

OPTIMIZING USER, GROUP, AND ROLE MANAGEMENT WITH ACCESS CONTROL AND WORKFLOWS

Team Id:NM2025TMID08799

Team Members:4

Team Leader: VINOTHA V

Team Member1: VIYASHINI J

Team Member 2: YUVARAJ M

Team Member3: AKASH J

Problem Context:

In a small project environment, a Project Manager (Alice) and a Team Member (Bob) are responsible for delivering tasks. However, the absence of well-defined roles, access restrictions, and structured workflows often creates confusion in responsibilities, accountability, and progress monitoring.

Objectives:

- 1. Role Definition:** Clearly outline the duties of Alice as Project Manager and Bob as Team Member, ensuring both responsibility and access boundaries are transparent.
- 2. Access Control:** Introduce mechanisms that limit Bob's ability to create or edit projects beyond his assigned tasks, while still allowing him to view and update his responsibilities.
- 3. Workflow Organization:** Establish a structured process that enables Alice to assign work, track task progress, and oversee completion in a timely and efficient manner.

KeySkills/Tools:Users,Groups,Roles,Tables,AccessControlLists(ACL),
Workflow/Flow Designer.

TASKINITIATION

Milestone1:Users

Activity1:CreateUsers

1. Openservicenow
2. ClickonAll>>search forusers
3. SelectUsersunder systemsecurity
4. Click onnew
5. Fillthefollowingdetailsto createanewuser
6. Click onsubmit

The screenshot shows the ServiceNow User creation interface. The user is creating a new user named 'Alice p' with the following details:
User ID: alice
First name: Alice
Last name: p
Title: (empty)
Department: (empty)
Email: alice@gmail.com
Language: -- None --
Calendar integration: Outlook
Time zone: System (America/Los_Angeles)
Date format: System (yyyy-MM-dd)
Business phone: (empty)
Mobile phone: (empty)
Active: checked
Other checkboxes: Password needs reset, Locked out, Web service access only, Internal Integration User
Buttons: Update, Set Password, Delete
Related Links: View linked accounts, View Subscriptions, Reset a password
Bottom navigation: Entitled Custom Tables, Roles, Groups, Delegates, Subscriptions, User Client Certificates
Table view: Table, Search

Create one more user:

7. Create another user with the following details

8. Click on submit

The screenshot shows the ServiceNow User creation form for a user named 'Bob p'. The form fields include:

- User ID: bob
- First name: Bob
- Last name: p
- Title: (empty)
- Department: (empty)
- Email: bob@gmail.com
- Language: -- None --
- Calendar integration: Outlook
- Time zone: System (America/Los_Angeles)
- Date format: System (yyyy-MM-dd)
- Business phone: (empty)
- Mobile phone: (empty)
- Photo: Click to add...
- Active: checked
- Web service access only: unchecked
- Locked out: unchecked
- Internal Integration User: unchecked

At the bottom, there are buttons for Update, Set Password, and Delete. Below the form, there is a Related Links section with links to New linked accounts, New Subscriptions, and Reset a password. A navigation bar at the bottom includes Entitled Custom Tables, Roles, Groups, Delegates, Subscriptions, and User Client Certificates.

Milestone 2: Groups

Activity 1: Create Groups

1. Open serviceNow.

2. Click on All > search for groups

3. Select groups under system security

4. Click on new

5. Fill the following details to create a new group

6. Click on submit.

Group - New Record

Name: project team

Manager:

Parent:

Description:

Submit

Milestone 3: Roles

Activity1:Create roles

1. Openservicenow.
2. ClickonAll>>search forroles
3. Selectrolesundersystemsecurity
4. Click onnew
5. Fillthefollowingdetailstocreateanewrole
6. Click onsubmit.

Role - project member

Name: project member

Application: Global

Elevated privilege:

Description:

Update Delete

New Edit...

Contains Roles	Applications with Role	Modules with Role	Custom Tables
<input type="text" value="for text"/> Search			

Role = project member

Contains

No records to display

Createonemorerole:

7. Createanotherrolewiththefollowingdetails

8. Click onsubmit

The screenshot shows a 'Role - New Record' form in ServiceNow. The 'Name' field contains 'team member'. The 'Application' dropdown is set to 'Global'. The 'Elevated privilege' checkbox is unchecked. The 'Description' field is empty. A 'Submit' button is visible at the bottom left.

