

Project Design Phase
Proposed Solution

Date	01 Nov 2025
TeamID	NM2025TMID07955
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 frequently managed manually, resulting in inconsistent access control, redundant role allocations, and approval delays. This manual approach heightens the risk of unauthorized access and makes compliance audits more complex.
2.	Idea / Solution Description	The proposed solution automates user, group, and role management using ServiceNow Flow Designer and Access Control Lists (ACLs). It incorporates workflow-based approvals for role assignments, dynamically validates permissions through GlideRecord scripts, and ensures that only authorized users can execute sensitive actions.
3.	Novelty/ Uniqueness	Unlike traditional role management, this solution streamlines the process by integrating ACL enforcement, automated validation, and manager approvals—all developed natively within ServiceNow’s scoped application, eliminating the need for external integrations or plugins.
4.	Social Impact / Customer Satisfaction	The system provides secure, transparent, and efficient access management across the organization. It minimizes human errors, enhances audit readiness, and fosters trust among employees and customers by upholding data security and workflow integrity.
5.	Business Model (Revenue Model)	Although not a direct source of revenue, the solution greatly reduces administrative workload, security incidents, and compliance expenses—resulting in enhanced operational efficiency and substantial cost savings for organizations utilizing ServiceNow.

6.	Scalability of the Solution	The design is adaptable and can be extended to various ServiceNow modules, including Change Management, Problem Management, and HR. It is scalable to support enterprise-level role hierarchies and can integrate with identity management systems to enable automated user provisioning and de-provisioning.
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Solution Description

To enhance and secure user, group, and role management in ServiceNow, a customized workflow-driven access control system has been implemented. Leveraging **Flow Designer**, **Access Control Lists (ACLs)**, and **GlideRecord scripts**, the solution automates the processes of assigning, modifying, and revoking user roles and group memberships.

When an administrator submits a request for a new role or group modification, 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 related actions for auditing purposes

If a request breaches predefined access policies—such as conflicting roles or unauthorized privilege escalation—the system blocks the operation and alerts the administrator.

This approach utilizes native ServiceNow capabilities without relying on external plugins, ensuring **secure, compliant, and automated access management**. It strengthens data consistency, enhances the organization's security posture, and supports efficient role governance across enterprise environments.