

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 dashboard	Web 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- role and group	ServiceNow Logic-2 Scripts / relationships before GlideRecord updates.
4	Application	Triggers Logic-3	ServiceNow notifications on updates or access changes.
5	Database	Stores user, group, and role	ServiceNow CMDB details.
6	Cloud Infrastructure	Hosted and managed on ServiceNow	ServiceNow SaaS Platform Cloud.
7	File Storage	Stores system logs and audit	ServiceNow System Logs trails.
8	External API	Integrates with HRMS for REST API	ServiceNow identity verification.

Table-2: Application Characteristics:

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