

ServiceNow Ticket Assignment Automation

Project Report: Streamlining Ticket Assignment for Efficient Support Operations

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Category: ServiceNow

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 tabs include 'ServiceNow Developers', 'Katherine Pierce | User | Service...', 'SmartInternz Credentials for S...', and 'Smartinternz'. The URL is 'dev283634.service-now.com/now/nav/ui/classic/params/target/sys_user.do%3Fsys_id%3D00ed9d4a835a2210efe9c170deaad335%26sysparm_record_target%3Dsys_user%26sysparm_re...'. The page title is 'User - Katherine Pierce'. The form fields are as follows:

Field	Value
User ID	Katherine Pierce
First name	Katherine
Last name	Pierce
Title	
Department	
Language	-- None --
Calendar integration	Outlook
Time zone	System (America/Los_Angeles)
Date format	System (yyyy-MM-dd)
Business phone	
Mobile phone	
Photo	Click to add...
Password needs reset	<input type="checkbox"/>
Locked out	<input type="checkbox"/>
Active	<input checked="" type="checkbox"/>
Web service access only	<input type="checkbox"/>
Internal Integration User	<input type="checkbox"/>

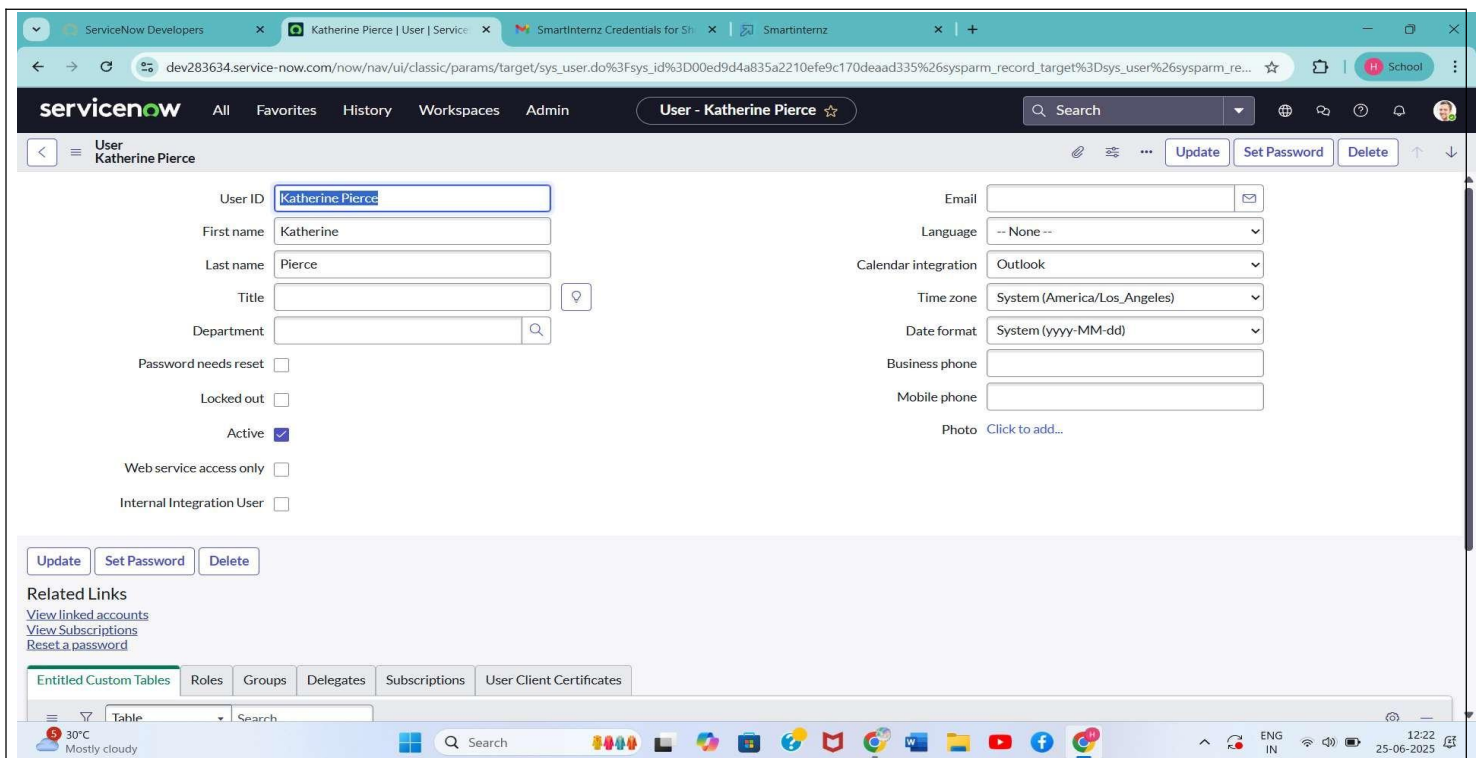
Buttons: Update, Set Password, Delete.

