Project Title:

Optimizing User, Group, and Role Management with Access Control and Workflows

Team ID : NM2025TMID06487

Team Size : 4

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Problem Statement:

In a project team consisting of a **Project Manager (Alice)** and a **Team Member (Bob)**, the absence of defined roles, access controls, and automated workflows caused confusion in task ownership and limited visibility into project progress.
This project implements a structured, role-based access and workflow system within the **ServiceNow platform**, enabling clarity, accountability, and automation in task management.

Objective:

To design and configure a **ServiceNow-based application** that:

- Defines clear roles and permissions for users and groups.
- Implements **Role-Based Access Control (RBAC)**.
- Automates task workflow transitions using **Flow Designer**.
- Provides real-time visibility using **reports and dashboards**.

Project Overview:

This application demonstrates how **ServiceNow configuration tools**—Users, Roles, ACLs, Flow Designer, and Analytics—can be integrated to create an efficient and secure project task management system.

Key Components:

- Role-based access for Managers and Members.
- Task management table for storing project tasks.
- Automated workflow that updates task status.
- Reports and dashboards for progress tracking.

Detailed Breakdown:

1. User, Group, and Role Creation:

What it does: Creates distinct identities and assigns them specific access.

How it works:

- Users like Alice (Project Manager) and Bob (Team Member) were created.
- Groups were formed based on roles: Project Managers and Team Members.
- Custom roles such as project_manager, team_member, and admin were defined.
- Roles were assigned to users and linked to their respective groups, setting up the foundation for access control rules.

2. Custom Scoped Application: Project Task Tracker

What it does: Centralizes task management inside a dedicated app.

How it works:

- A scoped application called Project Task Tracker was created.
- A custom table Project Task was built with fields: Task Name, Description, Status, Assigned To, Due Date, Created By.
- This table serves as the main database to store and manage task-related information.

3. Role-Based Access Control (ACLs)

What it does: Restricts actions like creating, updating, reading, and deleting tasks based on user roles.

How it works:

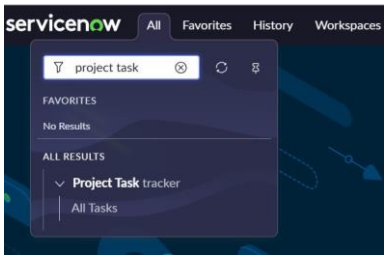
- ACLs (Access Control Rules) were set up for the Project Task table.
- Project Managers can create, update, delete any task.
- Team Members can only read and update tasks that are assigned to them.
- Roles were applied using “Requires Role” and Condition builder.

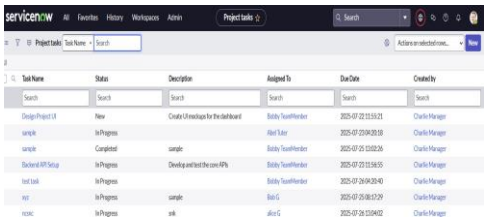
4. Application Navigation

What it does: Helps users quickly access the task list.

How it works:

- A custom Application Menu named Project Task Tracker was created.
- A module All Tasks was added under the menu.
- This module links to the list view of all project tasks.
- Role restrictions were used so that only users with correct roles can view this module.



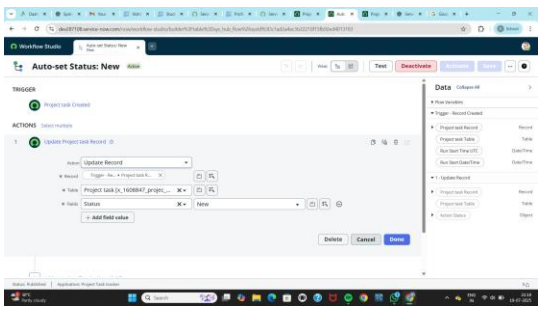


5. Workflow Automation Using Flow Designer

What it does: Reduces manual updates and keeps task progress accurate.

