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

Team ID: NM2025TMID16988
Team Size: 4
Team member:
Team Leader: SIVASAGAR D
Team member 1: MUGILAN PV
Team member 2: MAYURAN J
Team member 3: PARAMASIVAM A

Problem Statement:

In a small project management team with a Project Manager (Alice) and a Team Member (Bob), there is a need to manage tasks efficiently and ensure accountability. Currently, there are no clear **role definitions**, **access controls**, or **structured workflows**, which leads to confusion in task assignments and makes it difficult to track progress.

Objective:

1. Define User Roles Clearly:

- Assign specific responsibilities to Alice (Project Manager) and Bob (Team Member).
- Ensure clarity in permissions within the project management tool.

2. Implement Access Control Mechanisms:

- Restrict Bob's access to project creation and editing.
- Allow Bob to only view and update assigned tasks.

3. Streamline Workflow Processes:

- Create structured workflows for task assignment and tracking.
- Enable Alice to assign tasks and monitor progress easily.

Skills:

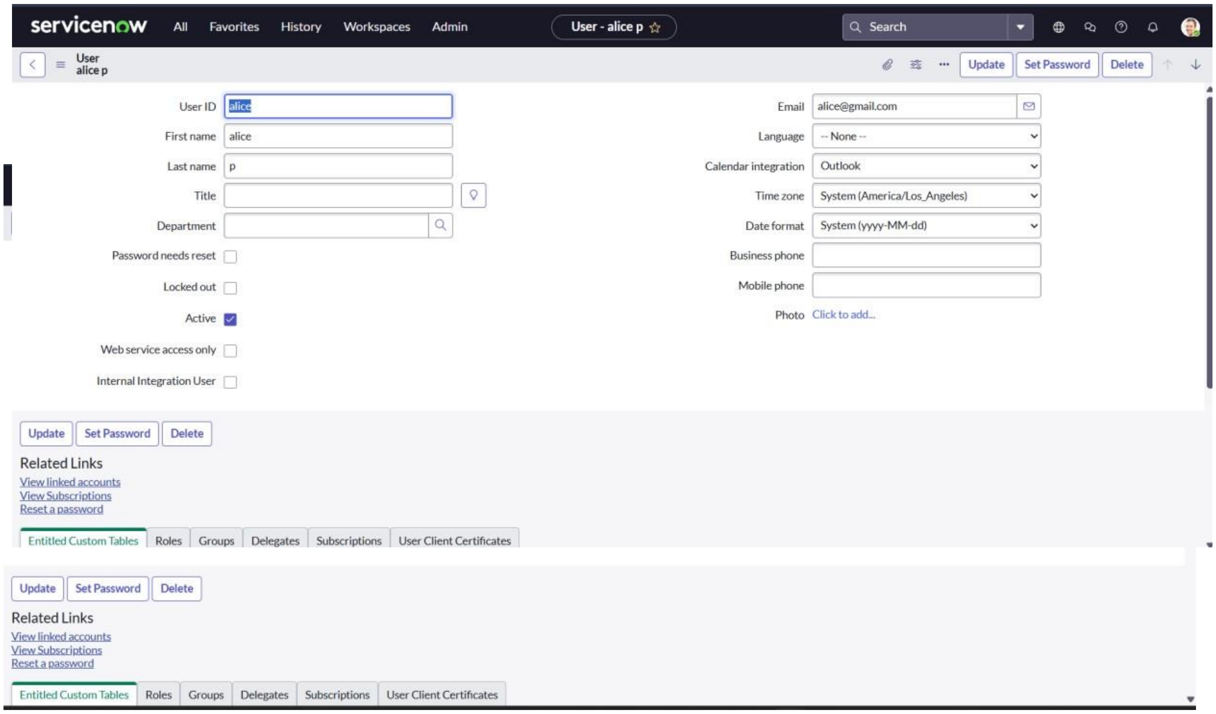
- Users
- Groups
- Roles
- Tables
- Access Control List
- Flow Designer

TASK INITIATION

Milestone 1: Users

Activity 1: Create Users

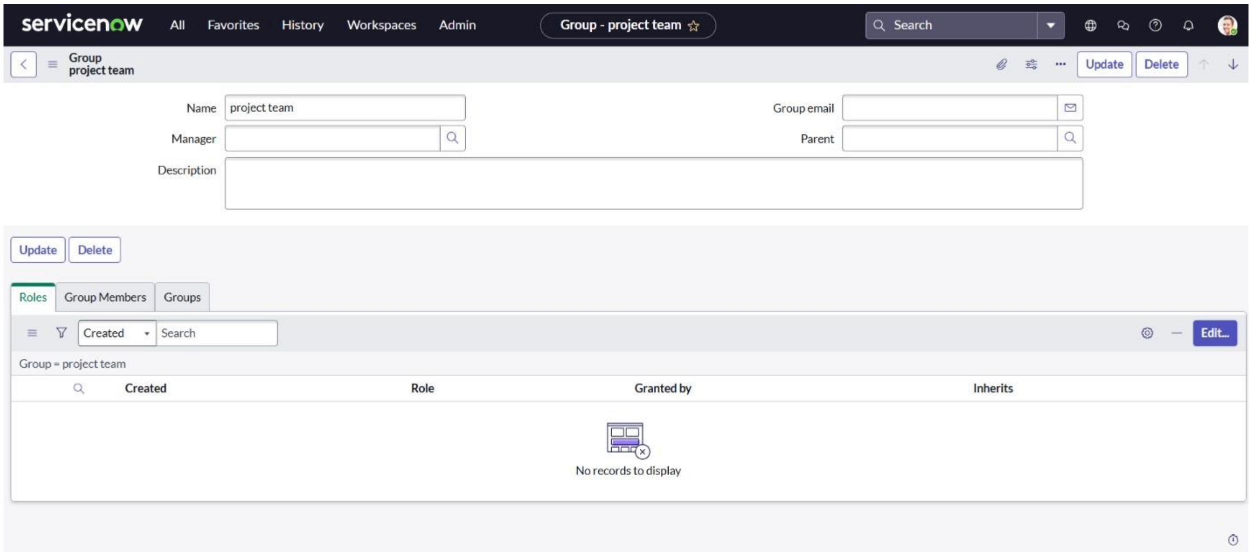
1. Open ServiceNow.
2. Go to **All → search "Users" → select Users under System Security**.
3. Click **New**, fill in user details, and submit.
4. Repeat the same process to create another user.



