

ServiceNow Project Documentation

Project: Prevent User Deletion if Assigned to an Incident

Team Details

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Project Overview

This project implements a safeguard in ServiceNow to prevent deletion of a user record when the user is assigned to one or more Incident records. The solution is implemented using a Business Rule on the **User [sys_user]** table, triggered **Before Delete**. If an assignment exists, the delete operation is aborted and an error message is displayed.

Objectives

- Prevent accidental deletion of users who are still working on active incidents.
- Maintain ITSM process continuity and assignment integrity.
- Provide clear feedback to administrators via an error message.

1. Configuration & Setup

The project uses a server-side Business Rule in the Global application scope. The rule is created on the User table and configured to run on delete.

1.1 Business Rule: When to run

Table: User [sys_user]

When: Before

Delete: True

Order: 100

The screenshot shows the ServiceNow interface for configuring a Business Rule named "Prevent User Deletion". The rule is set to run on the "User [sys_user]" table in the "Global" application scope. It is configured to run "before" the delete action, with an order of 100. The "Delete" checkbox is checked, indicating the rule runs on delete. The "When to run" tab is selected, showing the "When" dropdown set to "before" and the "Order" field set to 100. There are also checkboxes for "Insert", "Update", "Delete", and "Query", with "Delete" being the only one checked. A "Filter Conditions" section is visible at the bottom with "Add Filter Condition" and "Add OR Clause" buttons.

1.2 Business Rule: Script (Advanced tab)

The Business Rule checks the Incident table for any record where **Assigned to** equals the user being deleted. If at least one record exists, the script shows an error message and aborts the delete action.

The screenshot shows the "Advanced" tab of the Business Rule configuration. It displays a script that checks for incidents assigned to the user being deleted. The script is written in JavaScript and uses the GlideRecord class to query the Incident table. If any records are found, it adds an error message and aborts the delete action. The script is as follows:

```
1 (function executeRule(current, previous /*null when async*/) {
2
3     var incGr = new GlideRecord('incident');
4     incGr.addQuery('assigned_to', current.sys_id);
5     incGr.setLimit(1);
6     incGr.query();
7
8     if (incGr.next()) {
9         gs.addErrorMessage('This user cannot be deleted because they are assigned to one or more incidents.');
```

The script is shown in a code editor with line numbers 1 through 13. The "Update" and "Delete" buttons are visible at the bottom of the script editor. Below the script editor, there are "Related Links" including "Run Point Scan".

2. Test Data Creation

Two users were created to validate the functionality: one user that is assigned to an incident (deletion must be blocked), and one unused user (deletion should succeed).

2.1 User 1 Created

The screenshot shows the ServiceNow user record for 'User - Rudraraju Jogi Subrahmanya...'. The form includes the following fields and options:

- User ID:** raju
- First name:** Rudraraju
- Last name:** Jogi Subrahmanya Raju
- Title:** (empty)
- Department:** (empty)
- Email:** rudrarajuogisubrahmanyamraju@gi
- Language:** -- None --
- Calendar integration:** Outlook
- Time zone:** System (America/Los_Angeles)
- Date format:** System (yyyy-MM-dd)
- Business phone:** (empty)
- Mobile phone:** (empty)
- Password needs reset:** ☐
- Locked out:** ☐
- Active:** ☒
- Identity type:** Human
- Internal Integration User:** ☐

Buttons: Update, Set Password, Delete

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

Entitled Custom Tables: Roles (43), Groups (1), Delegates, Subscriptions, User Client Certificates

2.2 Roles Assigned to User 1

Roles are visible in the Roles related list on the user record. (Roles are not required for the Business Rule logic, but are part of standard user setup.)

The screenshot shows the ServiceNow user record for 'User - Rudraraju Jogi Subrahmanya...' with the 'Roles' tab selected. The table displays the following roles assigned to the user:

Role	State	Inherited	Inheritance Count
sn_request_read	Active	true	1
sn_itam_recomm.recommendations_read	Active	true	1
sn_sow.it_agent_dashboard_user	Active	true	1
sn_incident_read	Active	true	1
sn_gd_guidance.guidance_user	Active	true	7
viz_creator	Active	true	1
data_manager_user	Active	true	1
interaction_agent	Active	true	6
cmdb_ms_user	Active	true	1
sn_request_approver_read	Active	true	1
certification	Active	true	1
sn_sow.sow_list	Active	true	5
sn_change_read	Active	true	1

3. Incident Assignment Validation

An incident was created and assigned to User 1. The incident was set to **In Progress** to represent an active assignment scenario.

