

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.

The screenshot shows the ServiceNow user creation interface. The browser address bar displays a URL with a long alphanumeric string. The ServiceNow header includes navigation tabs (All, Favorites, History, Workspaces, Admin) and a search bar. The page title is 'User - kiran123'. The form contains the following fields and options:

- User ID:** kiran
- Name:** kiran123
- First name:** kiran
- Last name:** 123
- Title:** (empty)
- Department:** (empty)
- Email:** kiran@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

Below the form, there are 'Related Links' (View linked accounts, View Subscriptions, Reset a password) and a tabbed interface at the bottom with 'Roles (40)' selected.

User ID	Name	Email	Active	Created	Updated
Ajay	Ajay kumar	ajay@example.com	true	2025-09-19 21:40:45	2025-09-19 21:40:45
Kiran	kiran123	kiran@example.com	true	2025-09-19 21:38:02	2025-09-19 21:38:02
aes.creator	Creator User		true	2025-09-16 08:57:26	2025-09-19 21:08:20
admin	System Administrator	admin@example.com	true	2007-07-03 11:48:47	2025-09-19 21:08:20
ed.gompf	Ed Gompf	ed.gompf@example.com	true	2012-02-17 19:04:49	2025-09-16 08:23:41
mariano.mauray	Mariano Maury	mariano.mauray@example.com	true	2012-02-17 19:04:52	2025-09-16 08:23:41
roman.simone	Roman Simone	roman.simone@example.com	true	2012-02-17 19:04:52	2025-09-16 08:23:41
marion.gaulden	Marion Gaulden	marion.gaulden@example.com	true	2012-02-17 19:04:52	2025-09-16 08:23:41
sheila.holloran	Sheila Holloran	sheila.holloran@example.com	true	2012-02-17 19:04:53	2025-09-16 08:23:41
winnie.reich	Winnie Reich	winnie.reich@example.com	true	2012-02-17 19:04:53	2025-09-16 08:23:41
cristina.sharper	Cristina Sharper	cristina.sharper@example.com	true	2012-02-17 19:04:53	2025-09-16 08:23:41
lucius.winchester	Lucius Winchester	lucius.winchester@example.com	true	2012-02-17 19:04:53	2025-09-16 08:23:41
johnie.minaai	Johnie Minaai	johnie.minaai@example.com	true	2012-02-17 19:04:53	2025-09-16 08:23:41
arron.ubhi	Arron Ubhi	arron.ubhi@example.com	true	2021-03-19 08:42:30	2025-09-16 08:23:41
Change.Manager	Change Manager	change.manager@example.com	true	2015-06-23 22:19:00	2025-09-16 08:23:41
virtual.agent	Virtual Agent		true	2025-07-24 03:08:21	2025-09-16 08:23:41
lone.kucera	Ione Kucera	lone.kucera@example.com	true	2012-02-17 19:04:49	2025-09-16 08:23:41

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)

