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

Problem Statement:

Within a small project management setup involving a Project Manager (Alice) and a Team Member (Bob), the absence of well-defined roles, structured workflows, and proper access restrictions creates confusion. This lack of clarity often leads to task mismanagement, accountability gaps, and difficulty in tracking project progress.

Objectives:

1. Clearly Define User Roles – Assign specific roles to Alice (Project Manager) and Bob (Team Member) to make responsibilities and access privileges within the project management system more transparent.

2. Apply Access Control Measures – Build a system that limits Bob's permissions, preventing him from creating or modifying projects, while still enabling him to view and update only the tasks assigned to him, thus avoiding unauthorized changes.

3. Organize Workflow Processes – Create a well-structured workflow for task distribution and progress monitoring, allowing Alice to easily delegate tasks to Bob and track their completion effectively.

Skills:

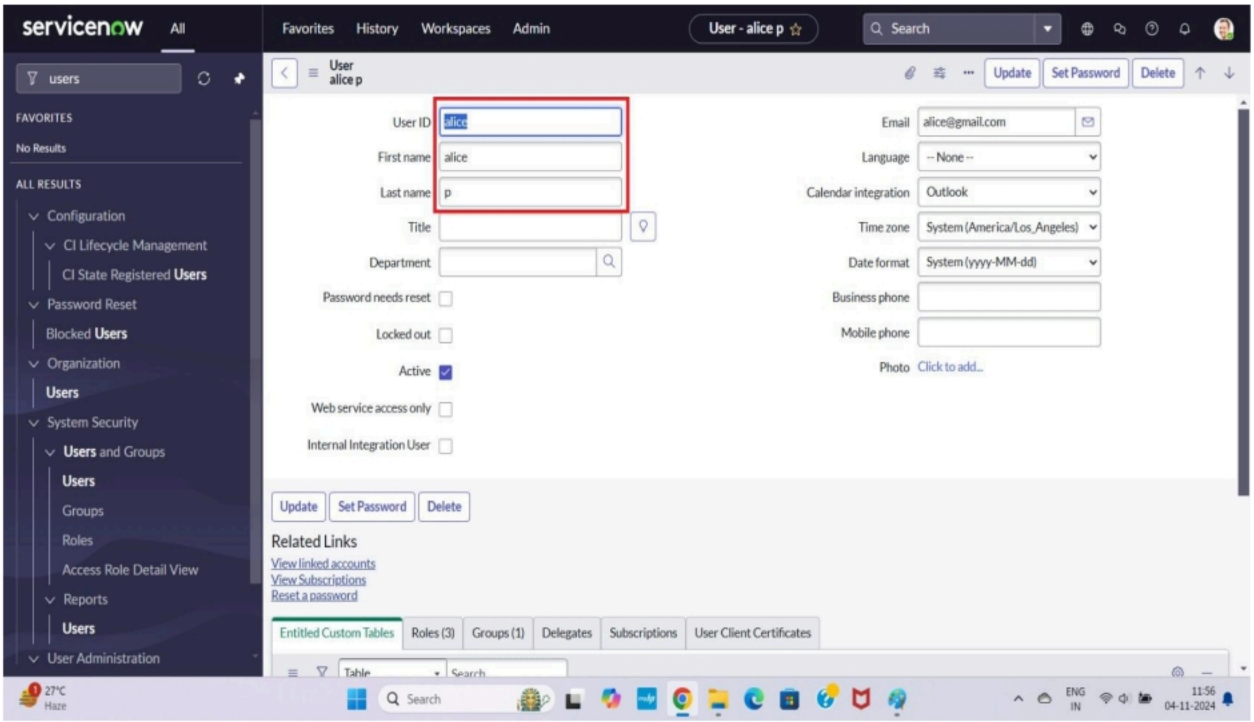
User Management, Groups, Roles, Tables, Access Control Lists, and Flow Designer.

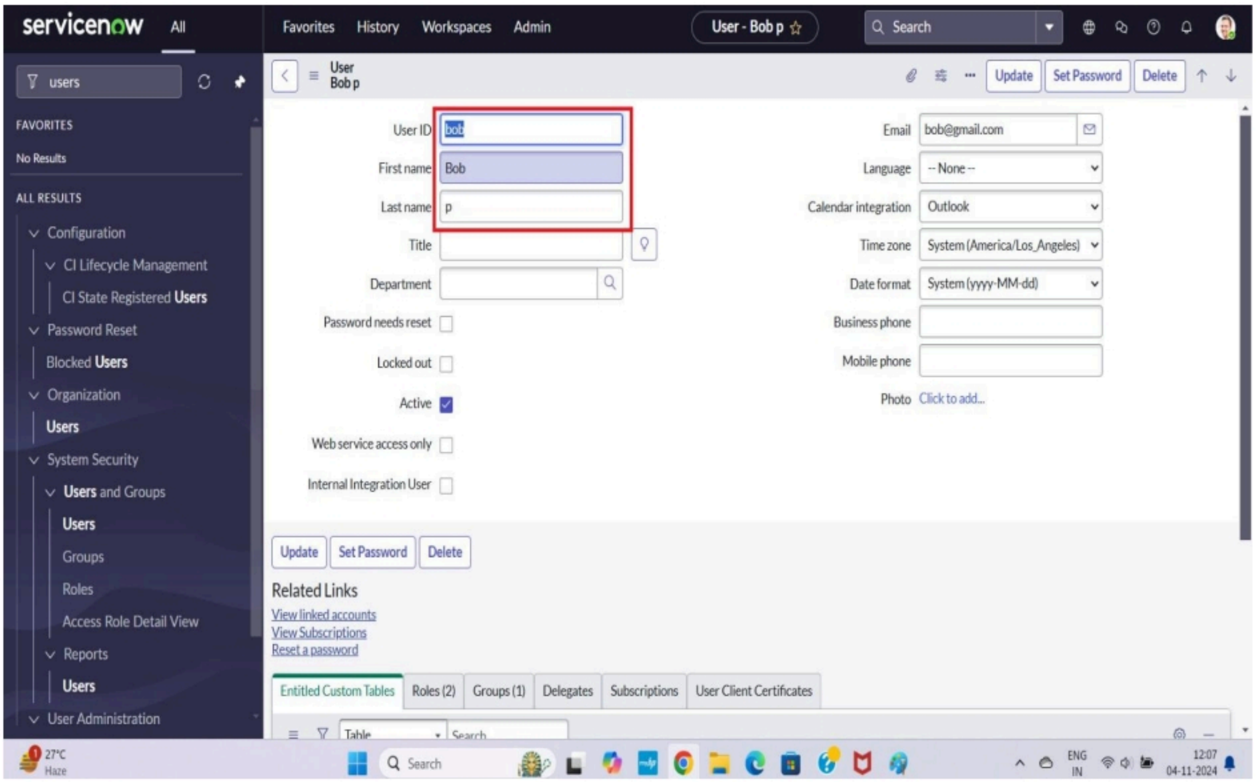
TASK INITIATION

Milestone 1: Users

Activity: Create Users

1. Open ServiceNow.
2. Navigate to 'All' > search for Users.
3. Select 'Users' under System Security.
4. Click 'New' and provide user details.
5. Save the new record.
6. Repeat the process to create a second user.

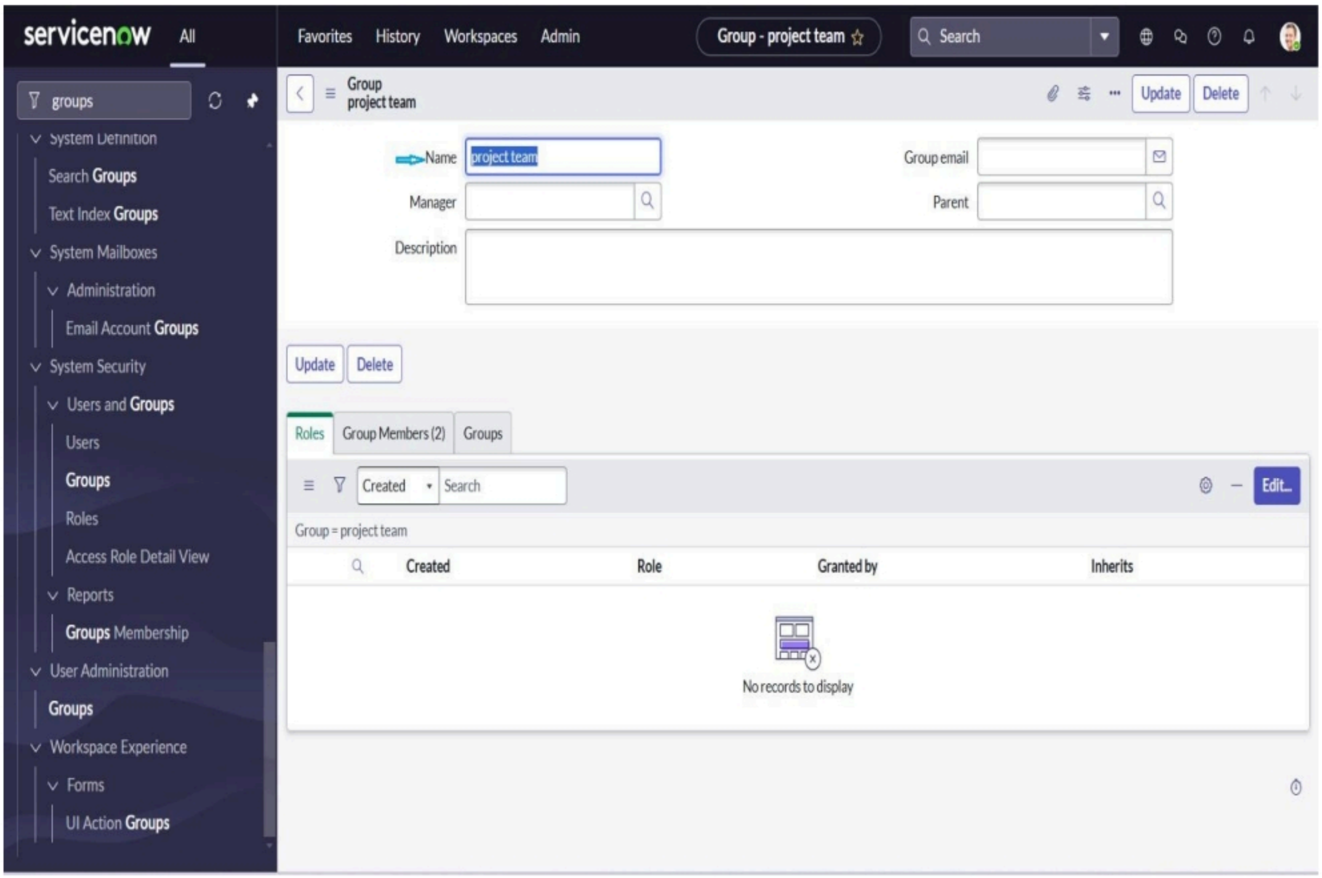

servicenow
All
Favorites
History
Workspaces
Admin
User - alice p
Search
users
FAVORITES
No Results
ALL RESULTS
Configuration
CI Lifecycle Management
CI State Registered Users
Password Reset
Blocked Users
Organization
Users
System Security
Users and Groups
Users
Groups
Roles
Access Role Detail View
Reports
Users
User Administration
User
alice p
Update
Set Password
Delete
User ID
alice
First name
alice
Last name
p
Title
Department
Password needs reset
Locked out
Active
Web service access only
Internal Integration User
Email
alice@gmail.com
Language
-- None --
Calendar integration
Outlook
Time zone
System (America/Los_Angeles)
Date format
System (yyyy-MM-dd)
Business phone
Mobile phone
Photo
Click to add...
Update
Set Password
Delete
Related Links
View linked accounts
View Subscriptions
Reset a password
Entitled Custom Tables
Roles (3)
Groups (1)
Delegates
Subscriptions
User Client Certificates
Table
Search
27°C
Haze
Search
ENG
IN
11:56
04-11-2024