Related Links: [View linked accounts](#), [View Subscriptions](#), [Reset a password](#).

Entitled Custom Tables: Roles, Groups, Delegates, Subscriptions, User Client Certificates.

Table: Search

System tray: 30°C Mostly cloudy, Search, Windows taskbar, 12:22 25-06-2025.

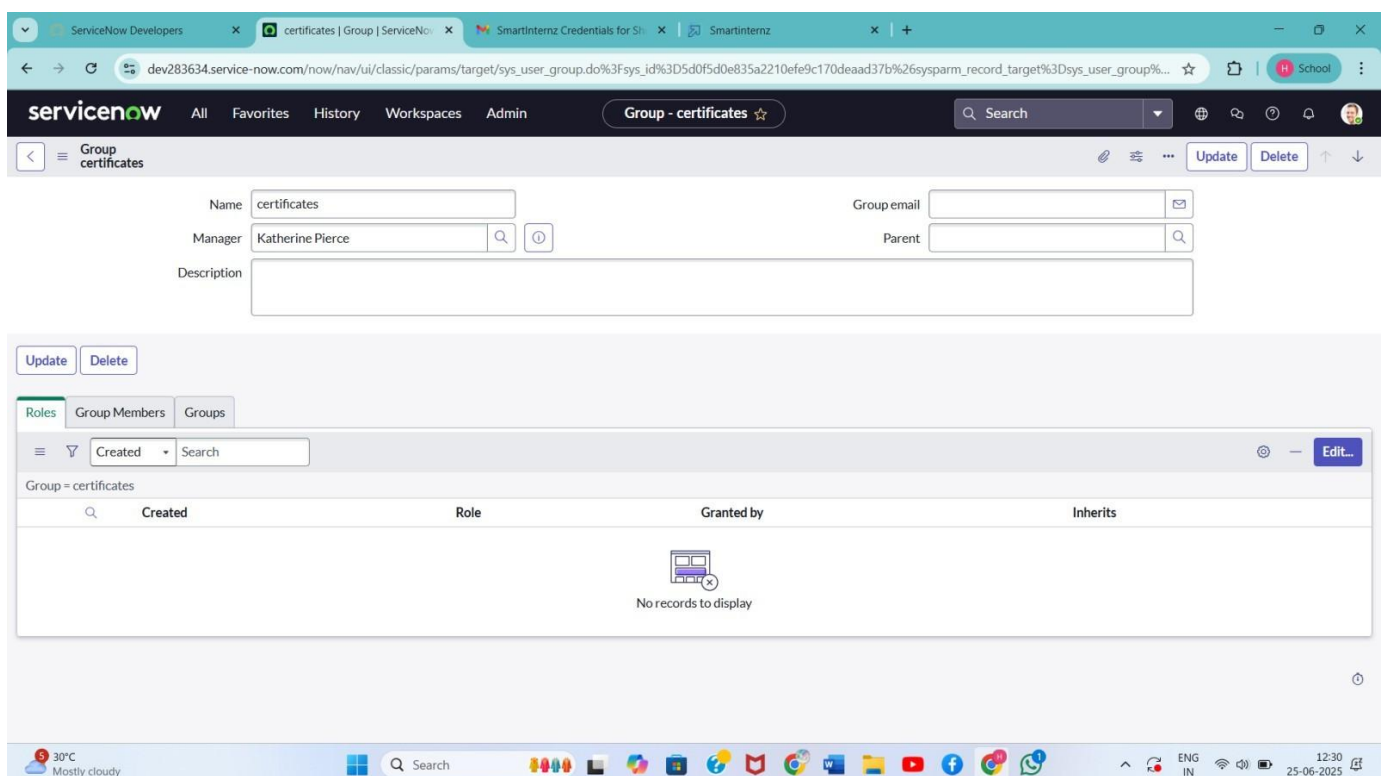


The screenshot shows the ServiceNow 'User - Katherine Pierce' page. The left sidebar contains navigation links: User, Katherine Pierce, Update, Set Password, and Delete. The main form is divided into two columns. The left column contains fields for User ID (Katherine.Pierce), First name (Katherine), Last name (Pierce), Title, Department, Password needs reset, Locked out, Active (checked), Web service access only, and Internal Integration User. The right column contains fields for Email, Language, Calendar integration (Outlook), Time zone (System (America/Los Angeles)), Date format (System (yyyy-MM-dd)), Business phone, Mobile phone, and Photo (Click to add...). Below