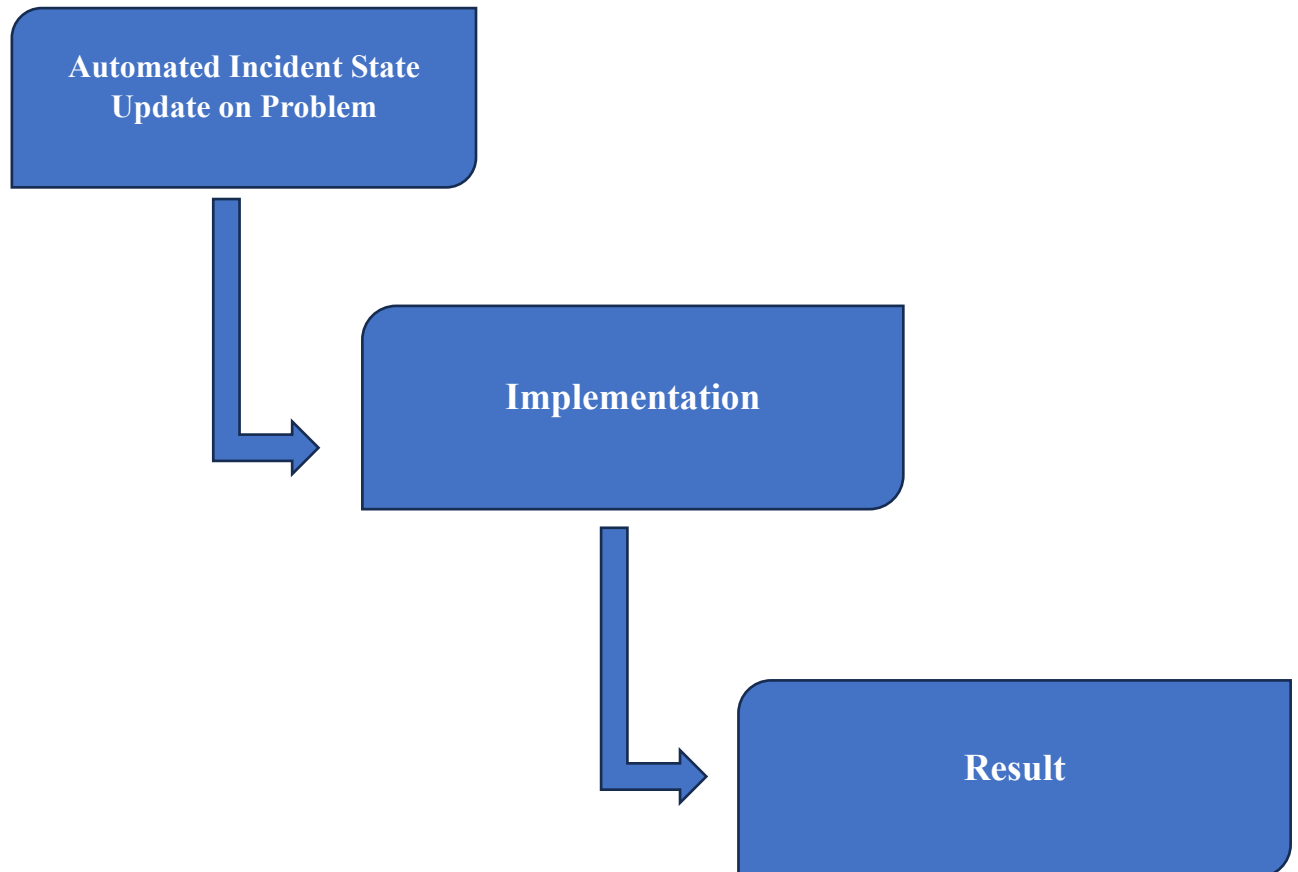


# Automated Incident State Update on Problem Creation

## Project Flow



## **Automated Incident State Update on Problem Creation**

### **Abstract :**

To improve efficiency and consistency in incident management, this automation in ServiceNow will automatically update Incidents linked to new or updated Problems. It will set these Incidents to "On Hold" with the reason "Awaiting Problem," reducing manual work and improving status tracking for faster resolution.

### **User Story :**

As a ServiceNow user, I want the state of Incidents related to a newly created Problem to automatically change to "On Hold" with the on-hold reason set to "Awaiting Problem" so that incident management is streamlined, and it is clear that the resolution is pending a related Problem.

### **Pre-Requisites :**

- Knowledge on Service Now.
- Knowledge on Business Rules.

### **Skills used to solve the problem statement :**

- Business Rules.
- Service Now Administration.

## Implementation :

### Step 1: Sign in to ServiceNow

- Log in to your ServiceNow account.

#### Sign Up for a Developer Account

- Visit [ServiceNow Developer Site](#).
- Sign up for a developer account.

#### Request a Personal Developer Instance

- Navigate to the "Personal Developer Instance" section.
- Click on "Request Instance" to create a new ServiceNow instance.

#### Fill Out and Submit the Request

- Provide the necessary details and submit the request.

#### Receive Instance Details

- Check your email for instance details and credentials.

#### Log in to ServiceNow

- Use the provided credentials to log in to your ServiceNow instance

### Step 2: Configure a Business Rule in ServiceNow

1. Open your ServiceNow Developer Instance.
2. Navigate to **All > Search for Business Rule** and open it.
3. Enter the following details:
  - **Name:** problem after br
  - **Table:** Select **ProblemTable**
  - **Active:** Ensure the checkbox is **checked**
  - **Advanced:** Check the **Advanced** checkbox

The screenshot shows the ServiceNow interface for creating a new Business Rule. The header includes the ServiceNow logo, navigation tabs (All, Favorites, History, Workspaces), and a breadcrumb trail: Business Rule - New Record. The main content area has a form with the following fields:

- Name:** problem after br
- Table:** Problem [problem]
- Application:** Global
- Active:** ☒
- Advanced:** ☒

A blue information bar at the top of the form 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](#)".

