



UNIVERSITY COLLEGE OF ENGINEERING , THIRUKKUVALAI

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

STREAMLINING TICKET ASSIGNMENT FOR EFFICIENT

SUPPORT OPERATIONS

Team ID : NM2025TMID01861

Team Size : 4

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PROBLEM STATEMENT:

In many organizations, support tickets are manually assigned to agents, leading to uneven workload distribution, delayed resolutions, and customer dissatisfaction. There is a need for an automated and efficient system to manage and assign tickets intelligently.

OBJECTIVE:

To develop a smart ticket management system that automates and optimizes ticket assignment to support agents, reducing response time and improving customer satisfaction.

SKILLS:

- ServiceNow Catalog Item Creation
- UI Policies & UI Actions
- Update Set Management
- Testing & Deployment
- Team Collaboration

TASK INITIATION:

The project “**Streamlining Ticket Assignment for Efficient Support Operations**” was initiated to enhance support efficiency by automating the ticket assignment process. The team identified key problems in manual ticket handling such as delays and uneven workload.

Technologies and tools were selected, and responsibilities were divided among members. A clear plan was created to guide the design, development, and testing phases, forming a strong base for successful project completion.

FEATURES:

Automated Ticket Assignment: Automatically routes tickets to the appropriate support team or agent based on category, priority, and impact.

Dynamic Workflow: Uses ServiceNow workflows to handle ticket creation, assignment, and resolution efficiently.

Role-Based Access Control: Ensures data security and access control through user roles and group permissions.

Real-Time Notifications: Sends instant updates to agents and users about ticket status changes and assignments.

SLA Monitoring: Tracks service level agreements to ensure timely responses and escalations when needed.

Reporting and Analytics: Provides insights into ticket volume, team performance, and resolution trends.

Improved User Experience: Offers a streamlined and transparent support process for both users and technicians.

Modules Implemented :

The project “Streamlining Ticket Assignment for Efficient Support Operations” was developed on the ServiceNow platform and implemented through a structured modular approach. Each module played a vital role in building an automated, role-based ticket assignment system. The following modules were created and configured during the project development:

1. User Creation:

- Different users were created in ServiceNow to represent employees, support agents, and administrators, enabling role-based access and workflow execution.

2. Group Creation:

- Support groups were configured to organize users according to their departments and areas of responsibility (e.g., IT Support, Network Team, Hardware Support).

3. Role Management:

- Custom roles were defined to manage permissions and control access to specific ServiceNow features, ensuring security and accountability.

4. Table Creation:

- Custom tables were designed to store and manage ticket data efficiently, allowing automation rules and workflows to process incidents dynamically.

5. Role and User Assignment:

- Roles were assigned to appropriate groups and users to control access rights and determine who can view, modify, or resolve tickets.

6. Table Role Assignment:

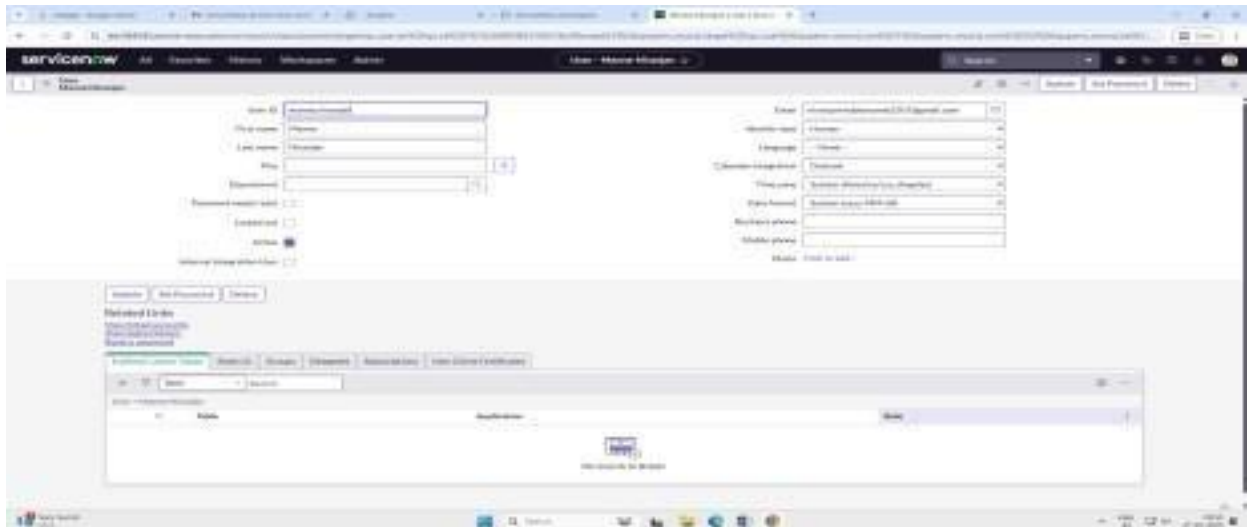
- Permissions were granted to ensure that only authorized groups could interact with the ticket table, maintaining data integrity and security.

