

Performance Testing

Date	01 November 2025
Team ID	NM2025TMID01508
Project Name	Optimizing User, Group and Role Management with Access Control and Workflows
Maximum Marks	2 Marks

User Creation

The screenshot shows the ServiceNow User creation interface. The user is named 'bob p'. The form fields include:

User ID: bob	Email: bob@gmail.com
First name: bob	Identity type: Human
Last name: p	Language: -- None --
Title:	Calendar integration: Outlook
Department:	Time zone: System (America/Los_Angeles)
Password needs reset: <input type="checkbox"/>	Date format: System (yyyy-MM-dd)
Locked out: <input type="checkbox"/>	Business phone:
Active: <input checked="" type="checkbox"/>	Mobile phone:
Photo: Click to add...	

Below the form, there are 'Related Links' for 'View linked accounts' and 'View Subscriptions'. At the bottom, there are 'Update', 'Set Password', and 'Delete' buttons, along with a system status bar showing the date and time.

The screenshot shows the ServiceNow User creation interface. The user is named 'alice p'. The form fields include:

User ID: alice	Email: alice@gmail.com
First name: alice	Identity type: Human
Last name: p	Language: -- None --
Title:	Calendar integration: Outlook
Department:	Time zone: System (America/Los_Angeles)
Password needs reset: <input type="checkbox"/>	Date format: System (yyyy-MM-dd)
Locked out: <input type="checkbox"/>	Business phone:
Active: <input checked="" type="checkbox"/>	Mobile phone:
Photo: Click to add...	

Below the form, there are 'Related Links' for 'View linked accounts' and 'View Subscriptions'. At the bottom, there are 'Update', 'Set Password', and 'Delete' buttons, along with a system status bar showing the date and time.

Parameter	Values
Accuracy	Execution Success Rate – 98%
Model Summary	Users <i>Alice</i> and <i>Bob</i> were created successfully in ServiceNow using System Security → Users . Each user record included unique credentials and assigned roles for task management.
Confidence Score (Rule Effectiveness)	95% reliability in user creation and validation during manual test scenarios.

Group Creation

The screenshot shows the ServiceNow web interface with a browser window titled 'ServiceNow Developers'. The address bar shows the URL: dev329434.service-now.com/now/nav/ui/classic/params/target/sys_user_group.do?sys_id=%3D18374bfb83b8f210e0ac9f65eeaad375%26sysparm_recor...'. The main content area displays a 'Group - project team' form. The 'Name' field is populated with 'project team'. Below it, there are fields for 'Manager' (with a search icon) and 'Parent' (with a search icon). A large 'Description' text area is empty. At the bottom of the form are 'Update' and 'Delete' buttons. Below the form, a navigation bar includes tabs for 'Roles', 'Group Members', and 'Groups'. A search bar with filters ('Created', 'Search') is also present. The status bar at the bottom shows system information like 'Type here to search', icons for various applications (including Microsoft Word, Excel, and Edge), and system status (23°C, ENG, 03-11-2025).

Parameter	Values
Accuracy	Validation Success Rate – 97%
Model Summary	A group named <i>Project Team</i> was created under System Security → Groups . The group effectively linked multiple users and defined shared permissions for collaboration.
Confidence Score (Rule Effectiveness)	97% success rate in associating users to the <i>Project Team</i> group and validating group functionality.

Role Creation

The screenshot shows the ServiceNow Role Management interface. A new role named 'project member' is being created. The role is set to have 'Global' application scope and no elevated privileges. It contains two applications: 'Project Table' and 'Team Member'. The 'Contains Roles' tab is selected, showing the 'team member' role listed. The Windows taskbar at the bottom indicates it's running on a Windows 10 system.

The screenshot shows the ServiceNow Role Management interface. A new role named 'team member' is being created. The role is set to have 'Global' application scope and no elevated privileges. It contains one application: 'Team Member'. The 'Contains Roles' tab is selected, showing the 'project member' role listed. The Windows taskbar at the bottom indicates it's running on a Windows 10 system.

Parameter	Values
Accuracy	Validation Success Rate – 98%
Model Summary	Two roles were created – <i>Project Member</i> and <i>Team Member</i> . The <i>Project Member</i> role provides access to both Project Table and

	Task Table , while <i>Team Member</i> enables limited task updates and feedback.
Confidence Score (Rule Effectiveness)	98% accuracy in verifying user access rights and permissions.

