

Optimizing User, Group, And Role Management With Access Control And Workflows

Problem Statement:

In a small project management team consisting of a Project Manager (Alice) and a Team Member (Bob), there is a need to efficiently manage project tasks and ensure accountability throughout the project lifecycle. The current system lacks clear role definitions, access controls, and a structured workflow, leading to confusion regarding task assignments and progress tracking.

Users:

The image displays two screenshots of the ServiceNow 'Users' page, showing the configuration for two different users: 'alice p' and 'Bob p'.

Top Screenshot: User - alice p

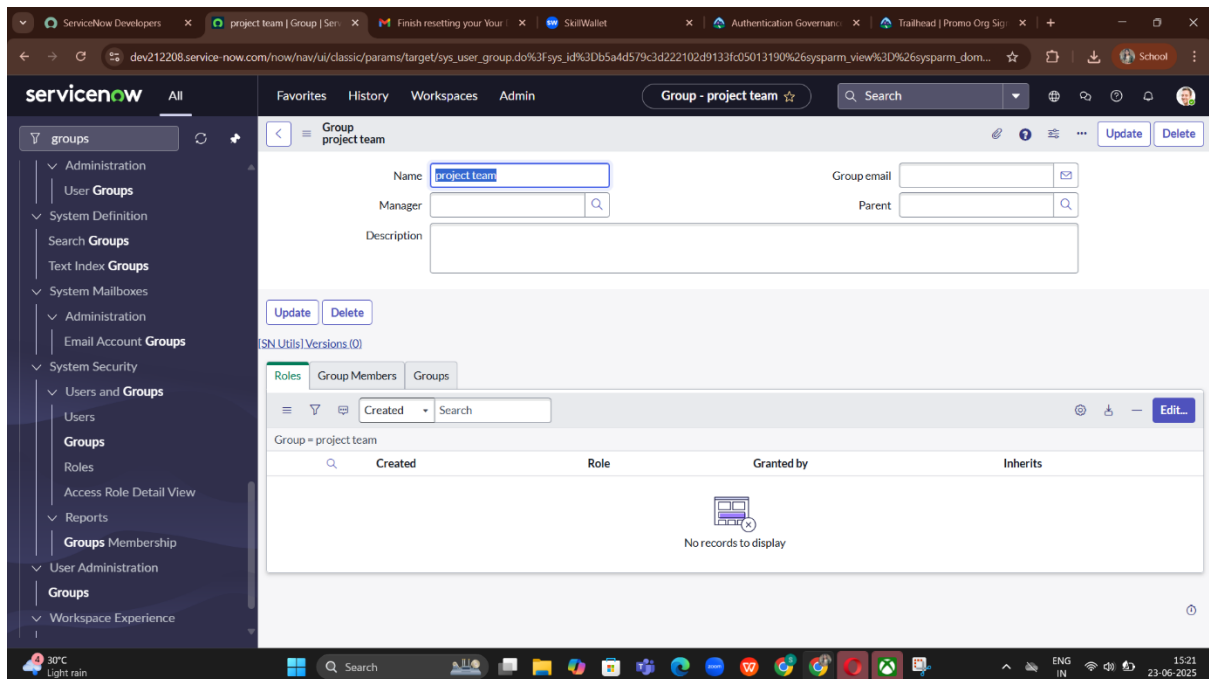
- Navigation:** The left sidebar shows the 'Users' section under 'System Security'.
- Form Fields:**
 - User ID:
 - First name:
 - Last name:
 - Email:
 - Language:
 - Calendar integration:
 - Time zone:
 - Date format:
 - Business phone:
 - Mobile phone:
 - Photo: [Click to add...](#)
- Settings:**
 - Primary email device created for alice p
 - Active: ☒
 - Web service access only: ☐
 - Internal Integration User: ☐
- Buttons:** Update, Set Password, Delete
- Related Links:** [View linked accounts](#), [View Subscriptions](#), [Reset a password](#), [\[SN Utils\] Versions \(0\)](#)

Bottom Screenshot: User - Bob p

- Navigation:** The left sidebar shows the 'Users' section under 'System Security'.
- Form Fields:**
 - User ID:
 - First name:
 - Last name:
 - Email:
 - Language:
 - Calendar integration:
 - Time zone:
 - Date format:
 - Business phone:
 - Mobile phone:
 - Photo: [Click to add...](#)
- Settings:**
 - Primary email device created for Bob p
 - Active: ☒
 - Web service access only: ☐
 - Internal Integration User: ☐
- Buttons:** Update, Set Password, Delete
- Related Links:** [View linked accounts](#), [View Subscriptions](#), [Reset a password](#), [\[SN Utils\] Versions \(0\)](#)

