

STREAMLINING TICKET ASSIGNMENT FOR EFFICIENT SUPPORT OPERATIONS

ServiceNow Ticket Assignment Automation

Project Report: Streamlining Ticket Assignment for Efficient Support Operations

Team ID: LTVIP2025TMID28568

Category: ServiceNow

Team : Mediseti Venkata Sai [Team Leader]

Saipriya Ksai [Team Member]

Addepalli Ramya Hari Priya Varshini [Team Member]

Chaitanya Sruthi [Team Member]

1. Ideation Phase

The primary motivation behind this project is to eliminate inefficiencies in manual ticket routing processes at ABC Corporation. The manual method often leads to delayed resolutions, incorrect assignments, and underutilized support resources. The idea is to implement an automated, condition-based ticket assignment system using ServiceNow Flow Designer, minimizing delays and improving user satisfaction.

2. Requirement Analysis:

- Automate ticket routing in ServiceNow.
- Route based on issue type.
- Assign tickets to the right support group automatically.

Requirements:

- Create users and assign them roles.
- Create support groups.
- Define roles and ACL permissions.
- Design tables with specific columns and choice values.
- Implement logic-based flow automation.
- Maintain secure access and role-based data access.

3. Project planning phase

- User & Role Management
- Group Creation
- Table Creation with Column Design
- ACL Setup
- Flow Designer Automation

Resources Used:

- ServiceNow Developer Instance
- Security Admin Role
- System User

4. Project Design phase:

User Creation

1. Open ServiceNow.
2. Go to All > Users (System Security)
3. Click New, enter required details, click Submit.

The screenshot shows the ServiceNow user creation interface. The browser address bar displays the URL: `dev270047.service-now.com/now/nav/ui/classic/params/target/sys_user.do%3Fsys_id%3Ddde12279c3122210d077b7ddd40131a9%26sysparm_record_target%3Dsys_user%26sysparm_record_row...`. The ServiceNow header includes navigation tabs (All, Favorites, History, Workspaces, Admin) and a search bar. The user profile for 'Katherine Pierce' is being edited. The form contains the following fields and options:

- User ID:** Katherine Pierce
- First name:** Katherine
- Last name:** Pierce
- Title:** (empty)
- Department:** (empty)
- Active:** ☒
- Web service access only:** ☐
- Internal Integration User:** ☐
- Email:** (empty)
- 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...

Buttons at the top right include 'Update', 'Set Password', and 'Delete'. Below the form, there are 'Related Links' (View linked accounts, View Subscriptions, Reset a password) and a tabbed interface for 'Entitled Custom Tables', 'Roles (1)', 'Groups (1)', 'Delegates', 'Subscriptions', and 'User Client Certificates'. The Windows taskbar at the bottom shows the date and time as 22:40 on 28-06-2025.

ServiceNow User form for Katherine Pierce. Fields include: User ID, First name, Last name, Title, Department, Email, Language, Calendar integration, Time zone, Date format, Business phone, Mobile phone, and checkboxes for Password needs reset, Locked out, Active, Web service access only, and Internal Integration User. Buttons: Update, Set Password, Delete. Related Links: View linked accounts, View Subscriptions, Reset a password. Tabs: Entitled Custom Tables, Roles, Groups, Delegates, Subscriptions, User Client Certificates.

4. Repeat to create another user.

Group Creation

1. Go to All > Groups (System Security)

2. Click New, fill details for each group (e.g., Certificates, Platform), click Submit.

ServiceNow Group form for 'certificates'. Fields include: Name, Manager, Description, Group email, and Parent. Buttons: Update, Delete. Tabs: Roles, Group Members, Groups. The Groups tab is active, showing a table with columns: Created, Role, Granted by, and Inherits. The table is empty, displaying 'No records to display'.

ServiceNow Developer | Katherine Pierce | User | Regarding Platform | check network speed | ServiceNow Developer | Smartinternz | Team Formation Success |

dev270047.service-now.com/now/nav/ui/classic/params/target/sys_user.do%3Fsys_id%3Ddde12279c3122210d077b7dd40131a9%26sysparm_record_target%3Dsys_user%26sysparm_record_row...

servicenow All Favorites History Workspaces Admin Group - Platform Search

Group Platform

Name: Platform Group email: Manager: Manne Niranjana Parent: Description:

Update Delete

Roles Group Members Groups

Created Search Edit...

