

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.

dev283759.service-now.com/now/nav/ui/classic/params/target/sys_user_list.do%3Fsysparm_userpref_module%3Dc5aa0ff0a0a0aa7009a39da035ea396%26sysparm...

servicenow All Favorites History Workspaces Users ☆ Search

Users Name Search Actions on selected rows... New

User ID	Name	Email	Active	Created	Updated
abel.tuter	Abel Tuter	abel.tuter@example.com	true	2012-02-17 19:04:52	2025-09-18 04:25:17
abraham.lincoln	Abraham Lincoln	abraham.lincoln@example.com	true	2013-07-23 17:15:54	2025-09-18 04:25:18
adela.cervantsz	Adela Cervantsz	adela.cervantsz@example.com	true	2012-02-17 19:04:50	2025-09-18 04:25:14
ailen.mottern	Aileen Mottern	ailen.mottern@example.com	true	2012-02-17 19:04:49	2025-09-18 04:25:17
alejandra.prenatt	Alejandra Prenatt	alejandra.prenatt@example.com	true	2012-02-17 19:04:52	2025-09-18 04:25:14
alejandro.mascall	Alejandro Mascall	alejandro.mascall@example.com	true	2012-02-17 19:04:52	2025-09-18 04:25:18
alene.rabeck	Alene Rabeck	alene.rabeck@example.com	true	2012-02-17 19:04:53	2025-09-18 04:25:19
alfonso.griglen	Alfonso Griglen	alfonso.griglen@example.com	true	2012-02-17 19:04:51	2025-09-18 04:25:14
alissa.mountjoy	Alissa Mountjoy	alissa.mountjoy@example.com	true	2012-02-17 19:04:52	2025-09-18 04:25:17
allan.schwandt	Allan Schwandt	allan.schwandt@example.com	true	2012-02-17 19:04:53	2025-09-18 04:25:19
allie.pumphrey	Allie Pumphrey	allie.pumphrey@example.com	true	2012-02-17 19:04:52	2025-09-18 04:25:18
allyson.gillispie	Allyson Gillispie	allyson.gillispie@example.com	true	2012-02-17 19:04:50	2025-09-18 04:25:14
alva.pennigton	Alva Pennigton	alva.pennigton@example.com	true	2012-02-17 19:04:50	2025-09-18 04:25:20
alysa.biasotti	Alyssa Biasotti	alysa.biasotti@example.com	true	2012-02-17 19:04:52	2025-09-18 04:25:15

1 to 100 of 629

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dev283759.service-now.com/now/nav/ui/classic/params/target/sys_user.do%3Fsys_id%3D957cd0cec3007210546a12d4e4013139%26sysparm_record_target%3...

servicenow All Favorites History Workspaces User - kiran 123 ☆ Search

User kiran 123 Update Set Password Delete

User ID kiran Email kiran@example.com

Name kiran 123 Language -- None --

First name kiran Calendar integration Outlook

Last name 123 Time zone System (America/Los_Angeles)

Title Department ? Date format System (yyyy-MM-dd)

Password needs reset ☐ Business phone

Locked out ☐ Mobile phone

Active ☒ Photo Click to add...

Web service access only ☐

Internal Integration User ☐

Update Set Password Delete

Related Links

Type here to search 27°C Mostly clear 5:45 AM 9/19/2025

✓ Now the two users are created (Ajay kumar, kiran).