servicenow
All
Favorites
History
Workspaces
Admin
User - Bob p
Search
users
FAVORITES
No Results
ALL RESULTS
Configuration
CI Lifecycle Management
CI State Registered Users
Password Reset
Blocked Users
Organization
Users
System Security
Users and Groups
Users
Groups
Roles
Access Role Detail View
Reports
Users
User Administration
User
Bob p
Update
Set Password
Delete
User ID
bob
First name
Bob
Last name
p
Title
Department
Password needs reset
Locked out
Active
Web service access only
Internal Integration User
Email
bob@gmail.com
Language
-- None --
Calendar integration
Outlook
Time zone
System (America/Los_Angeles)
Date format
System (yyyy-MM-dd)
Business phone
Mobile phone
Photo
Click to add...
Update
Set Password
Delete
Related Links
View linked accounts
View Subscriptions
Reset a password
Entitled Custom Tables
Roles (2)
Groups (1)
Delegates
Subscriptions
User Client Certificates
Table
Search
27°C
Haze
Search
ENG
IN
12:07
04-11-2024

Milestone 2: Groups

Activity 1: Create Groups

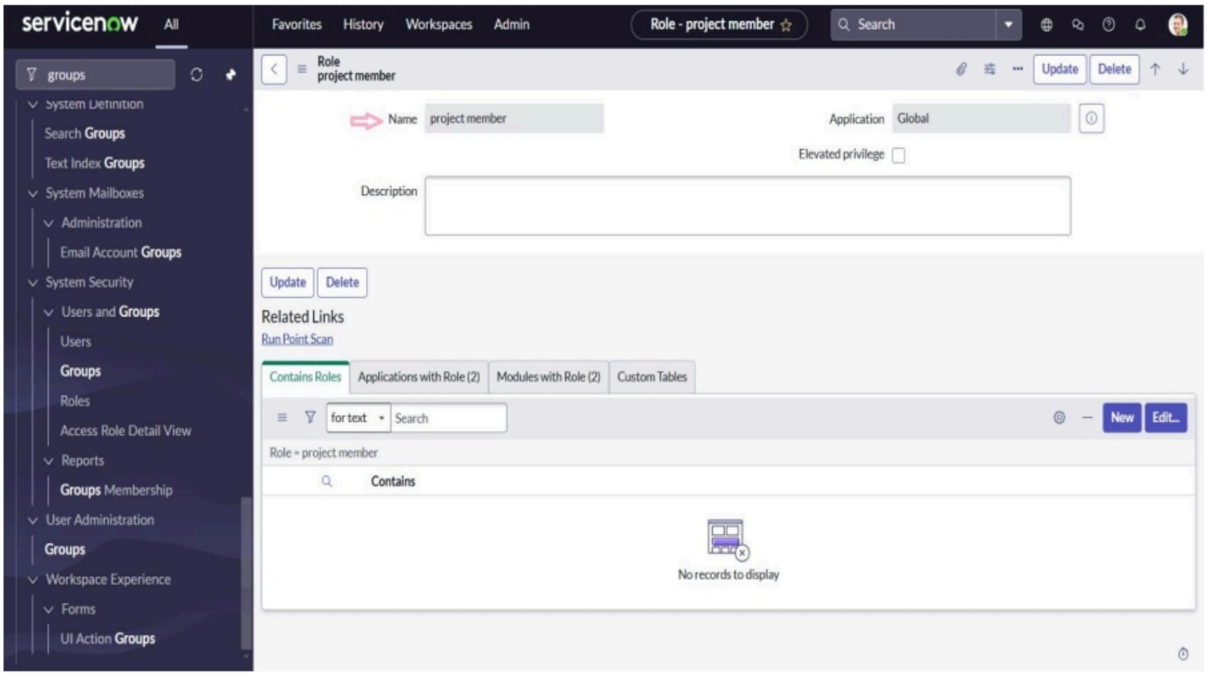
1. In ServiceNow, go to 'All' > search for Groups.
2. Select 'Groups' under System Security.
3. Click 'New', enter group details, and save.



Milestone 3: Roles

Activity 1: Create roles

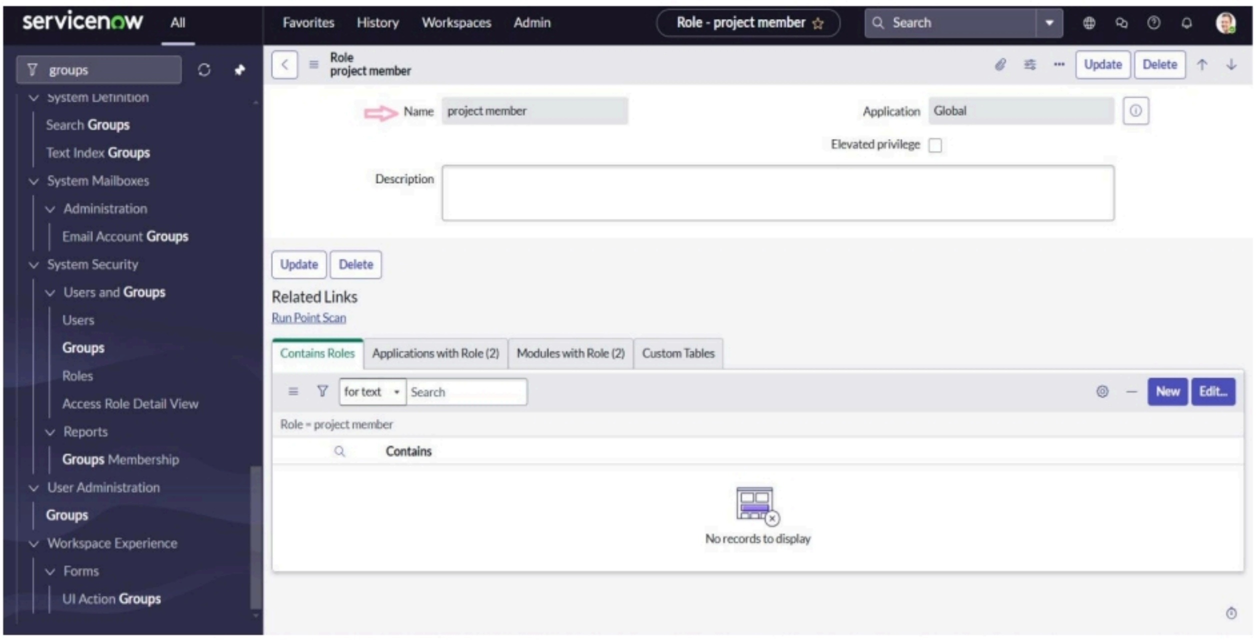
1. In ServiceNow, search for Roles under System Security.
2. Select 'New', enter details for the role, and save.
3. Create an additional role using the same steps.