Group = Platform

Created	Role	Granted by	Inherits
No records to display			

Role Creation

1. Go to All > Roles (System Security)
2. Click New, fill details for Certification_role and Platform_role, click Submit.

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dev270047.service-now.com/now/nav/ui/classic/params/target/sys_user.do%3Fsys_id%3Ddde12279c3122210d077b7dd40131a9%26sysparm_record_target%3Dsys_user%26sysparm_record_row...

servicenow All Favorites History Workspaces Admin Role - Certification_role Search

Role Certification_role

Name: Certification_role Application: Global Requires Subscription: Unspecified Elevated privilege: Description: Can deal with certification issues

Update Delete

Related Links Run Point Scan

Contains Roles Applications with Role Modules with Role Custom Tables

for text Search New Edit...

Role = Certification_role

Contains
No records to display

30°C Mostly cloudy Search 12:33 25-06-2025

The screenshot shows the ServiceNow interface for editing a role named 'Platform_role'. The form includes fields for Name, Application, Requires Subscription, and Description. Below the form are 'Update' and 'Delete' buttons. A 'Related Links' section contains a link to 'Run Point Scan'. At the bottom, there is a tabbed interface with 'Contains Roles' selected, showing a search bar and a table with no records displayed.

Table Creation

1. Go to All > Tables (System Definition)
2. Create a new table:
 - Label: Operations related
 - Check: Create module & Create mobile module
 - Menu Name: Operations related
 - Add Columns:
 - issue (Choice field)
 - assigned to group
 - other required fields
3. Use Form Designer to add choices to the issue field:
 - unable to login to platform
 - 404 error
 - regarding certificates
 - regarding user expired

ServiceNow Developer | Katherine Pierce | Us... | Regarding Platform | | check network speed | | ServiceNow Develop... | Smartinternz | Team Formation Suc... | +

dev270047.service-now.com/now/nav/ui/classic/params/target/sys_user.do%3Fsys_id%3Ddde12279c3122210d077b7dd40131a9%26sysparm_record_target%3Dsys_user%26sysparm_record_row...

servicenow All Favorites History Workspaces Admin Table - Operations related Search Update Delete Delete All Records

Table Operations related

Dictionary Entries

Q	Column label	Type	Reference	Max length	Default value	Display
×	Name	String	(empty)	40		false
×	Service request No	String	(empty)	40	javascript:getNextObj(NumberPadded());	false
×	Priority	String	(empty)	40		false
	Created by	String	(empty)	40		false
×	Assigned to user	Reference	User	32		false
×	Ticket raised Date	Date/Time	(empty)	40		false
	Sys ID	Sys ID (GUID)	(empty)	32		false
	Created	Date/Time	(empty)	40		false
×	Assigned to group	Reference	Group	32		false
×	issue	String	(empty)	40		false
	Updated by	String	(empty)	40		false
	Updates	Integer	(empty)	40		false
×	Comment	String	(empty)	40		false
	Updated	Date/Time	(empty)	40		false
+	Insert a new row...					

Update Delete Delete All Records

Assign Users to Groups

- Add Katherine Pierce to Certificates group with Certification_role
- Add Manne Nirajanan to Platform group with Platform_role

ServiceNow Developer | Katherine Pierce | Us... | Regarding Platform | | check network speed | | ServiceNow Develop... | Smartinternz | Team Formation Suc... | +

dev270047.service-now.com/now/nav/ui/classic/params/target/sys_user.do%3Fsys_id%3Ddde12279c3122210d077b7dd40131a9%26sysparm_record_target%3Dsys_user%26sysparm_record_row...

servicenow All Favorites History Workspaces Access Control - u_operations_related Search

Access Control u_operations_related

Conditions

Access Control Rules allow access to the specified resource if *all* four of these checks evaluate to true:

1. The user has one of the roles specified in the **Role** list, or the list is empty.
2. Users that do not satisfy the Security Attributes or the Subject Conditions will be denied access to records matching this ACL.
3. Conditions in the **Condition** field evaluate to true, or conditions are empty.
4. The script in the **Script** field (advanced) evaluates to true, or sets the variable "answer" to true, or is empty.

