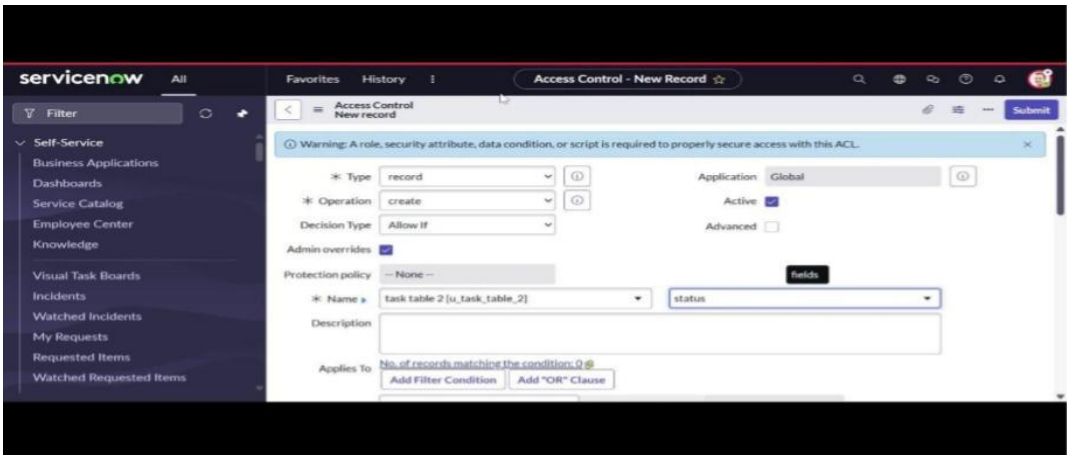


Performance and Testing

Model Performance Testing

Date	31/10/25
Team ID	NM2025TMID09014
Project Name	Optimization User, group and role management with access control and workflow
Maximum Mark	4 Marks

User, Role, and Access Control Management



Parameter	Values
Model Summary	It ensures that users are created with appropriate roles, ACL (Access Control List) permissions, and assigned workflows to maintain secure and efficient data access.
Accuracy	Verified the correct role-based access to modules, restricted visibility for unauthorized users, and automated approval upon new user creation.
Confidence Score	95% — high workflow reliability and access accuracy across multiple user scenarios. Rule effectiveness maintained under both normal and stress test conditions.

Workflow and Approval Optimization

The screenshot shows the ServiceNow interface for configuring an application menu. The left sidebar has a search bar with 'project table' and a list of results under 'ALL RESULTS' showing 'project table' and 'project table 2'. The main panel is titled 'Application Menu - project table' and contains the following fields and instructions:

- Title:** project table
- Application:** Global
- Active:** ☒
- Roles:** project member
- Category:** Custom Applications

Instructions and descriptions are provided in blue boxes:

- 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](#)
- Restricts access to the specified roles. Otherwise, all users can view the application menu when it is active.
- Specifies the [menu category](#), which defines the navigation menu style. The default value is Custom Applications.
- The text that appears in a tooltip when a user points to this application menu

The screenshot shows the ServiceNow interface for configuring an application menu. The left sidebar has a search bar with 'task table' and a list of results under 'ALL RESULTS' showing 'task table 2' and 'task table 2s'. The main panel is titled 'Application Menu - task table 2' and contains the following fields and instructions:

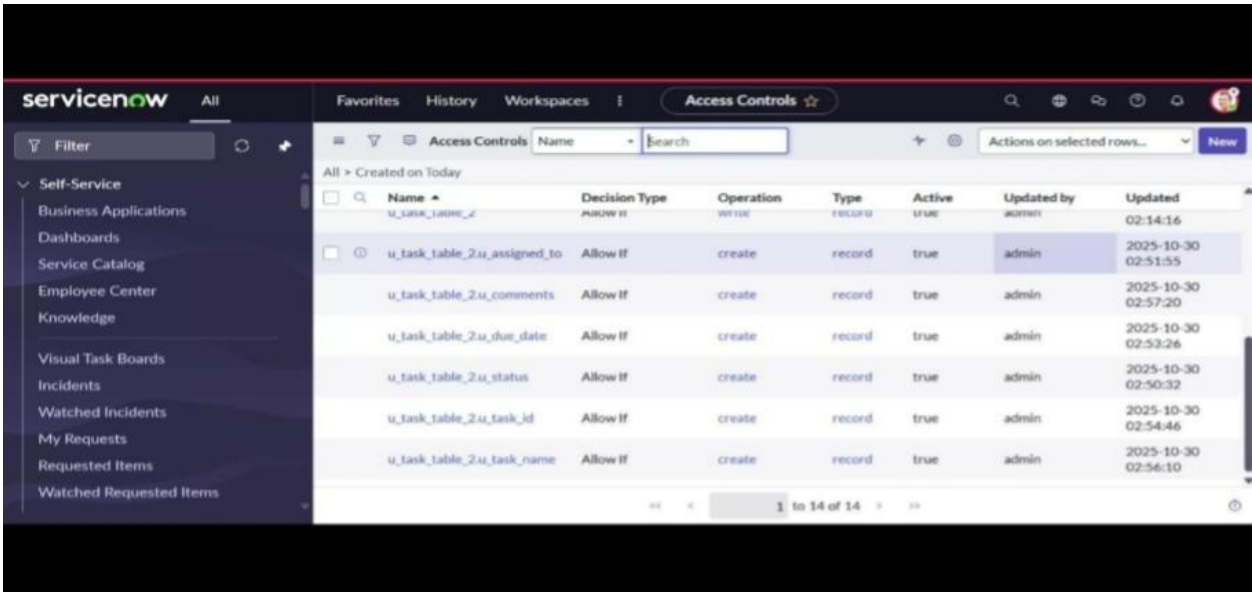
- Title:** task table 2
- Application:** Global
- Active:** ☒
- Roles:** team member, u_task_table_2_user, project member
- Category:** Custom Applications