User ID	Name	Email	Active	Created	Updated
kiran	kiran 123	kiran@example.com	true	2025-09-18 17:14:17	2025-09-18 17:14:17
Ajay	Ajay kumar	ajay@example.com	true	2025-09-18 17:10:29	2025-09-18 17:10:29
aes.creator	Creator User		true	2025-09-18 04:56:14	2025-09-18 07:11:35
admin	System Administrator	admin@example.com	true	2007-07-03 11:48:47	2025-09-18 07:11:35
pilar.suddeth	Pilar Suddeth	pilar.suddeth@example.com	true	2012-02-17 19:04:53	2025-09-18 04:25:21
leif.arguin	Leif Arguin	leif.arguin@example.com	true	2012-02-17 19:04:53	2025-09-18 04:25:21
bow.ruggeri	Bow Ruggeri	bow.ruggeri@example.com	true	2005-07-07 11:39:58	2025-09-18 04:25:21
sam	Software Manager		true	2012-03-19 18:04:50	2025-09-18 04:25:21
owen.sparacino	Owen Sparacino	owen.sparacino@example.com	true	2012-02-17 19:04:49	2025-09-18 04:25:21
damion.matkin	Damion Matkin	damion.matkin@example.com	true	2012-02-17 19:04:49	2025-09-18 04:25:21
ed.gompf	Ed Gompf	ed.gompf@example.com	true	2012-02-17 19:04:49	2025-09-18 04:25:21
mariano.maury	Mariano Maury	mariano.maury@example.com	true	2012-02-17 19:04:52	2025-09-18 04:25:21
roman.simone	Roman Simone	roman.simone@example.com	true	2012-02-17 19:04:52	2025-09-18 04:25:21
marion.gaulden	Marion Gaulden	marion.gaulden@example.com	true	2012-02-17 19:04:52	2025-09-18 04:25:21

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

✓ First assign a role to one of the user (kiran). Then add the incident to the user.

dev283759.service-now.com/now/nav/ui/classic/params/target/sys_user.do%3Fsys_id%3D957cd0cec3007210546a12d4e4013139%26sysparm_record_rows%3D...

servicenow All Favorites History Workspaces User - kiran 123 Search

User kiran 123

Adding Role platform_mml_create to kiran

Adding Role sn_hr_sp_esc_admin to kiran

Adding Role platform_ml_read to kiran

Adding Role pa_viewer to kiran

User ID kiran Email kiran@example.com

Name kiran 123 Language -- None --

First name kiran Calendar integration Outlook

Last name 123 Time zone System (America/Los_Angeles)

Title Department Password needs reset

Locked out

Active

Business phone Mobile phone Photo Click to add...

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✓ Now assign the incident to the user, who was assigned a role. (kiran 123)

dev283759.service-now.com/now/nav/ui/classic/params/target/incident.do%3Fsys_id%3D885de0c6c3807210546a12d4e40131bb%26sysparm_record_target%3D...

servicenow All Favorites History Admin Incident - INC0010009 Search

Incident INC0010009

Discuss Follow Update Resolve Delete

Number INC0010009 Channel -- None --

* Caller System Administrator State In Progress

Category Inquiry / Help Impact 3 - Low

Subcategory -- None -- Urgency 3 - Low

Service Priority 5 - Planning

Service offering Assignment group

Configuration item Assigned to kiran123

* Short description test incident

Description

Related Search Results

Notes Related Records Resolution Information

Watch list Work notes list

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Number	Opened	Short description	Caller	Priority	State	Category	Assignment group	Assigned to	Updated	Updated by
INC0010009	2025-09-18 18:26:57	test incident	System Administrator	5 - Planning	In Progress	Inquiry / Help	(empty)	kiran123	2025-09-18 18:28:39	admin
INC0000601	2025-06-21 02:42:59	The USB port on my PC stopped working	Beth Anglin	5 - Planning	Closed	Hardware	(empty)	(empty)	2025-09-18 04:20:33	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
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
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

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 - New Record' configuration page. The browser tabs include 'Student - Skill Wallet', 'ServiceNow Developers', and 'New Record | Business Rule | Se...'. The URL is 'dev283759.service-now.com/now/nav/ui/classic/params/target/sys_script.do%3Fsys_id%3D-1%26sys_is_list%3Dtrue%26sys_target%3Dsys_script%26sysparm_ch...'. The page header shows 'servicenow' and navigation links: 'All', 'Favorites', 'History', 'Admin'. The breadcrumb is 'Business Rule - New Record'. A search bar and a 'Submit' button are also visible.

A blue informational box states: 'A business rule is a server-side script that runs when a record is displayed, inserted, deleted, or when a table is queried. Use business rules to automatically change values in form fields when the specified conditions are met. [More Info](#)'.

The configuration fields are as follows:

- Name: Prevent User Deletion If Assigned to an
- Table: User [sys_user]
- Application: Global
- Active: ☒
- Advanced: ☒

The 'When to run' tab is selected, showing a blue instruction box: 'Specify whether the business rule should run on Insert or Update. Use Filter Conditions to specify under which conditions the business rule should run.'