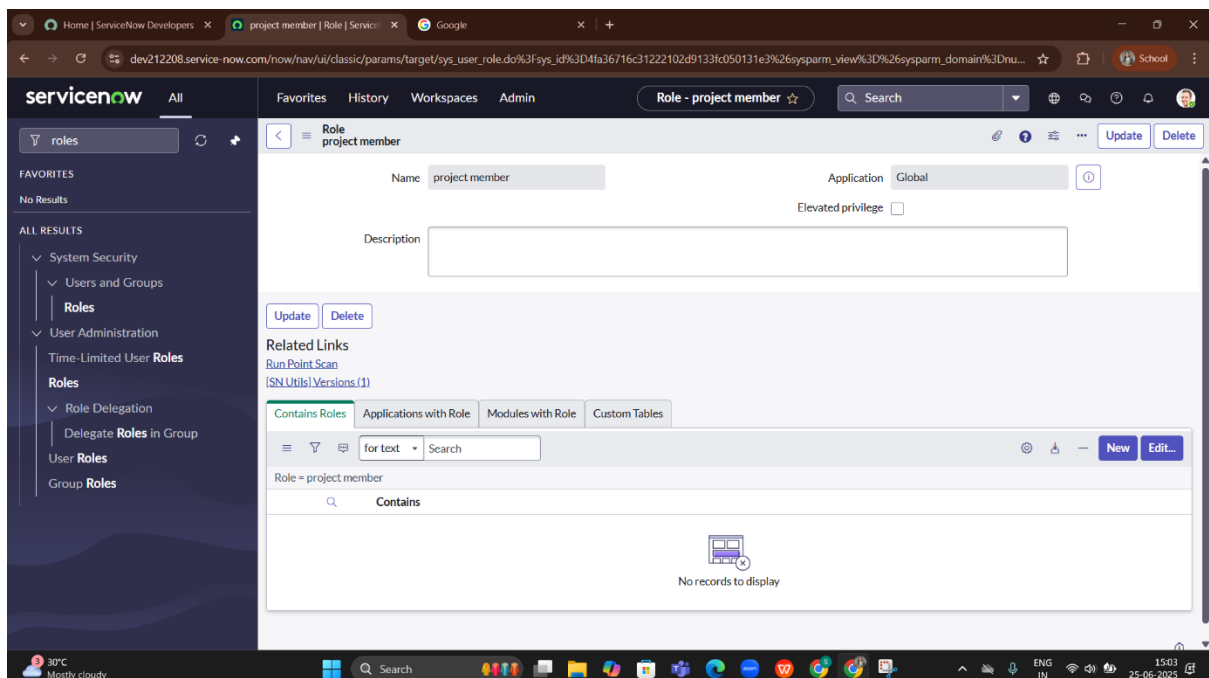
Created two users named as “alice” and “bob”.

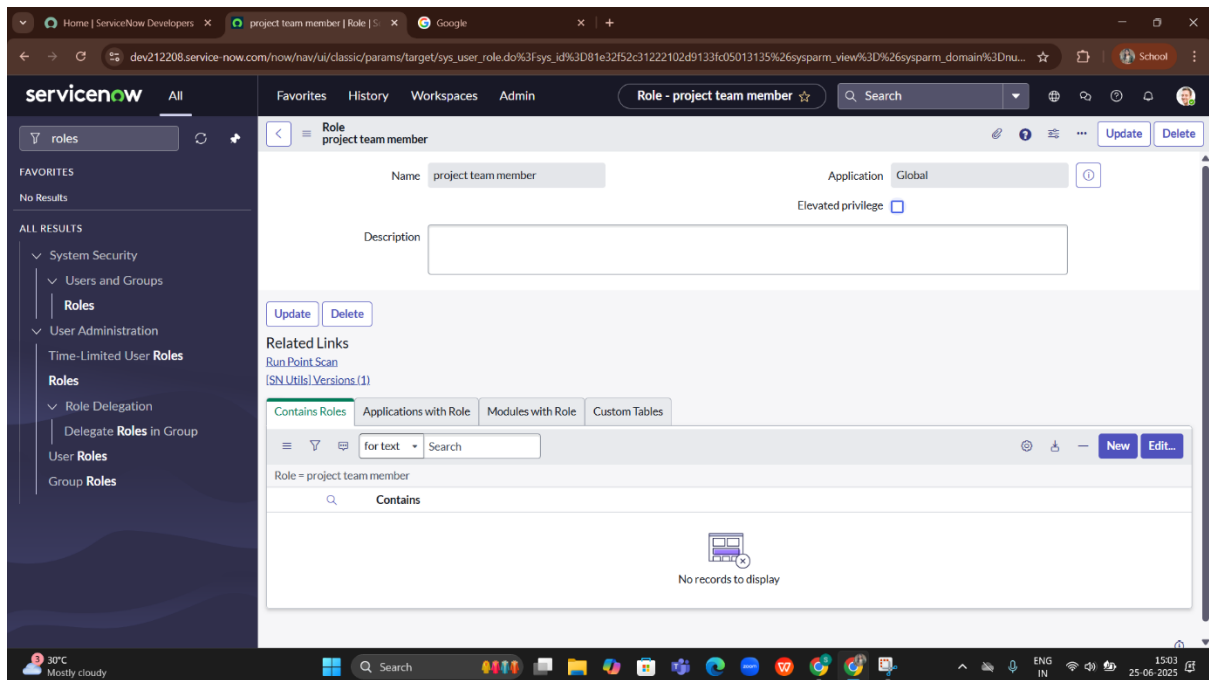
Groups:



Created a group named a “project team”.

