

Performance Testing

Performance and Testing

Define the Problem Statement

Date: 02 November 2025

NM ID: 57595D26352A593878648770E76E32EO

Project Name: Optimizing-User-Group-and-Role-Management-with-Access-Control-and- Workflows

Maximum Marks: 4 Marks

1. Create User

The screenshot shows the ServiceNow User creation interface. The User ID is set to 'alice'. The First name is 'alice' and the Last name is 'p'. The Email field contains 'alice@gmail.com'. The Active checkbox is checked. Other fields include Identity type (Human), Language (None), Calendar integration (Outlook), Time zone (System (America/Los_Angeles)), Date format (System (yyyy-MM-dd)), Business phone, and Mobile phone. There is also a Photo placeholder and a 'Click to add...' button. At the bottom, there are 'Update', 'Set Password', and 'Delete' buttons.

2. Create Groups

The screenshot shows the ServiceNow Group creation interface. The Name is 'project team'. The Manager field is empty. The Description field is also empty. At the bottom, there are 'Update' and 'Delete' buttons.

Below the main form, there is a table titled 'Group - project team' with columns: Roles, Group Members (2), Groups, Created, Role, Granted by, and Inherits. The table shows one record: 'Created' with a question mark icon in the Role column and 'No records to display' in the Granted by column.

3. Create Role

The screenshot shows the ServiceNow Role creation interface. The role name is 'project member'. It is set to 'Global' application and has 'Elevated privilege' checked. The 'Description' field is empty. Below the main form, there are tabs for 'Contains Roles', 'Applications with Role (2)', 'Modules with Role', and 'Custom Tables'. The 'Contains' tab is selected, showing a search bar and a results table with one entry: 'Role - project member'.

4. Create a Table and Assign the operations

The screenshot shows the ServiceNow Table creation interface. The table name is 'project table'. It is set to 'Global' application and is a 'Remote Table'. The 'Columns' tab is selected, displaying a table of dictionary entries:

Column label	Type	Reference	Max length	Default value	Display
Created by	String	(empty)	40	false	
Created	Date/Time	(empty)	40	false	
Updated by	String	(empty)	40	false	
Sys ID	Sys ID (GUID)	(empty)	32	false	
Updates	Integer	(empty)	40	false	
Updated	Date/Time	(empty)	40	false	

The screenshot shows the ServiceNow Table creation interface for 'task table 2'. The table columns are:

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

5. Assign Roles

The screenshot shows the ServiceNow User interface for the user 'alice p'. The 'Roles' tab is selected, displaying the following table:

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

6. Assign Table Access to Application

The screenshot shows the ServiceNow Application Menu interface for the application menu 'project table'. The 'Roles' section is set to 'project member'. Other fields include:

- * Title: project table
- Application: Global
- Active: checked
- Restricts access to the specified roles. Otherwise, all users can view the application menu when it is active.
- Category: Custom Applications
- The text that appears in a tooltip when a user points to this application menu.
- Hint: (empty)
- Description: (empty)

7. Assign Access Control

The screenshot shows the 'Access Control' configuration page for the 'u_task_table_2.u_status' record. The main settings are:

- Type: record
- Operation: write
- Decision Type: Allow If
- Admin overrides: checked
- Protection policy: None
- Name: u_task_table_2.u_status
- Description: (empty)
- Applies To: No.of.records matching the condition: 1 (empty)

Below this, there is a 'Conditions' section with a note about Access Control Rules having two decision types:

- Allow Access: Allows access to a resource if all conditions are met. Additional ACLs may grant access to records where this ACL has not granted access.
- Deny Access: Denies access to a resource unless all conditions are met. Additional ACLs may not grant access to records where this ACL has denied access.

At the bottom, there is a 'Requires role' section and a system status bar showing weather (20°C Mostly clear), time (22:54), and date (30-10-2025).

8. Create Flow

The screenshot shows the 'Workflow Studio' interface with a 'task table' trigger configuration. The trigger is set to 'Created' for the 'task table 2 [u_task_table_2]' table. The condition for the trigger is:

All of these conditions must be met:

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

Below the condition, there is an 'Advanced Options' button and a 'Data' panel on the right containing:

- Trigger - Record Created
 - task table 2 Record
 - task table 2 Table
 - Run Start Time UTC
 - Run Start Date/Time
- 1 - Update Record
 - u_task_table_2 Record
 - u_task_table_2 Table
 - Action Status
- 2 - Ask For Approval
 - Approval State
 - Ask for Approval Windows

At the bottom, there are 'Delete', 'Cancel', and 'Done' buttons.

9. Verify and Approval

The screenshot shows the ServiceNow Access Controls list page. The table has columns: Name, Decision Type, Operation, Type, Active, Updated by, and Updated. The table lists various security rules, such as 'u_task_table_2' with 'Allow If' decision type and 'read' operation, and 'sn_try_build_agent_knowledge_source' with 'Deny Unless' decision type and 'report_view' operation.

Name	Decision Type	Operation	Type	Active	Updated by	Updated
u_task_table_2.u_task_name	Allow If	write	record	true	admin	2025-10-29 01:11:04
u_task_table_2.u_task_id	Allow If	write	record	true	admin	2025-10-29 01:08:53
u_task_table_2.u_assigned_to	Allow If	write	record	true	admin	2025-10-29 01:06:42
u_task_table_2.u_due_date	Allow If	write	record	true	admin	2025-10-29 01:04:43
u_task_table_2.u_status	Allow If	write	record	true	admin	2025-10-28 23:13:59
u_task_table_2	Allow If	read	record	true	admin	2025-10-28 21:46:53
u_task_table_2	Allow If	delete	record	true	admin	2025-10-28 21:46:53
u_task_table_2	Allow If	write	record	true	admin	2025-10-28 21:46:53
u_task_table_2	Allow If	create	record	true	admin	2025-10-28 21:46:53
u_project_tableu	Allow If	read	record	true	admin	2025-10-28 21:43:18
u_project_tableu	Allow If	delete	record	true	admin	2025-10-28 21:43:18
u_project_tableu	Allow If	create	record	true	admin	2025-10-28 21:43:18
u_project_tableu	Allow If	write	record	true	admin	2025-10-28 21:43:18
sn_try_build_agent_knowledge_source	Deny Unless	report_view	record	true	system	2025-10-23 18:16:19
sn_try_build_agent_fremium_usage_log	Allow If	write	record	true	system	2025-10-23 18:16:19
sn_try_build_agent_task_telemetry	Deny Unless	report_view	record	true	system	2025-10-23 18:16:19
sn_try_build_agent_conversation	Allow If	read	record	true	system	2025-10-23 18:16:19

The screenshot shows the ServiceNow Approvals list page. The table has columns: State, Approver, Comments, Approval for, and Created. The table lists various approval requests, such as 'Approved' for 'alice.p' and 'Rejected' for 'Fred.Luddy'. The status column uses color-coded icons to represent the state of each approval request.

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.Kettnering	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.Kettnering	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