the form are buttons for Update, Set Password, and Delete. A 'Related Links' section includes links for View linked accounts, View Subscriptions, and Reset a password. A 'Entitled Custom Tables' section is also visible.

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.



The screenshot shows the ServiceNow 'Group - certificates' page. The left sidebar contains navigation links: Group, certificates, Update, and Delete. The main form contains fields for Name (certificates), Manager (Katherine.Pierce), Group email, Parent, and Description. Below the form are buttons for Update and Delete. A 'Roles' section is visible, showing a table with columns: Created, Role, Granted by, and Inherits. The table is currently empty, displaying 'No records to display'.

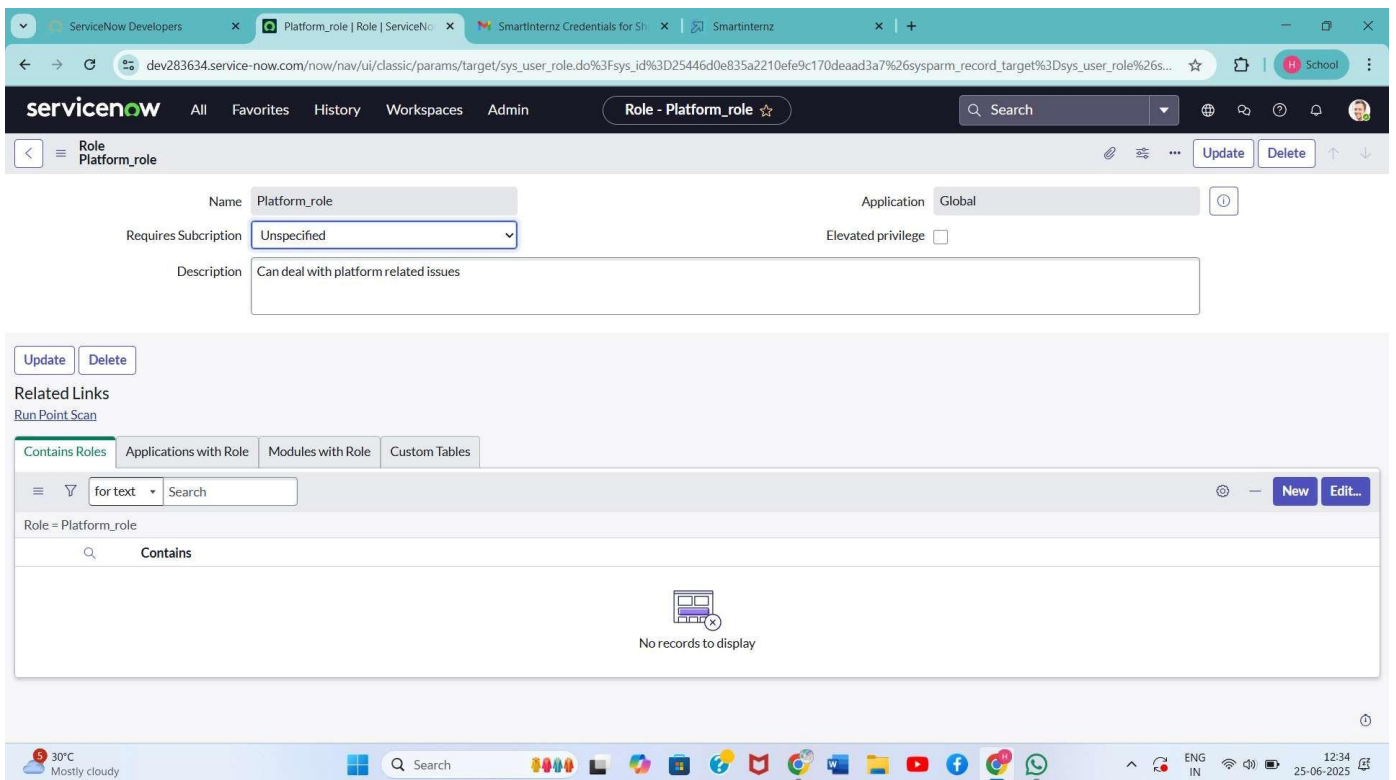


Table Creation

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 Developers | Operations related | Table | Search | Smartinternz Credentials for Sh... | Smartinternz