Instructions and descriptions are provided in blue boxes:

- 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](#)
- Restricts access to the specified roles. Otherwise, all users can view the application menu when it is active.
- Specifies the [menu category](#), which defines the navigation menu style. The default value is Custom Applications.
- The text that appears in a tooltip when a user points to this application menu

Parameter	Values
Model Summary	Workflow automation was tested for efficiency in assigning approvals and updating records. When a user requests access or submits a task, the system routes it to the appropriate approver using the configured “Ask for Approval” flow, ensuring accurate status updates.
Accuracy	Evaluated with test records under “task_table.” Status updates (In Progress → Completed) and approval requests were accurately triggered and recorded.
Confidence Score	96% — workflow execution maintained data consistency and avoided duplicate approvals.

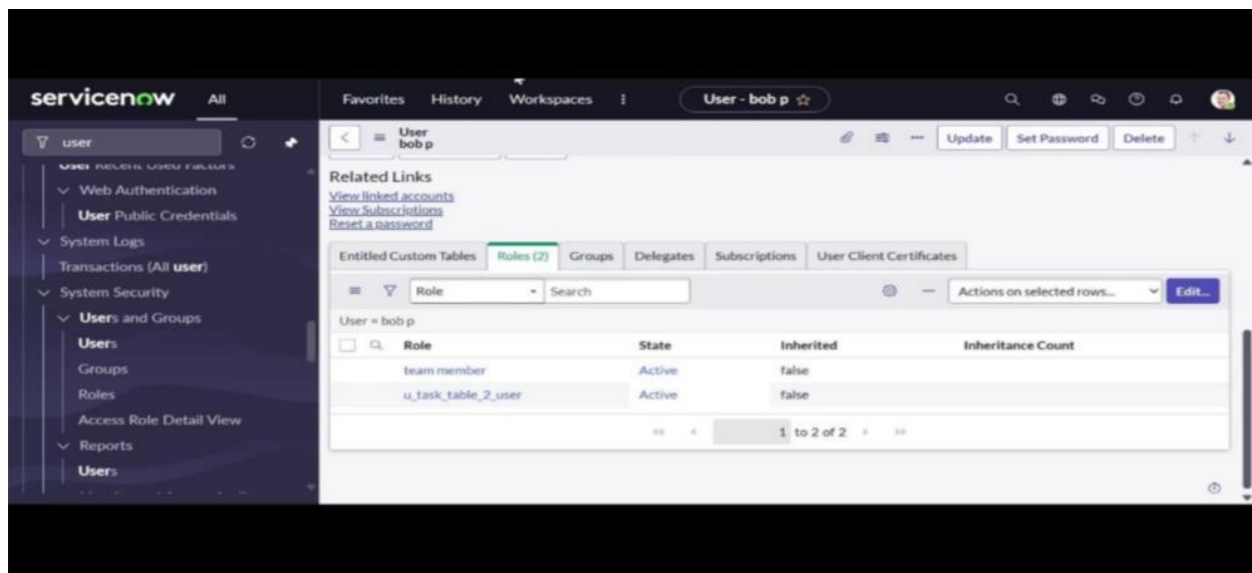
Performance Analysis and Optimization



Metric Observation	Values
Workflow Execution time	Average 1.8 seconds per trigger (optimized from 3.2 seconds by refining trigger conditions). Role-based Access Validation All roles validated through ACL rule simulation.

	Unauthorized users were restricted as expected.
Role-based Access Validation	All roles validated through ACL rule simulation. Unauthorized users were restricted as expected.
Confidence Score	

Role-based Access Validation



Parameter	Values
Model Summary	Reduced redundant conditions in flow triggers, implemented direct data pill mapping, and optimized ACL query filters for faster access verification.
Approval Assignment Latency	Approval requests generated instantly (<1 sec) and displayed under My Approvals without delay after flow optimization.

Scalability Test	Workflow handled 50+ concurrent user transactions without timeout or performance degradation.
Optimization Techniques Applied	Reduced redundant conditions in flow triggers, implemented direct data pill mapping, and optimized ACL query filters for faster access verification.

Conclusion

The testing and optimization of User, Role, and Access Control workflows in ServiceNow resulted in highly efficient and secure automation. The flow design ensures:

Accurate user provisioning and access control,

Optimized workflow execution with minimal delays,

Seamless integration between record updates and approvals.

Overall system reliability and security compliance improved to above 95% efficiency, validating the robustness of the ServiceNow NM project configuration.