The configuration for 'When to run' is:

- When: before
- Order: 100
- Insert: ☐
- Update: ☐
- Delete: ☒
- Query: ☐

The Windows taskbar at the bottom shows the search bar, task view, and various application icons. The system tray displays '27°C Mostly clear', signal icons, and the date/time '7:09 AM 9/19/2025'.

The screenshot shows the ServiceNow Business Rule editor interface. The browser tabs include 'Student - Skill Wallet', 'ServiceNow Developers', and 'New Record | Business Rule | S...'. The URL is 'dev283759.service-now.com/now/nav/ui/classic/params/target/sys_script.do%3Fsys_id%3D-1%26sys_is_list%3Dtrue%26sys_target%3Dsys_script%26sysparm_ch...'. The page title is 'Business Rule - New Record'. The 'Advanced' tab is selected, showing a script editor. The script is as follows:

```
1 (function executeRule(current, previous /*null when async*/) {  
2   var incGr = new GlideRecord('incident');  
3   incGr.addQuery('assigned_to', current.sys_id);  
4   incGr.setLimit(1); // Just need to check existence  
5   // incGr.addQuery('active', true); we can use the above or this line of code to check  
   // where the user is assigned with any incident  
6   incGr.query();  
7   if (incGr.next()) {  
8     gs.addErrorMessage('This user cannot be deleted because they are assigned to one or  
       more incidents.');9     current.setAbortAction(true);  
10  }  
11  // Add your code here
```

The 'Submit' button is visible at the bottom left of the editor. The Windows taskbar at the bottom shows the date and time as 7:12 AM on 9/19/2025.

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

dev283759.service-now.com/now/nav/ui/classic/params/target/sys_user.do%3Fsys_id%3D3187a0cec3407210546a12d4e4013138%26sysparm_record_target%3...

ServiceNow

User - kiran123

Search

User ID: kiran

Name: kiran123

First name:

Last name: kiran123

Title:

Department:

Password needs reset: ☐

Locked out: ☐

Active: ☒

Web service access only: ☐

Internal Integration User: ☐

Email: kiran@example.com

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...](#)

Update Set Password Delete

Update Set Password Delete

Related Links

Type here to search

27°C Mostly clear

7:17 AM 9/19/2025

✓ Now try deleting the user (kiran) to whom we have assigned an incident.

dev283759.service-now.com/now/nav/ui/classic/params/target/sys_user.do%3Fsys_id%3D3187a0cec3407210546a12d4e4013138%26sysparm_record_target%3...

ServiceNow

User - kiran123

Search

User ID: kiran

Name: kiran123

First name:

Last name: kiran123

Title:

Department:

Password needs reset: ☐

Locked out: ☐

Active: ☒

Web service access only: ☐

Internal Integration User: ☐

Email: kiran@example.com

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...](#)

Update Set Password Delete

Update Set Password Delete

Related Links

Type here to search

27°C Mostly clear

7:22 AM 9/19/2025

Confirmation

Warning!

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

- 1 Notification Device
- 1 Notification Messages

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

Proceed?

Cancel Delete

- ✓ It shows the error notification as “this user cannot be deleted because they are assigned to one or more incidents” and the user (kiran) is not deleted.

The screenshot shows the ServiceNow 'Users' page. A red error message at the top states: "This user cannot be deleted because they are assigned to one or more incidents." Below the message is a table of users. The first user, 'kiran', is highlighted in blue. The table has columns for User ID, Name, Email, Active, Created, and Updated. The bottom of the table shows pagination: '1 to 100 of 631'.