The four checks are evaluated independently in the order displayed above.

[More Info](#)

Requires role

Role
Certification_role
Platform_role
u_operations_related_user

Security Attribute Condition

Local or Existing Local

Condition (empty)

Data Condition

Condition 6 records match condition

Access Control (ACL)

1. Go to All > Access Control (ACL)

2. Create ACLs for table Operations related:

- Read: Requires admin, Platform_role, and Certificate_role
- Write: Requires Platform_role and Certificate_role
- Application Access: Enable read/write access accordingly

3. Elevate role using Security Admin if needed

The screenshot shows the ServiceNow web interface for configuring an Access Control Rule. The browser address bar shows the URL: `dev270047.service-now.com/now/nav/ui/classic/params/target/sys_user.do%3Fsys_id%3Ddde12279c3122210d077b7dd40131a9%26sysparm_record_target%3Dsys_user%26sysparm_record_row...`. The page title is "Access Control - u_operations_related.u_service_request_no".

The configuration form includes the following fields:

- * Type: `record`
- * Operation: `write`
- Application: `Global`
- Active: ☒
- Advanced: ☐
- Admin overrides: ☒
- Protection policy: `-- None --`
- * Name: `Operations related [u_operations_related]`
- Service request No: `Service request No`
- Description: (empty text area)

Below the form is a "Conditions" section with a blue background. It contains the following text:

Access Control Rules allow access to the specified resource if all four of these checks evaluate to true:

1. The user has one of the roles specified in the Role list, or the list is empty.
2. Users that do not satisfy the Security Attributes or the Subject Conditions will be denied access to records matching this ACL.
3. Conditions in the Condition field evaluate to true, or conditions are empty.
4. The script in the Script field (advanced) evaluates to true, or sets the variable "answer" to true, or is empty.

The four checks are evaluated independently in the order displayed above.

Below the conditions section is a "Requires role" section with a table header "Role".

The screenshot shows the ServiceNow interface for the 'Table - Operations related'. The top navigation bar includes 'ServiceNow', 'All', 'Favorites', 'History', 'Workspaces', and 'Admin'. A search bar is present on the right. Below the navigation bar, there are links for 'Show Schema Map', 'Add to Service Catalog', 'Run Point Scan', and 'Explore REST API'. The main content area has tabs for 'Access Controls (9)', 'Labels (1)', 'Database Indexes (3)', and 'Table Subscription Configuration (1)'. The 'Access Controls' tab is active, displaying a table with columns: Name, Operation, Type, Active, Updated by, and Updated. The table lists various access controls for the 'u_operations_related' table, including create, read, write, and delete operations, as well as specific field updates like 'u_issue', 'u_name', 'u_priority', 'u_service_request_no', and 'u_ticket_raised_date'. All operations are currently active and were updated by 'admin'.

Name	Operation	Type	Active	Updated by	Updated
u_operations_related	create	record	true	admin	2025-06-23 22:41:52
u_operations_related	read	record	true	admin	2025-06-23 23:58:17
u_operations_related	write	record	true	admin	2025-06-24 00:00:05
u_operations_related	delete	record	true	admin	2025-06-23 22:41:52
u_operations_related.u_issue	write	record	true	admin	2025-06-24 01:34:57
u_operations_related.u_name	write	record	true	admin	2025-06-24 01:34:21
u_operations_related.u_priority	write	record	true	admin	2025-06-24 01:25:26
u_operations_related.u_service_request_no	write	record	true	admin	2025-06-24 01:21:29
u_operations_related.u_ticket_raised_date	write	record	true	admin	2025-06-24 01:33:13

Flow Designer Regarding Certificate

1. Go to All > Flow Designer > New Flow
2. Name: Regarding Certificate
3. Application: Global, Run user: System user
4. Trigger:
 - Table: Operations related
 - Condition: issue is regarding certificates
5. Action:
 - Update Record: Assigned to group = Certificates
6. Click Save and Activate