dev283634.service-now.com/now/nav/ui/classic/params/target/sys_db_object.do%3Fsys_id%3D1de4edc2839a2210efe9c170deaad324%26sysparm_record_target%3Dsys_db_object%26...

servicenow All Favorites History Workspaces Admin Table - Operations related Search

Table Operations related Update Delete Delete All Records

Dictionary Entries

Column label	Type	Reference	Max length	Default value	Display
Name	String	(empty)	40		false
Service request No	String	(empty)	40	javascript:getNextObjNumberPadded();	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

30°C Mostly cloudy Search 12:36 25-06-2025

Assign Users to Groups

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

ServiceNow Developers | u_operations_related | Access Control | Smartinternz Credentials for Sh... | Smartinternz

dev283634.service-now.com/now/nav/ui/classic/params/target/sys_security_acl.do%3Fsys_id%3Db155e506839a2210efe9c170deaad36b%26sysparm_record_target%3Dsys_security_acl...

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 1 to 3 of 3

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

SL - BAN Live Search 12:41 25-06-2025

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 displays the ServiceNow web interface for configuring an Access Control List (ACL). The browser tabs include 'ServiceNow Developers', 'u_operations_related.u_service...', 'Smartinternz Credentials for Sh...', and 'Smartinternz'. The address bar shows a URL from dev283634.service-now.com. 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] (with a dropdown arrow)
- Service request No:** (with a dropdown arrow)
- Description:** (empty text box)

Below the form is a section titled 'Conditions' 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.

[More Info](#)

Below the conditions section is a table titled 'Requires role' with a single row:

Role
admin

The bottom of the screenshot shows the Windows taskbar with a search bar, various application icons, and system tray information including '31°C Mostly cloudy', 'ENG IN', and the date '25-06-2025'.

ServiceNow Developers | Operations related | Table | ServiceNow | SmartInternz Credentials for S... | SmartInternz

dev283634.service-now.com/now/nav/ui/classic/params/target/sys_db_object.do%3Fsys_id%3D1de4edc2839a2210efe9c170deaad324%26sysparm_record_target%3Dsys_db_object%26...

servicenow All Favorites History Workspaces Admin Table - Operations related

Show Schema Map
Add to Service Catalog
Run Point Scan
Explore REST API

Access Controls (9) Labels (1) Database Indexes (3) Table Subscription Configuration (1)

Name Search Actions on selected rows...

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

1 to 9 of 9

Hot days ahead 31°C

Search

ENG IN 12:43 25-06-2025

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

Workflow Studio Regarding Certificate Flow

Regarding Certificate Active

TRIGGER

Operations related Created or Updated where (Issue is regarding certificates)

ACTIONS Select multiple

1 Update Operations related Record

Action: Update Record

* Record: Trigger ... Operations relate...

* Table: Operations related [u_operation...

* Fields: Assigned to group (certificates), Assigned to user (Katherine Pierce)

+ Add field value

Buttons: Delete, Cancel, Done

Data Collapse All

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)

Status: Published | Application: 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 interface for "Regarding Platform" flow. The flow is triggered by "Created or Updated" on the "Operations related" table. The condition is set to "All of these conditions must be met" with three criteria: "Issue is unable to login to platform", "Issue is 404 error", and "Issue is regarding user expired". The flow is set to run "Once".

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 interface showing a record in the "Operations related" table. The record details are as follows:

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

Buttons: Update, Delete

The screenshot shows a web browser window with multiple tabs. The active tab is 'Hinata | Operations related | ServiceNow'. The URL bar shows a long alphanumeric string. The ServiceNow interface has a dark header with the logo and navigation links. The main content area displays a ticket form for 'Operations related - Hinata'. The form fields are as follows:

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. The Windows taskbar at the bottom shows the date as 25-06-2025 and the time as 15:07.

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.