### Step 3: Configure When to Run

1. Scroll down to the **When to Run** section.
2. Set **When** to **After**.
3. Under **Operations**, select **Insert** and **Update**.
4. In **Filter Conditions**, set:
  - **Problem statement** → **Starts with** → "Related"

The screenshot shows the 'When to run' configuration panel. It has tabs for 'When to run', 'Actions', and 'Advanced'. A blue header bar says: 'Specify whether the business rule should run on Insert or Update. Use Filter Conditions to specify under which conditions the business rule should run.' Below this, the 'When' dropdown is set to 'after' and 'Order' is 100. On the right, 'Insert' and 'Update' are checked under 'Operations'. Under 'Filter Conditions', there are buttons for 'Add Filter Condition' and 'Add "OR" Clause'. A condition is added: 'Problem statement' starts with 'Related'. There are also 'AND', 'OR', and 'X' buttons. At the bottom left is a 'Submit' button.

### Step 4: Add Advanced Script

1. In the **Advanced** section, locate the **Script** field.
2. Enter the following script:

```
(function executeRule(current, previous /*null when async*/) {  
    // Ensure the current record has a valid sys_id  
    if (!current.sys_id) {  
        return;  
    }  
    // Retrieve related incidents  
    var incidentGR = new GlideRecord('incident');  
    incidentGR.addQuery('problem_id', current.sys_id);  
    incidentGR.query();  
    // Update each related incident  
    while (incidentGR.next()) {  
        incidentGR.state = 3; // Set state to "On Hold"  
        incidentGR.u_on_hold_reason = 3; // Set On Hold Reason to "Awaiting Problem"  
    }  
}
```

```

incidentGR.update();

}

})(current, previous);

```

When to run: **Advanced**

Condition: `</>`

Script: `</>`

```

1 (function executeRule(current, previous /*null when async*/) {
2
3     // Add your code here
4     if (!current.sys_id) {
5         return;
6     }
7
8     // Query related incidents
9     var incidentGR = new GlideRecord('incident');
10    incidentGR.addQuery('problem_id', current.sys_id);
11    incidentGR.query();
12
13    while (incidentGR.next()) {
14        // Update state to On Hold and set On Hold Reason to Awaiting Problem
15        incidentGR.state = 3;
16        incidentGR.u_on_hold_reason = 3; // Ensure 'u_on_hold_reason' is the correct field name
17        incidentGR.update();
18    }
19
20 })(current, previous);

```

**Submit**

**Step 4:** Click on “**Submit**”.

**Result:**

**Step 5: Verify the Result**

1. Navigate to **Problem > All**.
2. Open any **Problem** record that has related **Incidents**.

**Problem** PRB0000008

Discuss Follow **Confirm** Mark Duplicate Cancel Update Delete

New ✓ **Assess** Root Cause Analysis Fix in Progress Resolved Closed

Number: PRB0000008

State: Assess

First reported by: INC0000006

Impact: 3 - Low

Category: Software

Urgency: 3 - Low

Subcategory: -- None --

Priority: 5 - Planning

Service:

Assignment group:

Service offering:

\* Assigned to: Problem Coordinator A

Configuration item:

\* Problem statement: Hang when trying to print VISIO document

Description:

[Related Search Results >](#)

**Incidents (1)** Affected CIs Problem Tasks Change Requests Outages Attached Knowledge

Incidents Assignment group Search Actions on selected rows... Add New

Problem = PRB0000008

	Number	Opened	Short description	Caller	Priority	State	Category	Assignment group	Assigned to	Updated	Updated by
<input type="checkbox"/>	INC0000006	2024-08-26 16:08:05	Hangs when trying to print VISIO document	Joe Employee	1 - Critical	In Progress	Software	Software	Howard Johnson	2025-01-29 07:48:21	admin

1 to 1 of 1

**Note:**

When you open the related Incident record, its state will **not** be set to “**On Hold**” initially.

**Step 6: Steps to Trigger the Update:**

Update the **Problem statement** field to:

**"Related incident records for problem"**

- 1. Click **Update**.
- 2. Now, the related Incident's state will be set to **"On Hold"** automatically.

ProblemPRB0000008

DiscussFollowConfirmMark DuplicateCancelUpdateDelete

New

Assess

Root Cause Analysis

Fix in Progress

Resolved

Closed

NumberPRB0000008

StateAssess

First reported byINC0000006

Impact3 - Low

CategorySoftware

Urgency3 - Low

Subcategory-- None --

Priority5 - Planning

Service

Assignment group

Service offering

\* Assigned toProblem Coordinator A

Configuration item

\* Problem statementHang when trying to print VISIO document

DescriptionRelated incident records for problem

Related Search Results

Incidents (1)

Affected CIs

Problem Tasks

Change Requests

Outages

Attached Knowledge

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▼

Incidents

Category

Search

🔍

🗑️

Actions on selected rows...

Add

New

Problem = PRB0000008

<input type="checkbox"/>	🔍	Number	Opened	Short description	Caller	Priority	State	Category	Assignment group	Assigned to	Updated	Updated by
<input type="checkbox"/>		INC00000006	2024-08-26 16:08:05	Hangs when trying to print VISIO document	Joe Employee	1 - Critical	On Hold	Software	Software	Howard Johnson	2025-01-29 07:49:38	admin

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