

# Prevent User Deletion if Assigned to an Incident

## Category:

ServiceNow Application Developer

## Skills Required:

Script, Business Rules, Glide Records and APIs, User and Group Management.

## Problem Statement:

In an IT Service Management environment, users are frequently assigned to incidents for issue resolution and tracking. However, the current system lacks a validation mechanism to prevent the deletion of a user who is still actively assigned to incidents. This can lead to broken data references, loss of accountability, and disruption in workflow continuity.

There is a need to implement a safeguard that prevents such deletions unless all assigned incidents are closed or reassigned.

## User Creation

### Create Test Users

1. Go to ServiceNow >> All >> Users (under System Security)
2. Click on New
3. Create two users (e.g., kiran123,ajaykumar)
4. Submit and verify user records.

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dev313178.servicenow.com/sys\_user\_list.do?sysparm\_userpref\_module=c5a0ff0a0a7009a39da035ea396&sysparm\_clear\_stack=true

UsersUpdatedSearchActions on selected rows...New

All

	User ID	Name	Email	Active	Created	Updated
	pd1.analytics.user	PDI Analytics User	pd1.analytics.user@example.com	true	2025-02-17 07:01:25	2025-02-17 07:04:25
	survey.user	survey user	survey.user@email.com	true	2019-04-05 14:09:12	2025-08-25 03:23:16
	lucius.bagnoli	Lucius Bagnoli	lucius.bagnoli@example.com	true	2012-02-17 19:04:49	2025-08-25 03:23:16
	jimmie.barninger	Jimmie Barninger	jimmie.barninger@example.com	true	2012-02-17 19:04:49	2025-08-25 03:23:16
	melinda.carleton	Melinda Carleton	melinda.carleton@example.com	true	2012-02-17 19:04:49	2025-08-25 03:23:16
	jewel.agresta	Jewel Agresta	jewel.agresta@example.com	true	2012-02-17 19:04:49	2025-08-25 03:23:16
	sean.bonnet	Sean Bonnet	sean.bonnet@example.com	true	2012-02-17 19:04:50	2025-08-25 03:23:16
	jacinto.gawron	Jacinto Gawron	jacinto.gawron@example.com	true	2012-02-17 19:04:50	2025-08-25 03:23:16
	krystle.stika	Krystle Stika	krystle.stika@example.com	true	2012-02-17 19:04:50	2025-08-25 03:23:16
	billie.cowley	Billie Cowley	billie.cowley@example.com	true	2012-02-17 19:04:50	2025-08-25 03:23:16
	christian.marnell	Christian Marnell	christian.marnell@example.com	true	2012-02-17 19:04:50	2025-08-25 03:23:16
	naomi.greenly	Naomi Greenly	naomi.greenly@example.com	true	2012-02-17 19:04:53	2025-08-25 03:23:16
	jess.assad	Jess Assad	jess.assad@example.com	true	2012-02-17 19:04:49	2025-08-25 03:23:16
	cherie.fuhri	Cherie Fuhri	cherie.fuhri@example.com	true	2012-02-17 19:04:49	2025-08-25 03:23:17
	geri.forness	Geri Forness	geri.forness@example.com	true	2012-02-17 19:04:50	2025-08-25 03:23:17
	nelly.jakuboski	Nelly Jakuboski	nelly.jakuboski@example.com	true	2012-02-17 19:04:50	2025-08-25 03:23:17
	dwain.cuttitta	Dwain Cuttitta	dwain.cuttitta@example.com	true	2012-02-17 19:04:50	2025-08-25 03:23:17

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dev313178.servicenow.com/sys\_user.do?sys\_id=17db049e930032104b5d3aaefaba10fe&sysparm\_record\_target=sys\_user&sysparm\_record\_row=2&sysparm\_record\_rows=631&sysparm\_record\_target=sys\_user

UserKiran 123UpdateSet PasswordDelete

User IDkiran

First namekiran

Last name123

Title

Department

Password

Password needs reset

Locked out

Active

Web service access only

Internal Integration User

Emailkiran@example.com

Language-- None --

Calendar integrationOutlook

Time zoneSystem (America/Los Angeles)

Date formatSystem (yyyy-MM-dd)

Business phone

Mobile phone

PhotoClick to add...