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

Add Filter Run filter

-- choose field -- -- oper -- -- value --

Collection

Roles List

kiran 123

itil

Cancel Save

Name itil

Incident INC0010001

Number INC0010001

* Caller System Administrator

Category Inquiry / Help

Subcategory -- None --

Service

Service offering

Configuration item

* Short description Test Incident

Description

Channel -- None --

State In Progress

Impact 3 - Low

Urgency 3 - Low

Priority 5 - Planning

Assignment group

Assigned to kiran123

Related Search Results

Notes

Watch list

Work notes

Work notes list

Additional comments (Customer visible) Post

Number	Opened	Short description	Caller	Priority	State	Category	Assignment group	Assigned to	Updated	Updated by
INC0010001	2025-09-19 22:05:57	Test Incident	System Administrator	5 - Planning	In Progress	Inquiry / Help	(empty)	kiran123	2025-09-19 22:25:21	admin
INC0009009	2018-08-30 01:06:16	Unable to access the shared folder.	David Miller	4 - Low	New	Inquiry / Help	(empty)	(empty)	2018-12-12 23:30:24	admin
INC0009005	2018-08-31 21:35:21	Email server is down.	David Miller	1 - Critical	New	Software	(empty)	(empty)	2018-12-12 23:18:55	admin
INC0009001	2018-09-11 20:56:26	Unable to post content on a Wiki page	David Miller	3 - Moderate	New	Inquiry / Help	(empty)	(empty)	2018-12-12 23:32:42	admin
INC0008112	2019-07-29 11:48:43	Assessment : ATF Assessor	survey user	5 - Planning	New	Inquiry / Help	(empty)	(empty)	2019-07-29 11:49:28	admin
INC0008111	2019-07-22 14:04:57	ATF : Test1	System Administrator	5 - Planning	New	Inquiry / Help	(empty)	(empty)	2019-07-22 14:05:48	admin
INC0008001	2021-01-15 13:04:14	ATF:TEST2	survey user	5 - Planning	New	Inquiry / Help	(empty)	(empty)	2021-01-21 15:31:42	admin
INC0007002	2018-10-16 22:47:51	Need access to the common drive.	David Miller	4 - Low	New	Inquiry / Help	(empty)	(empty)	2018-12-12 23:28:49	admin
INC0007001	2018-10-16 22:47:10	Employee payroll application server is down.	David Miller	1 - Critical	New	Hardware	Openspace	(empty)	2025-07-24 03:19:36	system
INC0001990	2020-06-07 09:02:25	Unable to access the personal details section in payroll portal	Problem CoordinatorATF	5 - Planning	On Hold	Inquiry / Help	(empty)	(empty)	2020-06-07 09:04:34	admin
INC0000059	2016-08-10 09:14:29	Unable to access team file share	Rick Berzle	3 - Moderate	New	Inquiry / Help	(empty)	(empty)	2016-08-10 09:14:29	admin
INC0000058	2016-08-10 09:37:45	Performance problems with email	Bow Ruggeri	5 - Planning	New	Inquiry / Help	(empty)	(empty)	2016-08-10 09:37:45	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