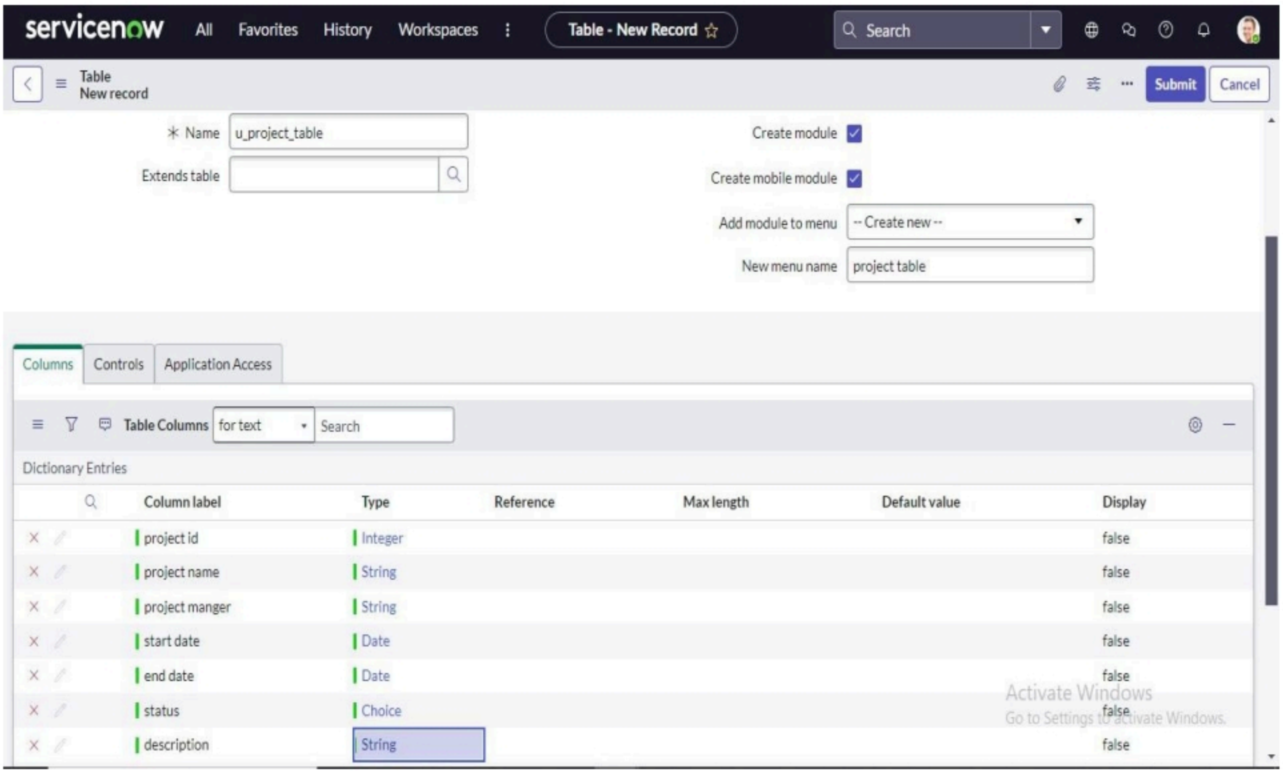


Milestone 4: Table

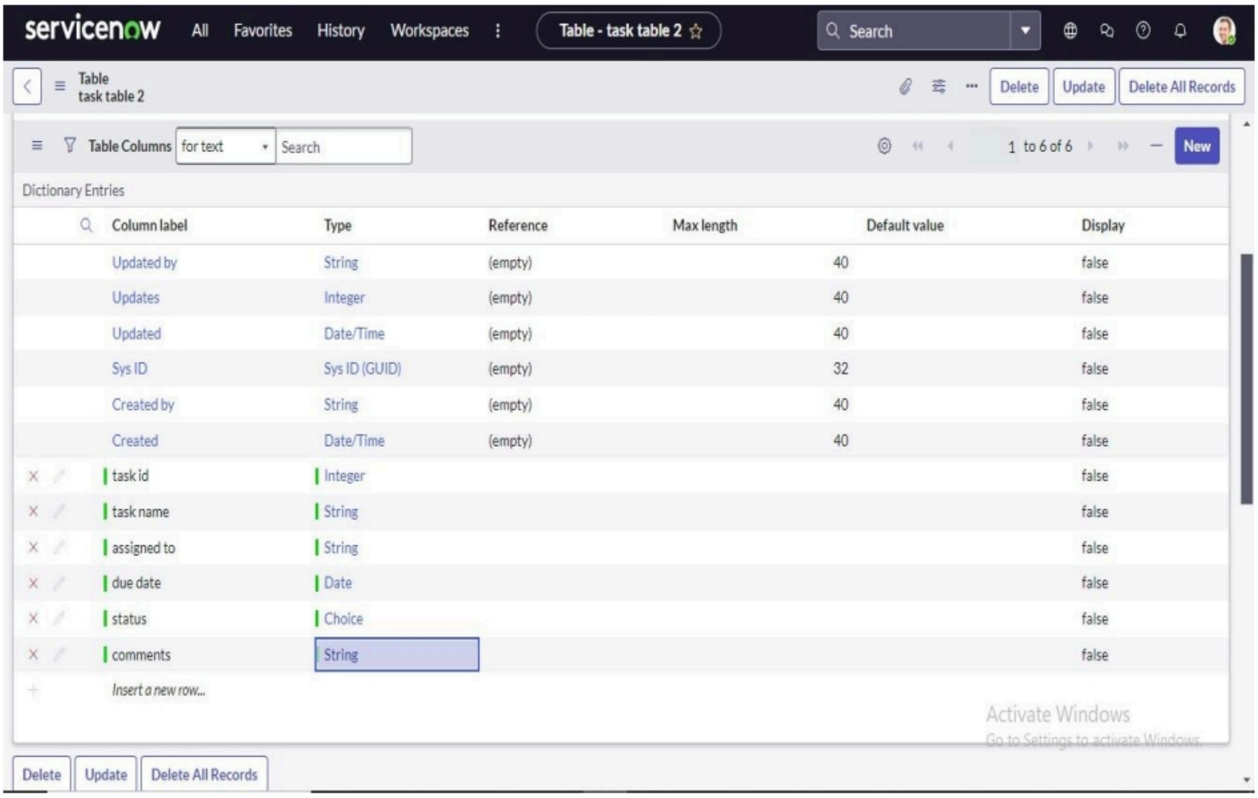
Activity 1: Create Table

1. In ServiceNow, navigate to 'All' > search for Tables.
2. Create a new table labeled 'Project Table', enabling module and mobile module options.
3. Define necessary columns and save.
4. Repeat the process to create 'Task Table 2'.





servicenow
All
Favorites
History
Workspaces
Table - New Record
Search
Table
New record
Submit
Cancel
Name
u_project_table
Extends table
Create module
Create mobile module
Add module to menu
-- Create new --
New menu name
project table
Columns
Controls
Application Access
Table Columns
for text
Search
Dictionary Entries
Column label
Type
Reference
Max length
Default value
Display
project id
Integer
false
project name
String
false
project manger
String
false
start date
Date
false
end date
Date
false
status
Choice
false
description
String
false
Activate Windows
Go to Settings to activate Windows.

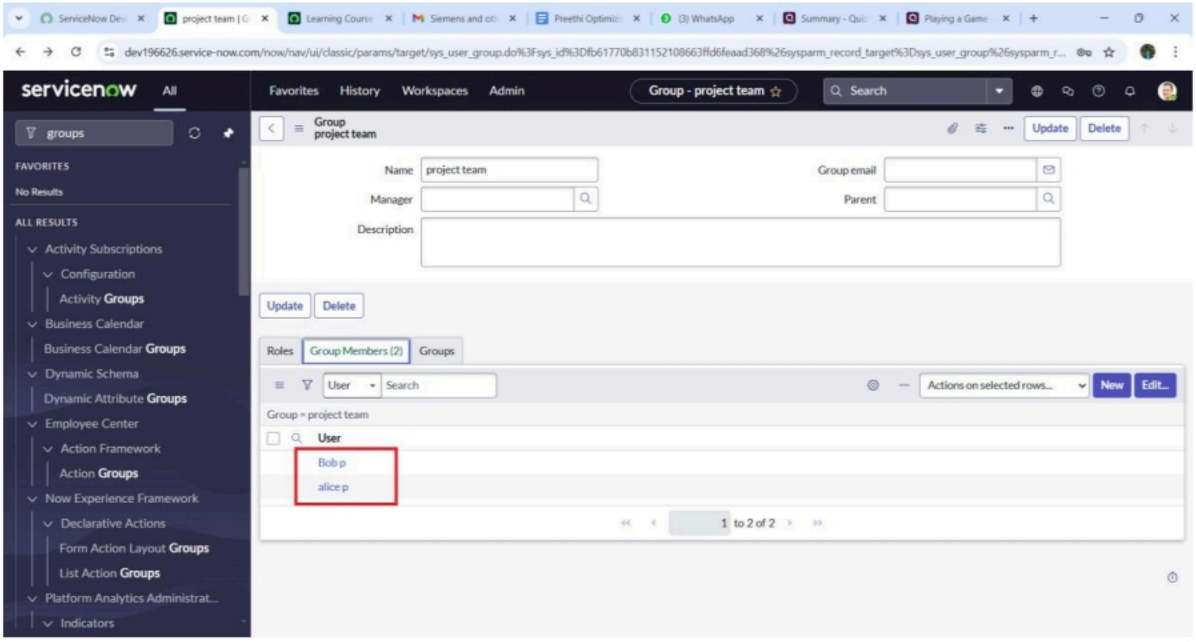


servicenow
All
Favorites
History
Workspaces
Table - task table 2
Search
Table
task table 2
Delete
Update
Delete All Records
Table Columns
for text
Search
1 to 6 of 6
New
Dictionary Entries
Column label
Type
Reference
Max length
Default value
Display
Updated by
String
(empty)
40
false
Updates
Integer
(empty)
40
false
Updated
Date/Time
(empty)
40
false
Sys ID
Sys ID (GUID)
(empty)
32
false
Created by
String
(empty)
40
false
Created
Date/Time
(empty)
40
false
task id
Integer
false
task name
String
false
assigned to
String
false
due date
Date
false
status
Choice
false
comments
String
false
Insert a new row...
Activate Windows
Go to Settings to activate Windows.
Delete
Update
Delete All Records

Milestone 5: Assign user to groups

Activity users to project team group

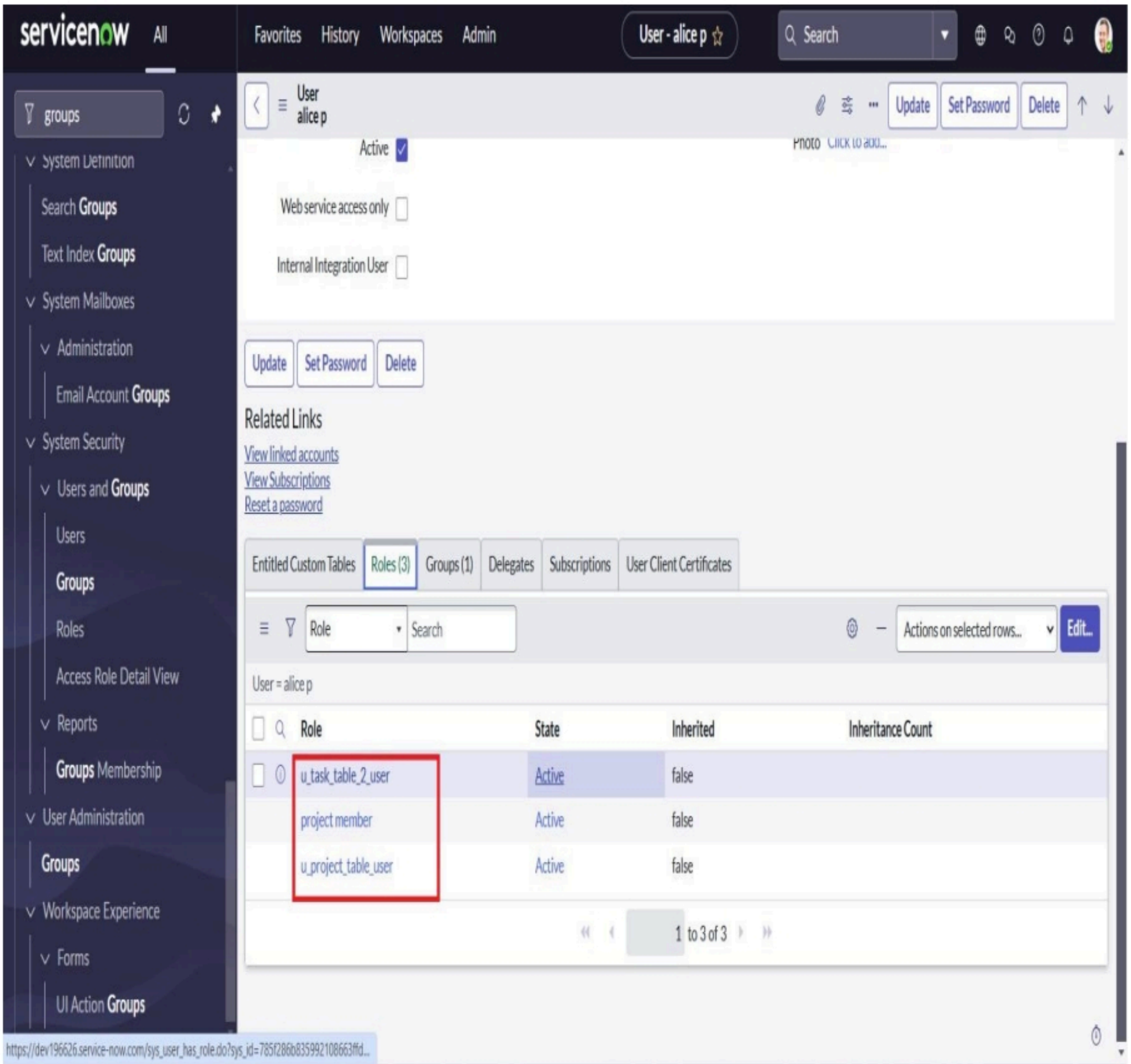
1. Open ServiceNow and search for Groups.
2. Select the 'Project Team' group.
3. Under Group Members, edit and add Alice P. and Bob P., then save.