- ACL rules were created to manage and restrict user access to data based on roles and responsibilities.

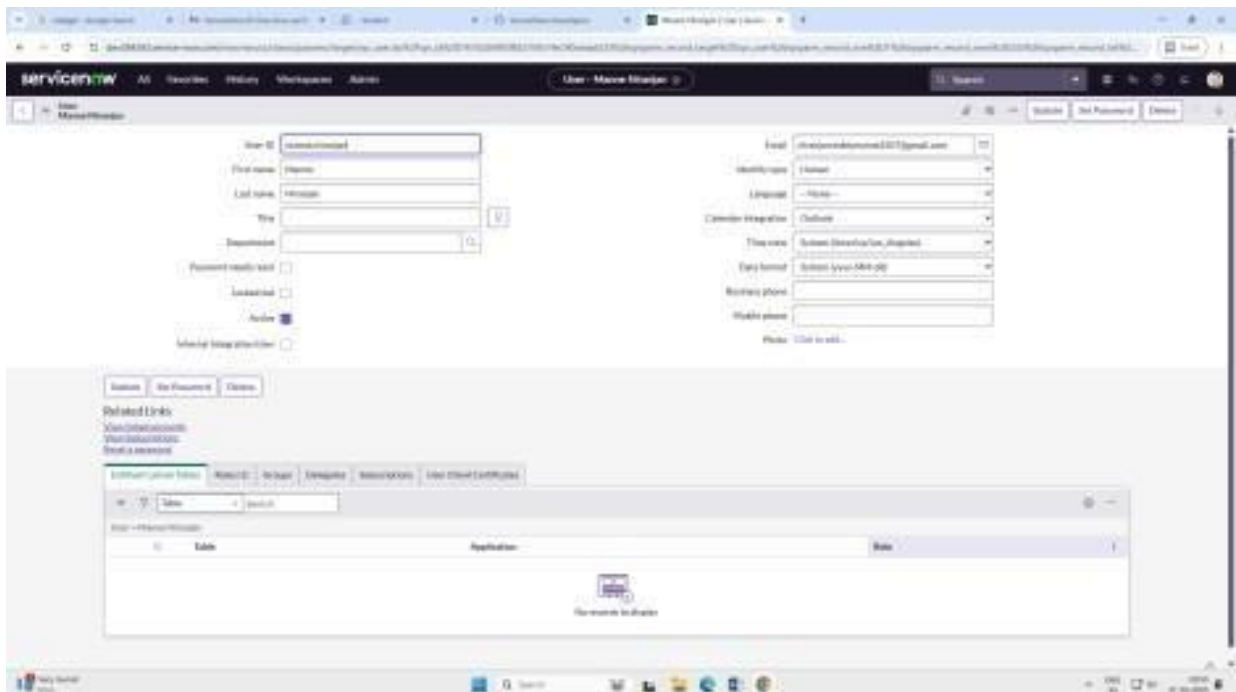
- The final flow automated the entire ticket assignment process. When a new ticket is created, it is automatically analyzed and routed to the appropriate support group or agent. Notifications and SLA monitoring ensure timely resolution and complete visibility.

