

Enhanced Incident Management with AI (ServiceNow)

Introduction

The project Enhanced Incident Management with OpenAI integrates the power of AI with ServiceNow's IT Service Management (ITSM) capabilities. The solution leverages OpenAI to improve the speed, accuracy, and efficiency of handling incidents. By combining automation, natural language processing (NLP), and intelligent recommendations, the project reduces manual effort and enhances user experience in resolving incidents.

Project Summary

This project focuses on enhancing the existing ServiceNow Incident Management process by integrating OpenAI's language model. The integration allows automatic incident categorization, prioritization, and resolution suggestions. End users can describe their issues in natural language, and OpenAI interprets the request, helping ServiceNow to log incidents more effectively. Additionally, the system provides IT support agents with AI-driven recommendations and solutions, ensuring faster resolution times and reduced SLA breaches.

The project demonstrates how AI can transform IT service management by making incident handling smarter, proactive, and user-friendly.

Objectives

- To automate incident categorization and prioritization using AI-powered insights.
- To provide AI-driven recommendations for faster resolution of incidents.
- To enhance user experience by enabling natural language interaction for incident logging.
- To improve efficiency and reduce manual effort for IT support teams.
- To demonstrate the potential of ServiceNow and AI integration for future ITSM enhancements.

Modules

1. Incident table & fields
2. Flow Designer — Flow 1: Auto Assignment
3. Flow Designer — Flow 2: Priority Auto-Set
4. Reports (Category, Priority, Assignment Group)
5. Dashboard (AI Incident Dashboard)

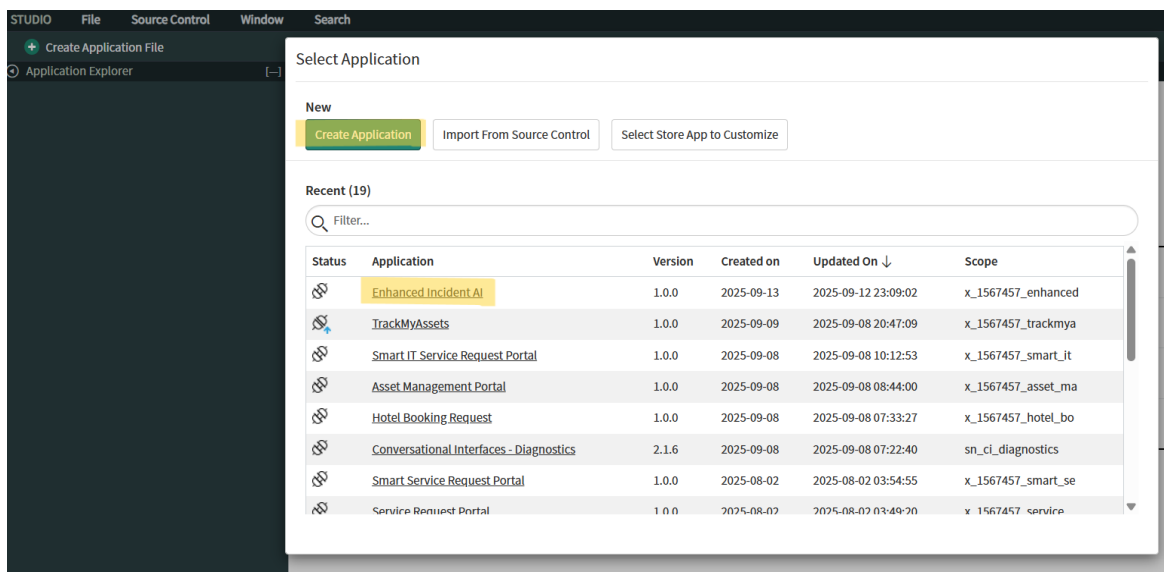
Tools & Components

- ServiceNow PDI (Personal Developer Instance)
- Studio (Application container)
- Flow Designer
- Reports & Dashboards

Implementation

Step 1 - Create Application (Studio)

1. Log in to your PDI.
2. Navigate: System Applications → Studio.
3. Click Create Application.
 - Name: **Enhanced Incident AI**
 - Scope auto-fills.



Step 2 - Create Table

1. Inside Studio - click Create Application File
2. Choose Data Model → Table.
3. Label: **AI Incident**

Step 3- Auto Number

Auto-number gives professional-looking record IDs (e.g., AIINC0001).

- Add a field of type Auto Number or configure the table number field.

The screenshot shows the ServiceNow interface for configuring a table. The left sidebar shows the navigation menu with 'Tables' selected. The main area is titled 'Table - AI Incident'. The 'Controls' tab is active, showing configuration options for the table. The 'Label' is 'AI Incident' and the 'Name' is 'x_1567457_enhanced_ai_incident'. The 'Application' is 'Enhanced Incident AI'. Under the 'Controls' tab, there are checkboxes for 'Extensible' and 'Live feed', both of which are unchecked. A blue informational box states: 'Use auto-numbering to define a sequential identifying code made up of a prefix, a base number and a padding value to ensure a consistent format'. Below this, the 'Prefix' is set to 'AIINC', the 'Number' is set to '10,000', and the 'Number of digits' is set to '9'.