Milestone 6: Assign role of users

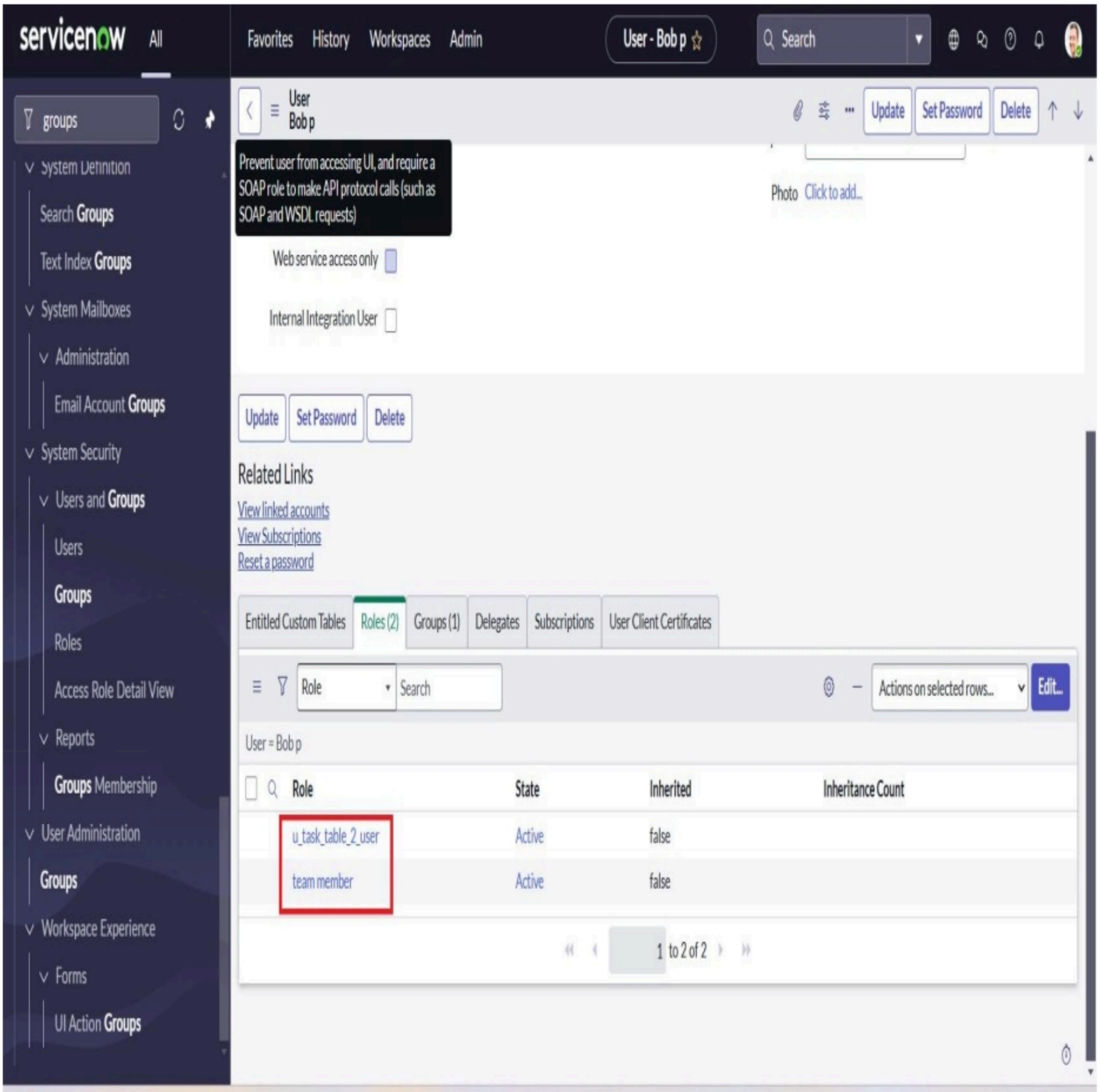
Activity 1: Assign roles to alice user

1. Open ServiceNow and go to All → Users.
2. From the options, select Tables under System Definition.
3. Choose the Project Manager user account.
4. In the Project Manager’s profile, click Edit.
5. Add the Project Member role and save.
6. Again, click Edit and assign the u_project_table role and the u_task_table role.
7. Save the changes and update the form.



Actitvity 2: Assign role to bob user

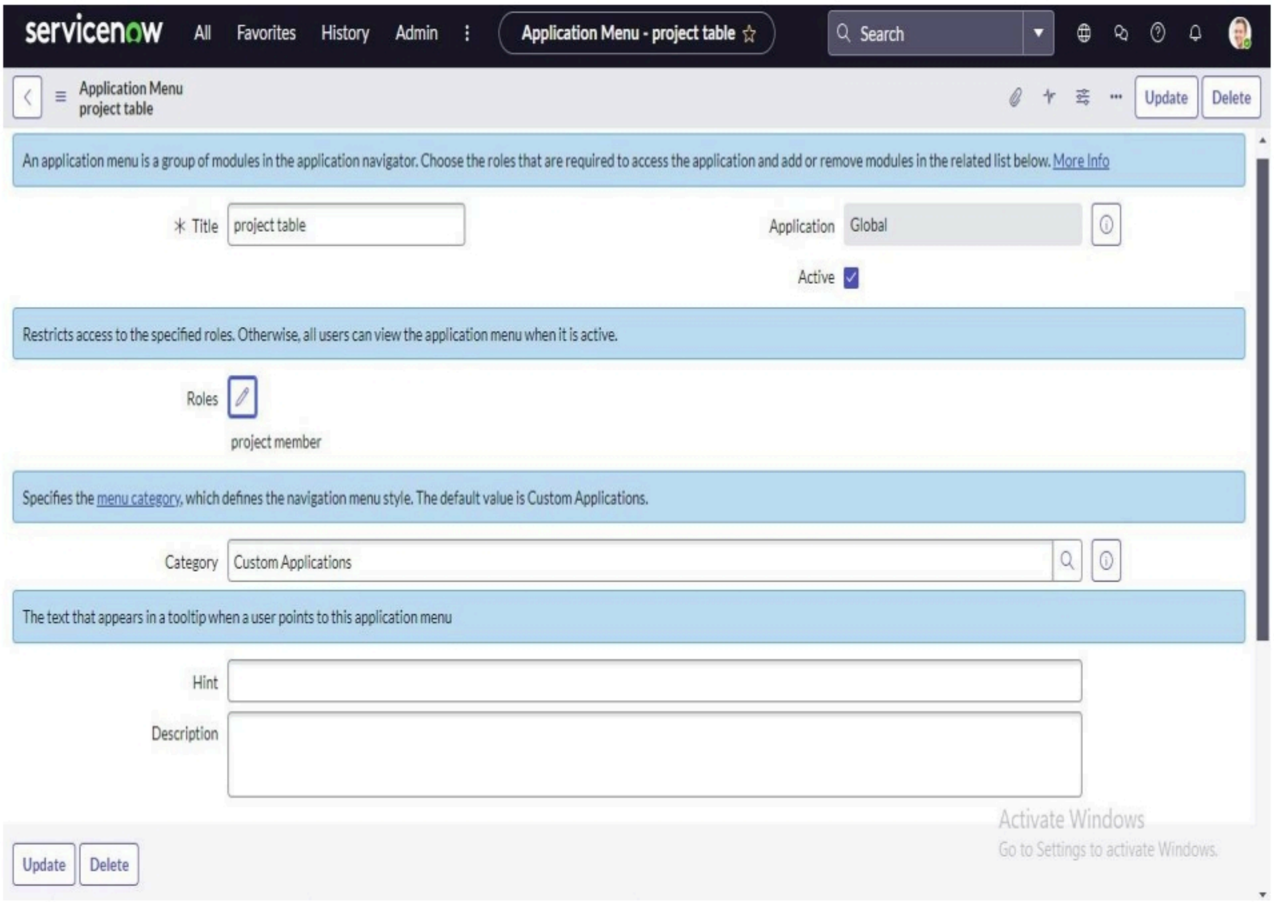
1. Open ServiceNow and navigate to All → Users.
2. Select Tables under System Definition.
3. Choose the user account for Bob P.
4. In the Team Member section, click Edit.
5. Assign the Team Member role along with the required table role, then save.
6. Click on the Profile icon and impersonate Bob.
7. Once logged in as Bob, verify that the Task Table 2 is visible.

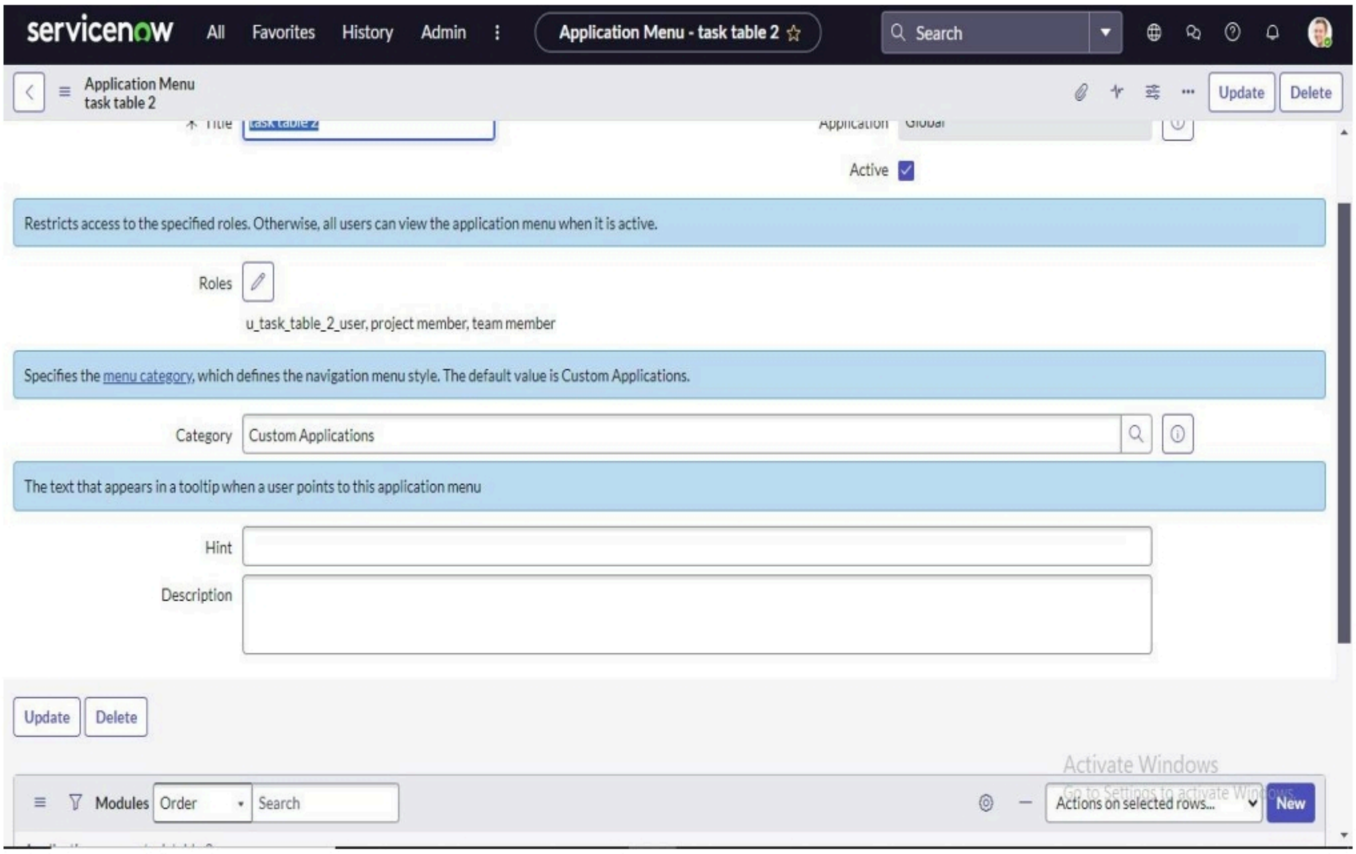


Milestone 7: Application Access

Activity 1: Assign table access to application

1. Each table automatically generates an application and module.
2. Search for the 'Project Table' application and edit module roles.
3. Grant access to the 'Project Member' role.
4. Repeat for 'Task Table 2', assigning both Project Member and Team Member roles.