Milestone 2: Groups

Activity 1: Create Groups

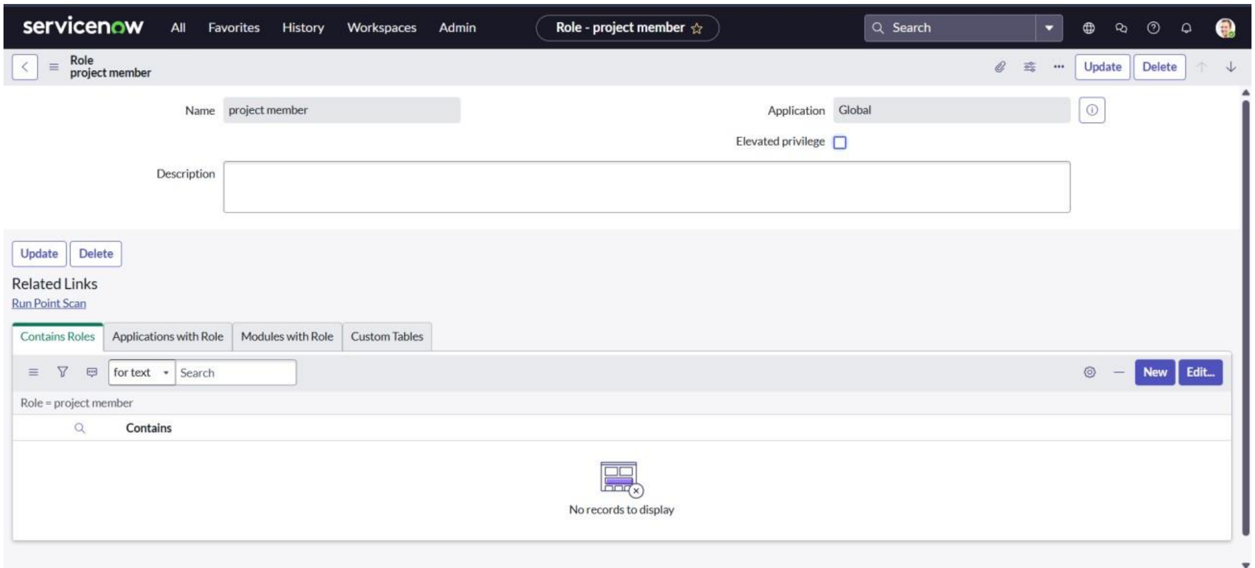
1. Open ServiceNow.
2. Go to **All → search "Groups" → select Groups under System Security**.
3. Click **New**, fill in group details, and submit.

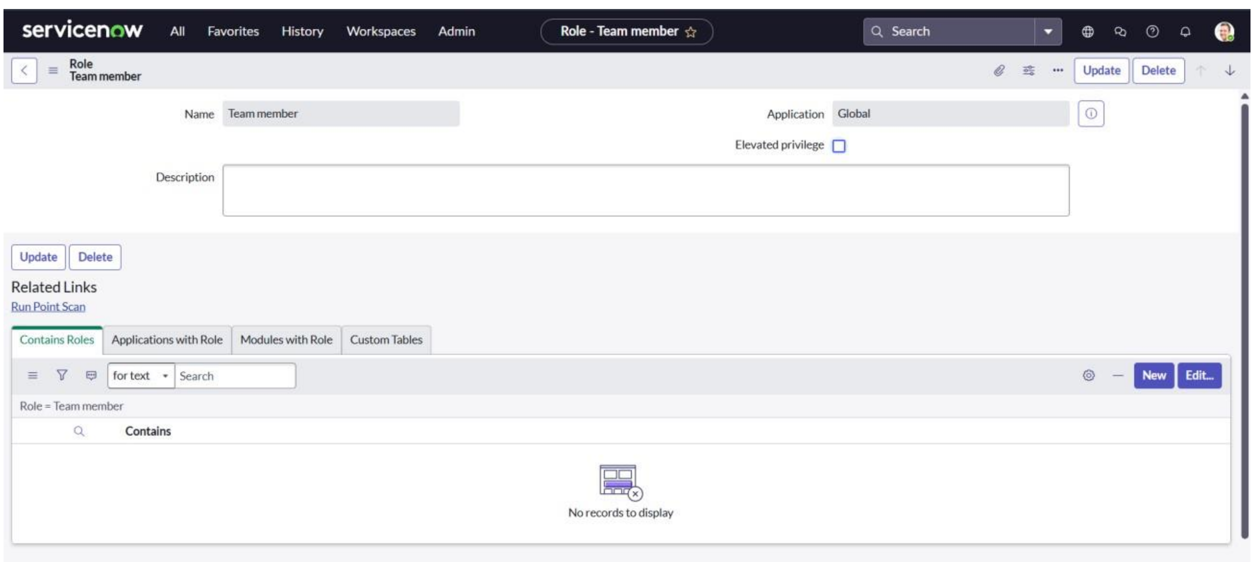


Milestone 3: Roles

Activity 1: Create roles

1. Open ServiceNow.
2. Go to **All → search "Roles" → select Roles under System Security**.
3. Click **New**, enter role details, and submit.
4. Create another role by repeating the process.