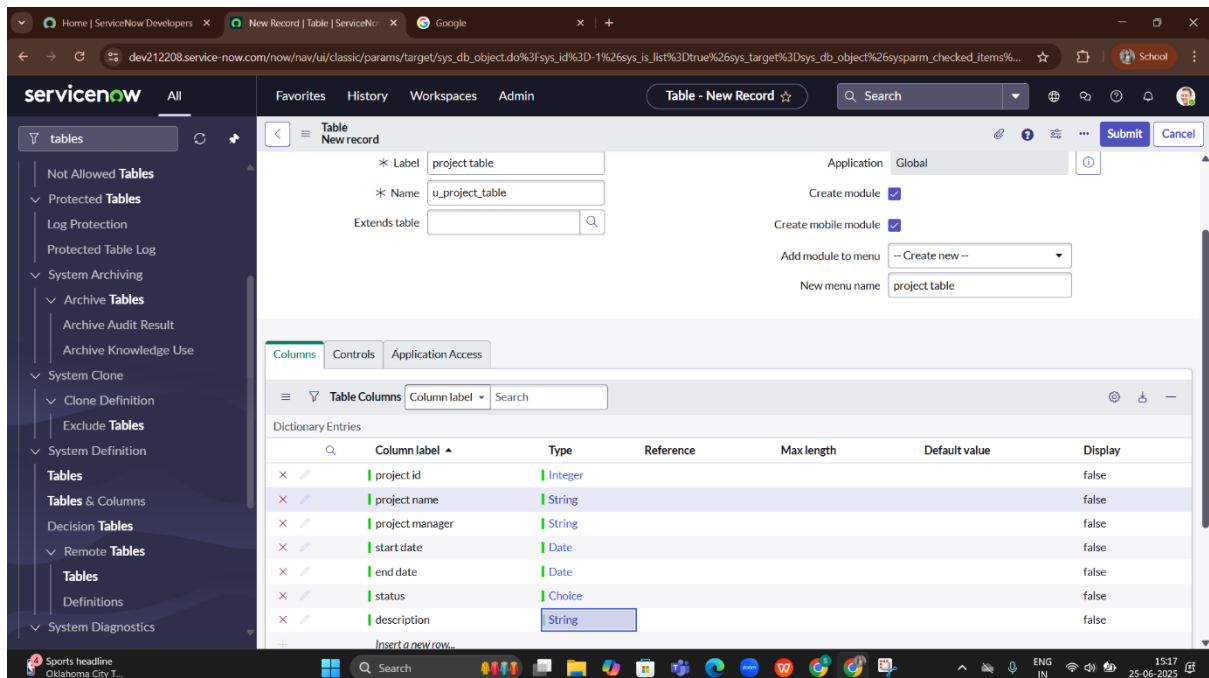
Roles:

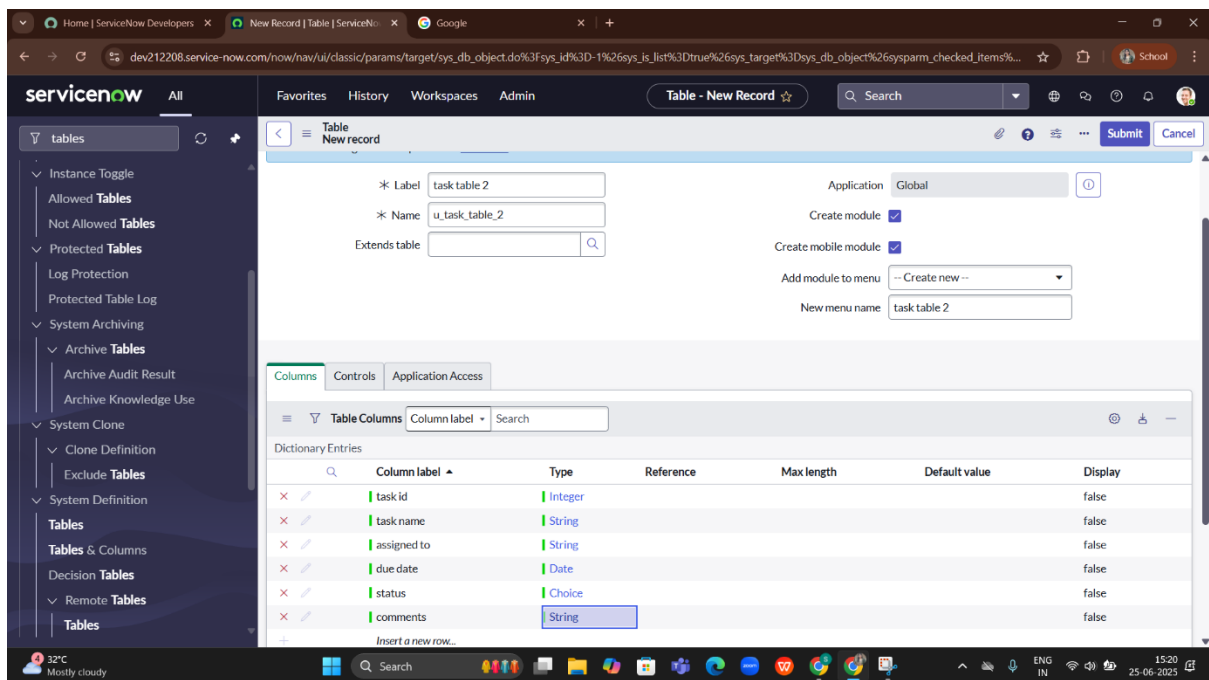




Created two roles namely as “project member” and “project team member”.

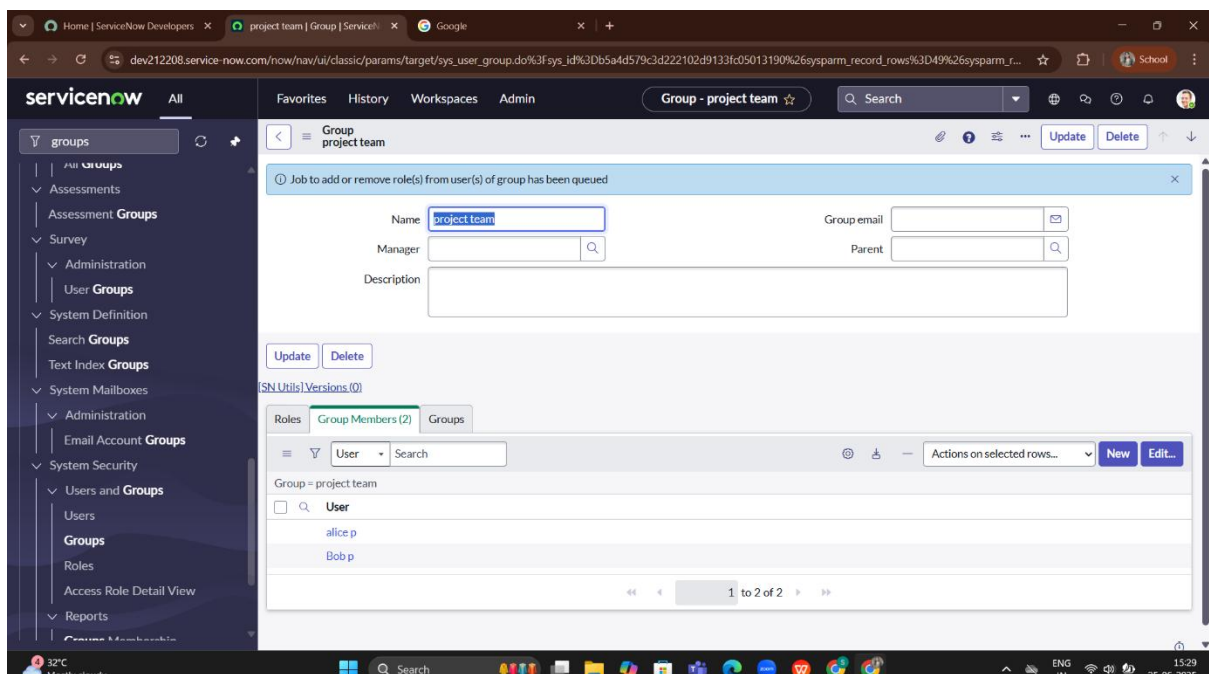
Table:





Created two tables with respective columns namely “project table” and “task table 2”.

Assign Users To Groups:



Added group members(alice and bob) to the group(project team).

Assign Roles To Users:

Assign Roles To Alice User:

The top screenshot shows the ServiceNow user profile for 'alice p'. The user is active and has the role 'Internal Integration User' assigned. The bottom screenshot shows the 'Roles' tab for the same user, displaying a table of assigned roles.

Role	State	Inherited	Inheritance Count
u_project_table_user	Active	false	
project member	Active	false	
u_task_table_2_user	Active	false	

Assigned “u_project_table_user”, “project member” and “u_task_table_2_user” roles to Alice.

Assign Roles To Bob User:

The top screenshot shows the ServiceNow user profile for 'Bob p'. The 'Roles' tab is selected, showing a table with the following data:

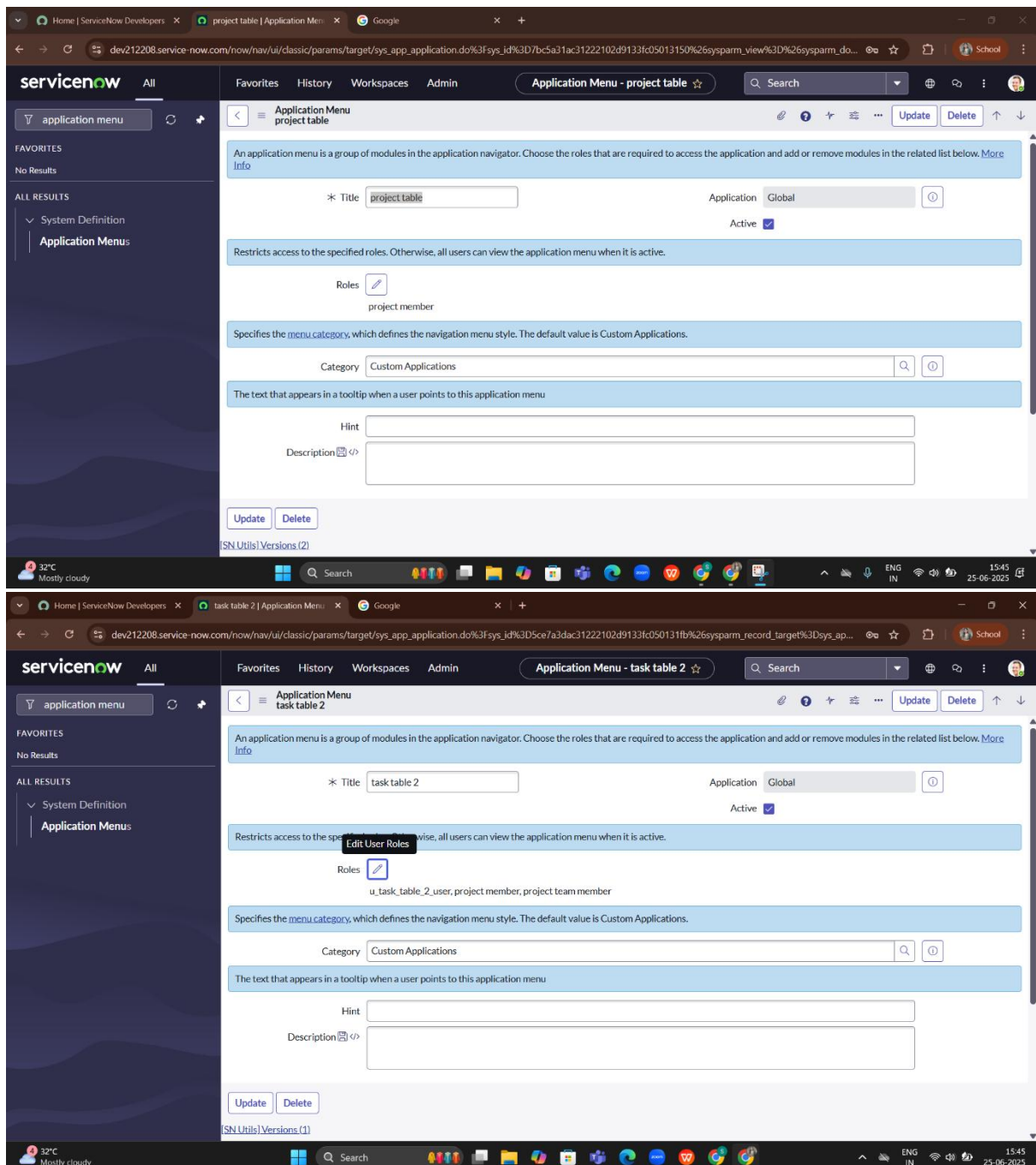
Role	State	Inherited	Inheritance Count
u_task_table_2_user	Active	false	
project team member	Active	false	

The bottom screenshot shows the same user profile, but with the 'Roles' tab selected. The table below shows the assigned roles:

Role	State	Inherited	Inheritance Count
u_task_table_2_user	Active	false	
project team member	Active	false	

Assigned “u_task_table_2_user” and “project team member” roles to Bob.

Application Access(Assign Table Access To Application):



Added roles in the application of both the tables.