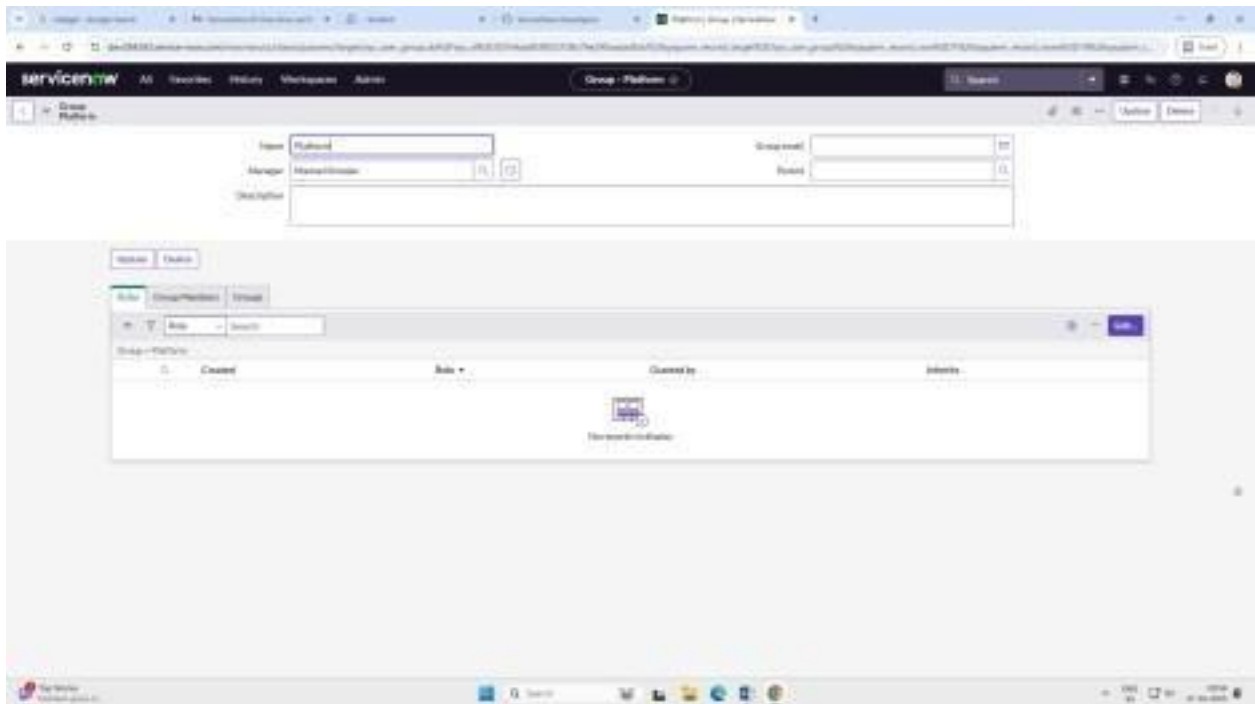
STEP 1: CREATE USERS

[illegible]