Milestone 4: Table

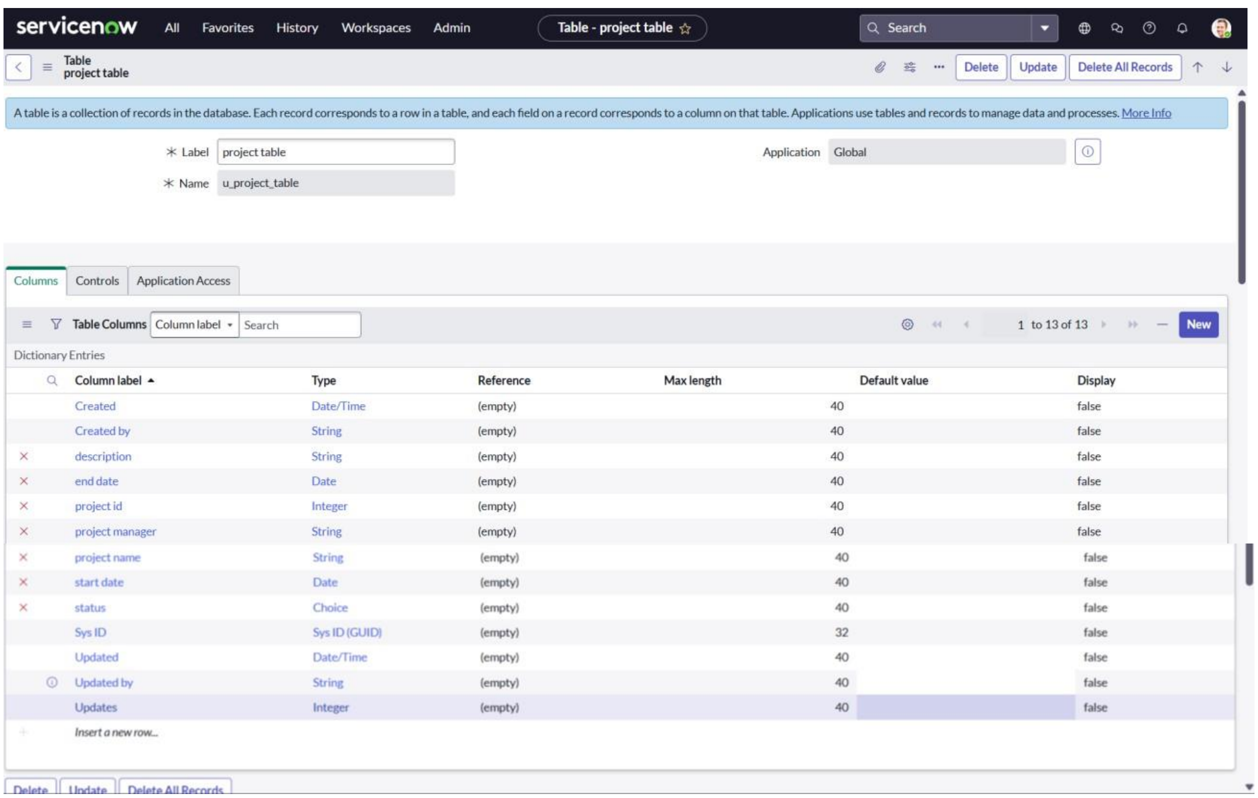
Activity 1: Create a Table

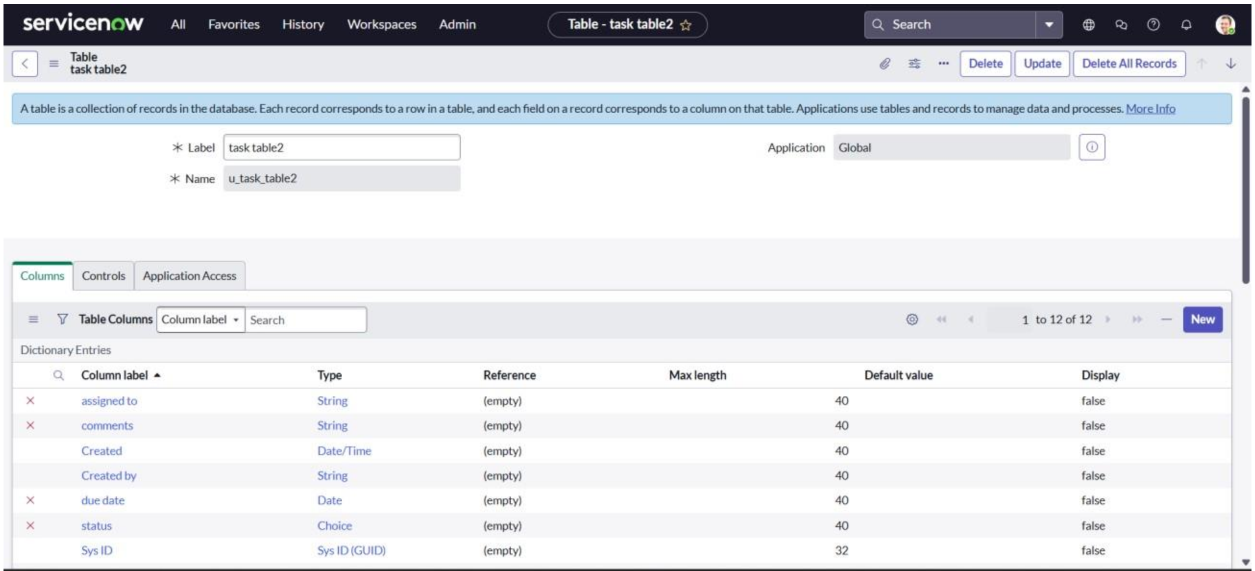
1. Open ServiceNow.
2. Navigate to **All → Tables (under System Definition)**.
3. Click on **New**.
4. Fill in the details:

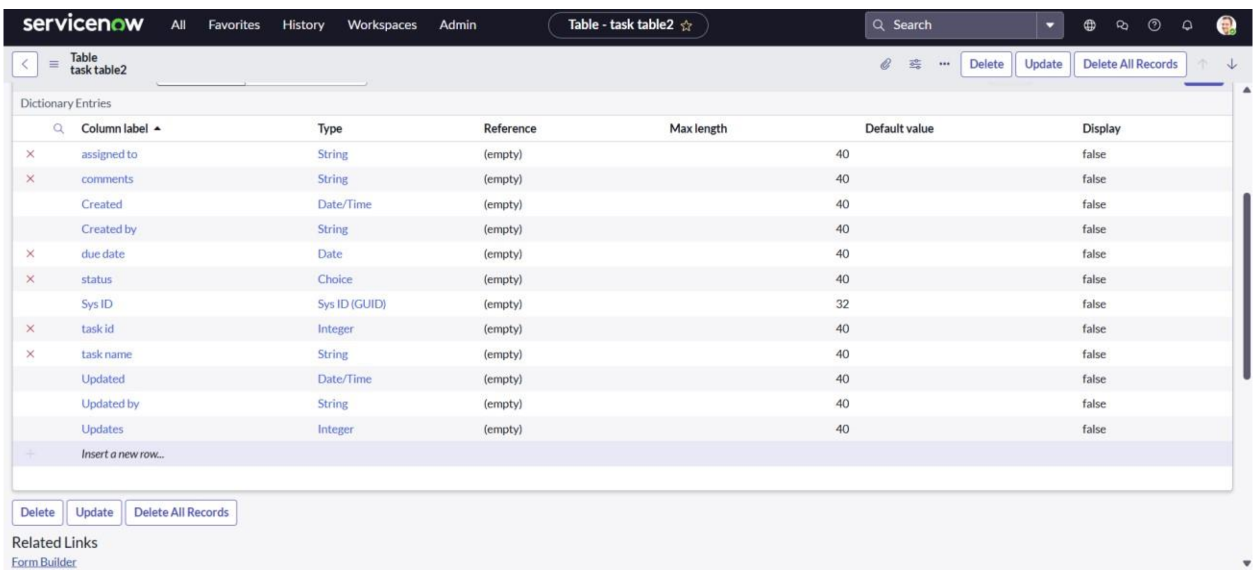
- **Label:** Project Table

- Enable **Create Module** & **Create Mobile Module**
- Under **New Menu Name:** Project Table
- Add necessary **Table Columns**