Project table:-**project member**

Task table:-**u_task_table_2_user,project team member**

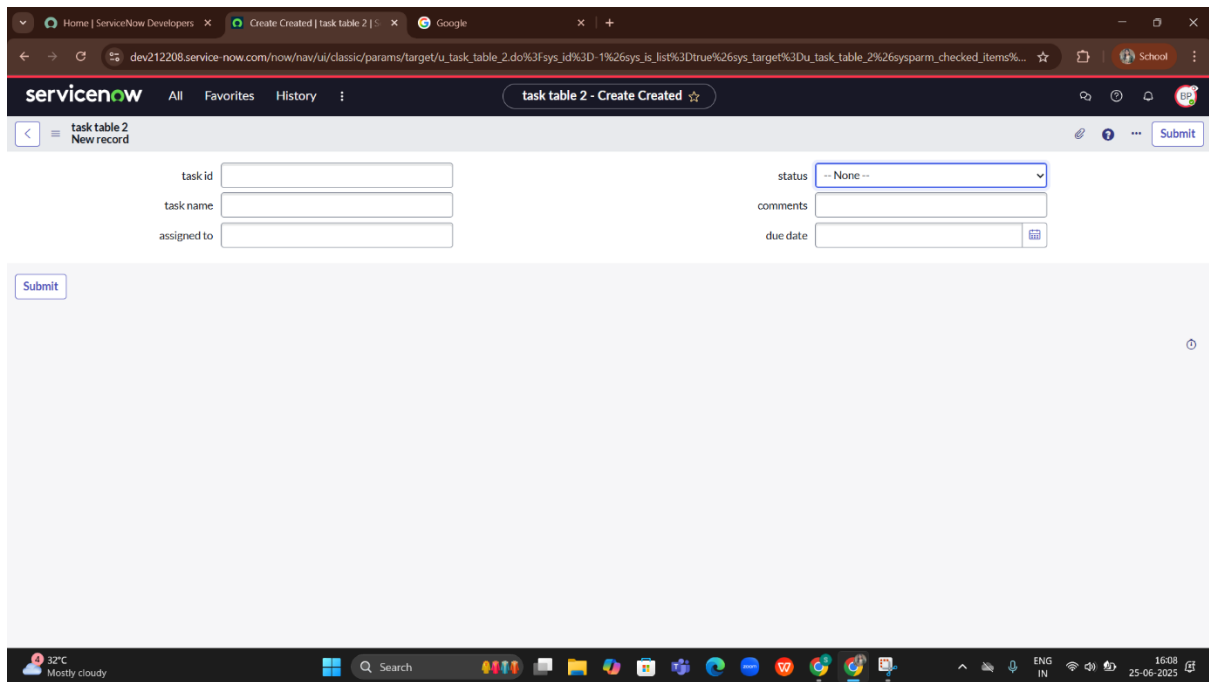
Access Control List(ACL):

The top screenshot shows the 'Access Control - New Record' form in ServiceNow. The form includes fields for Type (record), Operation (write), Decision Type (Allow If), Application (Global), Active (checked), and Admin overrides (checked). The Protection policy is set to None. The Name field is 'task table 2 [u_task_table_2]' and the Description is 'status'. The Applies To section shows 'No. of records matching the condition: 2' with links to 'Add Filter Condition' and 'Add "OR" Clause'. The Conditions section contains a warning: 'Access Control Rules have two decision types, and these types will behave differently depending on conditions. 1. Allow Access: Allows access to a resource if all conditions are met. 2. Deny Access: Denies access to a resource unless all conditions are met.'

The bottom screenshot shows the 'Access Controls' list view. The table displays the following data:

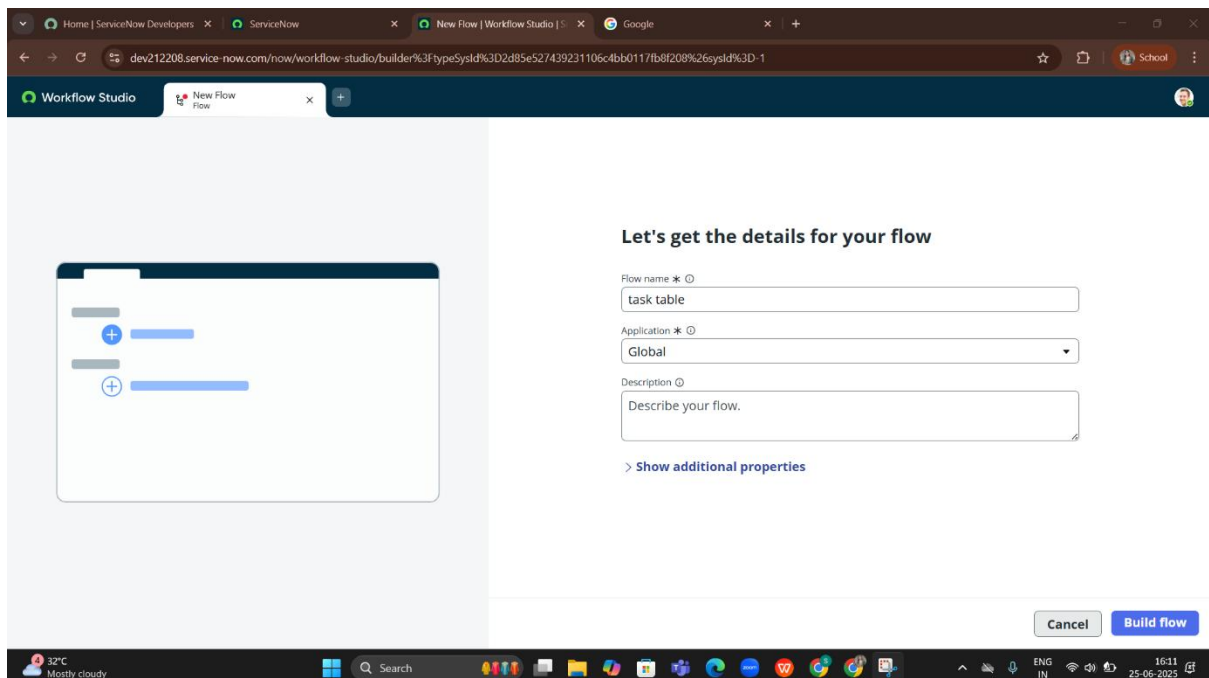
Name	Decision Type	Operation	Type	Active	Updated by	Updated
u_task_table_2_u_task_name	Allow If	write	record	true	admin	2025-06-25 03:37:05
u_task_table_2_u_task_id	Allow If	write	record	true	admin	2025-06-25 03:36:16
u_task_table_2_u_due_date	Allow If	write	record	true	admin	2025-06-25 03:35:39
u_task_table_2_u_assigned_to	Allow If	write	record	true	admin	2025-06-25 03:34:48
u_task_table_2_u_status	Allow If	write	record	true	admin	2025-06-25 03:29:34
u_task_table_2	Allow If	read	record	true	admin	2025-06-25 02:50:42
u_task_table_2	Allow If	delete	record	true	admin	2025-06-25 02:50:42
u_task_table_2	Allow If	write	record	true	admin	2025-06-25 02:50:42
u_task_table_2	Allow If	create	record	true	admin	2025-06-25 02:50:41
u_project_table	Allow If	read	record	true	admin	2025-06-25 02:47:42
u_project_table	Allow If	delete	record	true	admin	2025-06-25 02:47:42
u_project_table	Allow If	write	record	true	admin	2025-06-25 02:47:42
u_project_table	Allow If	create	record	true	admin	2025-06-25 02:47:42
sys_one_extend_eval_strategy_metric	Allow If	create	record	true	system	2025-06-21 05:34:47
sys_one_extend_eval_suggestion	Allow If	read	record	true	system	2025-06-21 05:34:47
sys_one_extend_dataset_skill_mapping	Allow If	read	record	true	system	2025-06-21 05:34:47
sys_one_extend_eval_strategy	Allow If	create	record	true	system	2025-06-21 05:34:47