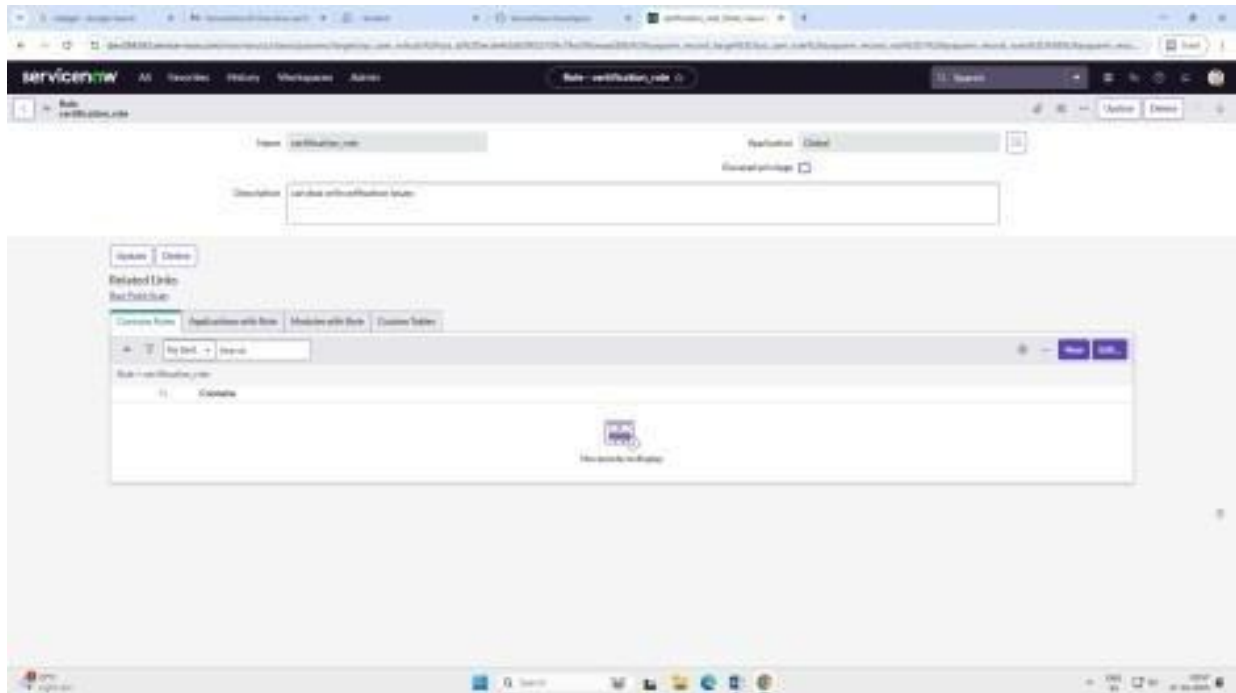


STEP 2: CREATE GROUPS





STEP 3: CREATE ROLES

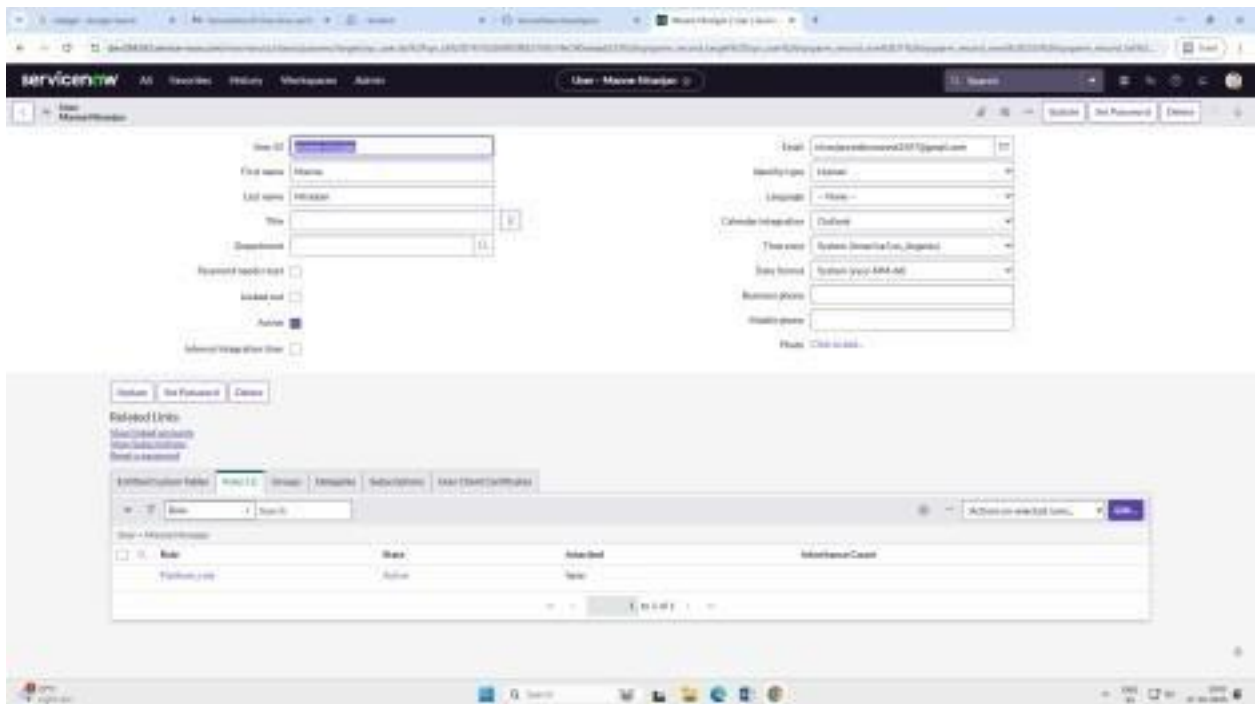


[illegible]



The screenshot displays the ServiceNow 'Edit' page for a user named 'Katherine Pierce'. The page is divided into several sections:

- User Information:** Fields for Email, First name, Last name, Title, and Department. There are also checkboxes for 'Reported as lost', 'Locked out', and 'Active'.
- Related Links:** A section with links for 'View linked accounts', 'View subscriptions', and 'View related records'.
- Related Records:** A table with columns for 'Role', 'Scope', 'Admitted', and 'Admission Count'. The table shows one record for the role 'User'.