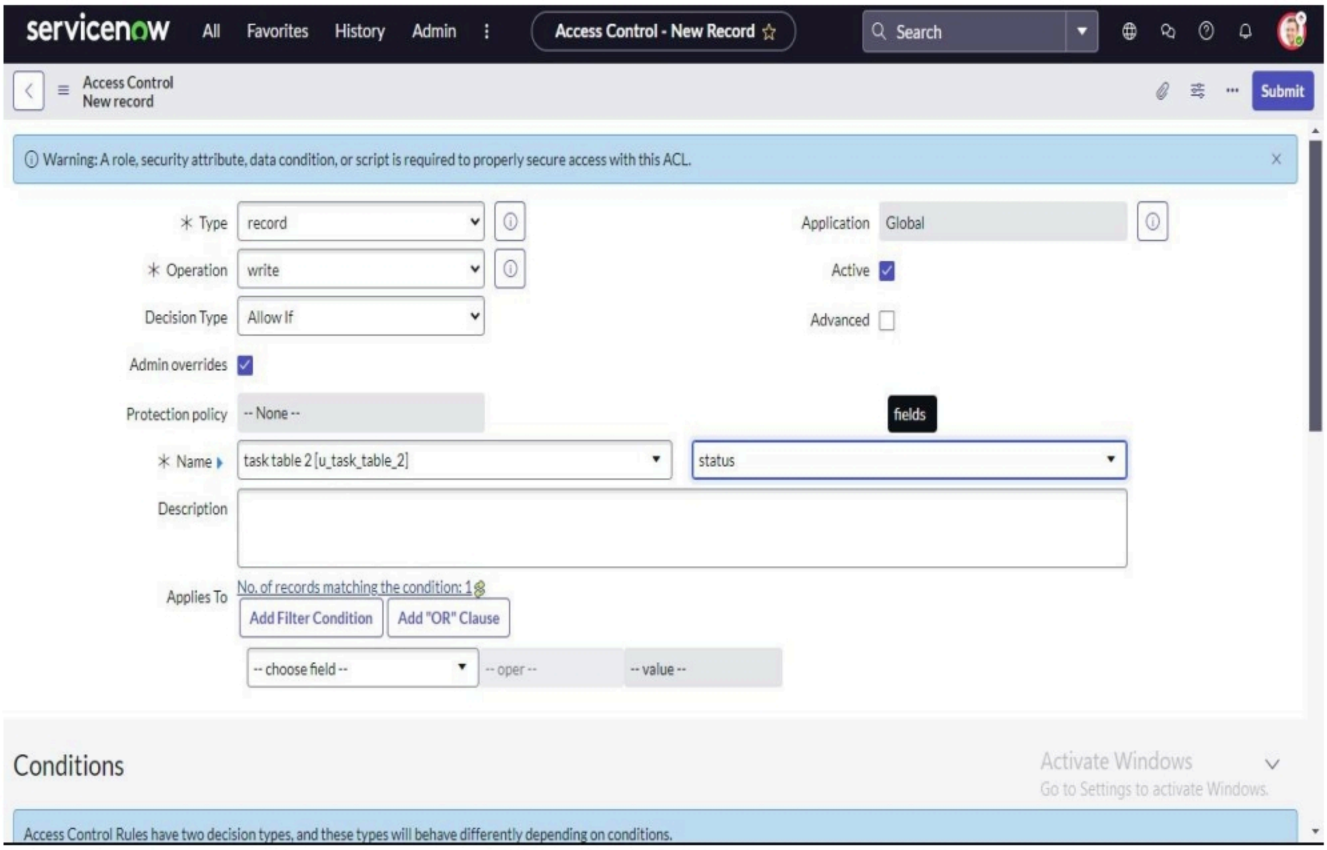

servicenow
All
Favorites
History
Admin
Application Menu - project table
Search
Application Menu
project table
Update
Delete
An application menu is a group of modules in the application navigator. Choose the roles that are required to access the application and add or remove modules in the related list below. More Info
Title
project table
Application
Global
Active
Restricts access to the specified roles. Otherwise, all users can view the application menu when it is active.
Roles
project member
Specifies the menu category, which defines the navigation menu style. The default value is Custom Applications.
Category
Custom Applications
The text that appears in a tooltip when a user points to this application menu
Hint
Description
Activate Windows
Go to Settings to activate Windows.
Update
Delete

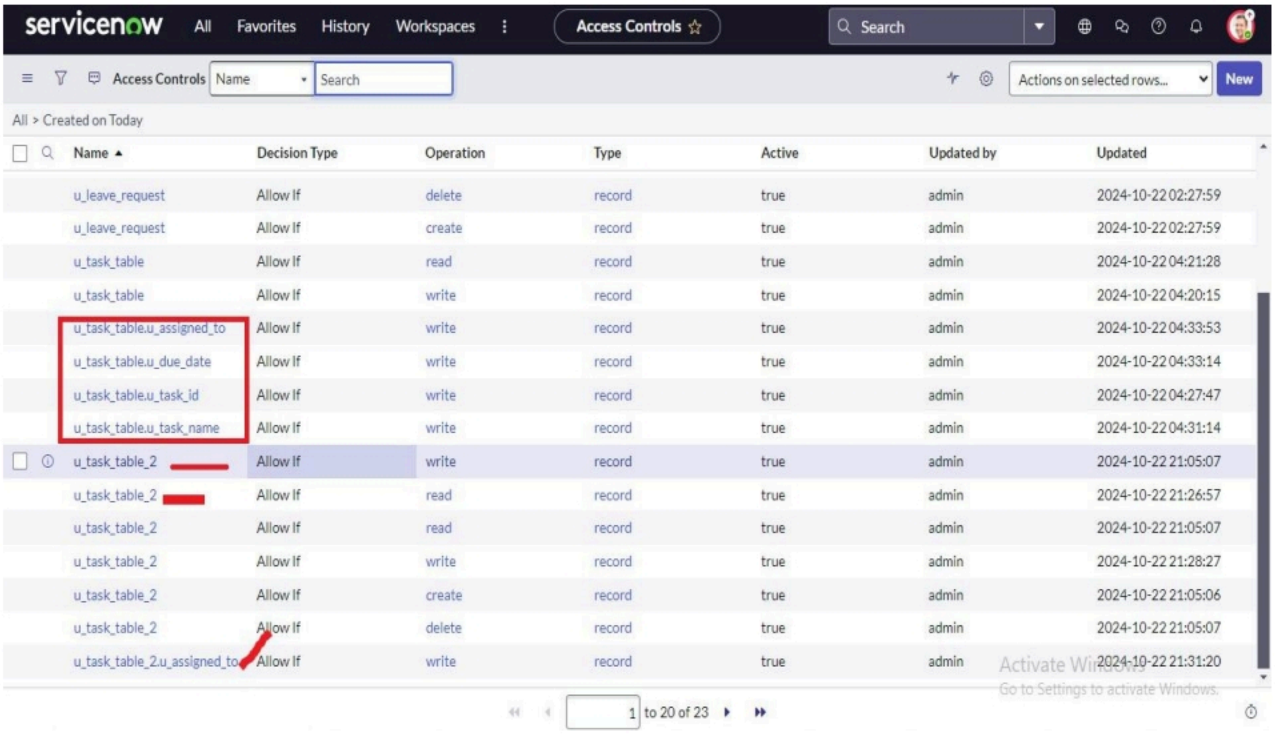

servicenow
All
Favorites
History
Admin
Application Menu - task table 2
Search
Application Menu
task table 2
Update
Delete
Active
Restricts access to the specified roles. Otherwise, all users can view the application menu when it is active.
Roles
u_task_table_2_user, project member, team member
Specifies the menu category, which defines the navigation menu style. The default value is Custom Applications.
Category
Custom Applications
The text that appears in a tooltip when a user points to this application menu
Hint
Description
Update
Delete
Activate Windows
Modules
Order
Search
Actions on selected rows...
New

