

Project Design Phase-II

Data Flow Diagram & User Stories

Date	01 Nov 2025
TeamID	NM2025TMID07955
Project Name	Optimizing User Group and Role Management with Access Control and Workflows
Maximum Marks	4Marks

Data Flow Diagram (DFD) Description

A Data Flow Diagram (DFD) provides a structured visual representation of how information moves through a system. It helps identify how data is collected, processed, stored, and transferred between users and system components.

In the project “Optimizing User Group and Role Management with Access Control and Workflows,” the DFD depicts the complete flow of role and group management activities — from initiation to validation, approval, and final update within the ServiceNow platform.

The diagram highlights the interaction between the Administrator, the System (Flow Designer & ACLs), and the User and Role Tables, ensuring that every access change remains secure and compliant.

Process Flow:

1. The Administrator submits a role or group change request through the ServiceNow Web UI.
2. The Flow Designer workflow is triggered to validate the request and initiate manager approval.
3. The System, using GlideRecord scripts, checks whether the request complies with all access control policies.
4. If the request is approved, the system updates the relevant tables — sys_user, sys_user_role, and sys_user_group.
5. If the request is unauthorized or conflicting, the system automatically blocks the update and sends a notification to the administrator.

This DFD ensures data integrity, access compliance, and auditability throughout all user and role management operations, minimizing unauthorized access risks and maintaining secure, traceable updates to organizational roles.

User Stories Overview

User stories describe what different users expect from the system in a simple, goal-oriented manner. They help capture real-world needs and guide the development of features that deliver clear value to users.

In this project, user stories focus on ensuring that **role and group management** is streamlined, **access is securely controlled**, and **unauthorized modifications are automatically prevented** — enabling a more efficient, compliant, and secure access management process within ServiceNow.

UserType	Functional Requirement (Epic)	UserStory Number	UserStory/ Task	Acceptance criteria	Priority	Release
Administrator	User & Group Management	USN-1	As an admin, I want to create and manage users, groups, and role assignments within ServiceNow.	The system should allow role/group creation, editing, and deletion only if it complies with ACL policies.	High	Sprint-1
System(Auto-check)	Role Validation Workflow	USN-2	As a system, I must automatically validate access privileges before approving or rejecting role assignments	The system verifies using GlideRecord and ACLs; only approved, compliant role updates proceed.	High	Sprint-1
Manager (Approver)	Role Approval Process	USN-3	As a manager, I want to approve or reject role or group change requests through a workflow	Role/group updates proceed only after manager approval in Flow Designer	Medium	Sprint-2