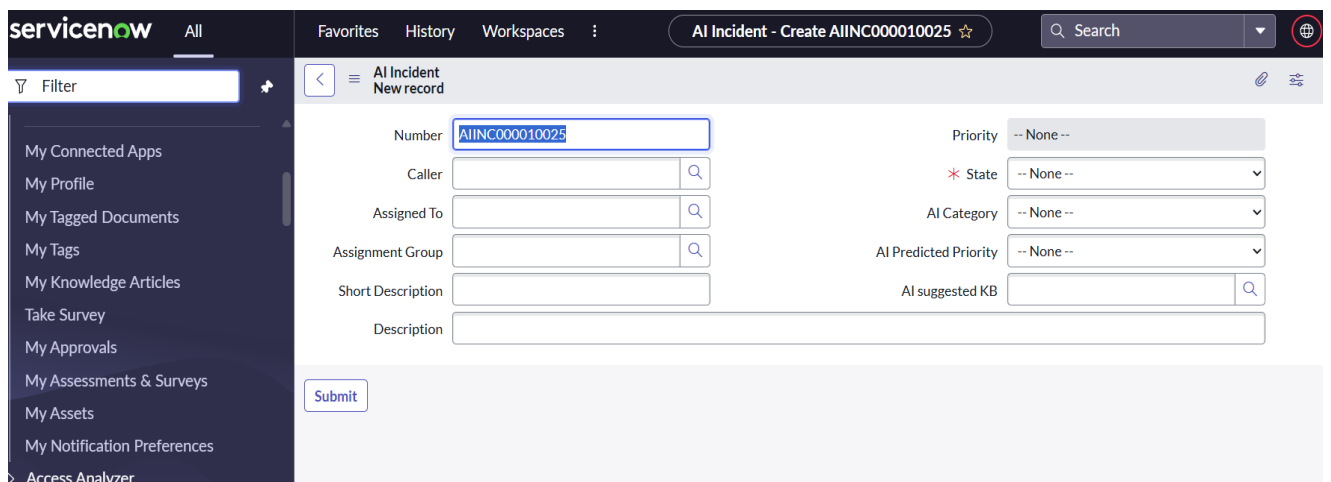
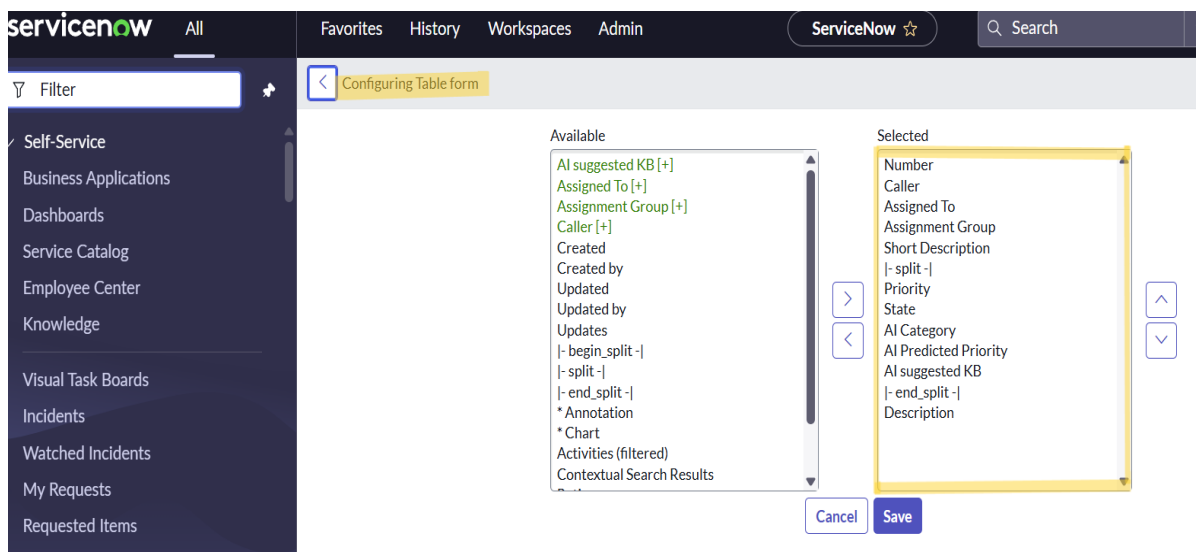
Step 4 - Add Fields (Basic & Custom AI fields)

A. Basic Fields

- short_description - Type: Single Line Text
- description - Type: Multi-line Text
- Number - Autonumber for forms
- caller_id - Reference -> User [sys_user] (Caller)
- assignment_group - Reference -> Group [sys_user_group]
- assigned_to - Reference -> User [sys_user]
- priority - Choice -> Values: 1 - Critical, 2 - High, 3 - Moderate, 4 - Low
- state - Choice -> Values: New, In Progress, Resolved, Closed