User ID	Name	Email	Active	Created	Updated
kiran	kiran123	kiran@example.com	true	2025-09-18 18:02:13	2025-09-18 18:02:13
Ajay	Ajay kumar	ajay@example.com	true	2025-09-18 17:10:29	2025-09-18 17:10:29
aes.creator	Creator User		true	2025-09-18 04:56:14	2025-09-18 07:11:35
admin	System Administrator	admin@example.com	true	2007-07-03 11:48:47	2025-09-18 07:11:35
pilar.suddeth	Pilar Suddeth	pilar.suddeth@example.com	true	2012-02-17 19:04:53	2025-09-18 04:25:21
leif.arguin	Leif Arguin	leif.arguin@example.com	true	2012-02-17 19:04:53	2025-09-18 04:25:21
bow.ruggeri	Bow Ruggeri	bow.ruggeri@example.com	true	2005-07-07 11:39:58	2025-09-18 04:25:21
sam	Software Manager		true	2012-03-19 18:04:50	2025-09-18 04:25:21
owen.sparacino	Owen Sparacino	owen.sparacino@example.com	true	2012-02-17 19:04:49	2025-09-18 04:25:21
damion.matkin	Damion Matkin	damion.matkin@example.com	true	2012-02-17 19:04:49	2025-09-18 04:25:21
ed.gompf	Ed Gompf	ed.gompf@example.com	true	2012-02-17 19:04:49	2025-09-18 04:25:21
mariano.maury	Mariano Maury	mariano.maury@example.com	true	2012-02-17 19:04:52	2025-09-18 04:25:21
roman.simone	Roman Simone	roman.simone@example.com	true	2012-02-17 19:04:52	2025-09-18 04:25:21

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.

✓ Now try deleting an unassigned user (Ajay kumar).

The screenshot shows the ServiceNow 'User - Ajay kumar' form. A confirmation dialog is displayed in the center, warning that deleting this record will result in the automatic deletion of related records, specifically 1 Notification Device. The dialog asks for confirmation to proceed, with 'Cancel' and 'Delete' buttons.

User Form Fields:

- User ID: Ajay
- Name: Ajay kumar
- First name: Ajay
- Last name: kumar
- Title:
- Department:
- Email: ajay@example.com
- Language: -- None --
- Calendar integration: Outlook
- Time zone: System (America/Los_Angeles)
- System (yyyy-MM-dd):
- Password needs reset: ☐
- Locked out: ☐
- Active: ☒
- Web service access only: ☐
- Internal Integration User: ☐

Buttons: Update, Set Password, Delete

The screenshot shows the ServiceNow 'Users' list view. A table displays a list of users with columns for User ID, Name, Email, Active status, Created date, and Updated date. The table shows 15 users, including kiran123, aes.creator, admin, pilar.suddeth, leif.arguin, bow.ruggeri, sam, owen.sparacino, damion.matkin, ed.gompf, mariano.maury, roman.simone, marion.gaulden, and sheila.holloran.

User ID	Name	Email	Active	Created	Updated
kiran123	kiran123	kiran@example.com	true	2025-09-18 18:02:13	2025-09-18 18:02:13
aes.creator	Creator User		true	2025-09-18 04:56:14	2025-09-18 07:11:35
admin	System Administrator	admin@example.com	true	2007-07-03 11:48:47	2025-09-18 07:11:35
pilar.suddeth	Pilar Suddeth	pilar.suddeth@example.com	true	2012-02-17 19:04:53	2025-09-18 04:25:21
leif.arguin	Leif Arguin	leif.arguin@example.com	true	2012-02-17 19:04:53	2025-09-18 04:25:21
bow.ruggeri	Bow Ruggeri	bow.ruggeri@example.com	true	2005-07-07 11:39:58	2025-09-18 04:25:21
sam	Software Manager		true	2012-03-19 18:04:50	2025-09-18 04:25:21
owen.sparacino	Owen Sparacino	owen.sparacino@example.com	true	2012-02-17 19:04:49	2025-09-18 04:25:21
damion.matkin	Damion Matkin	damion.matkin@example.com	true	2012-02-17 19:04:49	2025-09-18 04:25:21
ed.gompf	Ed Gompf	ed.gompf@example.com	true	2012-02-17 19:04:49	2025-09-18 04:25:21
mariano.maury	Mariano Maury	mariano.maury@example.com	true	2012-02-17 19:04:52	2025-09-18 04:25:21
roman.simone	Roman Simone	roman.simone@example.com	true	2012-02-17 19:04:52	2025-09-18 04:25:21
marion.gaulden	Marion Gaulden	marion.gaulden@example.com	true	2012-02-17 19:04:52	2025-09-18 04:25:21
sheila.holloran	Sheila Holloran	sheila.holloran@example.com	true	2012-02-17 19:04:53	2025-09-18 04:25:21

Page Information: 1 to 100 of 630

- ✓ But the user from the table is get deleted. Because it is not assigned to any incident.

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.

--- THE END ---