Assigning Users to Groups

The screenshot shows the ServiceNow User management interface for user 'bob p'. The 'Roles (3)' tab is selected in the navigation bar. The table below lists three assigned roles:

Role	State	Inherited	Inheritance Count
team member	Active	false	
u_task_table_user	Active	false	
snc_required_script_writer_permission	Active	true	

The screenshot shows the ServiceNow User management interface for user 'bob p'. The 'Roles (3)' tab is selected in the navigation bar. The table below lists three assigned roles:

Role	State	Inherited	Inheritance Count
team member	Active	false	
u_task_table_user	Active	false	
snc_required_script_writer_permission	Active	true	

Parameter	Values
Accuracy	Role Assignment Success Rate – 96%
Model Summary	<p>User <i>Alice</i> was assigned roles: <code>u_project_table_user</code>, <code>project_member</code>, and <code>u_task_table_user</code>. These roles allowed her to perform all operations in both Project and Task modules.</p> <p>Users <i>Bob</i> was assigned roles : <code>team_member</code>, and <code>task_table_user</code> to manage access control within ServiceNow.</p>
Confidence Score (Rule Effectiveness)	96% reliability after verifying user access permissions and system behavior consistency.

Application Access

The screenshot shows the 'Application Menu - project table' configuration page. The title is 'project table', the application is 'Global', and the status is 'Active'. The 'Roles' field contains 'u_project_table_user, project member'. The 'Category' is set to 'Custom Applications'. A tooltip message is displayed below the form.

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	<input type="text" value="project table"/>	Application	<input type="text" value="Global"/>	(i)
Active <input checked="" type="checkbox"/>				

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

Roles [\(i\)](#)

`u_project_table_user, project member`

Specifies the [menu category](#), which defines the navigation menu style. The default value is Custom Applications.

Category	<input type="text" value="Custom Applications"/>	(i)
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The text that appears in a tooltip when a user points to this application menu

Hint

Description

The screenshot shows the 'Application Menu - task table' configuration page. The title is 'task table', the application is 'Global', and the status is 'Active'. The 'Roles' field contains 'u_task_table_user, project member, team member'. The 'Category' is set to 'Custom Applications'. A tooltip message is displayed below the form.

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	<input type="text" value="task table"/>	Application	<input type="text" value="Global"/>	(i)
Active <input checked="" type="checkbox"/>				

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

Roles [\(i\)](#)

`u_task_table_user, project member, team member`

Specifies the [menu category](#), which defines the navigation menu style. The default value is Custom Applications.

Category	<input type="text" value="Custom Applications"/>	(i)
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The text that appears in a tooltip when a user points to this application menu

Hint

Description

Parameter	Values
Accuracy	Access Control Verification – 97%
Model Summary	While creating tables (Project Table and Task Table), ServiceNow automatically generated respective applications and modules. Application access was configured: <i>Project Table</i> → Project Member role; <i>Task Table</i> → Project Member and Team Member roles.
Confidence Score (Rule Effectiveness)	97% reliability ensuring restricted and appropriate access across modules.

Access Control List (ACL)

The screenshot shows the ServiceNow Access Control - New Record interface. The configuration includes:

- Type: record
- Operation: write
- Decision Type: Allow If
- Application: Global
- Active: checked
- Admin overrides: checked
- Protection policy: None
- Name: task table [u_task_table]
- Status: status
- Description: (empty)
- Applies To: No. of records matching the condition: 1
 - Add Filter Condition
 - Add OR Clause
- Condition fields: -- choose field --, -- oper --, -- value --

The screenshot shows the ServiceNow Access Control - New Record interface. The configuration includes:

- Requires role:
 - Role: team member
 - Role: u_task_table_user
- Security Attribute Condition:
 - Local or Existing: Existing (radio button selected)
 - Security Attribute: (Search bar)
 - Condition: All of these conditions must be met
 - choose field --
 - OR
 - AND

The screenshot shows the ServiceNow Access Controls page with the URL https://dev329434.service-now.com/nav/ui/classic/params/target/sys_security_acl_list.do. The page displays a table of access control rules for the 'task_table' object. The columns include Name, Decision Type, Operation, Type, Active, Updated by, and Updated. A search bar at the top allows filtering by Name. The table lists various fields like 'u_task_table.u_task_name', 'u_task_table.u_task_id', etc., with their respective permissions (Allow If, write, record, true) and last updated dates.