3.1 Incident Assigned to User 1

Expected fields shown:

- Assigned to = User 1
- State = In Progress

The screenshot displays the ServiceNow interface for an incident record. The top navigation bar includes the ServiceNow logo, navigation links (All, Favorites, History, Admin), a search bar, and a user profile icon. The incident title "Incident - INC0010003" is prominently displayed. Below the title, a set of action buttons (Discuss, Follow, Update, Resolve, Delete) is visible. The main form area is divided into two columns. The left column contains fields for "Number" (INC0010003), "Caller" (Rudraraju Jogi Subrahmanyam Raji), "Category" (Inquiry / Help), "Subcategory" (-- None --), "Service", "Service offering", "Configuration item", "Short description" (Test incident for user deletion validation), and "Description". The right column contains fields for "Channel" (-- None --), "State" (In Progress), "Impact" (3 - Low), "Urgency" (3 - Low), "Priority" (5 - Planning), "Assignment group", and "Assigned to" (Rudraraju Jogi Subrahmanyam Raji). Below the form, there is a "Related Search Results" section and a "Notes" tab. The "Notes" tab is active, showing a "Watch list" and a "Work notes list".

servicenow All Favorites History Admin Incident - INC0010003 Search

Incident INC0010003 Discuss Follow Update Resolve Delete

Number INC0010003

* Caller Rudraraju Jogi Subrahmanyam Raji

Category Inquiry / Help

Subcategory -- None --

Service

Service offering

Configuration item

* Short description Test incident for user deletion validation

Description

Channel -- None --

State In Progress

Impact 3 - Low

Urgency 3 - Low

Priority 5 - Planning

Assignment group

Assigned to Rudraraju Jogi Subrahmanyam Raji

Related Search Results >

Notes Related Records Resolution Information

Watch list

Work notes list

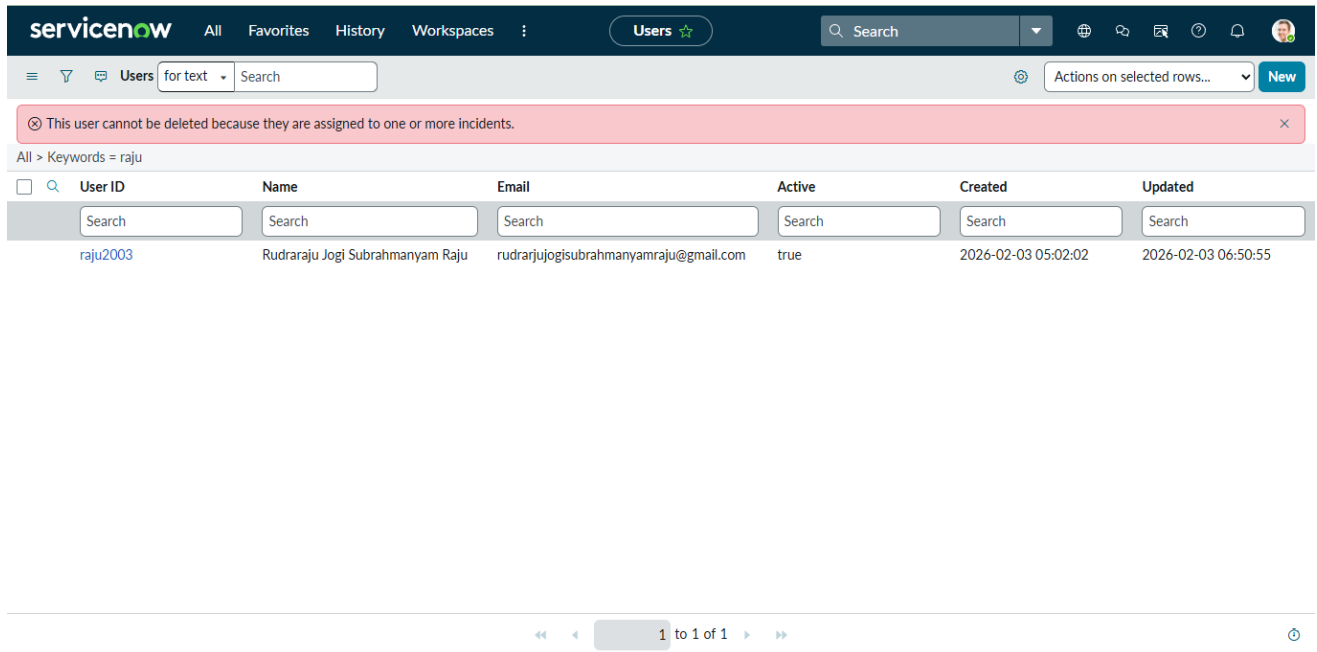
Work notes

4. Testing & Results

The deletion behavior was tested for both users to confirm correct Business Rule functionality.

4.1 Attempt to Delete Assigned User (User 1)

When trying to delete User 1 (who is assigned to an incident), ServiceNow blocks the deletion and shows an error message.