Milestone 8: Access Control Lists

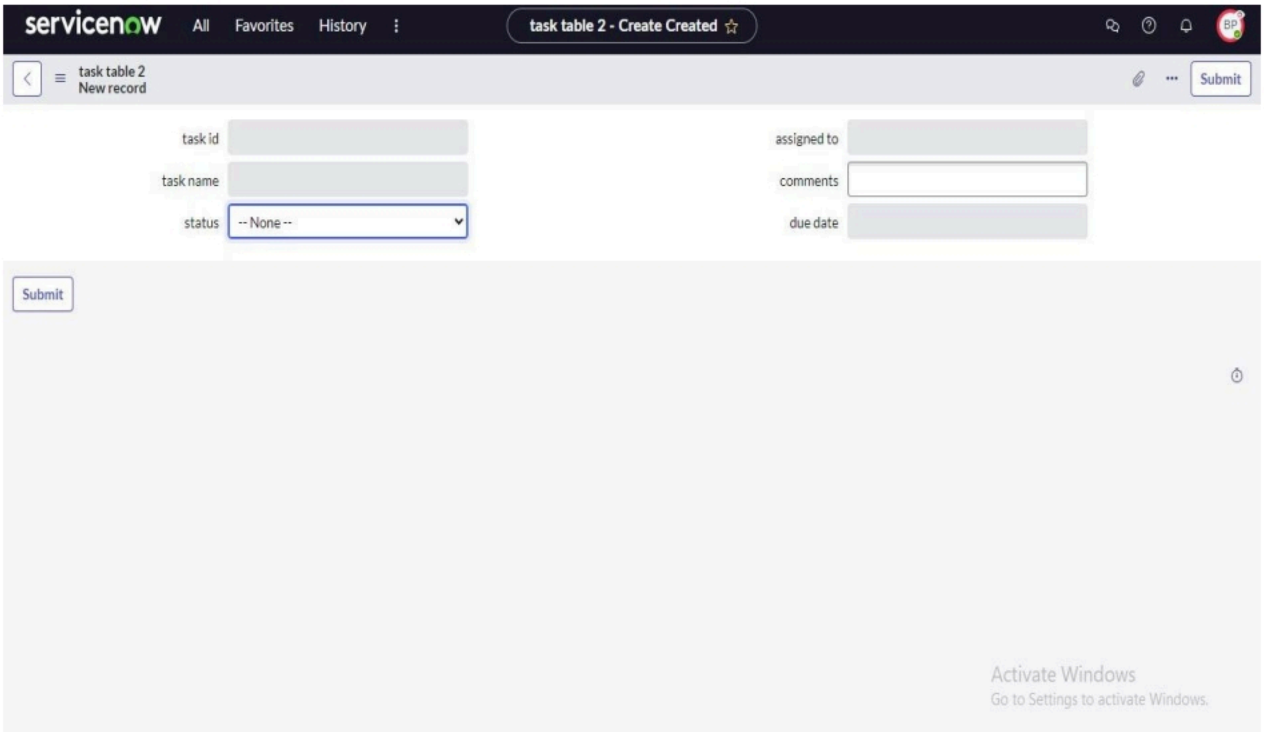
Activity: Create ACL

1. Open ServiceNow.
2. Navigate to All → ACL.
3. Under System Security, select Access Control (ACL).
4. Click on Elevate Role.
5. Click New to create a new ACL.
6. Enter the required details for the ACL configuration.
7. Scroll down to the Requires Role section.
8. Double-click to insert a new row.
9. Assign the Task Table and the Team Member role.
10. Click Submit to save.
11. Repeat the process to create four additional ACLs for the specified fields.
12. Go to the profile icon in the top-right corner and click Impersonate User.
13. Select Bob as the impersonated user.
14. From the application menu, navigate to All → Task Table 2.
15. Verify that the Comment and Status fields are accessible for editing





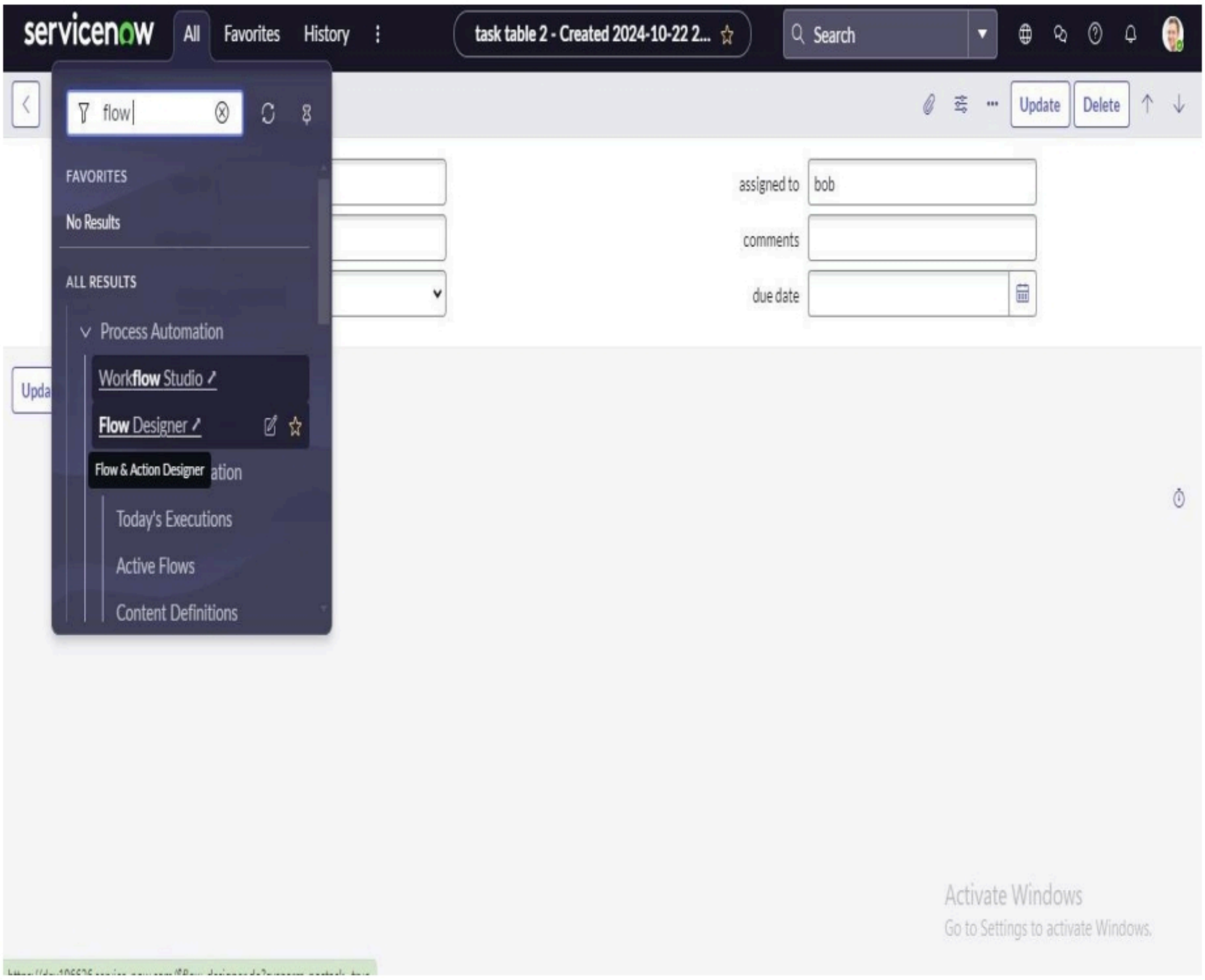
Name	Decision Type	Operation	Type	Active	Updated by	Updated
u_leave_request	Allow If	delete	record	true	admin	2024-10-22 02:27:59
u_leave_request	Allow If	create	record	true	admin	2024-10-22 02:27:59
u_task_table	Allow If	read	record	true	admin	2024-10-22 04:21:28
u_task_table	Allow If	write	record	true	admin	2024-10-22 04:20:15
u_task_table.u_assigned_to	Allow If	write	record	true	admin	2024-10-22 04:33:53
u_task_table.u_due_date	Allow If	write	record	true	admin	2024-10-22 04:33:14
u_task_table.u_task_id	Allow If	write	record	true	admin	2024-10-22 04:27:47
u_task_table.u_task_name	Allow If	write	record	true	admin	2024-10-22 04:31:14
u_task_table_2	Allow If	write	record	true	admin	2024-10-22 21:05:07
u_task_table_2	Allow If	read	record	true	admin	2024-10-22 21:26:57
u_task_table_2	Allow If	read	record	true	admin	2024-10-22 21:05:07
u_task_table_2	Allow If	write	record	true	admin	2024-10-22 21:28:27
u_task_table_2	Allow If	create	record	true	admin	2024-10-22 21:05:06
u_task_table_2	Allow If	delete	record	true	admin	2024-10-22 21:05:07
u_task_table_2.u_assigned_to	Allow If	write	record	true	admin	2024-10-22 21:31:20