Milestone 4: Table

Activity1: CreateTable

1. Openservicenow.
2. ClickonAll>>search fortables
3. Selecttablesunder systemdefinition
4. Click onnew
5. Fillthefollowingdetailstocreateanewtable

Label: project table

ChecktheboxesCreatemodule &Createmobilemodule

6. Undernew menuname:projecttable
7. Undertablecolumnsgivethecolumns

https://dev194007.service-now.com/nav/uiclassic/params/target/sys_db_object.do?sys_id=1%26sys_is_list%3Dtrue%26sys_target%3Dsys_db_object%26sysparm_checked_items%3D

servicenow All Favorites History Workspaces Admin Table - New Record Search

Table New record

Name: u_project_table

Create module:

Extends table:

Create mobile module:

Add module to menu: -- Create new --

New menu name: project table

Remote Table:

Columns Controls Application Access

Table Columns: for text Search

Dictionary Entries

	Column label	Type	Reference	Max length	Default value	Display
X	project id					false
X	project name					false
X	project manager					false
+	st	I				

8. Click onsubmit

https://dev194007.service-now.com/nav/uiclassic/params/target/sys_db_object.do?sys_id=1%26sys_is_list%3Dtrue%26sys_target%3Dsys_db_object%26sysparm_checked_items%3D

servicenow All Favorites History Workspaces Admin Table - New Record Search

Table New record

Name: u_task_value_2

Create module:

Extends table:

Create mobile module:

Add module to menu: -- Create new --

New menu name: task table 2

Remote Table:

Columns Controls Application Access

Table Columns: Column label Search

Dictionary Entries

	Column label	Type	Reference	Max length	Default value	Display
X	Updated by	String	(empty)	40		false
X	Updates	Integer	(empty)	40		false
X	Updated	Date/Time	(empty)	40		false
X	Sys ID		(empty)	32		false
X			(empty)	40		false
X			(empty)	40		false
+	Insert a new row...					

Createonemoretable:

9. Create another table as: tasktable2 and fill with following details.

10. Click on submit.

Column label	Type	Reference	Max length	Default value	Display
Updated by	String	{empty}	40	40	false
Updates	Integer	{empty}	40	40	false
Updated	Date/Time	{empty}	40	40	false
Sys ID	Integer	{empty}	32	40	false
Created by	String	{empty}	40	40	false
Created	Date/Time	{empty}	40	40	false
task id	Integer				false
task name	String				false
assigned to	String				false
due date	Date				false
status	Choice				false
comments	String				false

Milestone5: Assign user to groups

Activity1: Assign users to project team group

1. Open service now.

2. Click on All >> search for groups

3. Select tables under system definition

4. Select the project team group

5. Under group members

6. Click on edit

7. Select alice and bob and save

The screenshot shows the ServiceNow user profile page for a user named 'alice p'. The top navigation bar includes links for All, Favorites, History, Workspaces, Admin, and a search bar. The main content area displays the user's details: 'Locked out' (unchecked), 'Active' (checked), and 'Internal Integration User' (unchecked). There are fields for 'Business phone' and 'Mobile phone'. Below this, there are buttons for Update, Set Password, and Delete. A 'Related Links' section lists /view_linked_accounts, /view_Subscriptions, and /reset_a_password. A 'Entitled Custom Tables' section shows tabs for Roles, Groups (1), Delegates, Subscriptions, and User Client Certificates. The 'Roles' tab is selected and shows a search bar with 'Role' and 'Search' buttons, and an 'Edit...' button. The results table has columns for Role, State, Inherited, and Inheritance Count. It displays one record: 'Project Manager' with state 'Inherited' and count '1'. A note says 'No records to display'.

Milestone 6: Assign roles to users

Activity 1: Assign roles to alice user

1. Openservicenow.ClickonAll>>searchforuser
2. Selecttablesunder systemdefinition
3. Selectthe project manager user
4. Under project manager
5. Clickonedit
6. Select project member and save
7. clickoneditaddu_project_tableroleandu_task_tablerole
8. clickonsaveandupdate the form.

User - alice p

Related Links:

- New linked accounts
- New Subscriptions
- Reset a password

Entitled Custom Tables	Roles (2)	Groups (1)	Delegates	Subscriptions	User Client Certificates
	Role				
	<input type="checkbox"/> Search				

User = alice p

Role	State	Inherited	Inheritance Count
u_project_table_user	Active	false	
u_task_table_2_user	Active	false	

1 to 2 of 2

Activity2:Assignrolestobobuser

1. Openservicenow.ClickonAll>>searchforuser
2. Selecttablesunder systemdefinition
3. Selectthebobp user
4. Underteammember
5. Clickonedit
6. Selectteammemberandgivetableroleandsave
7. ClickonprofileiconImpersonate usertobob
8. We cansee the tasktable2.

User ID: bob
First name: bob
Last name: p
Title:
Department:
Password needs reset:
Locked out:
Active:
Internal Integration User:

Email: bob@gmail.com
Identity type: Human
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...