UpdateSet PasswordDelete

Related Links

[View linked accounts](#)

[View Subscriptions](#)

[Reset a password](#)

Screenshot of the ServiceNow User Management interface showing the 'User' form for 'Ajay kumar' and a list of users.

**User Form Details:**

- User ID: Ajay
- First name: Ajay
- Last name: kumar
- Title: (empty)
- Department: (empty)
- Email: ajay@example.com
- 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...
- Active: ☒
- Web service access only: ☐
- Internal Integration User: ☐

**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

**User List Table:**

User ID	Name	Email	Active	Created	Updated
Ajay	Ajay kumar	ajay@example.com	true	2025-09-20 01:50:55	2025-09-20 01:50:55
kiran	kiran 123	kiran@example.com	true	2025-09-19 10:40:19	2025-09-19 10:40:19
admin	System Administrator	admin@example.com	true	2007-07-03 11:48:47	2025-08-25 06:03:07
aes.creator	Creator User		true	2025-08-25 04:00:01	2025-08-25 06:03:07
pilar.suddeth	Pilar Suddeth	pilar.suddeth@example.com	true	2012-02-17 19:04:53	2025-08-25 03:23:23
leif.arguin	Leif Arguin	leif.arguin@example.com	true	2012-02-17 19:04:53	2025-08-25 03:23:23
bow.ruggeri	Bow Ruggeri	bow.ruggeri@example.com	true	2005-07-07 11:39:58	2025-08-25 03:23:23
sam	Software Manager		true	2012-03-19 18:04:50	2025-08-25 03:23:23
owen.sparacino	Owen Sparacino	owen.sparacino@example.com	true	2012-02-17 19:04:49	2025-08-25 03:23:23
damion.matkin	Damion Matkin	damion.matkin@example.com	true	2012-02-17 19:04:49	2025-08-25 03:23:23
ed.gompf	Ed Gompf	ed.gompf@example.com	true	2012-02-17 19:04:49	2025-08-25 03:23:23
mariano.maury	Mariano Maury	mariano.maury@example.com	true	2012-02-17 19:04:52	2025-08-25 03:23:23
roman.simone	Roman Simone	roman.simone@example.com	true	2012-02-17 19:04:52	2025-08-25 03:23:23
marion.gaulden	Marion Gaulden	marion.gaulden@example.com	true	2012-02-17 19:04:52	2025-08-25 03:23:23
sheila.holoran	Sheila Holoran	sheila.holoran@example.com	true	2012-02-17 19:04:53	2025-08-25 03:23:23
winnie.reich	Winnie Reich	winnie.reich@example.com	true	2012-02-17 19:04:53	2025-08-25 03:23:23
cristina.sharper	Cristina Sharper	cristina.sharper@example.com	true	2012-02-17 19:04:53	2025-08-25 03:23:23

## Assign Incident to User Assign Incidents

1. Navigate to the Incident table.

2. Create a new incident and assign it to one of the created users (e.g., kiran123)
3. Keep the incident Active = true and State = In Progress

**Note:** To assign any user the user should have at least one role so assigned a role to the user before assigning incident

The image shows two screenshots of the ServiceNow interface. The top screenshot displays the 'Edit Members' dialog box. It features a search bar at the top with 'Add Filter' and 'Run filter' buttons. Below the search bar is a dropdown menu labeled '-- choose field --' and another labeled '-- oper --'. The main area is divided into two panes: 'Collection' on the left and 'Roles List' on the right. The 'Collection' pane contains a list of roles, including 'access\_analyzer\_admin', 'action\_category\_creator', 'action\_designer', 'activity\_admin', 'activity\_creator', 'actsub\_admin', 'actsub\_user', 'admin', 'agent\_admin', 'agent\_security\_admin', 'agent\_workspace\_user', 'ais\_admin', 'ais\_high\_security\_admin', 'aisa\_admin', 'analytics\_admin', 'analytics\_categories\_admin', and 'analytics\_filter\_admin'. The 'Roles List' pane shows 'kiran 123' selected. There are 'Cancel' and 'Save' buttons at the bottom of the dialog.

