

Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	2 November 2025
Team ID	NM2025TMID06473
Project Name	Optimizing User, Group, and Role Management with Access Control and Workflows
Marks	4 Marks

Technical Architecture:

The deliverable includes the architectural diagram and technology stack used in the project 'Optimizing User, Group, and Role Management with Access Control and Workflows'. It outlines how various components such as user management, group assignments, and role-based access controls are integrated within a workflow-driven system to ensure data integrity and secure operations.

• Example:

Table-1: Components & Technologies:

S.No	Component	Description	Technology	Date & Time
1	User Interface	Admin interacts	ServiceNow	

		via web dashboardWeb UI for managing users, groups, and roles.
2	Application Implements ServiceNow Logic-1	workflows for Flow Designer role assignment and group management.
3	Application Validates user- ServiceNow Logic-2 role and group Scripts /	relationships GlideRecord before updates.
4	Application Triggers ServiceNow Logic-3	notifications on Notifications updates or access changes.
5	Database Stores user, ServiceNow group, and role CMDB details.	
6	Cloud Hosted and ServiceNow Infrastructure managed on SaaS Platform ServiceNow Cloud.	
7	File Storage Stores system ServiceNow logs and audit System Logs trails.	
8	External API Integrates with ServiceNow HRMS for REST API identity verification.	

Table-2: Application Characteristics:

S.No	Characteristics		
	Description	Technology	Date & Time
1	Security Implementations	Role-based access control, ACLs & Scoped ACLs, and secure workflows.	ServiceNow Applications
2	Scalable Architecture	SaaS-based scalable Platform architecture for large organizations.	ServiceNow Cloud
3	Availability	High availability through redundant ServiceNow instances.	Load-balanced SaaS Nodes
4	Performance workflows	Optimized Background ensure fast operations and validations.	Flow Designer, Scripts
5	Integration	Seamless connection with IntegrationHub external systems via REST APIs.	ServiceNow