Related Links
New linked accounts
New Subscriptions
Reset a password

Entitled Custom Tables | Roles | Groups (1) | Delegates | Subscriptions | User Client Certificates

Actions on selected rows...

Milestone7: Applicationaccess

Activity1: Assignableaccesstoapplication

1. while creating a table automatically create application and module for that table
2. Go to application navigator search for search project table application
3. Click on edit module
4. Give project member roles to that application
5. Search for task table 2 and click on edit application.
6. Give the project member and team member role for task table 2 application

Application Menu - project table

Restricts access to the specified roles. Otherwise, all users can view the application menu when it is active.

Roles: u_project_table_user

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**

Application menu = project table

Title	Table	Active	Filter	Order	Link type	Device type	Roles	Updated
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Milestone8:Accesscontrolist Activity

1: Create ACL

1. Openservicenow.
2. ClickonAll>>search forACL
3. SelectAccessControl(ACL) undersystemsecurity
4. Clickonelevaterole
5. Click onnew

The screenshot shows the ServiceNow Access Control (ACL) creation interface. At the top, there are tabs for All, Favorites, History, Workspaces, Admin, and Access Controls. The URL in the address bar is https://dev194007.service-now.com/nav/ui/classic/params/target/sys_security.ac_list.do?o%3Fsysparm_userpref_module%3D4ec206740a0aa700b850e0337b2f00%26sysparm_clear_stack... . The main form has a title 'Access Control New record'. A warning message at the top says: 'Warning: A role, security attribute, data condition, script or ACL control via reference fields is required to properly secure access with this ACL.' The form fields include:

- Type: record
- Operation: write
- Decision Type: Allow If
- Application: Global
- Active: checked
- Advanced: unchecked
- Admin overrides: checked
- Protection policy: -- None --
- Name: * (highlighted with a blue border)
- Description: (empty text area)
- Applies To: Add Filter Condition, Add OR Clause

A 'Conditions' section is visible below the main form.

6. Fillthefollowingdetailsto createanewACL
7. Scrolldownunderrequiresrole
8. Doubleclickoninsertanewrow
9. Givetasktableandteammemberrole
10. Clickonsubmit
11. Similarlycreate4 aclforthefollowingfields
12. Clickonprofile ontoprighthside

13. Click on impersonate user

14. Select bob user

15. Go to all and select task table 2 in the application menu bar

16. Comment and status fields have the edit access

Milestone 9: Flow

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

1. Open ServiceNow.

2. Click on All >> search for Flow Designer

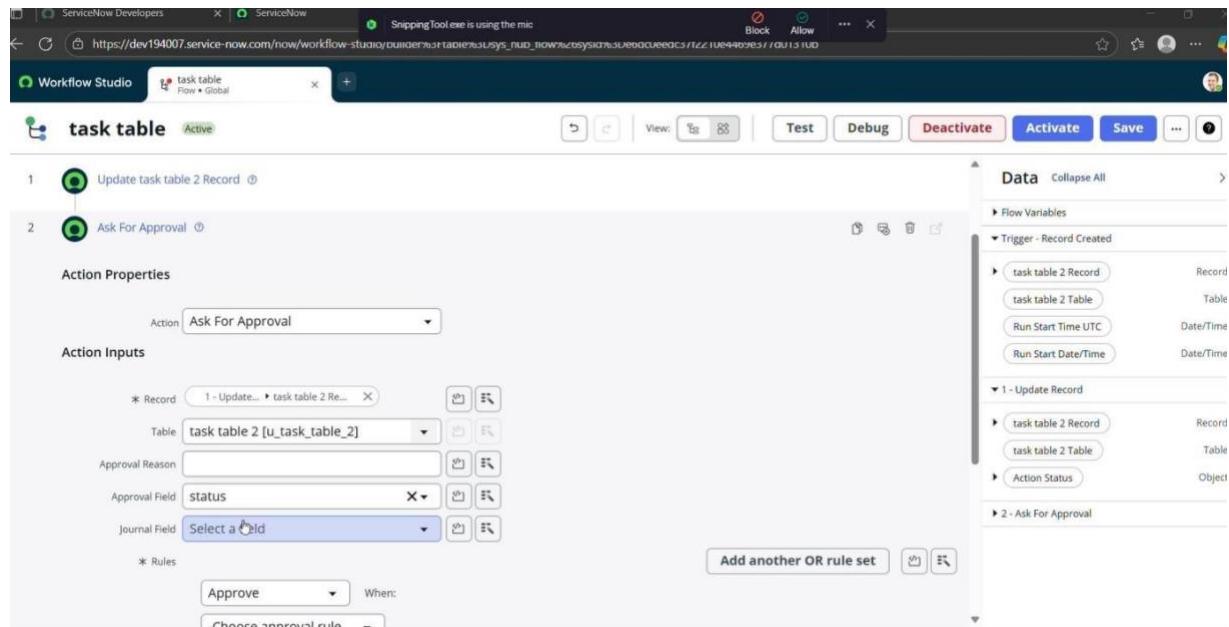
3. Click on Flow Designer under Process Automation.