5. Click on **Submit**.
6. Create another table named **Task Table 2** with the required details and click **Submit**.







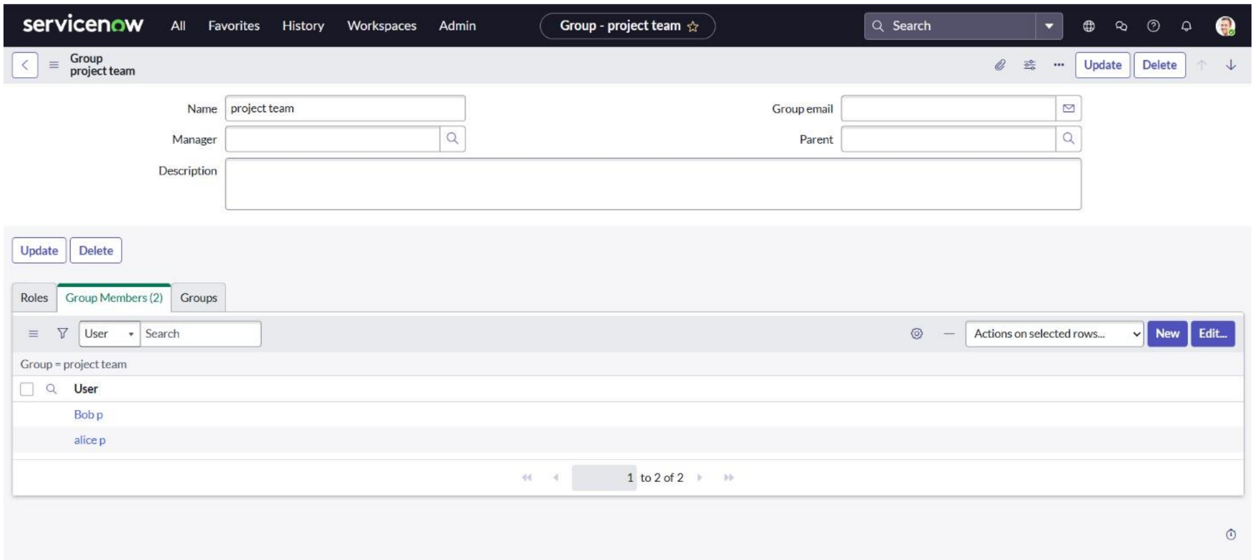
Milestone 5: Assign users to groups

Activity 1: Assign users to the project team group

1. Open ServiceNow.
2. Navigate to **All → Groups**.
3. Select **Project Team Group**.

4. Under **Group Members**, click **Edit**.

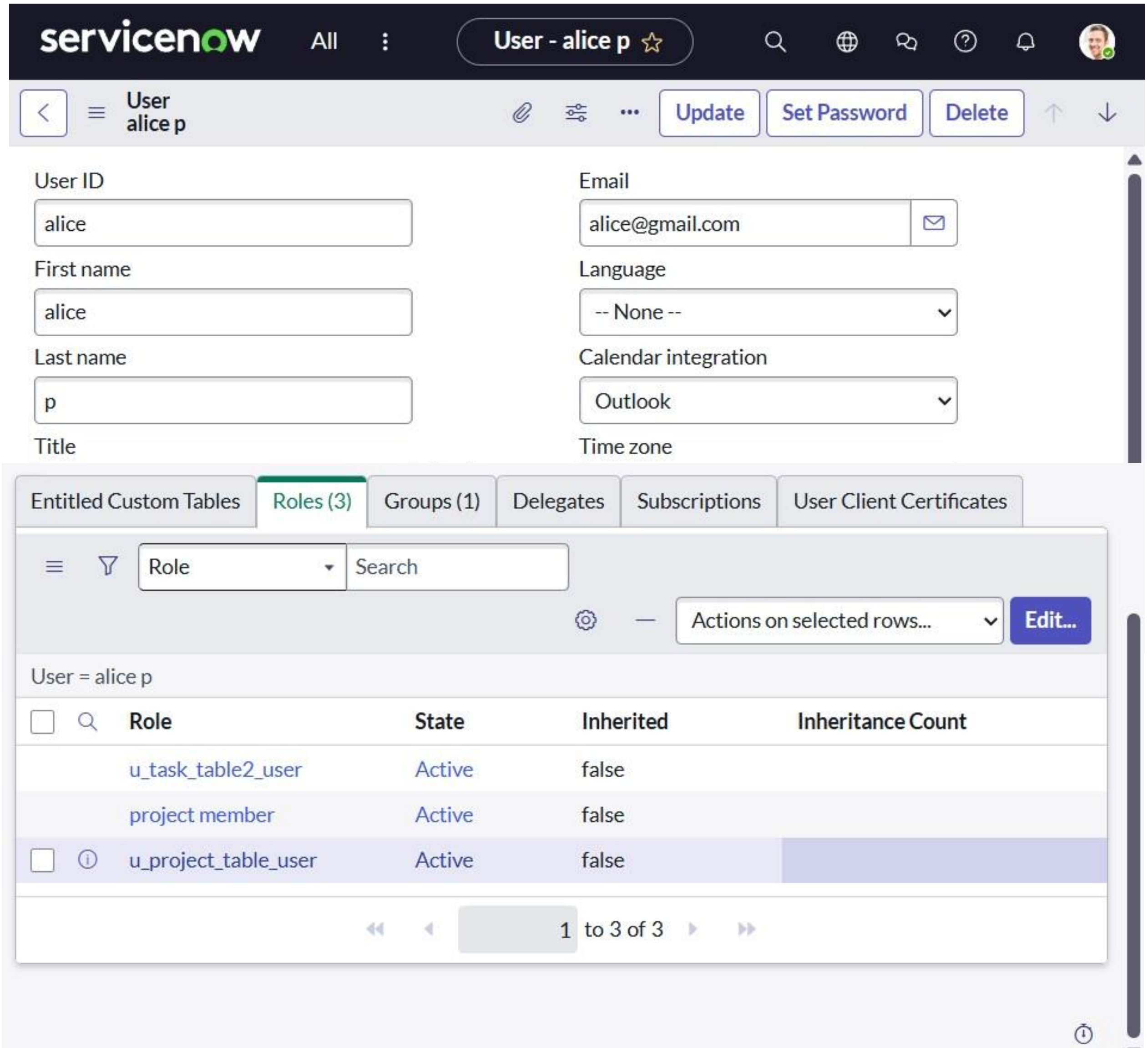
5. Add **Alice P** and **Bob P** as group members and save.



Milestone 6: Assign roles to users

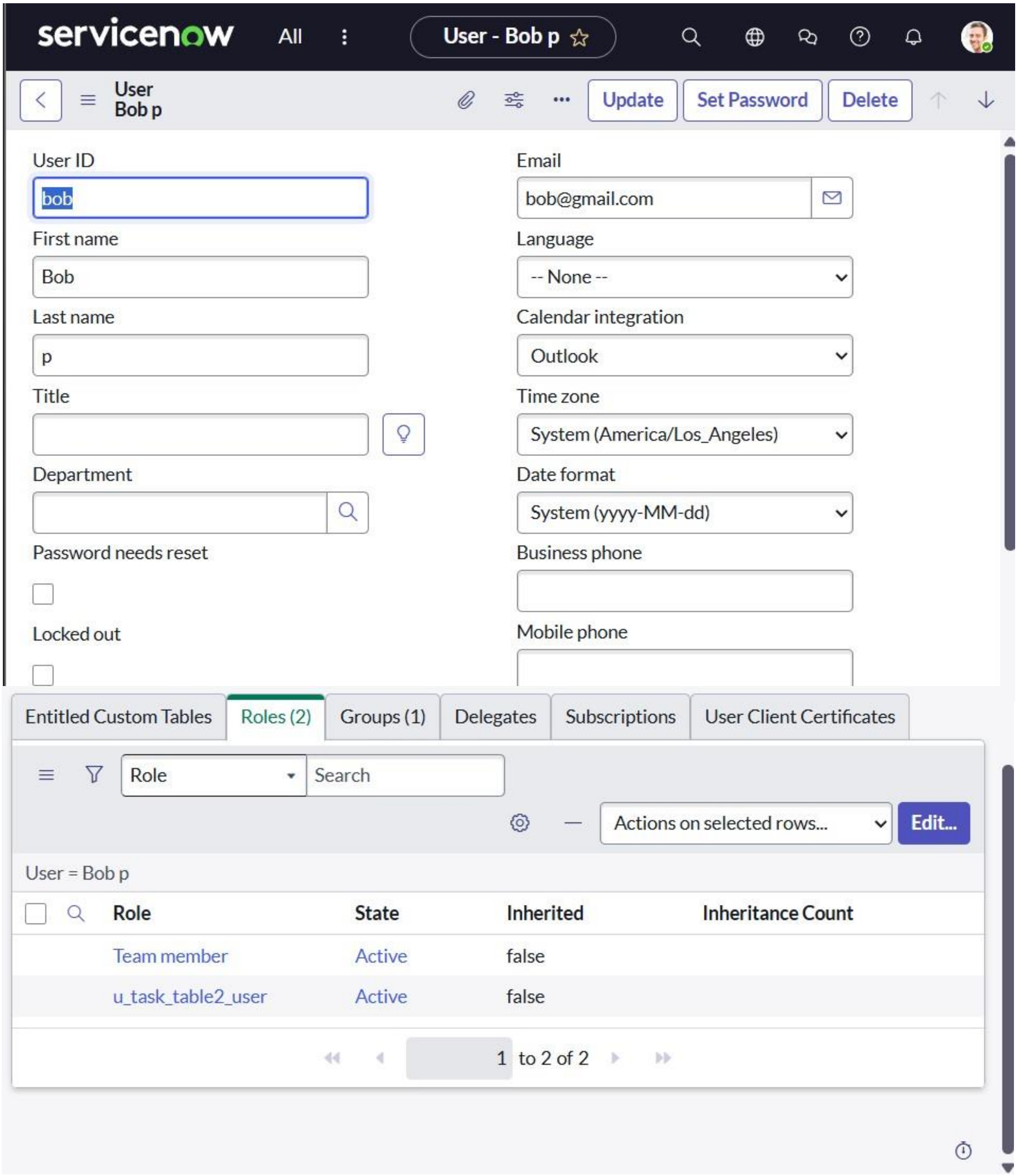
Activity 1: Assign roles to the Alice user

1. Open ServiceNow and search for **Users**.
2. Select **Project Manager user (Alice P)**.
3. Under **Roles**, click **Edit**.
4. Assign **Project Member**, **u_project_table**, and **u_task_table** roles.
5. Save and update the form.