The screenshot shows the ServiceNow Workflow Studio interface. The flow is named "Regarding Certificate" and is in the "Active" state. The trigger is "Operations related Created or Updated where (Issue is regarding certificates)". The action is "Update Record" with the following configuration:

- Record: Trigger ... Operations relate...
- Table: Operations related [u_operation...]
- Fields:
 - Assigned to group: certificates
 - Assigned to user: Katherine Pierce

The right sidebar shows the "Data" section with a list of variables:

- Flow Variables
- Trigger - Record Created or Updated
 - Operations related Record: Record
 - Changed Fields: Array.Object
 - Operations related Table: Table
 - Run Start Time UTC: Date/Time
 - Run Start Date/Time: Date/Time
- 1 - Update Record
 - Operations related Record: Record
 - Operations related Table: Table
 - Action Status: Object

At the bottom, the status is "Published" and the application is "Global".

Flow Designer Regarding Platform

1. Create New Flow: Regarding Platform

2. Trigger:

- Table: Operations related
- Conditions:
 - issue is Unable to login to platform
 - issue is 404 Error
 - issue is Regarding user expired

3. Action:

- Update Record: Assigned to group = Platform

4. Click Save and Activate

Workflow Studio | Regarding Platform | Active

Operations related Created or Updated where (Issue is unable to login to platform; Issue is 404 error; Issue is regarding user expired)

Trigger: Created or Updated

* Table: Operations related [u_operation...]

Condition: All of these conditions must be met

- Issue is unable to login to platform
- Issue is 404 error
- Issue is regarding user expired

Run Trigger: Once

Status: Published | Application: Global

Data Panel:

- Flow Variables
- Trigger - Record Created or Updated
 - Operations related Record (Record)
 - Changed Fields (Array.Object)
 - Operations related Table (Table)
 - Run Start Time UTC (Date/Time)
 - Run Start Date/Time (Date/Time)
- 1 - Update Record
 - Operations related Record (Record)
 - Operations related Table (Table)
 - Action Status (Object)

5. Performance

Testing:

Test Scenarios:

- Create a record in Operations related with each issue type
- Verify assignment is correct based on issue
- Validate ACL enforcement by accessing table data with users in different roles

servicenow | All | Favorites | History | Workspaces | Operations related - Vegata

Service request no: ticket0001014

Name: Vegata

Issue: unable to login to platform

Ticket raised Date: 2025-06-24 23:18:00

Priority: Low

Comment: 40

Assigned to group: Platform

Assigned to user: Maane Niranjana

Update | Delete

The screenshot shows a web browser window with multiple tabs. The active tab is 'ServiceNow Develop...'. The address bar shows the URL: 'dev270047.service-now.com/now/nav/ui/classic/params/target/sys_user.do%3Fsys_id%3Ddde12279c3122210d077b7ddd40131a9%26sysparm_record_target%3Dsys_user%26sysparm_record_row...'. The ServiceNow interface has a dark header with the 'servicenow' logo and navigation links: 'All', 'Favorites', 'History', 'Workspaces'. A search bar is on the right. Below the header, the breadcrumb 'Operations related - Hinata' is visible. The main form contains the following fields:

Service request no	ticket0001016
Name	Hinata
Issue	regarding certificates
Ticket raised Date	2025-06-25 02:37:04
Priority	Medium
Comment	Slove it ASAP
Assigned to group	certificates
Assigned to user	Katherine Pierce

At the bottom of the form, there are 'Update' and 'Delete' buttons. A small 'i' icon is visible in the bottom right corner of the form area.

Results:

- All tickets assigned correctly based on issue
- Unauthorized users restricted from modifying sensitive data
- Groups receive only relevant tickets

Conclusion:

This automation significantly improves the efficiency of ticket handling in ServiceNow. It ensures timely resolution by directing the tickets to appropriate groups based on predefined criteria. The use of Flow Designer and ACLs offers a secure and scalable foundation for managing enterprise-level support systems.