updates:**
 - Team members execute tasks and regularly update progress within the system.
 - Each status change (e.g., In Progress, Blocked, Completed) triggers a notification to the relevant stakeholders.
- Review and Feedback:**
 - The Project Manager reviews task outputs and provides feedback or approvals.
 - A feedback loop ensures continuous improvement and knowledge transfer.

6. Reporting and Documentation:

- The system generates reports on task completion, timelines, and performance.
- These insights help in future project planning and accountability.

Example - Solution Architecture Diagram:

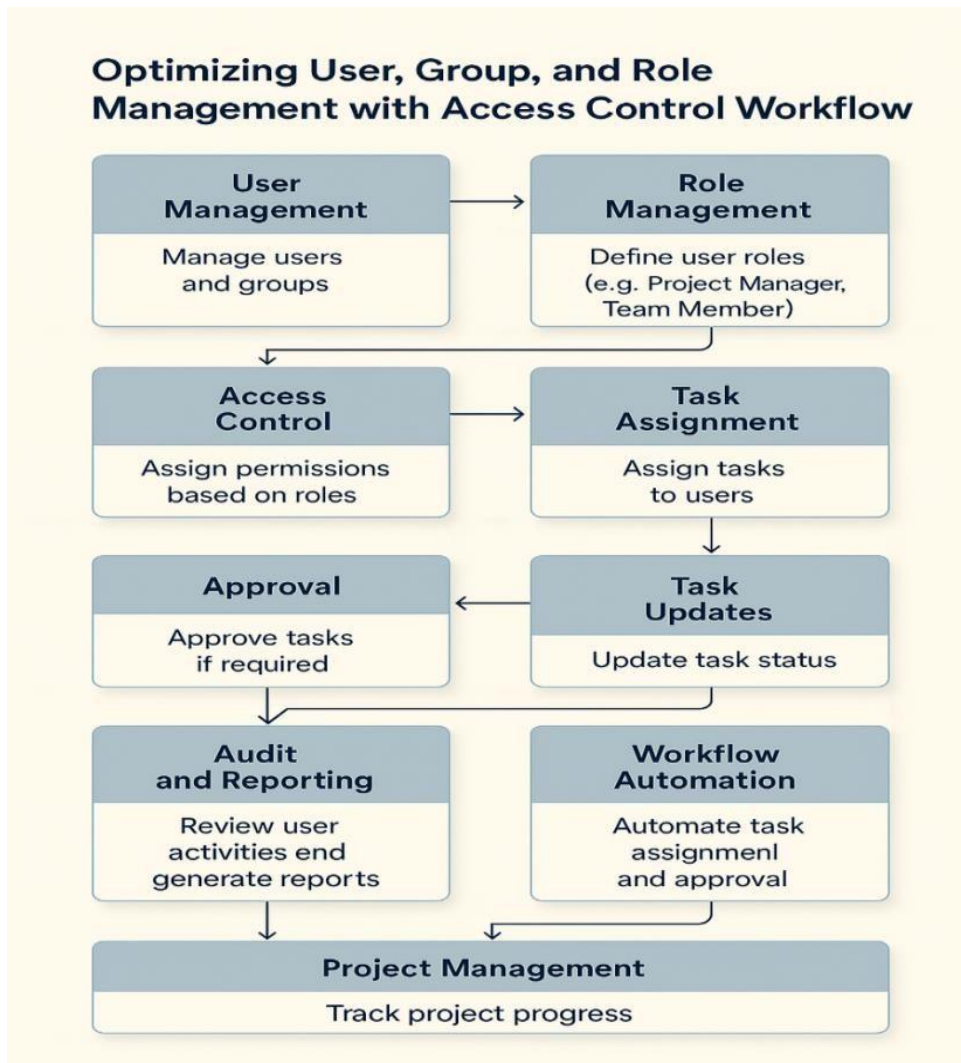


Figure : Architecture and data flow of the Optimizing User, Group, and Role Management with Access Control and Workflows