Activity 2: Assign roles to the Bob user 1. Open ServiceNow and search for **Users**.

2. Select **Team Member user (Bob P)**.
3. Under **Roles**, click **Edit**.

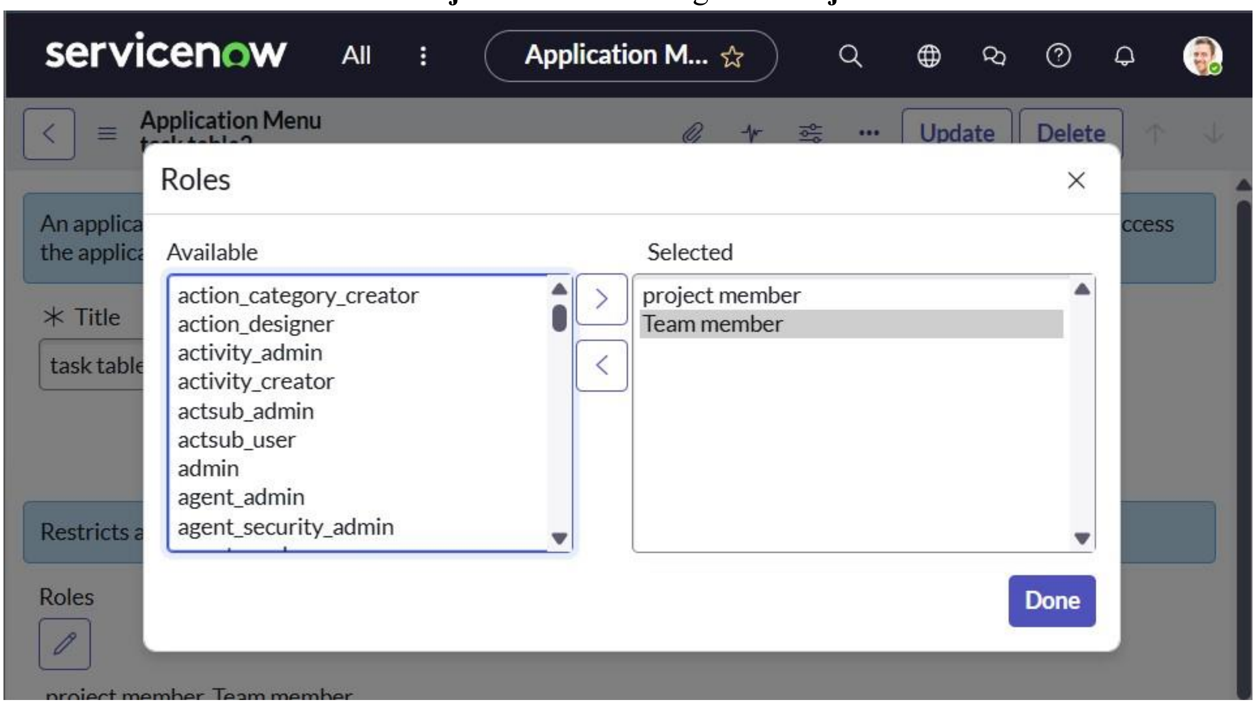


4. Assign **Team Member** role and appropriate table roles.
5. Save and update the form.
6. Impersonate Bob to verify that he has access to **Task Table 2**.

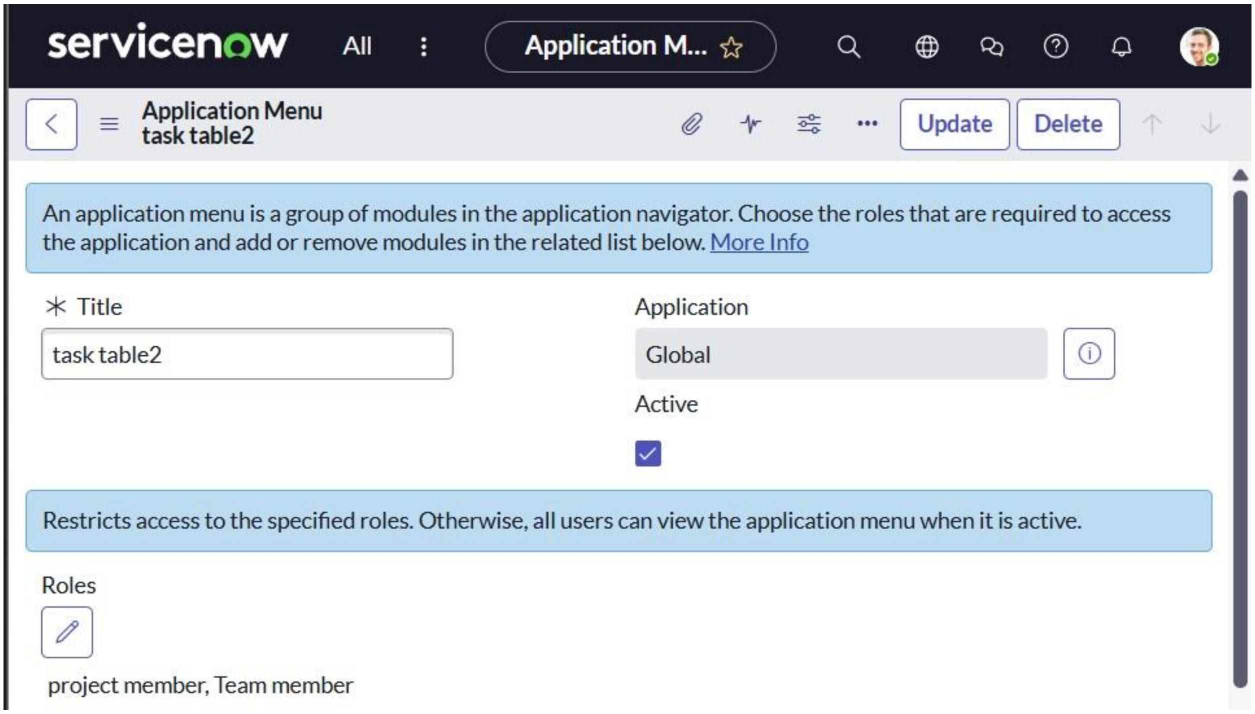
Milestone 7: Application access

Activity 1: Assign table access to the application

1. When a table is created, an application and module are automatically created.
2. Navigate to the application in the Application Navigator.
3. Edit the module for the **Project Table** and assign the **Project Member** role.