Created above all ACL's(status,task name,task id,assigned to,due date).



Due to this ACL's we have seen the edit access for comments and status fields.

Flow:



Created a flow named as “task table”.

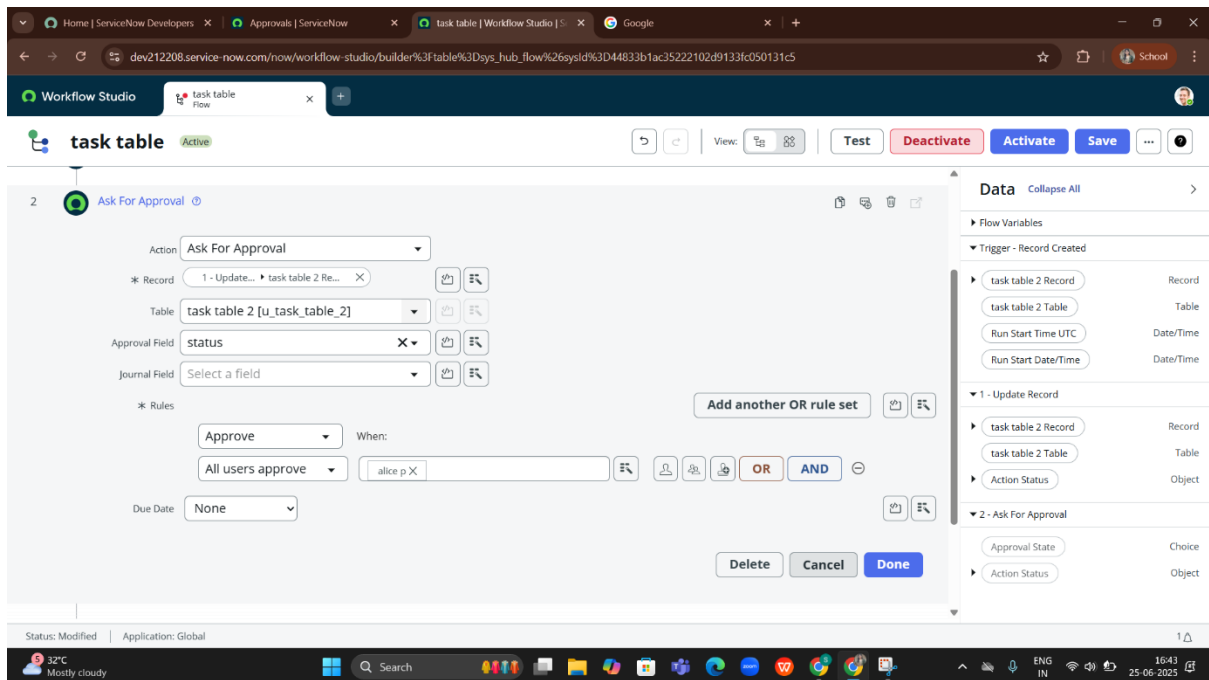
Workflow Studio interface showing the configuration for a task table workflow. The trigger is set to "Created" for the table "task table 2 [u_task_table_2]". The condition is defined as "All of these conditions must be met":