The bottom screenshot shows the 'Incident' form for incident INC0010004. The form is divided into two main sections. The left section contains fields for 'Number' (INC0010004), 'Caller' (System Administrator), 'Category' (Inquiry / Help), 'Subcategory' (-- None --), 'Service', 'Service offering', 'Configuration item', 'Short description' (test incident), and 'Description'. The right section contains fields for 'Channel' (-- None --), 'State' (In Progress), 'Impact' (3 - Low), 'Urgency' (3 - Low), 'Priority' (5 - Planning), 'Assignment group', and 'Assigned to' (kiran 123). There are 'Follow', 'Update', 'Resolve', and 'Delete' buttons at the top right of the form. Below the form is a 'Related Search Results' section with tabs for 'Notes', 'Related Records', and 'Resolution Information'. The 'Related Records' tab is active, showing fields for 'Parent Incident', 'Problem', 'Change Request', and 'Caused by Change'.

Number	Opened	Short description	Caller	Priority	State	Category	Assignment group	Assigned to	Updated	Updated by
INC0010004	2025-09-19 11:14:13	test incident	System Administrator	5 - Planning	In Progress	Inquiry / Help	(empty)	kiran 123	2025-09-19 11:14:49	admin
INC0000601	2025-06-21 02:42:59	The USB port on my PC stopped working	Beth Anglin	5 - Planning	Closed	Hardware	(empty)	(empty)	2025-08-25 03:19:03	system
INC0009002	2018-09-16 05:49:23	My computer is not detecting the headphone device	David Miller	3 - Moderate	Closed	Hardware	(empty)	(empty)	2025-06-25 23:45:07	system
INC0000005	2025-03-21 16:06:52	CPU load high for over 10 minutes	Alejandro Mascall	1 - Critical	Closed	Hardware	Hardware	Bud Richman	2025-06-25 23:45:07	system
INC0009004	2018-09-01 06:13:30	Defect tracking tool is down.	David Miller	3 - Moderate	Closed	Software	(empty)	(empty)	2025-06-25 23:45:07	system
INC0000014	2025-02-28 15:37:35	Missing my home directory	Bow Ruggeri	1 - Critical	Closed	Inquiry / Help	(empty)	Bud Richman	2025-06-25 23:45:07	system
INC0007001	2018-10-16 22:47:10	Employee payroll application server is down.	David Miller	1 - Critical	New	Hardware	Openspace	(empty)	2025-06-25 23:36:34	system
INC0000010	2025-03-26 15:53:02	Need Oracle 10GR2 installed	Fred Luddy	4 - Low	Closed	Database	Database	Don Goodliffe	2025-06-25 13:16:35	admin
INC0000004	2025-04-01 15:49:22	Forgot email password	Fred Luddy	1 - Critical	Closed	Inquiry / Help	Service Desk	Bud Richman	2025-06-25 13:16:24	admin
INC0000035	2025-04-04 12:22:22	Reset my password	Natasha	5 - Planning	Closed	Inquiry / Help	Service Desk	Luke Wilson	2025-06-25 12:22:22	admin

## Business Rule Creation Create

### Business Rule

1. Go to System Definition >> Business Rules
2. Click on New
3. Fill in:
4. Name: Prevent User Deletion if Assigned to an Incident
5. Table: sys\_user
6. When: Before
7. Delete: Checked
8. Script : // Add your code here 9. Click submit.

### SCRIPT :

```
/// (function executeRule(current, previous /*null when
```

```
async*/) { var incGr = new GlideRecord('incident');
```

```
incGr.addQuery('assigned_to', current.sys_id);
```

```
incGr.setLimit(1); // Just need to check existence
```

```
// incGr.addQuery('active', true); we can use the above or this line of code to check
```

```
where the user is assigned with any incident incGr.query(); if (incGr.next()) {
```

```
    gs.addErrorMessage('This user cannot be deleted because they are assigned to one  
or more incidents.');
```

```
    current.setAbortAction(true);
```

```
}
```

```
// Add your code here
```