4. After opening Flow Designer Click on new and select Flow.

5. Under Flow properties Give Flow Name as "tasktable".

6. Application should be Global.

7. Click build flow.



next step:

1. Click on Add a trigger

2. Select the trigger in that search for "create record" and select that.

3. Give the table name as "task table".

4. Give the condition as Field:status Operator:is Value:in progress

Field:comments Operator:is Value:feedback Field:

assigned to Operator: is Value: bob

5. After that click on Done.

Next step:

1. Click on Add an action.

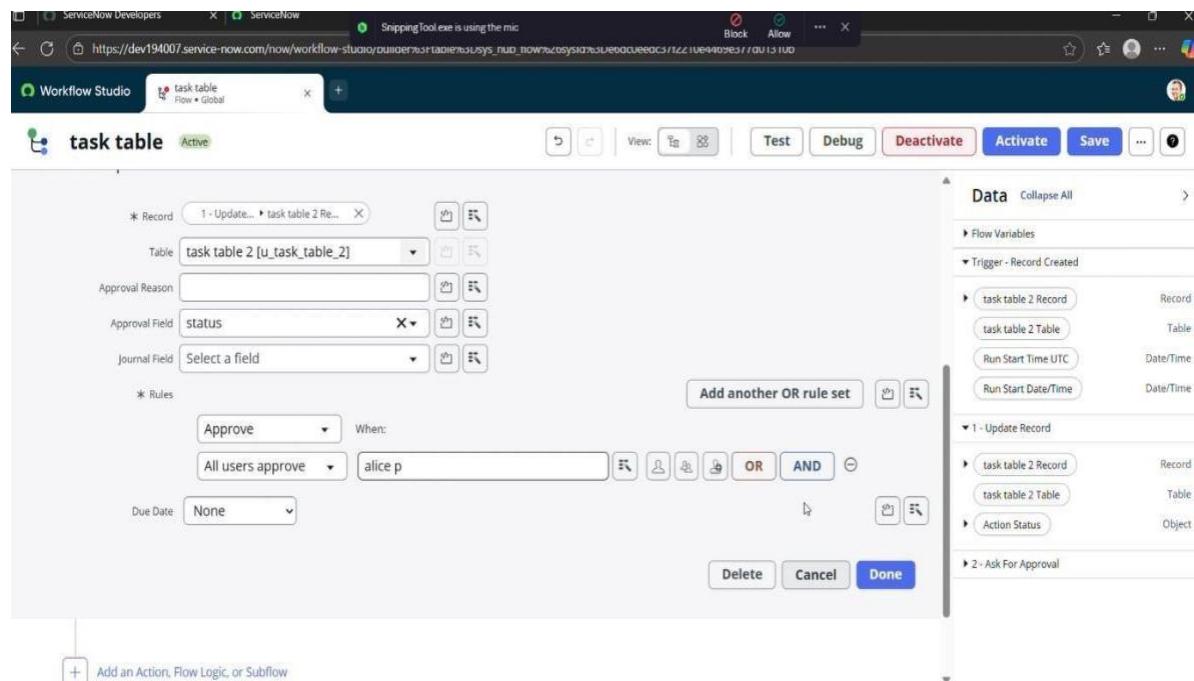
2. Select action in that, search for "update records".

3. In Record field drag the fields from the data navigation from Right Side (Data pill)

4. Table will be auto assigned after that

5. Add fields as "status" and value as "completed"

6. Click on Done.



Nextstep:

1. NowunderActions.
2. ClickonAddanaction.
3. Selectactioninthat,searchfor“askforapproval”.
4. InRecordfield dragthefieldsfromthedatanavigationfromRightside
5. Tablewillbeautoassignedafterthat
6. Givetheadprovefieldas“status”
7. Giveapproverasalicep
8. Click onDone.
9. Gotoapplicationnavigatorsearchfortasktable.
10. Itstatusfieldisupdatedtocompleted
11. Gotoapplication navigatorandsearchfor myapproval
12. Clickonmyapprovalundertheservice desk.
13. Alicepgot approvalrequestthenrightclickonrequestedthenselectapproved

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 approach provides a streamlined system for managing projects by defining roles, applying access restrictions, and organizing workflows. It helps the team collaborate effectively, improves accountability, simplifies task tracking, and ensures successful project delivery.