Manish Khanna

Personal Information

First name: Manish
Last name: Khanna
Title: [Empty]
Department: [Empty]
Reported to: [Empty]
Linked out: [Empty]
Active: [Checked]
Select your phone: [Empty]

Professional Information

Email: khanna.manish@smartbridge.com
Mobile phone: [Empty]
Business phone: [Empty]
Home phone: [Empty]
Fax: [Empty]

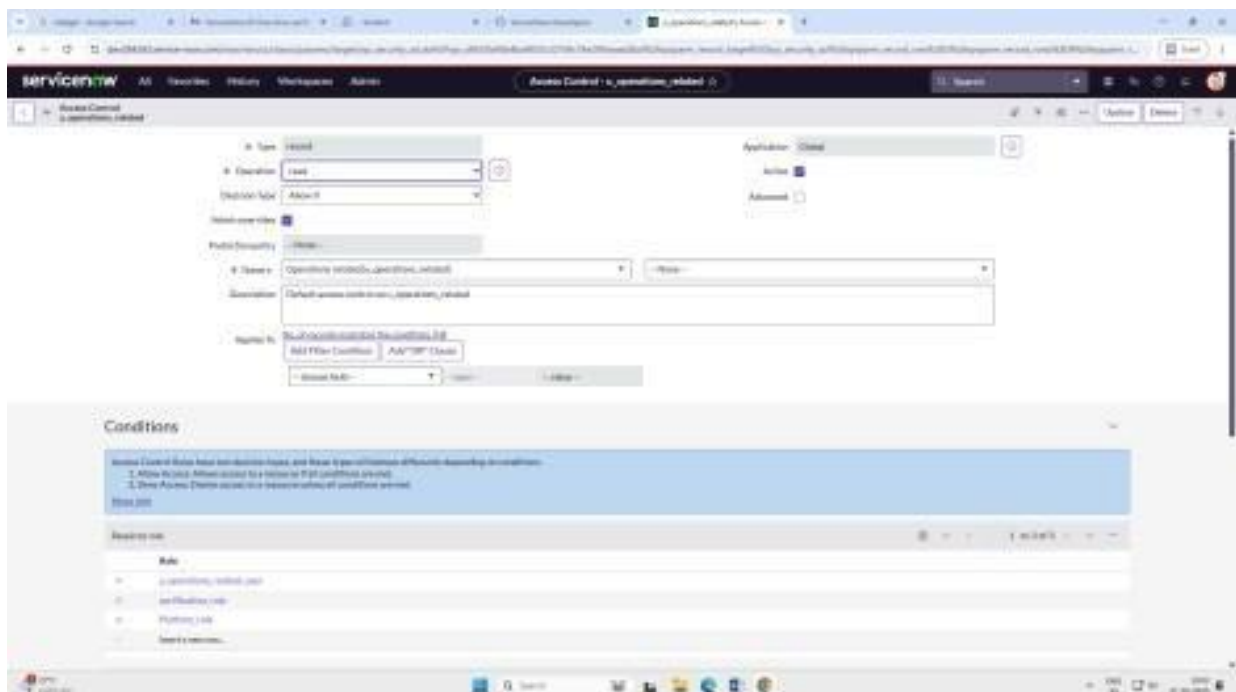
Related Links

View profile activity
View subscriptions
View documents

Subscription Table

Subscription	Status	Assigned	Subscription Cost
Manish Khanna	Active	Manish Khanna	Manish Khanna

STEP 6: ASSIGN ROLES TO TABLE



Operations-related

Role Details

Role: Operations-related
Description: Default role for operations-related tasks
Assigned to: [Empty]
Add Filter: [Empty]
Add Filter: [Empty]

Conditions

Conditions are used to define the scope of a role. They are used to determine if a user is eligible for a role based on specific criteria.

Conditions are defined by the following rules:

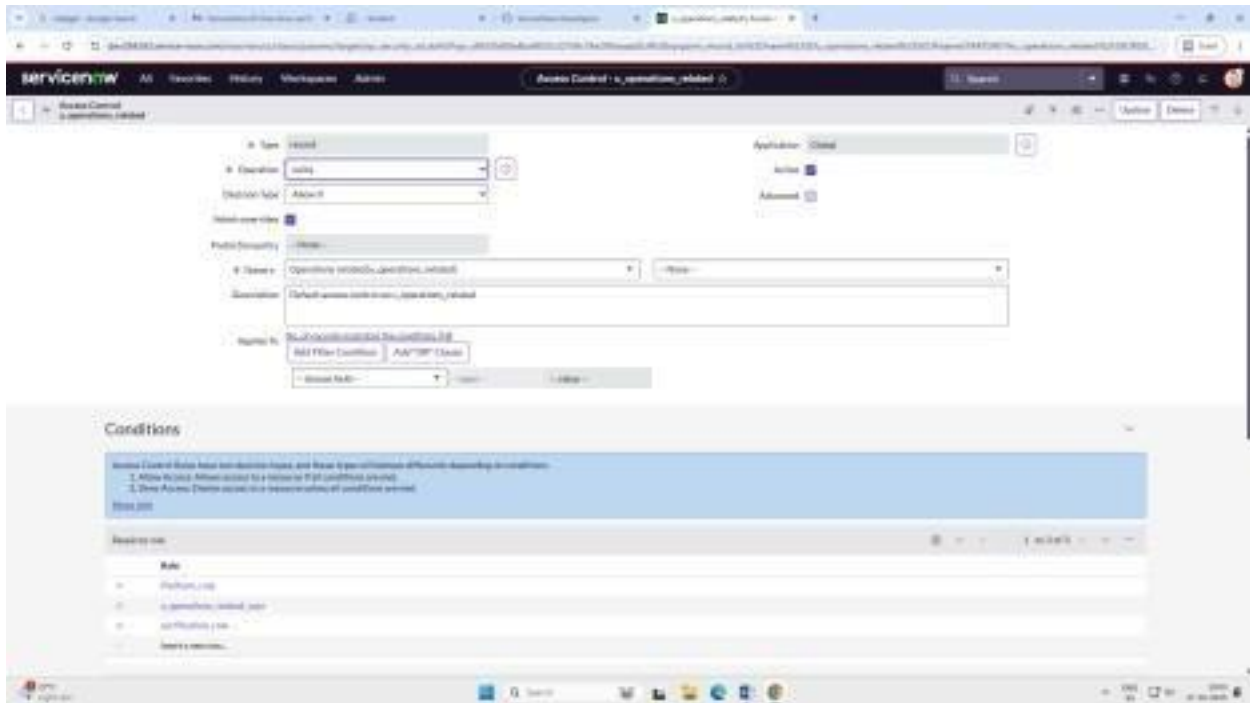
- 1. Role is assigned to a user or group.
- 2. Role is assigned to a user or group.

Role ID: [Empty]

Assigned to

Role: [Empty]

Assigned to: [Empty]



ServiceNow ACL configuration page for 'Access Control : a_permissions_restricted'.

Operation: write

Application: Cloud

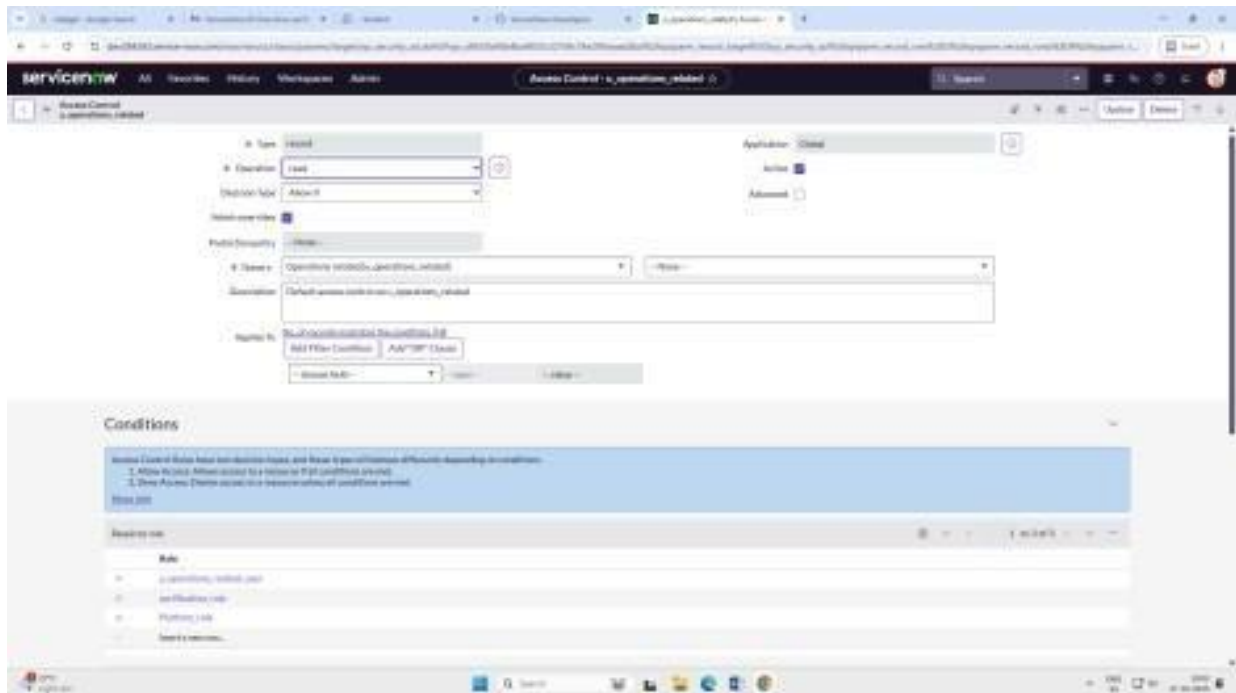
Access: Allow

Restrictions: Operation restricted: a_permissions_restricted

Conditions:

- Platform: i18n
- a_permissions_restricted: user
- a_permissions: i18n

STEP 7: CREATE ACL



ServiceNow ACL configuration page for 'Access Control : a_permissions_restricted'.

Operation: read

Application: Cloud

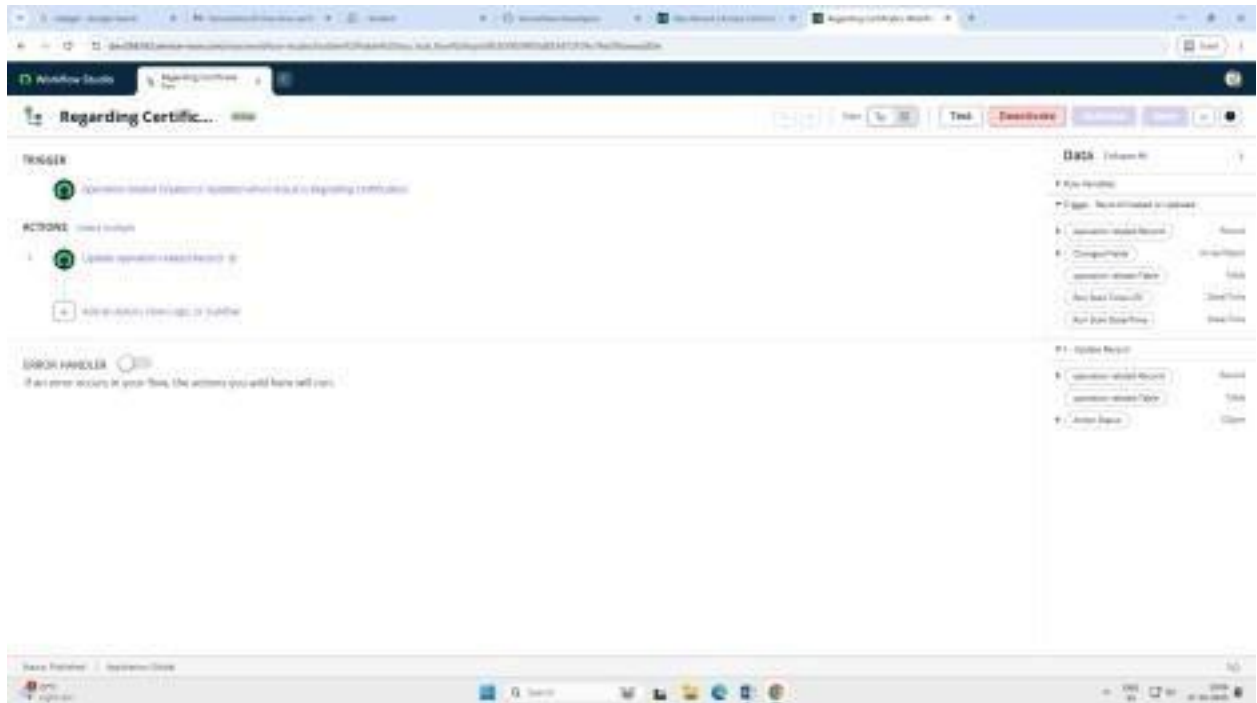
Access: Allow

Restrictions: Operation restricted: a_permissions_restricted

Conditions:

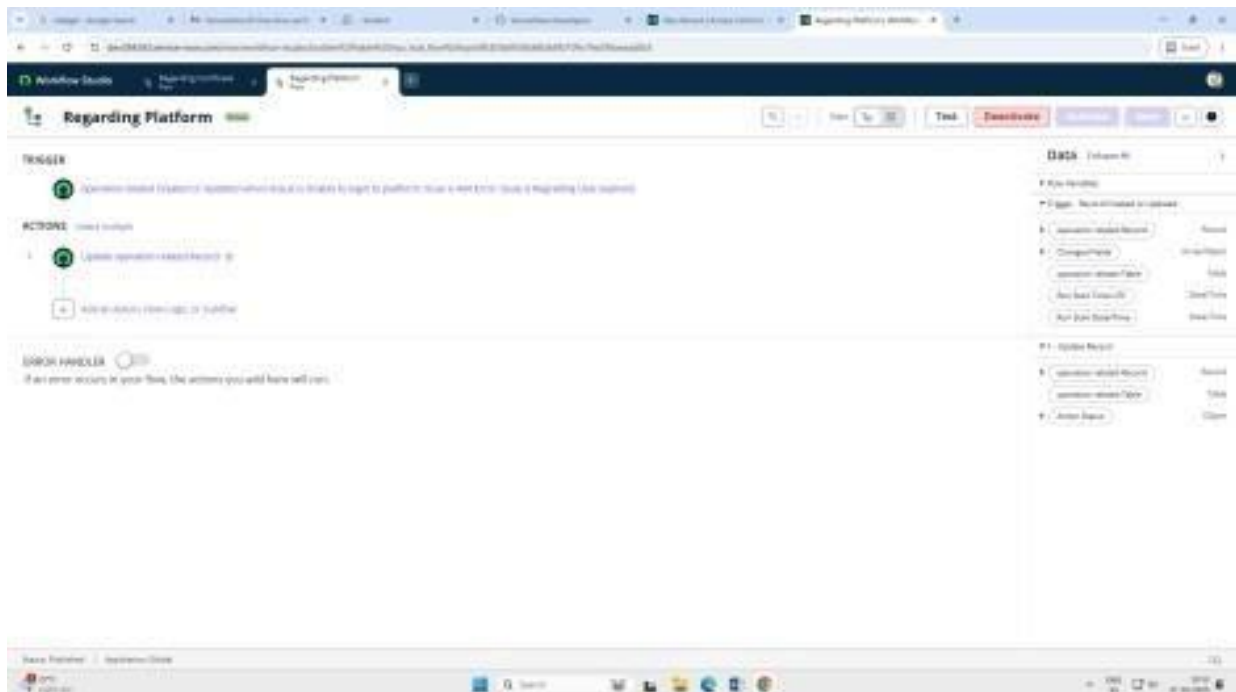
- a_permissions_restricted: user
- a_permissions: i18n
- Platform: i18n

STEP 8: FLOW & OUTPUTS



The screenshot shows the 'Workflow Studio' interface for a workflow named 'Regarding Certificate'. The interface is divided into several sections:

- TRIGGER:** A single trigger event labeled 'Operation-based (system) - operation when data is regarding certificate'.
- ACTIONS:** A sequence of actions:
 - 'Update operation + record Record' (with a dropdown menu showing 'Record' and 'Update Record').
 - 'Add to database (new record) of further'.
- ERROR HANDLER:** A section with a toggle switch and the text 'If an error occurs in your flow, the actions you add here will run.'.
- DATA:** A section on the right showing data outputs for 'Flow Handling', 'Flow', and 'Error Report'. Each section contains a table of data points with columns for 'Name', 'Type', and 'Status'.



The screenshot shows the 'Workflow Studio' interface for a workflow named 'Regarding Platform'. The interface is divided into several sections:

- TRIGGER:** A single trigger event labeled 'Operation-based (system) - operation when data is related to login to platform from a new login (due to regarding (due required))'.
- ACTIONS:** A sequence of actions:
 - 'Update operation + record Record' (with a dropdown menu showing 'Record' and 'Update Record').
 - 'Add to database (new record) of further'.
- ERROR HANDLER:** A section with a toggle switch and the text 'If an error occurs in your flow, the actions you add here will run.'.
- DATA:** A section on the right showing data outputs for 'Flow Handling', 'Flow', and 'Error Report'. Each section contains a table of data points with columns for 'Name', 'Type', and 'Status'.

Outcome :

The project successfully automates the entire ticket assignment process, reducing manual workload and improving service efficiency. It ensures that each ticket is handled by the right team, minimizes delays, and maintains SLA compliance. The automation enhances productivity, transparency, and customer satisfaction by providing real-time updates and balanced task distribution among agents.

Conclusion:

The project “Streamlining Ticket Assignment for Efficient Support Operations” effectively demonstrates how automation can improve IT service management using the ServiceNow platform. By eliminating manual ticket routing, it ensures faster resolution times, efficient workload management, and consistent service quality. This implementation showcases the power of workflow automation and smart assignment logic in achieving operational excellence and better end-user experience.