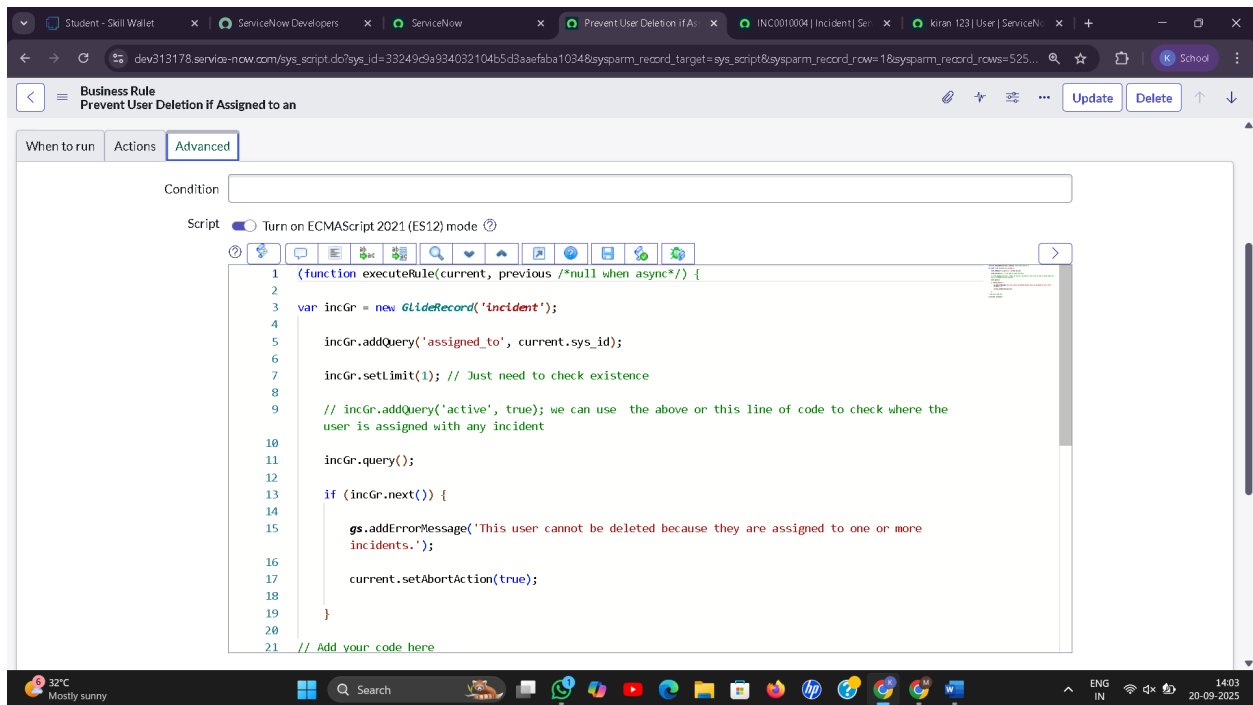
```
})(current, previous);
```

The screenshot shows the ServiceNow Business Rule configuration interface. The browser tabs at the top include 'Student - Skill Wallet', 'ServiceNow Developers', 'ServiceNow', 'Prevent User Deletion if Assigned to an Incident', 'INC0010004 | Incident | Ser...', and 'kiran 123 | User | ServiceN...'. The address bar shows a URL from dev313178.service-now.com.

The Business Rule configuration page is titled 'Business Rule Prevent User Deletion if Assigned to an Incident'. It includes fields for 'Name' (Prevent User Deletion if Assigned to an Incident), 'Table' (User [sys\_user]), 'Application' (Global), 'Active' (checked), and 'Advanced' (checked). Buttons for 'Update' and 'Delete' are visible.