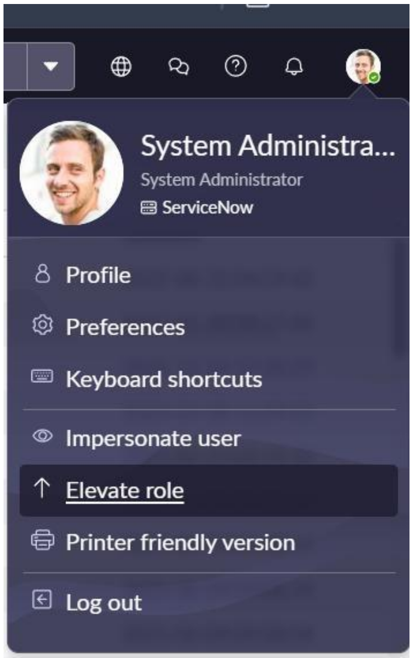
4. Edit the module for **Task Table 2** and assign both **Project Member** and **Team Member** roles.

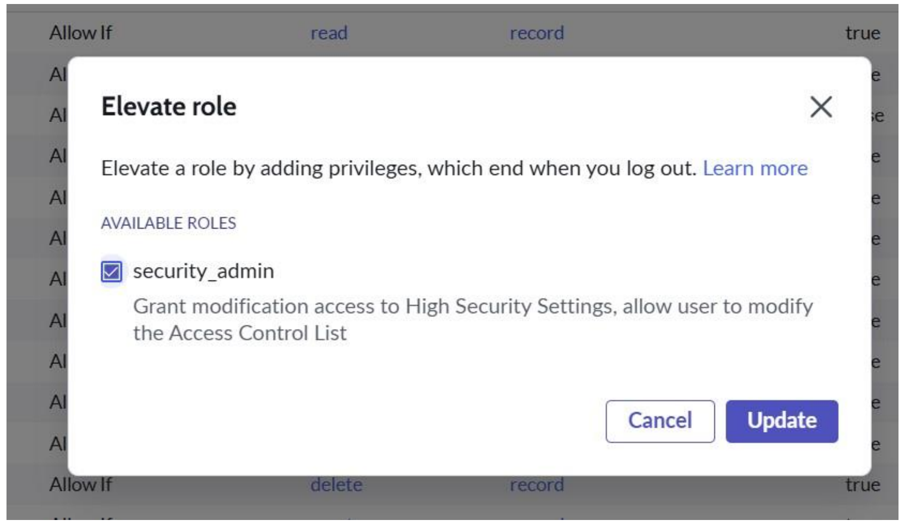


Milestone 8: Access control list

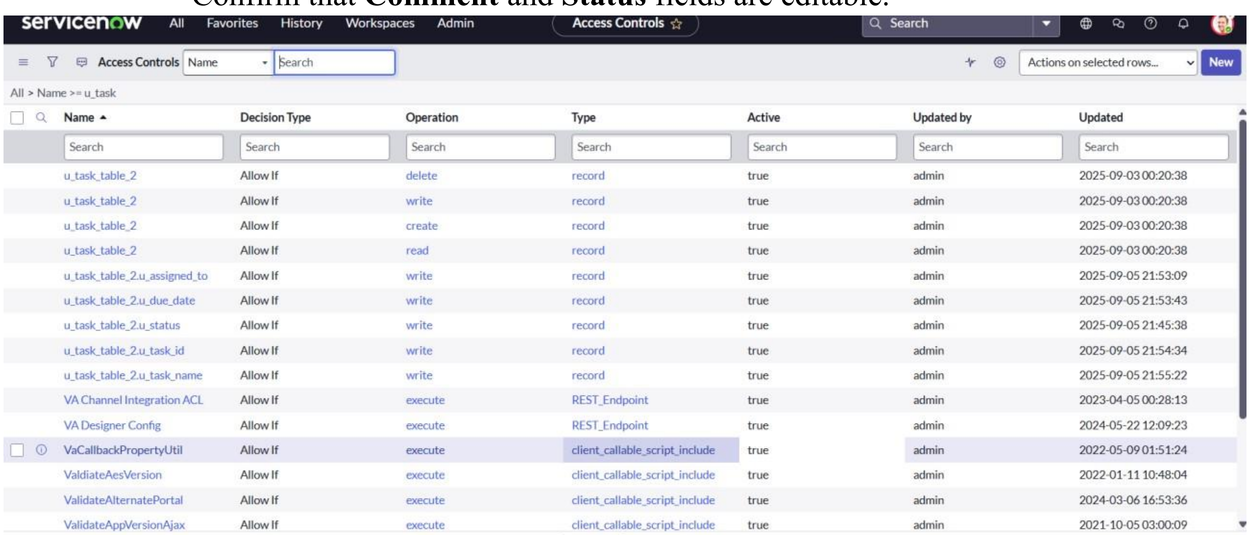
Activity 1: Create ACL

1. Open ServiceNow.
2. Navigate to **All → Access Control (ACL) under System Security**.
3. Click on **Elevate Role → New**.
4. Fill in the ACL details.
5. Under **Requires Role**, add **Task Table** and **Team Member role**.
6. Submit

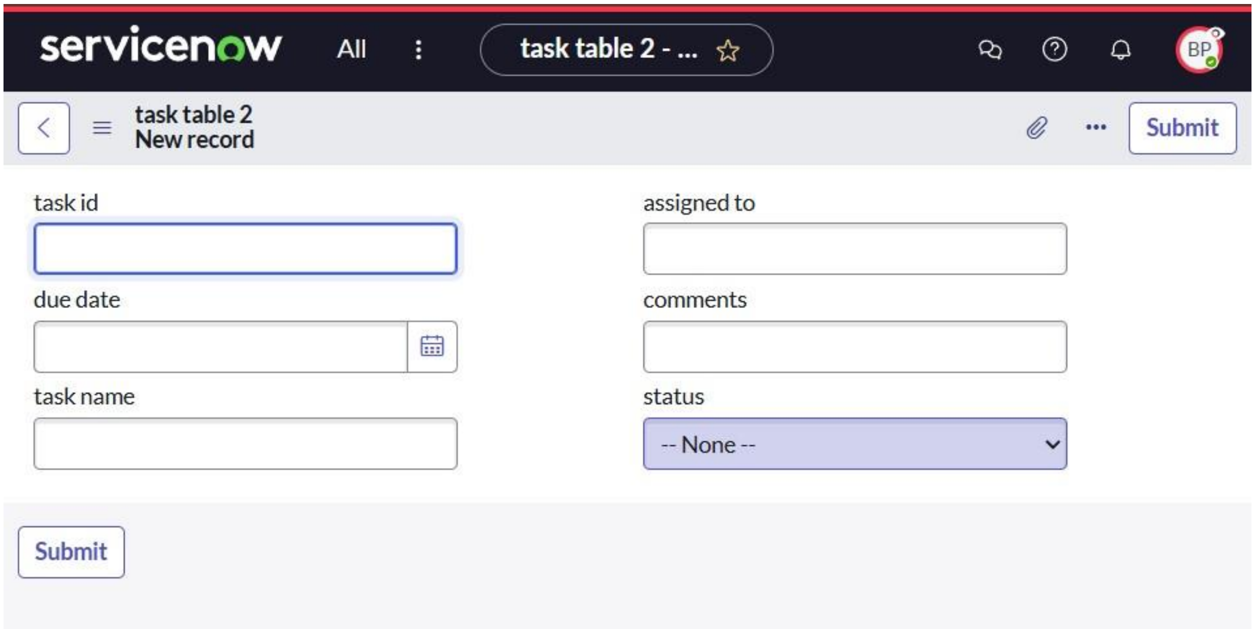




7. Similarly, create four ACLs for different fields.
8. **Verification:**
    - Impersonate Bob.
    - Navigate to **Task Table 2**.
    - Confirm that **Comment** and **Status** fields are editable.