How it works:

- A flow was created using ServiceNow Flow Designer.
- Trigger: When a record in Project Task is updated.
- Condition: The Assigned To field is not empty
- Action: Automatically updates the Status field to In Progress.
- This helps to ensure that any time a task is assigned, its progress is tracked.



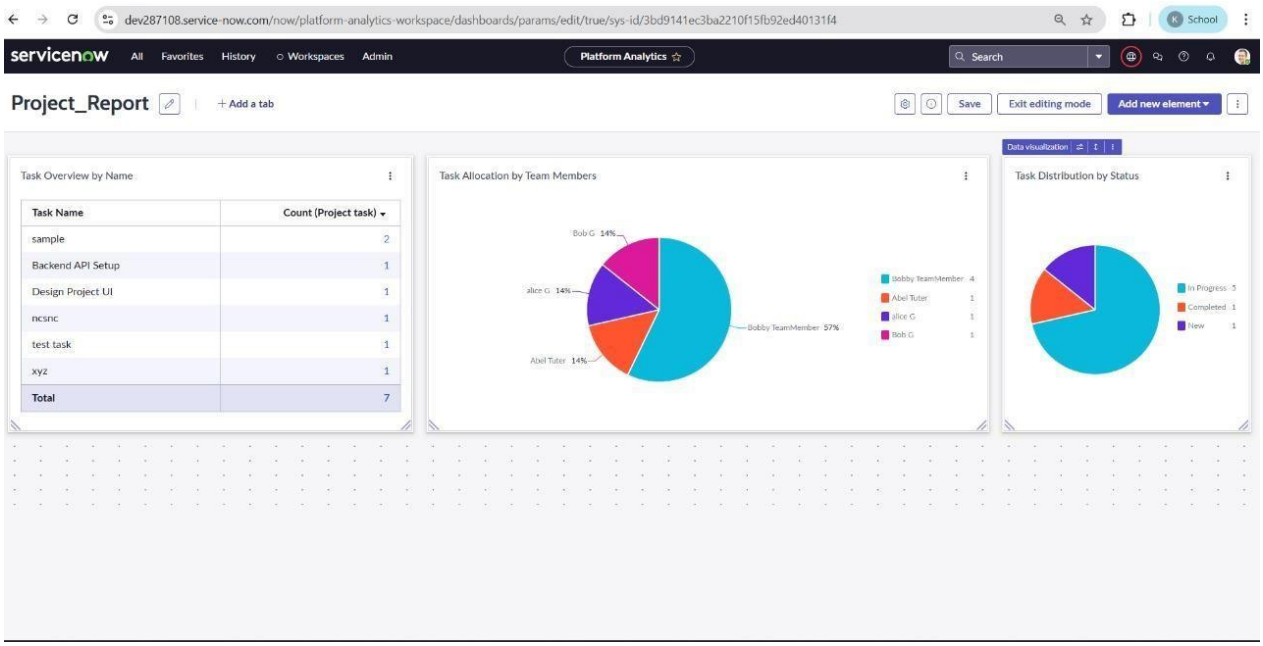
6. Dashboard & Reporting with Platform Analytics

What it does: Visualizes task progress and performance using charts and reports.

How it works:

- Multiple reports were created:
- Pivot Table grouped by Task Name
- Pie Chart grouped by Status (New, In Progress, Completed)
- Pie Chart grouped by Assigned Users
- These reports were added to a dashboard.

- The dashboard helps managers and team members monitor workload and status easily.



Outcome:

- Improved task visibility and accountability
- Controlled access based on user roles
- Automated workflow actions to reduce manual efforts
- Real-time monitoring of task distribution and progress

Why this is useful:

- Helps project managers and team members stay organized
- Prevents unauthorized task modifications

- Improves collaboration and transparency
- Supports scalable project tracking with clear metrics

Conclusion:

This project demonstrates how ServiceNow's built-in capabilities—**Users, Groups, Roles, ACLs, Flow Designer, and Analytics**—can be configured to create a secure and automated project workflow.
It serves as a reusable model for teams seeking structured access management and process automations