Project Title:

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

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Problem Statement:

In a project management environment involving a Project Manager (Alice) and a Team Member (Bob), inefficiencies arise due to the absence of structured role definitions, secure access, and workflow automation. This leads to confusion in task assignments and difficulty tracking task status, ultimately reducing productivity and transparency.

Objective:

To implement a custom ServiceNow application that enforces role-based access control (RBAC), automates task workflows, and provides real-time task insights through dashboards and reports.

Project Overview:

This project leverages ServiceNow's capabilities to design a complete task management system with the following components:

- Adds users and defines clear roles
- Restricts access based on user roles
- Automates task status updates
- Provides dashboards and visual reports
- Creates a custom scoped application for managing tasks

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:

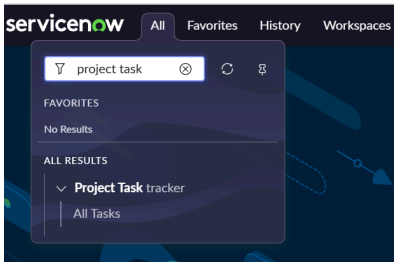
- ACLs (Access Control Rules) were set up for the Project Task table.
- Project Managers can create, update, delete any task.
- Team Members can only read and update tasks that are assigned to them.
- Roles were applied using “Requires Role” and Condition builder.

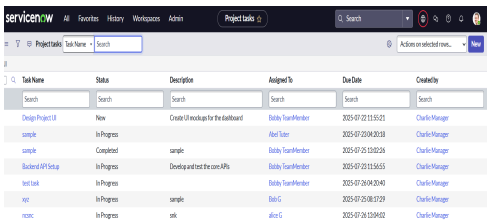
4. Application Navigation

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.



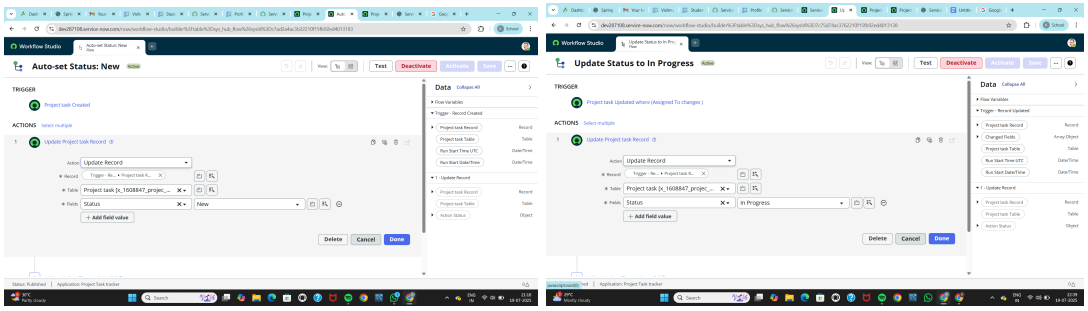


5. Workflow Automation Using Flow Designer

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.



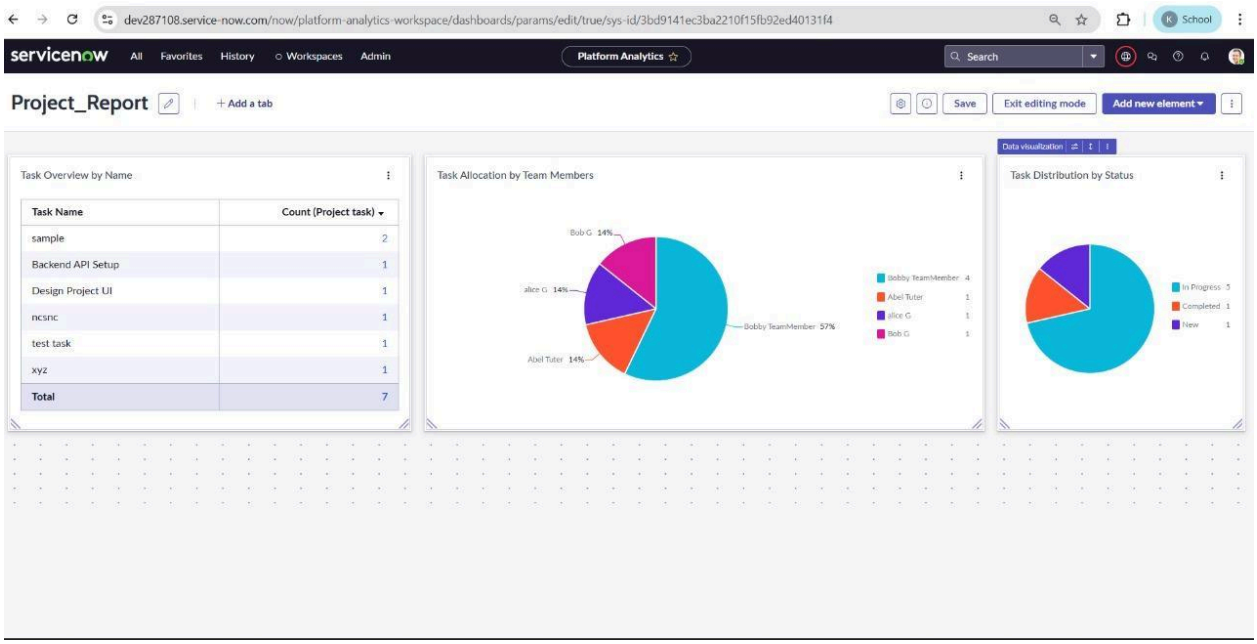
6. Dashboard & Reporting with Platform Analytics

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 ServiceNow-based solution demonstrates how effective configuration of roles, access controls, and automation can transform a simple task management scenario into a secure and efficient workflow system. Any team or individual referring to this document can follow similar steps to build or enhance their own role-based project management systems.