Name	Decision Type	Operation	Type	Active	Updated by	Updated
u_task_table_2	Allow If	delete	record	true	admin	2025-09-03 00:20:38
u_task_table_2	Allow If	write	record	true	admin	2025-09-03 00:20:38
u_task_table_2	Allow If	create	record	true	admin	2025-09-03 00:20:38
u_task_table_2	Allow If	read	record	true	admin	2025-09-03 00:20:38
u_task_table_2.u_assigned_to	Allow If	write	record	true	admin	2025-09-05 21:53:09
u_task_table_2.u_due_date	Allow If	write	record	true	admin	2025-09-05 21:53:43
u_task_table_2.u_status	Allow If	write	record	true	admin	2025-09-05 21:45:38
u_task_table_2.u_task_id	Allow If	write	record	true	admin	2025-09-05 21:54:34
u_task_table_2.u_task_name	Allow If	write	record	true	admin	2025-09-05 21:55:22
VA Channel Integration ACL	Allow If	execute	REST_Endpoint	true	admin	2023-04-05 00:28:13
VA Designer Config	Allow If	execute	REST_Endpoint	true	admin	2024-05-22 12:09:23
VaCallbackPropertyUtil	Allow If	execute	client_callable_script_include	true	admin	2022-05-09 01:51:24
ValdiateAesVersion	Allow If	execute	client_callable_script_include	true	admin	2022-01-11 10:48:04
ValidateAlternatePortal	Allow If	execute	client_callable_script_include	true	admin	2024-03-06 16:53:36
ValidateAppVersionAjax	Allow If	execute	client_callable_script_include	true	admin	2021-10-05 03:00:09



Milestone 9: Flow

Activity 1: Create a Flow to assign an operations ticket to a group

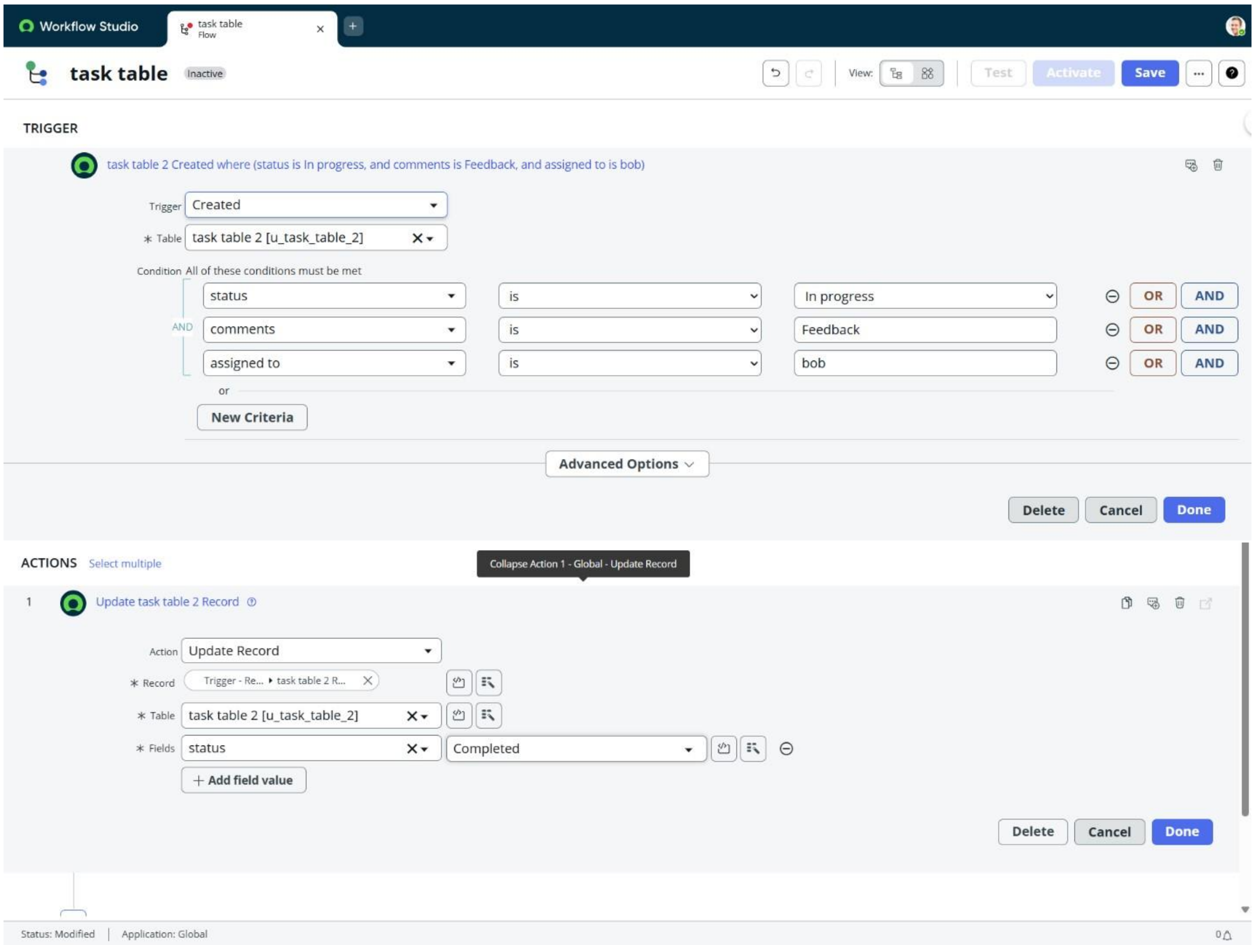
1. Open ServiceNow.
2. Navigate to **All → Flow Designer (under Process Automation)**.
3. Click on **New Flow**.
4. Enter details:
    - ○ **Flow Name:** Task Table ○