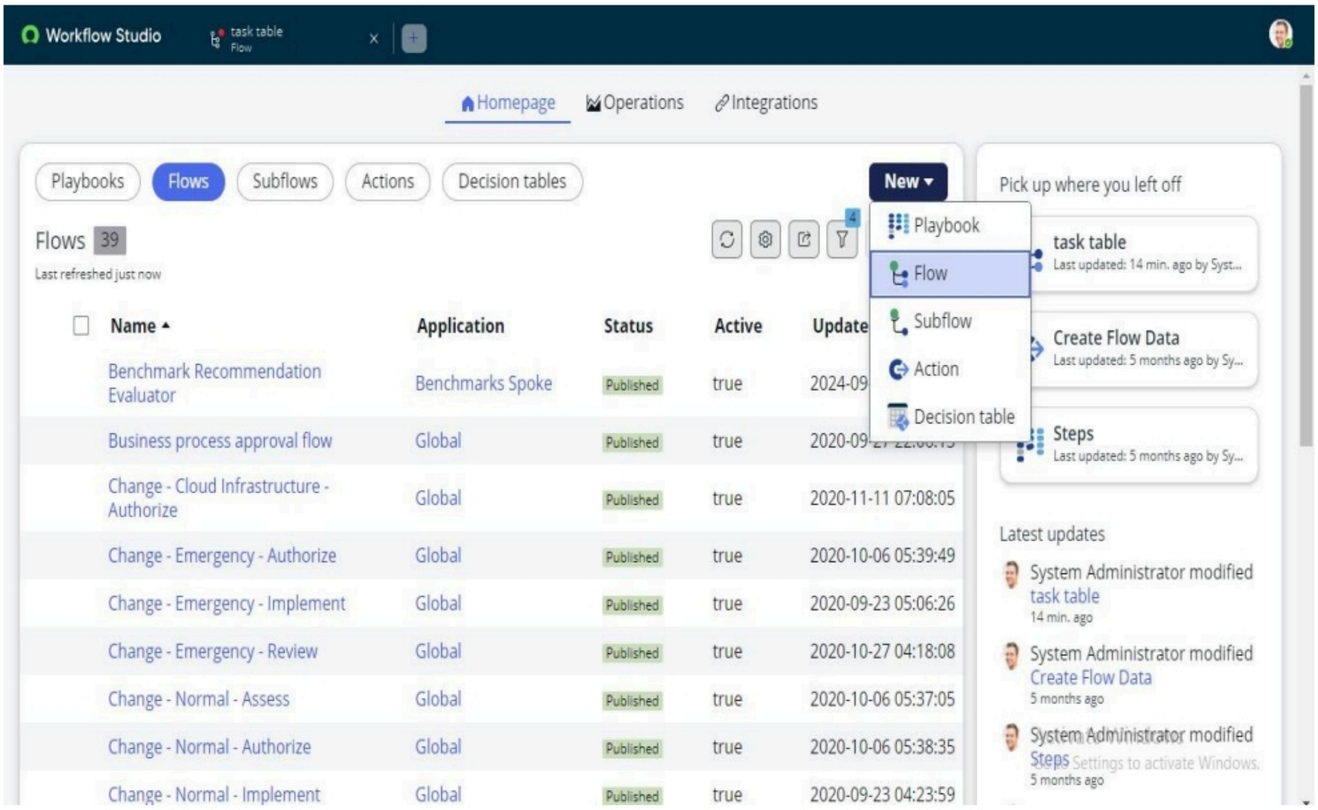


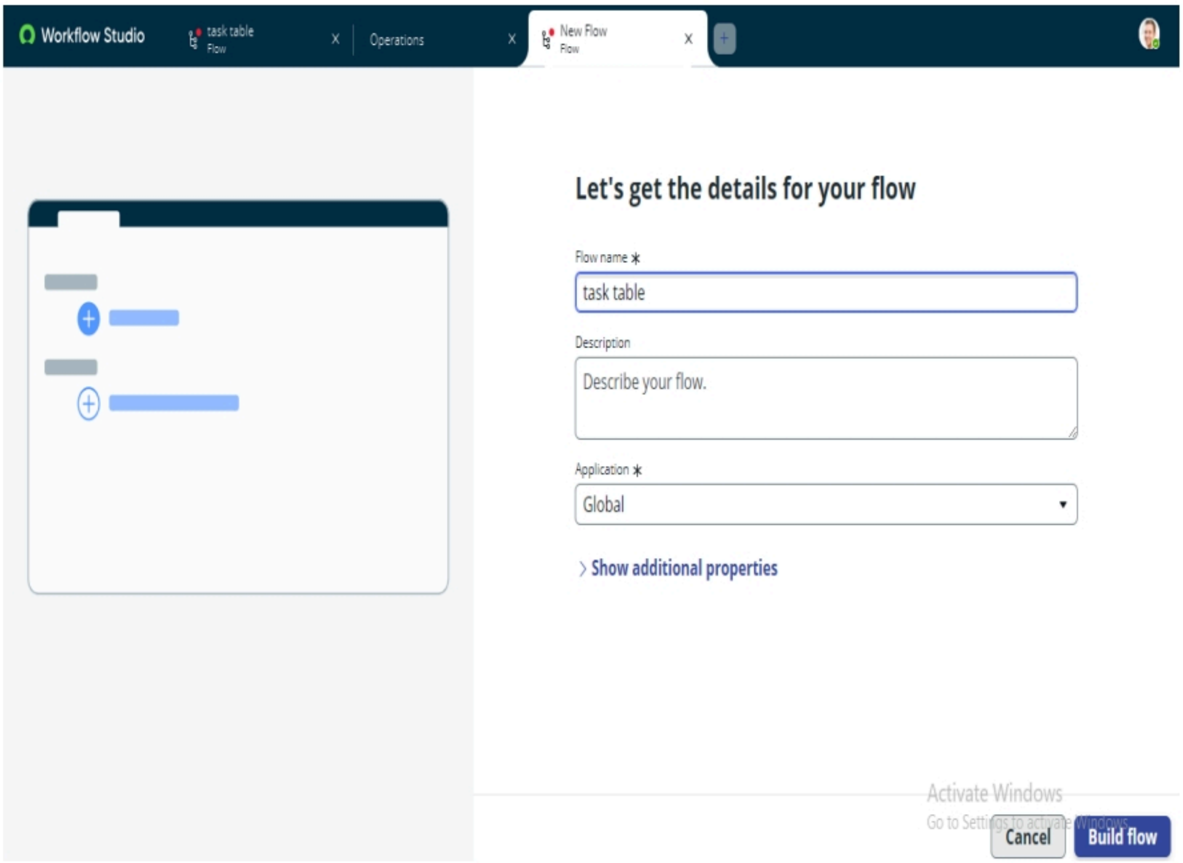
Milestone 9: Flow

Activity 1: Create a Flow to Assign Operations ticket to group

1. Open ServiceNow.
2. Go to All → Flow Designer under Process Automation.
3. Click New, then select Flow.
4. In Flow Properties, set the Flow Name as “Task Table”.
5. Choose Global as the application.
6. Click Build Flow to proceed.

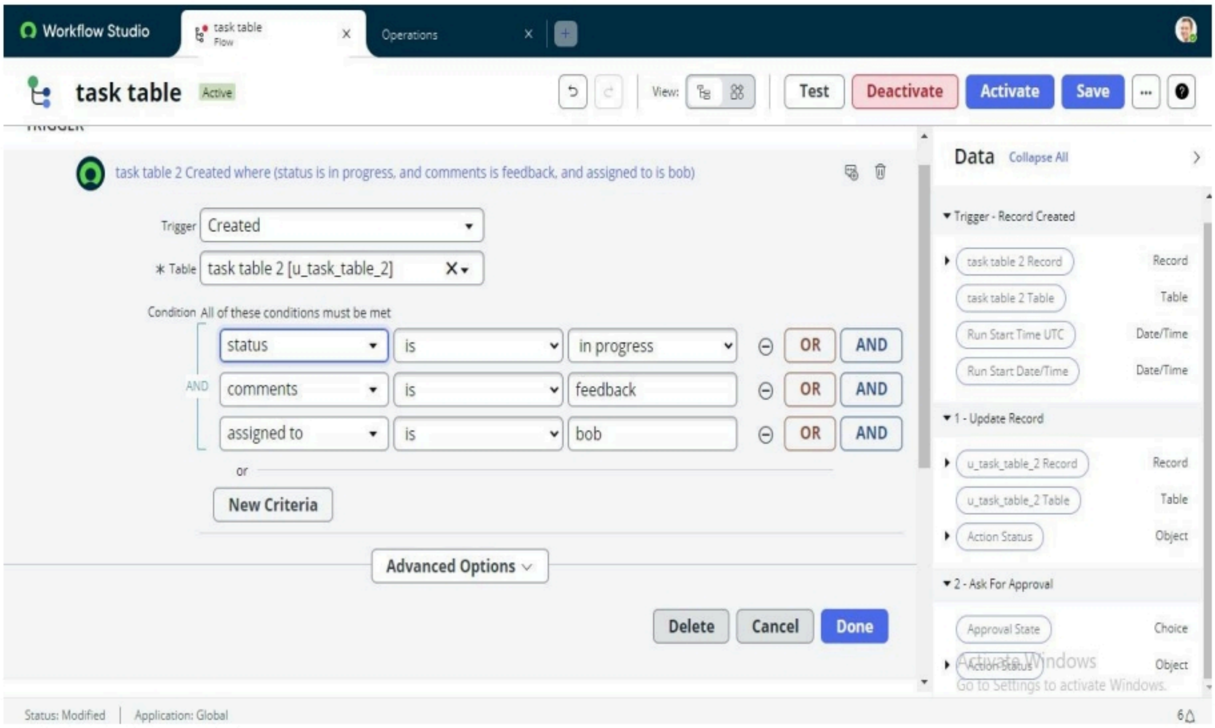



Workflow Studio
task table
Flow
Homepage
Operations
Integrations
Playbooks
Flows
Subflows
Actions
Decision tables
New
Playbook
Flow
Subflow
Action
Decision table
Flows 39
Last refreshed just now
Name
Application
Status
Active
Update
Benchmark Recommendation Evaluator
Benchmarks Spoke
Published
true
Business process approval flow
Global
Change - Cloud Infrastructure - Authorize
2020-11-11 07:08:05
Change - Emergency - Authorize
2020-10-06 05:39:49
Change - Emergency - Implement
2020-09-23 05:06:26
Change - Emergency - Review
2020-10-27 04:18:08
Change - Normal - Assess
2020-10-06 05:37:05
Change - Normal - Authorize
2020-10-06 05:38:35
Change - Normal - Implement
2020-09-23 04:23:59
Pick up where you left off
task table
Last updated: 14 min. ago by Syst...
Create Flow Data
Last updated: 5 months ago by Sy...
Steps
Last updated: 5 months ago by Sy...
Latest updates
System Administrator modified task table
14 min. ago
System Administrator modified Create Flow Data
5 months ago
System Administrator modified Steps
5 months ago


Workflow Studio
task table
Flow
Operations
New Flow
Flow
Let's get the details for your flow
Flow name *
task table
Description
Describe your flow.
Application *
Global
Show additional properties
Cancel
Build flow

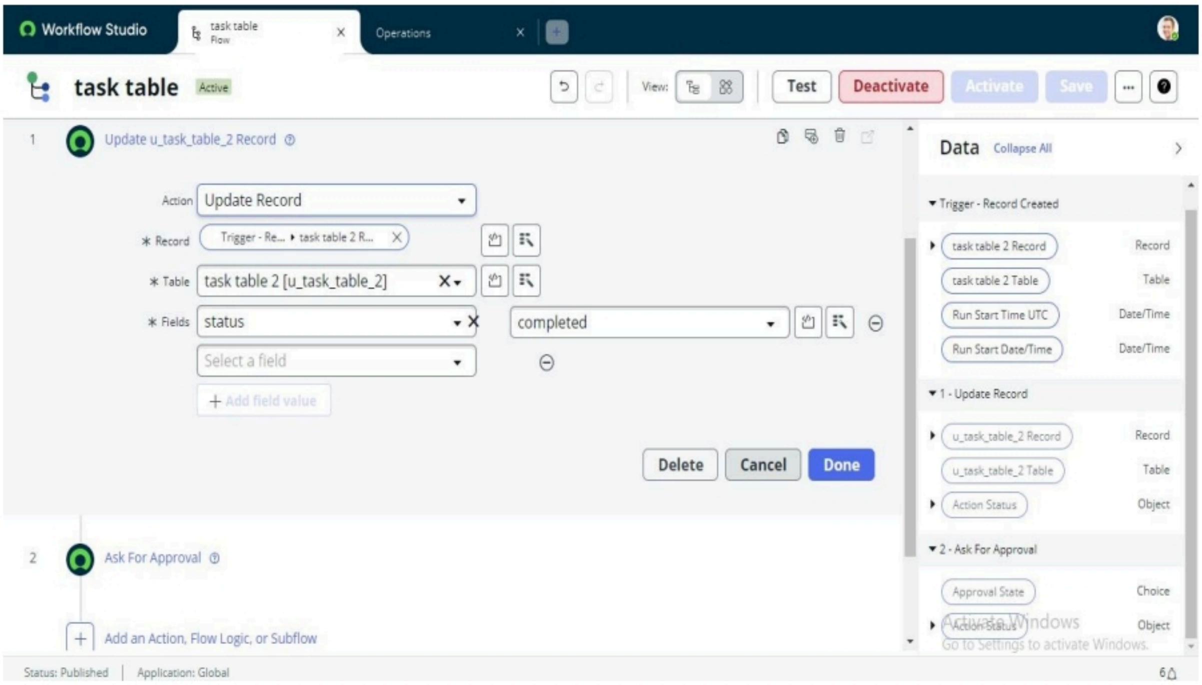
Next Step:

1. Click Add a Trigger.
2. Search and select Create Record.
3. Set the table name to Task Table.
4. Define conditions:
Status → In Progress
Comments → Feedback
Assigned To → Bob
5. Click Done to save.