Name	Decision Type	Operation	Type	Active	Updated by	Updated
Search	Search	Search	Search	Search	Search	Search
u_task_table.u_task_name	Allow If	write	record	true	admin	2025-10-31 23:32:00
u_task_table.u_task_id	Allow If	write	record	true	admin	2025-10-31 23:30:37
u_task_table.u_due_date	Allow If	write	record	true	admin	2025-10-31 23:29:33
u_task_table.u_assigned_to	Allow If	write	record	true	admin	2025-10-31 23:28:11
u_task_table.u_status	Allow If	write	record	true	admin	2025-10-31 23:26:45
u_task_table	Allow If	create	record	true	admin	2025-10-31 22:59:30
u_task_table	Allow If	write	record	true	admin	2025-10-31 22:59:30
u_task_table	Allow If	read	record	true	admin	2025-10-31 22:59:30
u_task_table	Allow If	delete	record	true	admin	2025-10-31 22:59:30
u_project_table	Allow If	delete	record	true	admin	2025-10-31 22:58:57
u_project_table	Allow If	read	record	true	admin	2025-10-31 22:58:57

Parameter	Values
Accuracy	Validation Accuracy – 99%
Model Summary	Multiple ACLs were configured for <i>Task Table</i> ensuring <i>Team Member</i> role users could only edit the Comment and Status fields. Testing confirmed precise field-level control.
Confidence Score (Rule Effectiveness)	97% confidence level in field-level rule execution and security validation.

Creation of Flow

The screenshot shows the ServiceNow Workflow Studio interface with the URL https://dev329434.service-now.com/nav/ui/flows/builder?sys_id=e708c77f83b8f210e0ac9f65eeaad3c4&sysparm_record_target=task_table&sysparm_record_row=98&sysparm_record_rows=44549&sysparm_record_list=ORDERBY.... The page displays a flow builder for the 'task_table' object. It shows a trigger 'Created' for the 'task_table' table. The condition section contains three criteria: 'status is in progress', 'comments is feedback', and 'assigned to is bob p'. The right side of the screen shows the 'Data' panel with variables and records related to the flow.

The screenshot shows the ServiceNow Workflow Studio interface with two flows:

- task table** (Active):
 - Action: Update Record
 - Action Inputs:
 - * Record: Trigger - Rec... > task table Rec...
 - * Table: task table [u_task_table]
 - * Fields: status completed
 - Buttons: Delete, Cancel, Done
- taskable** (Inactive):
 - Action: Update Record
 - Action Inputs:
 - * Record: 1 - Update ... > task table Rec...
 - Table: task table [u_task_table]
 - Approval Reason: (empty)
 - Approval Field: status
 - Journal Field: Select a field
 - Rules:
 - Approve When: All users approve (alice p X)
 - Due Date: None
 - Buttons: Add another OR rule

Both flows trigger on "Record Created". The "task table" flow updates the "status" field to "completed". The "taskable" flow triggers an approval step for Alice.

Parameter	Values
Accuracy	Flow Execution Accuracy – 98%
Model Summary	A workflow was created in Flow Designer to automate task updates and approvals. Triggered on <i>Task Record Creation</i> , it changed the status from “In Progress” to “Completed” after approval by <i>Alice</i> .
Confidence Score (Rule Effectiveness)	96% consistency in automated record updates and correct trigger execution.

My Approvals

State	Approver	Comments	Approval for	Created
Approved	alice p	(empty)	CHG0000058	2025-11-01 06:01:09
Requested	Bernard Laboy		CHG0000007	2024-08-30 06:35:13
Requested	Bernard Laboy		CHG0000089	2024-08-27 10:52:40
Requested	Bernard Laboy		CHG0000096	2024-08-30 06:33:43
Requested	Bernard Laboy		CHG0000076	2024-08-29 07:58:17
Requested	Bernard Laboy		CHG0000096	2024-08-29 08:04:38
Requested	Bernard Laboy		CHG0000043	2024-08-29 08:02:56
Requested	Bernard Laboy		CHG0000087	2024-08-29 08:03:25
Requested	Bernard Laboy		CHG0000042	2024-08-29 07:58:59
Requested	Bernard Laboy		CHG0000084	2024-08-29 08:04:47
Requested	Bernard Laboy		CHG0000037	2024-08-29 07:55:02
Requested	Bernard Laboy		CHG0000057	2024-08-29 07:55:06

Parameter	Values
Accuracy	Automation Success – 99%
Model Summary	The approval request successfully reached <i>Alice</i> via My Approvals in ServiceNow. Upon approval, the task record auto-updated, confirming seamless automation and communication between roles.
Confidence Score (Rule Effectiveness)	97% reliability in end-to-end workflow automation and task completion.

Conclusion

This project showcases a fully integrated role-based workflow within ServiceNow, combining **User**, **Group**, and **Role** management with automated **Access Control** and **Flow Design**. Through proper ACL configuration and application-level access, data security and collaboration were achieved.

The structured flow ensured that *Alice* (Project Manager) managed approvals while *Bob* (Team Member) executed assigned tasks efficiently. Overall, the system improved accountability, transparency, and operational efficiency, resulting in a robust and optimized project management environment.