Application: Global **Steps:**

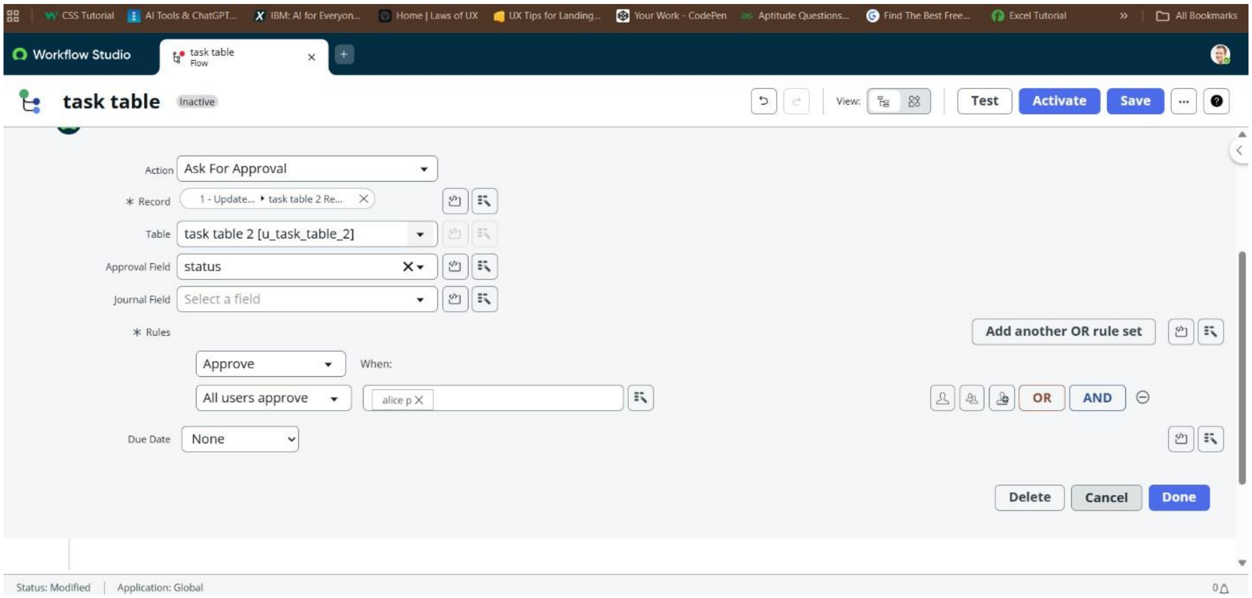
- **Trigger:** Set trigger to *Record Created* on **Task Table** with conditions:
    - ○ Status = In Progress ○
      Comments =
      Feedback ○
      Assigned To = Bob
- **Action 1:** *Update Records* → Set **Status = Completed**.
- **Action 2:** *Ask for Approval* → Assign approval to **Alice P**.

Execution:

- Bob updates the task → Status changes to *Completed*.
- Alice receives an approval request → Approves it.
- Task is successfully closed.



Workflow Studio
task table
Flow
task table
Inactive
View:
Test
Activate
Save
TRIGGER
task table 2 Created where (status is In progress, and comments is Feedback, and assigned to is bob)
Trigger Created
Table task table 2 [u_task_table_2]
Condition All of these conditions must be met
status is In progress OR AND
AND comments is Feedback OR AND
assigned to is bob OR AND
or
New Criteria
Advanced Options
Delete Cancel Done
ACTIONS Select multiple
Collapse Action 1 - Global - Update Record
1 Update task table 2 Record
Action Update Record
Record Trigger - Re... ▸ task table 2 R...
Table task table 2 [u_task_table_2]
Fields status Completed
Add field value
Delete Cancel Done
Status: Modified | Application: Global



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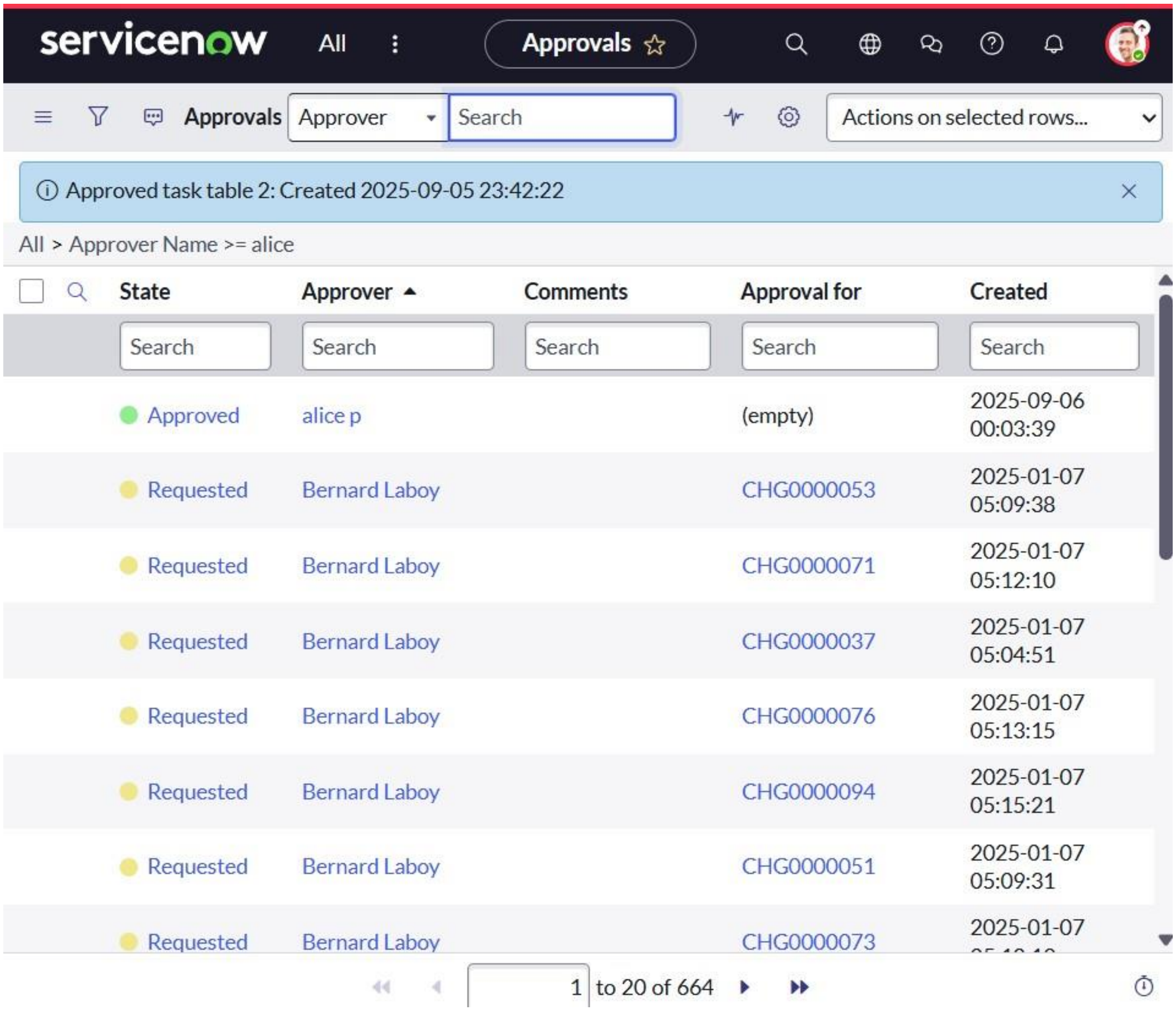
Your Work - CodePen
Aptitude Questions...
Find The Best Free...
Excel Tutorial
All Bookmarks
Workflow Studio
task table
Flow
task table
Inactive
View:
Test
Activate
Save
Action
Ask For Approval
Record
1 - Update... ▸ task table 2 Re...
Table
task table 2 [u_task_table_2]
Approval Field
status
Journal Field
Select a field
Rules
Add another OR rule set
Approve
When:
All users approve
alice p
OR
AND
Due Date
None
Delete
Cancel
Done
Status: Modified
Application: Global



Conclusion:

This scenario demonstrates a structured approach to project management by clearly defining roles and workflows. Alice, as the Project Manager, oversees task assignments and approvals, while Bob, as the Team Member, executes and updates tasks. The use of tables simplifies project tracking, and the integration of ACLs and workflows ensures accountability, transparency, and smooth communication. Overall, this system enhances project efficiency and leads to successful project completion.