

**Project Design Phase**  
**Proposed Solution**

Date	01 Nov 2025
TeamID	NM2025TMID09058
ProjectName	Optimizing User Group and Role Management with Access Control and Workflows
MaximumMarks	2 Marks

**Proposed Solution Template:**

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	In ServiceNow, user group and role assignments are often managed manually, leading to inconsistent access control, redundant roles, and delays in approvals. This increases the risk of unauthorized access and complicates compliance audits.
2.	Idea / Solution Description	The proposed solution automates user group and role management using ServiceNow Flow Designer and Access Control Lists (ACLs). It introduces workflow-based approvals for role assignments, validates permissions dynamically through GlideRecord scripts, and ensures only authorized users can perform sensitive actions.
3.	Novelty/ Uniqueness	Unlike standard role management, this solution optimizes the process by combining ACL enforcement, automated validation, and manager approvals—all built natively within ServiceNow's scoped application, without external integrations or plugins.
4.	Social Impact / Customer Satisfaction	The system ensures secure, transparent, and efficient access management across the organization. It reduces human errors, improves audit readiness, and increases trust among employees and customers by maintaining data security and workflow integrity.
5.	Business Model (Revenue Model)	While not directly revenue-generating, the solution significantly reduces administrative overhead, security incidents, and compliance costs—translating into improved operational efficiency and cost savings for enterprises using ServiceNow.

6.	Scalability of the Solution	The design can be extended to multiple ServiceNow modules, such as Change Management, Problem, or HR. It can scale to enterprise-level role hierarchies and integrate with identity management systems for automated provisioning and de-provisioning of users.
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## Solution Description

To optimize and secure user group and role management in ServiceNow, a customized workflow-based access control system is implemented. Using Flow Designer, ACLs, and GlideRecord scripts, the solution automates the process of assigning, modifying, and revoking user roles and group memberships.

When an admin requests a new role or group change, the system automatically:

- Validates existing assignments and access privileges using server-side scripts (GlideRecord)
- Initiates a manager approval workflow through Flow Designer
- Updates user records only after approval and logs all actions for auditing

If a request violates predefined access policies (e.g., conflicting roles or unauthorized privilege escalation), the system blocks the operation and notifies the admin.

This approach leverages native ServiceNow functionality—requiring no external plugins—ensuring secure, compliant, and automated access management. It enhances data consistency, improves security posture, and ensures efficient role governance across enterprise environments.