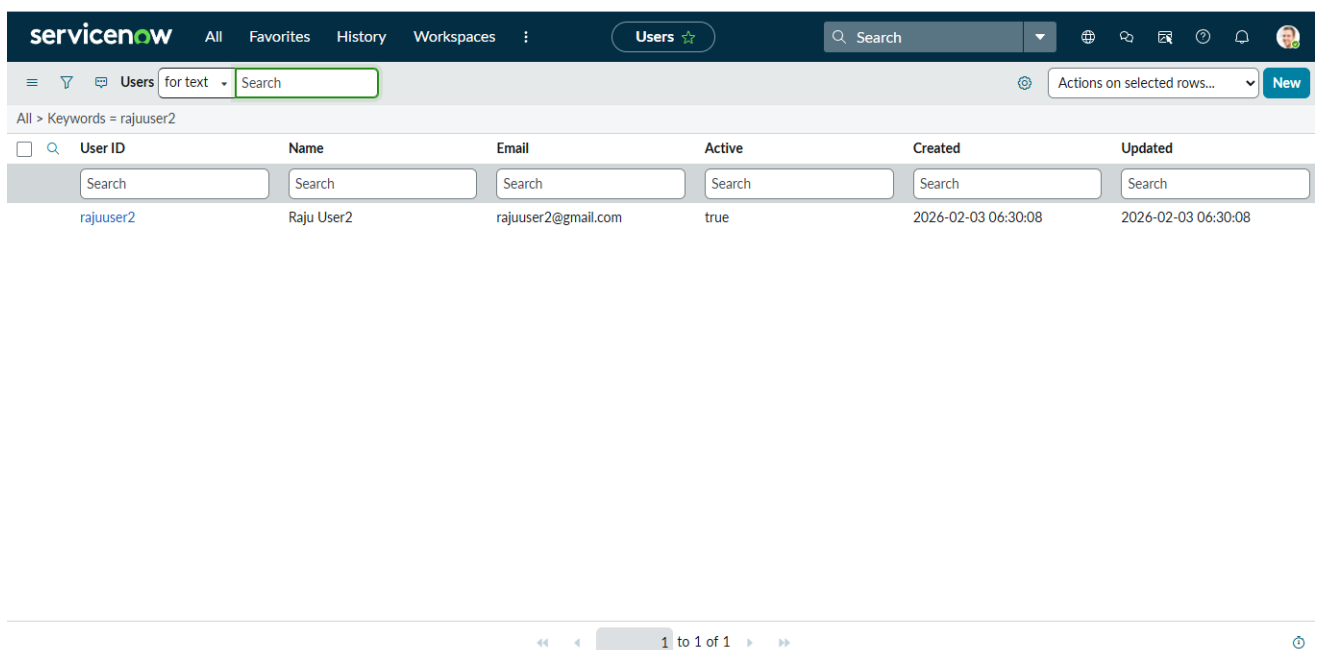


The screenshot shows the ServiceNow 'Users' list interface. A red error message banner at the top states: 'This user cannot be deleted because they are assigned to one or more incidents.' Below the banner, the table shows one user: 'raju2003' (Rudraraju Jogi Subrahmanyam Raju). The table columns are: User ID, Name, Email, Active, Created, and Updated. The pagination at the bottom indicates '1 to 1 of 1'.

User ID	Name	Email	Active	Created	Updated
raju2003	Rudraraju Jogi Subrahmanyam Raju	rudrarajugisubrahmanyamraju@gmail.com	true	2026-02-03 05:02:02	2026-02-03 06:50:55

4.2 Delete Unused User (User 2)

When trying to delete User 2 (not assigned to any incident), the deletion succeeds normally. This confirms that the Business Rule only blocks deletion when assignment exists.



The screenshot shows the ServiceNow 'Users' list interface. The search bar is highlighted with a green border. The table shows one user: 'rajuuser2' (Raju User2). The table columns are: User ID, Name, Email, Active, Created, and Updated. The pagination at the bottom indicates '1 to 1 of 1'.

User ID	Name	Email	Active	Created	Updated
rajuuser2	Raju User2	rajuuser2@gmail.com	true	2026-02-03 06:30:08	2026-02-03 06:30:08

5. Business Rule Logic (Explanation)

The Business Rule executes on the User table before delete. It performs a query on the Incident table using the sys_id of the user being deleted.

```
var incGr = new GlideRecord('incident');
incGr.addQuery('assigned_to', current.sys_id);
incGr.setLimit(1);
incGr.query();

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

current.setAbortAction(true);

```
}
```

Why this works

- The query checks if at least one incident exists for the user.
- If found, deletion is blocked using **current.setAbortAction(true)**.
- The administrator receives a clear error note using **gs.addErrorMessage()**.

6. Conclusion

This project successfully prevents deletion of users who are still assigned to incidents. It improves data integrity, reduces operational risk, and ensures incident ownership is preserved in ServiceNow.