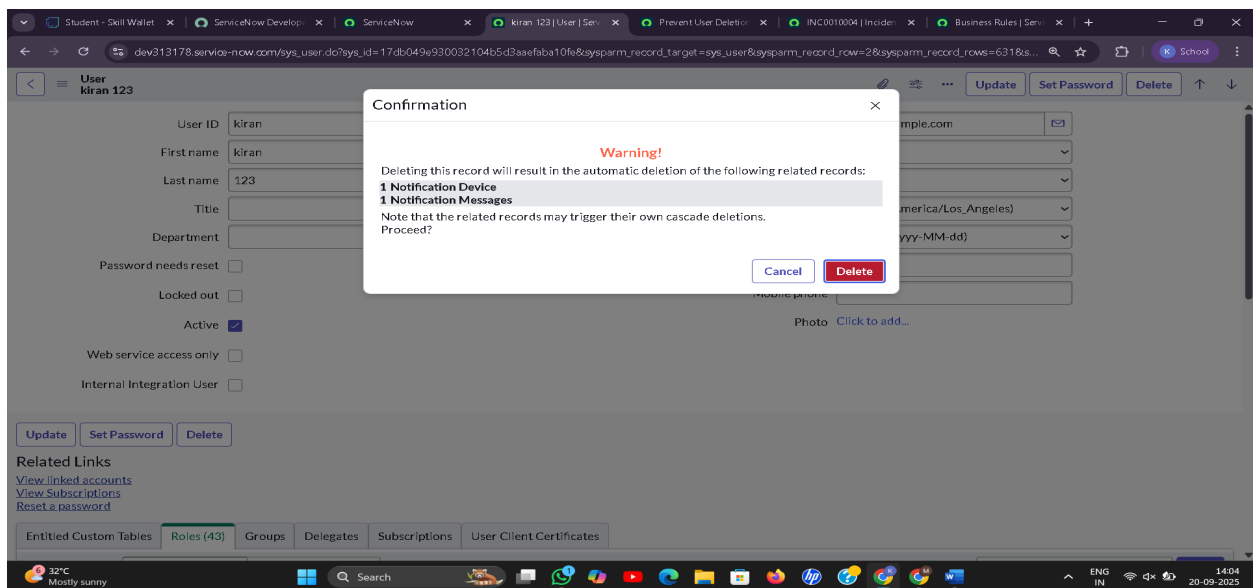
The 'When to run' tab is selected, showing options for 'When' (before) and 'Order' (100). There are checkboxes for 'Insert', 'Update', 'Delete' (checked), and 'Query'. A section for 'Filter Conditions' includes buttons for 'Add Filter Condition' and 'Add OR Clause', and a dropdown menu for '-- choose field --'. Below this is a 'Role conditions' section with an edit icon.

The Windows taskbar at the bottom shows the date and time as 20-09-2025 14:03, along with various system icons and application shortcuts.



## Test Deletion Attempt to Delete Assigned User

1. Go to the user record (kiran123)
2. Click Delete
3. Verify that deletion is blocked with an error message



This user cannot be deleted because they are assigned to one or more incidents.

User ID	Name	Email	Active	Created	Updated
Ajay	Ajay kumar	ajay@example.com	true	2025-09-20 01:27:39	2025-09-20 01:27:39
kiran	kiran 123	kiran@example.com	true	2025-09-19 10:40:19	2025-09-19 10:40:19
admin	System Administrator	admin@example.com	true	2007-07-03 11:48:47	2025-08-25 06:03:07
aes.creator	Creator User		true	2025-08-25 04:00:01	2025-08-25 06:03:07
pilar.suddeth	Pilar Suddeth	pilar.suddeth@example.com	true	2012-02-17 19:04:53	2025-08-25 03:23:23
leif.arguin	Leif Arguin	leifarguin@example.com	true	2012-02-17 19:04:53	2025-08-25 03:23:23
bow.ruggeri	Bow Ruggeri	bow.ruggeri@example.com	true	2005-07-07 11:39:58	2025-08-25 03:23:23
sam	Software Manager		true	2012-03-19 18:04:50	2025-08-25 03:23:23
owen.sparacino	Owen Sparacino	owen.sparacino@example.com	true	2012-02-17 19:04:49	2025-08-25 03:23:23
damion.matkin	Damion Matkin	damion.matkin@example.com	true	2012-02-17 19:04:49	2025-08-25 03:23:23
ed.gompf	Ed Gompf	ed.gompf@example.com	true	2012-02-17 19:04:49	2025-08-25 03:23:23
mariano.maury	Mariano Maury	mariano.maury@example.com	true	2012-02-17 19:04:52	2025-08-25 03:23:23
roman.simone	Roman Simone	roman.simone@example.com	true	2012-02-17 19:04:52	2025-08-25 03:23:23
marion.gaulden	Marion Gaulden	marion.gaulden@example.com	true	2012-02-17 19:04:52	2025-08-25 03:23:23
sheila.holloran	Sheila Holloran	sheila.holloran@example.com	true	2012-02-17 19:04:53	2025-08-25 03:23:23