- status is in progress
- comments is feedback
- assigned to is bob

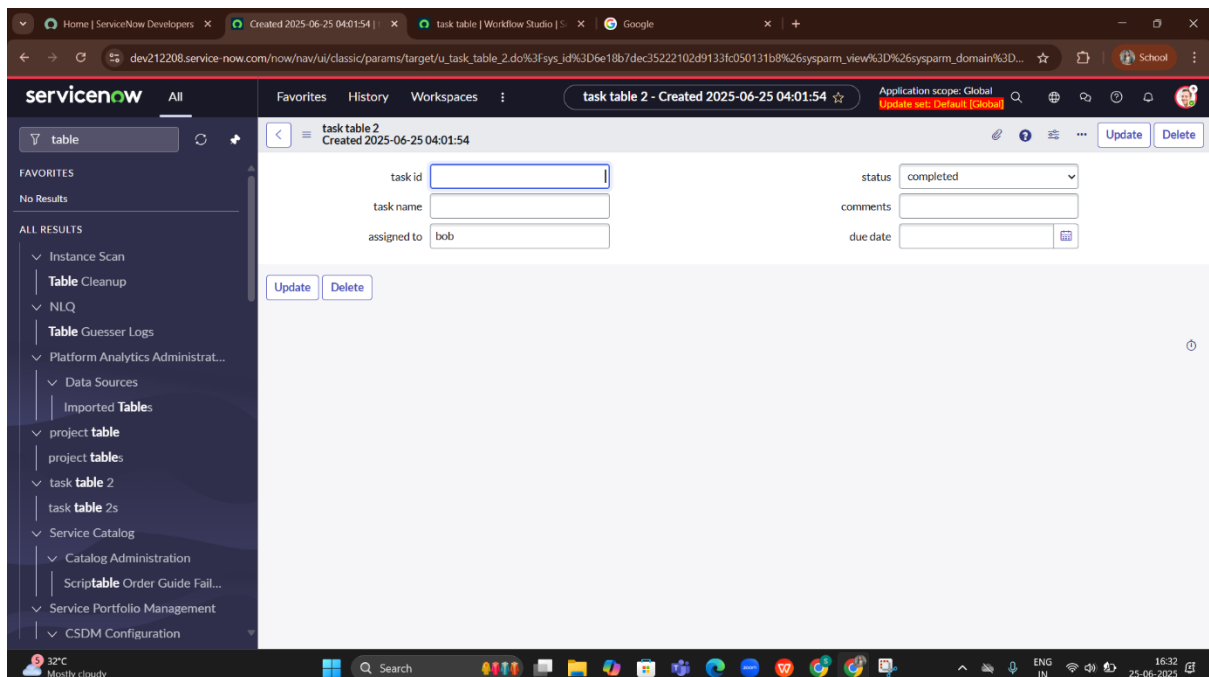
The right sidebar shows the Data section with variables: task table 2 Record, task table 2 Table, Run Start Time UTC, and Run Start Date/Time.

Workflow Studio interface showing the configuration for an action. The action is set to "Update Record" for the table "task table 2 [u_task_table_2]". The fields are set to "status" and "completed".

The right sidebar shows the Data section with variables: task table 2 Record, task table 2 Table, Run Start Time UTC, Run Start Date/Time, and Action Status.



Added necessary actions to be performed.



The screenshot displays the ServiceNow interface, divided into two main sections: Approvals and Workflow Studio.

Approvals Section:

- Navigation:** The left sidebar shows the 'Self-Service' menu with options like Business Applications, Dashboards, Service Catalog, Employee Center, Knowledge, Visual Task Boards, Incidents, Watched Incidents, My Requests, Requested Items, Watched Requested Items, My Connected Apps, My Profile, My Tagged Documents, My Tags, My Knowledge Articles, and Take Survey.
- Table:** A table titled 'All > Approver Name >= alice p' lists approval records. The columns are State, Approver, Comments, Approval for, and Created. The table shows one 'Approved' record for 'alice p' and 15 'Requested' records for 'Bernard Laboy'.

Workflow Studio Section:

- Execution Details:** The top bar shows 'task table' with a 'Test Run - Completed' status and buttons for 'Open flow' and 'Open context record'.
- Flow Statistics:** A section showing 'Run as: System Administrator', 'Open flow logs', 'Completed' state, '2025-06-25 04:54:53' start time, and '308ms' duration.
- Trigger:** A green circle icon with the text 'task table 2 Created' and a link 'Open current record'.
- Actions:** A list of two actions:
 1. Update Record (Core Action, Completed, 2025-06-25 04:54:53, 11ms)
 2. Ask For Approval (Core Action, Completed, 2025-06-25 04:54:53, 297ms)
- Error Handler:** A section for handling errors, currently empty.

These are the results of the flow.

Conclusion:

This scenario highlights a structured approach to project management, showcasing the roles of Alice and Bob within a defined workflow. With Alice's oversight and Bob's execution, the team effectively collaborates

to ensure project success. The use of tables organizes key information, facilitating easy tracking of projects, tasks, and progress updates. Overall, this system promotes accountability, enhances communication, and leads to the successful completion of projects.