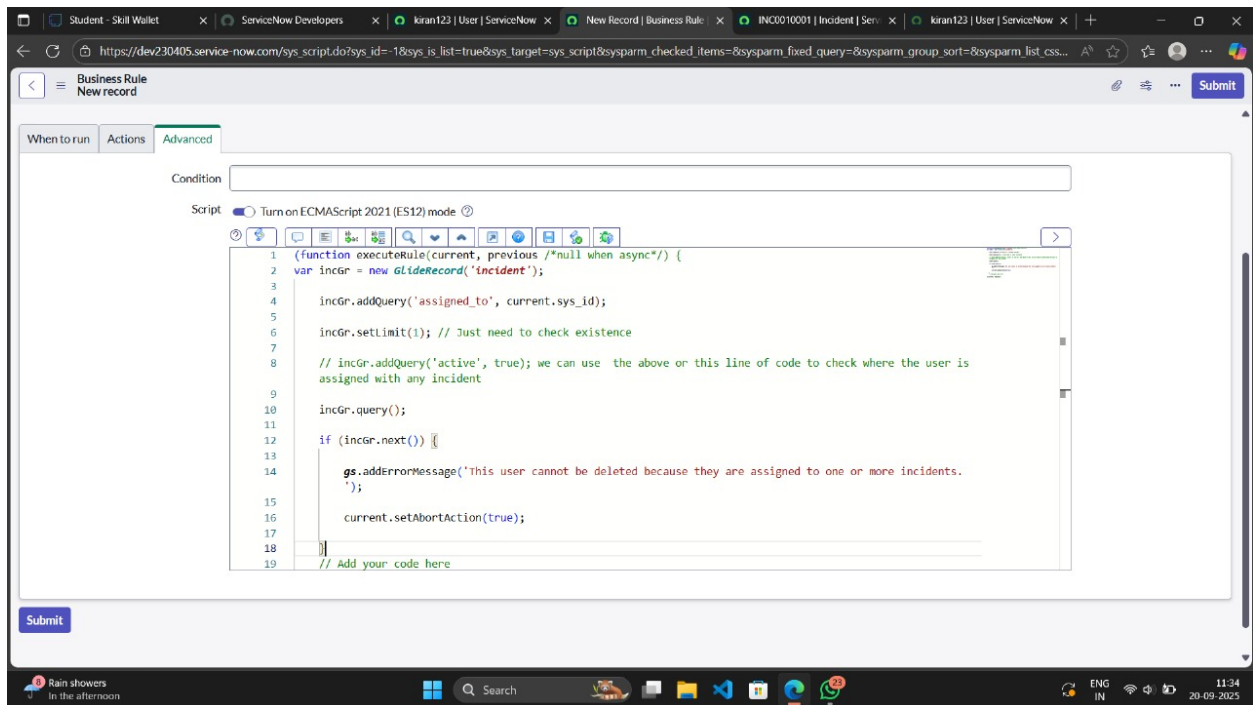
})(current, previous);
```

The screenshot shows the ServiceNow Business Rule configuration interface. The browser tabs include 'Student - Skill Wallet', 'ServiceNow Developers', and 'Prevent User Deletion if Assigned to an'. The URL is a long alphanumeric string. The page title is 'Business Rule - Prevent User Deletion if Assigned to an'. Below the title, there is a description: '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:** ☒

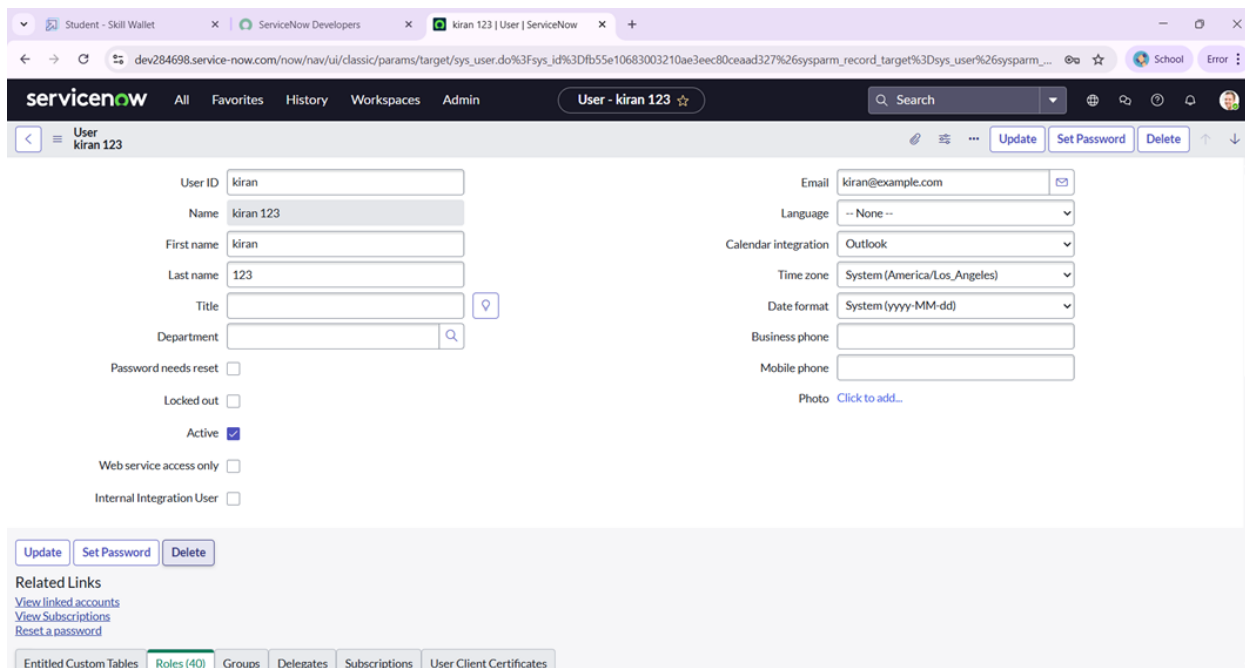
The 'When to run' tab is selected. It contains the following settings:

- When:** before
- Order:** 100
- Filter Conditions:**
 - Add Filter Condition:** (button)
 - Add "OR" Clause:** (button)
 - choose field --** (dropdown)
 - oper --** (dropdown)
 - value --** (text input)
- Role conditions:** (link)
- Insert:** ☐
- Update:** ☐
- Delete:** ☒
- Query:** ☐



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



Confirmation Dialog:

Warning!

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

- 1 Notification Device
- 1 Notification Message

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

Users List Table:

User ID	Name	Email	Active	Created	Updated
Ajay	Ajay kumar	ajay@example.com	true	2025-09-19 21:40:45	2025-09-19 21:40:45
Kiran	kiran123	kiran@example.com	true	2025-09-19 21:38:02	2025-09-19 21:38:02
aes.creator	Creator User		true	2025-09-16 08:57:26	2025-09-19 21:08:20
admin	System Administrator	admin@example.com	true	2007-07-03 11:48:47	2025-09-19 21:08:20
ed.gompf	Ed Gompf	ed.gompf@example.com	true	2012-02-17 19:04:49	2025-09-16 08:23:41
mariano.mauray	Mariano Maury	mariano.mauray@example.com	true	2012-02-17 19:04:52	2025-09-16 08:23:41
roman.simone	Roman Simone	roman.simone@example.com	true	2012-02-17 19:04:52	2025-09-16 08:23:41
marlon.gaulden	Marlon Gaulden	marlon.gaulden@example.com	true	2012-02-17 19:04:52	2025-09-16 08:23:41