## Test With Unassigned User Attempt to Delete Unused User

1. Try deleting the second user (Ajay kumar) who is not assigned to any active incidents.
2. Deletion should succeed.

**Confirmation**

**Warning!**

Deleting this record will result in the automatic deletion of the following related records:

**1 Notification Device**

Note that the related records may trigger their own cascade deletions. Proceed?

[Cancel](#) [Delete](#)

User ID: Ajay  
First name: Ajay  
Last name: kumar  
Title:  
Department:  
Password needs reset: ☐  
Locked out: ☐  
Active: ☒  
Web service access only: ☐  
Internal Integration User: ☐

[Update](#) [Set Password](#) [Delete](#)

**Related Links**  
[View linked accounts](#)  
[View Subscriptions](#)  
[Reset a password](#)

Entitled Custom Tables: [Roles](#) [Groups](#) [Delegates](#) [Subscriptions](#) [User Client Certificates](#)



	User ID	Name	Email	Active	Created	Updated
	kiran	kiran 123	kiran@example.com	true	2025-09-19 10:40:19	2025-09-19 10:40:19
	admin	System Administrator	admin@example.com	true	2007-07-03 11:48:47	2025-08-25 06:03:07
	aes.creator	Creator User		true	2025-08-25 04:00:01	2025-08-25 06:03:07
	pilar.suddeth	Pilar Suddeth	pilar.suddeth@example.com	true	2012-02-17 19:04:53	2025-08-25 03:23:23
	leif.arguin	Leif Arguin	leif.arguin@example.com	true	2012-02-17 19:04:53	2025-08-25 03:23:23
	bow.ruggeri	Bow Ruggeri	bow.ruggeri@example.com	true	2005-07-07 11:39:58	2025-08-25 03:23:23
	sam	Software Manager		true	2012-03-19 18:04:50	2025-08-25 03:23:23
	owen.sparacino	Owen Sparacino	owen.sparacino@example.com	true	2012-02-17 19:04:49	2025-08-25 03:23:23
	damion.matkin	Damion Matkin	damion.matkin@example.com	true	2012-02-17 19:04:49	2025-08-25 03:23:23
	ed.gompf	Ed Gompf	ed.gompf@example.com	true	2012-02-17 19:04:49	2025-08-25 03:23:23
	mariano.maury	Mariano Maury	mariano.maury@example.com	true	2012-02-17 19:04:52	2025-08-25 03:23:23
	roman.simone	Roman Simone	roman.simone@example.com	true	2012-02-17 19:04:52	2025-08-25 03:23:23
	marion.gaulden	Marion Gaulden	marion.gaulden@example.com	true	2012-02-17 19:04:52	2025-08-25 03:23:23
	sheila.holloran	Sheila Holloran	sheila.holloran@example.com	true	2012-02-17 19:04:53	2025-08-25 03:23:23
	winnie.reich	Winnie Reich	winnie.reich@example.com	true	2012-02-17 19:04:53	2025-08-25 03:23:23
	cristina.sharper	Cristina Sharper	cristina.sharper@example.com	true	2012-02-17 19:04:53	2025-08-25 03:23:23
	lucius.winchester	Lucius Winchester	lucius.winchester@example.com	true	2012-02-17 19:04:53	2025-08-25 03:23:23

## Conclusion

This project provides a safeguard mechanism against accidental or improper deletion of users who are still involved in active incidents. By using a Business Rule on the sys\_user table, ServiceNow administrators can ensure that incident ownership and workflow integrity remain intact. This solution upholds data consistency and promotes operational continuity within IT service processes.