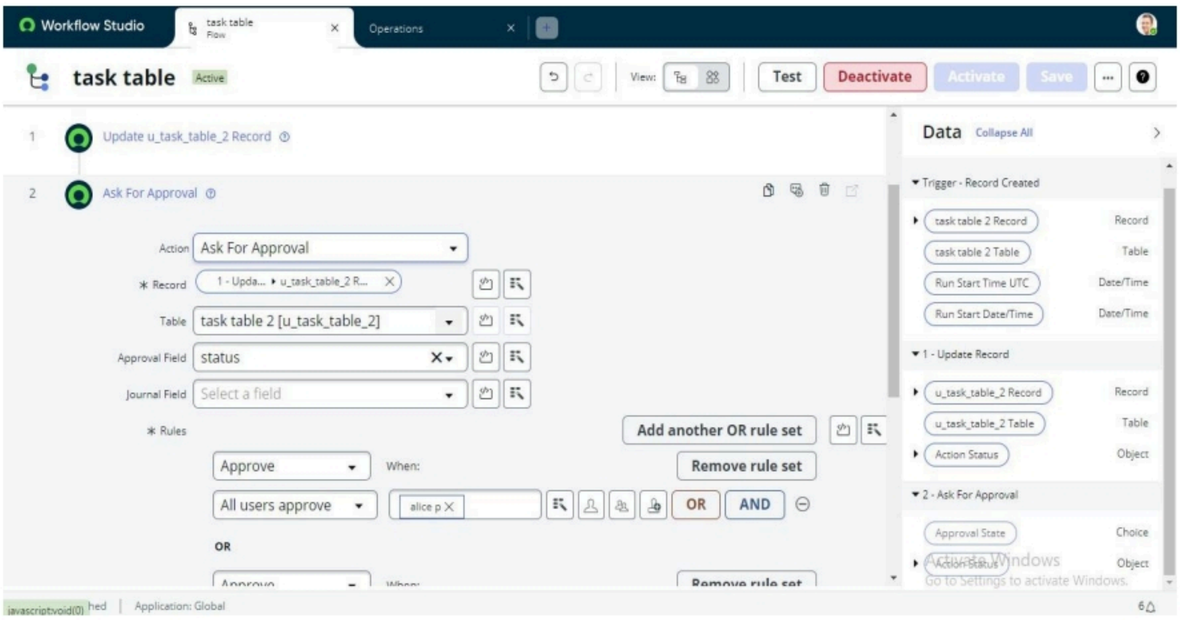
Next Step:

1. Click Add an Action.
2. Search and select Update Records.
3. In the Record field, drag the required fields from the right-side data panel.
4. The table will auto-assign.
5. Set the field Status to the value Completed.
6. Click Done to save.

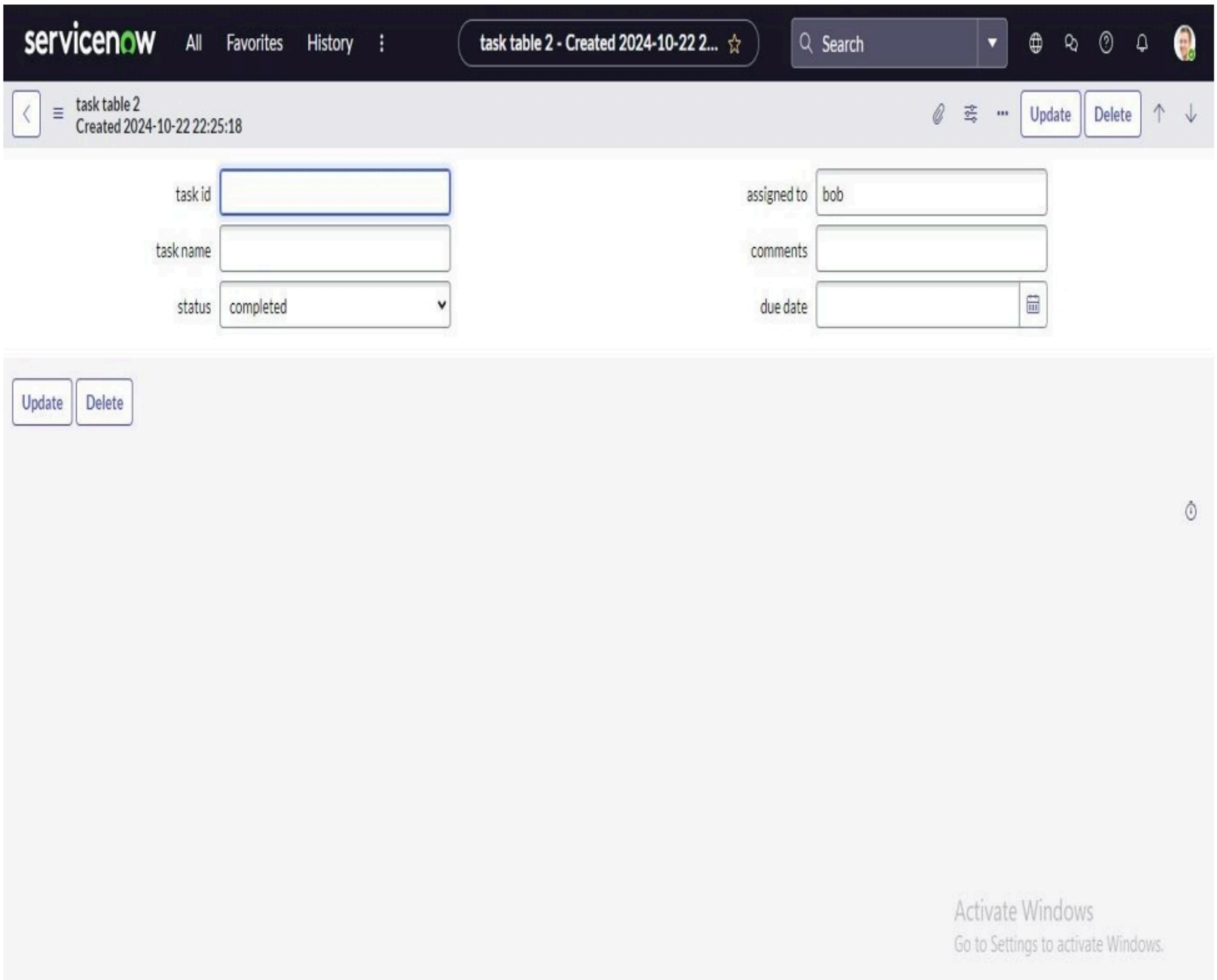


Next Step:

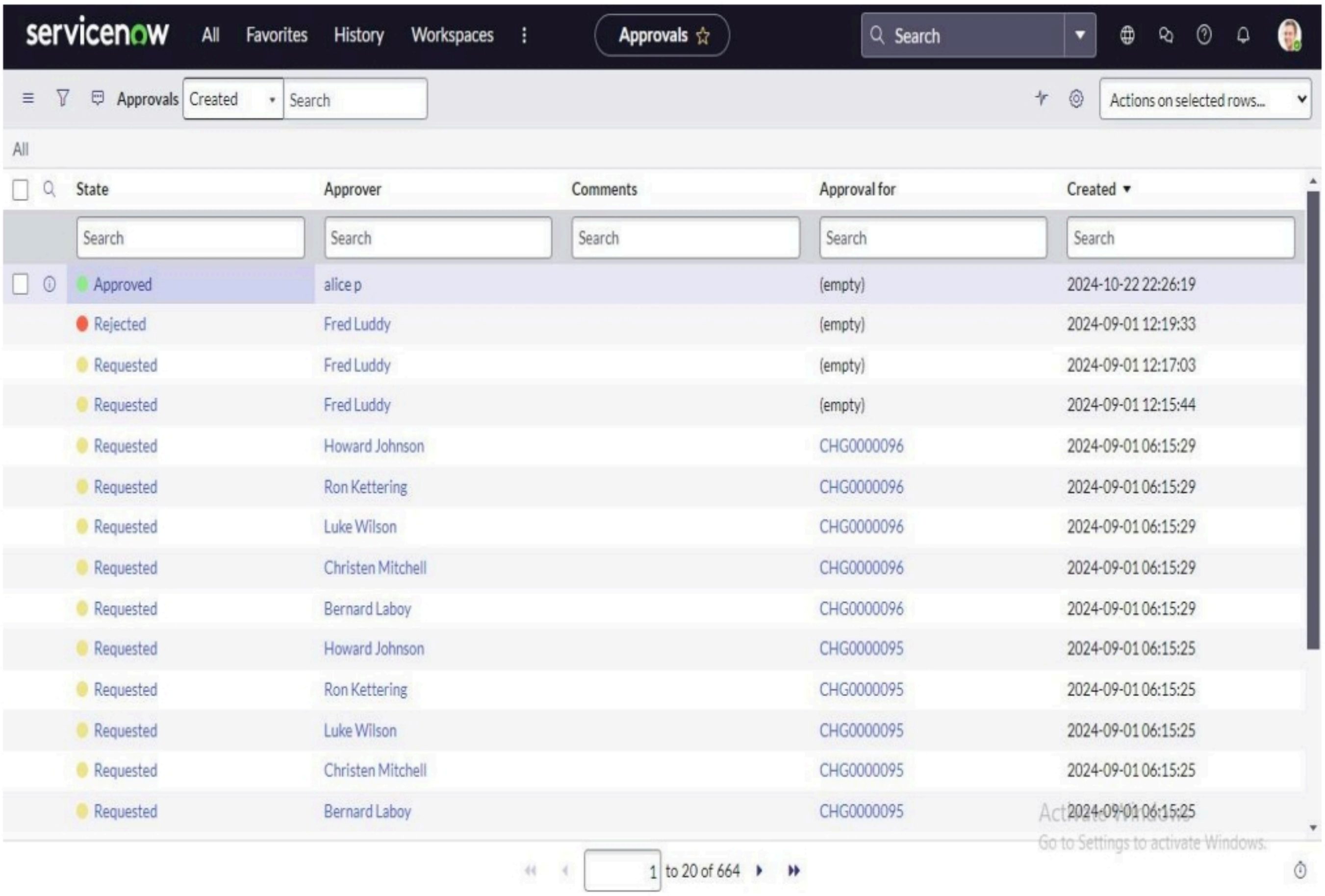
1. Under Actions, click Add an Action.
2. Search and select Ask for Approval.
3. In the Record field, drag the required fields from the right-side data panel.
4. The table will auto-assign.
5. Set the approval field to Status.
6. Assign Alice P as the approver.
7. Click Done to save.



9. In the Application Navigator, search for Task Table.
10. Verify that the Status field is updated to Completed.



11. Open the Application Navigator and search for My Approvals.
12. Click on My Approvals under Service Desk.
13. Alice P will receive an approval request. Right-click on the request and select Approve.



State	Approver	Comments	Approval for	Created
Approved	alice p		(empty)	2024-10-22 22:26:19
Rejected	Fred Luddy		(empty)	2024-09-01 12:19:33
Requested	Fred Luddy		(empty)	2024-09-01 12:17:03
Requested	Fred Luddy		(empty)	2024-09-01 12:15:44
Requested	Howard Johnson		CHG0000096	2024-09-01 06:15:29
Requested	Ron Kettering		CHG0000096	2024-09-01 06:15:29
Requested	Luke Wilson		CHG0000096	2024-09-01 06:15:29
Requested	Christen Mitchell		CHG0000096	2024-09-01 06:15:29
Requested	Bernard Laboy		CHG0000096	2024-09-01 06:15:29
Requested	Howard Johnson		CHG0000095	2024-09-01 06:15:25
Requested	Ron Kettering		CHG0000095	2024-09-01 06:15:25
Requested	Luke Wilson		CHG0000095	2024-09-01 06:15:25
Requested	Christen Mitchell		CHG0000095	2024-09-01 06:15:25
Requested	Bernard Laboy		CHG0000095	2024-09-01 06:15:25

Conclusion:

This scenario demonstrates a well-structured approach to project management by clearly defining the roles of Alice and Bob within an organized workflow. With Alice providing direction and Bob executing assigned tasks, the team collaborates effectively to achieve project goals. The use of tables helps in systematically organizing key information, making it easier to monitor projects, tasks, and progress updates. Overall, this system strengthens accountability, improves communication, and supports the successful completion of projects.