sheila.holloran	Sheila Holloran	sheila.holloran@example.com	true	2012-02-17 19:04:53	2025-09-16 08:23:41
winnie.reich	Winnie Reich	winnie.reich@example.com	true	2012-02-17 19:04:53	2025-09-16 08:23:41
cristina.sharper	Cristina Sharper	cristina.sharper@example.com	true	2012-02-17 19:04:53	2025-09-16 08:23:41
lucius.winchester	Lucius Winchester	lucius.winchester@example.com	true	2012-02-17 19:04:53	2025-09-16 08:23:41
johnie.minaai	Johnie Minaai	johnie.minaai@example.com	true	2012-02-17 19:04:53	2025-09-16 08:23:41
arron.ubhi	Arron Ubhi	arron.ubhi@example.com	true	2021-03-19 08:42:30	2025-09-16 08:23:41
Change.Manager	Change Manager	change.manager@example.com	true	2015-06-23 22:19:00	2025-09-16 08:23:41
virtual.agent	Virtual Agent		true	2025-07-24 03:08:21	2025-09-16 08:23:41

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.

The screenshot displays the ServiceNow user management interface. A confirmation dialog is open, warning that deleting the user 'Ajay kumar' 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.

The background shows the user profile for 'Ajay kumar' with fields for User ID, Name, First name, Last name, Title, Department, Password needs reset, Locked out, Active, Web service access only, Internal Integration User, Mobile phone, and Photo. Below the profile are 'Update', 'Set Password', and 'Delete' buttons.

The bottom part of the screenshot shows the 'Users' list table with columns: User ID, Name, Email, Active, Created, and Updated. The table contains 20 rows of user data, including 'Kiran', 'aes.creator', 'admin', 'ed.gompf', 'mariano.maury', 'roman.simone', 'marion.gaulden', 'shelia.holloran', 'winnie.reich', 'cristina.sharper', 'lucius.winchester', 'johnie.minaai', 'arron.ubhi', 'Change.Manager', 'virtual.agent', 'ione.kucera', and 'emilio.lampkin'.

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.