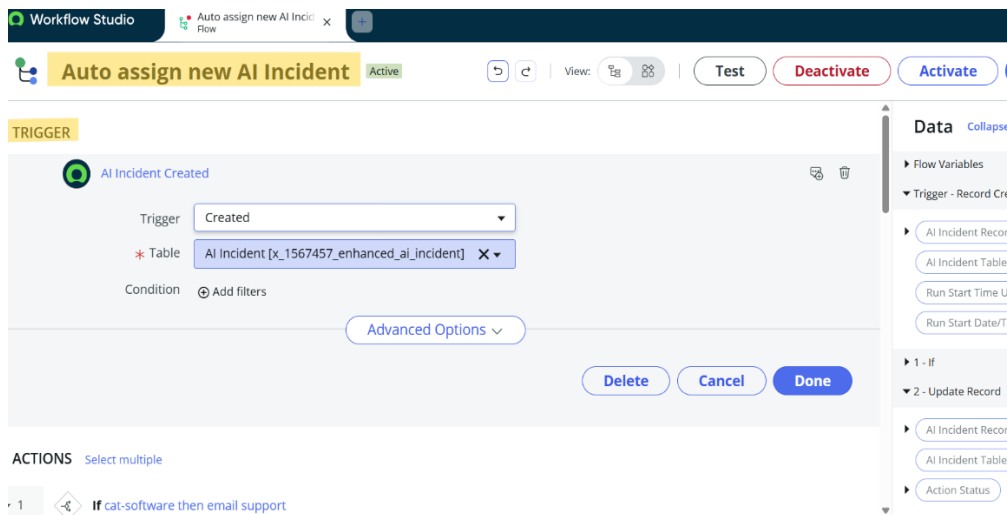
B. Custom AI Fields (project-specific):

- u_ai_category - Label: **AI Category** - Type: Choice
 - Values: General, Software - Email, Access - Login, Infrastructure - Server
- u_ai_predicted_priority - Label: **AI Predicted Priority** - Type: Choice
 - Values: 1 - Critical, 2 - High, 3 - Moderate, 4 - Low
- u_ai_suggested_kb - Label: **AI Suggested KB** - Type: Reference -> Knowledge [kb_knowledge] (optional)



Step 5 - Flow Designer: Auto Assignment (Flow 1)

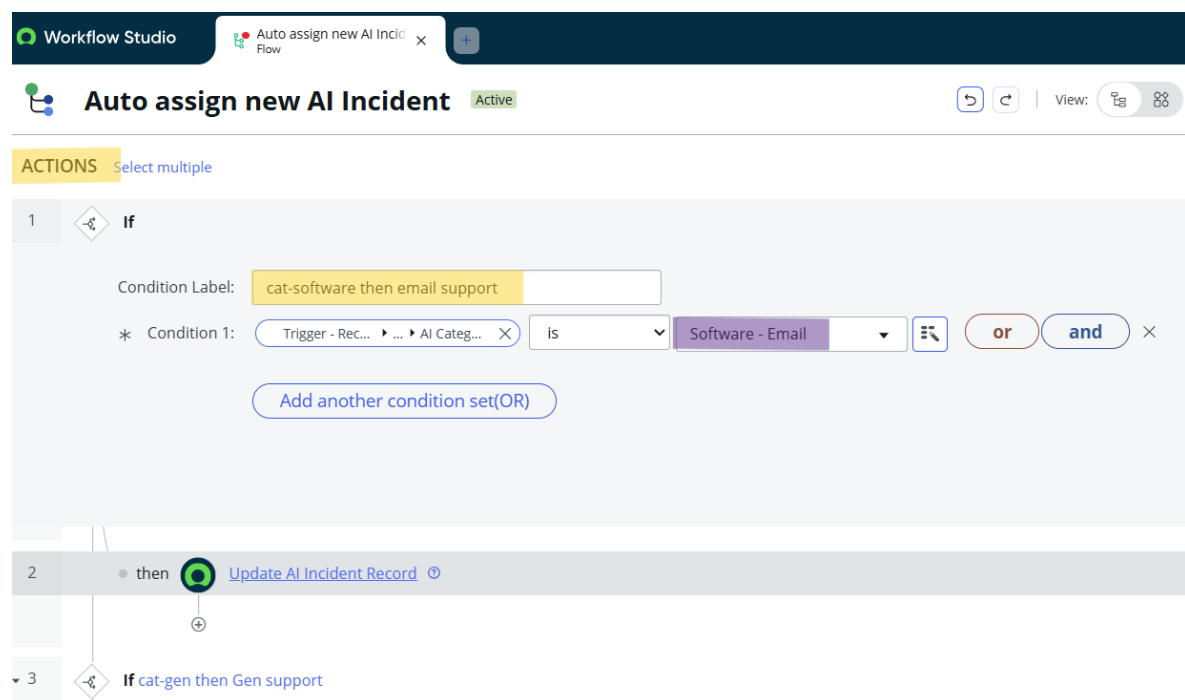
1. Create Flow: Go to Flow Designer -> New Flow.
 - Name: **Auto assign new AI Incident**
 - Application: Enhanced Incident AI

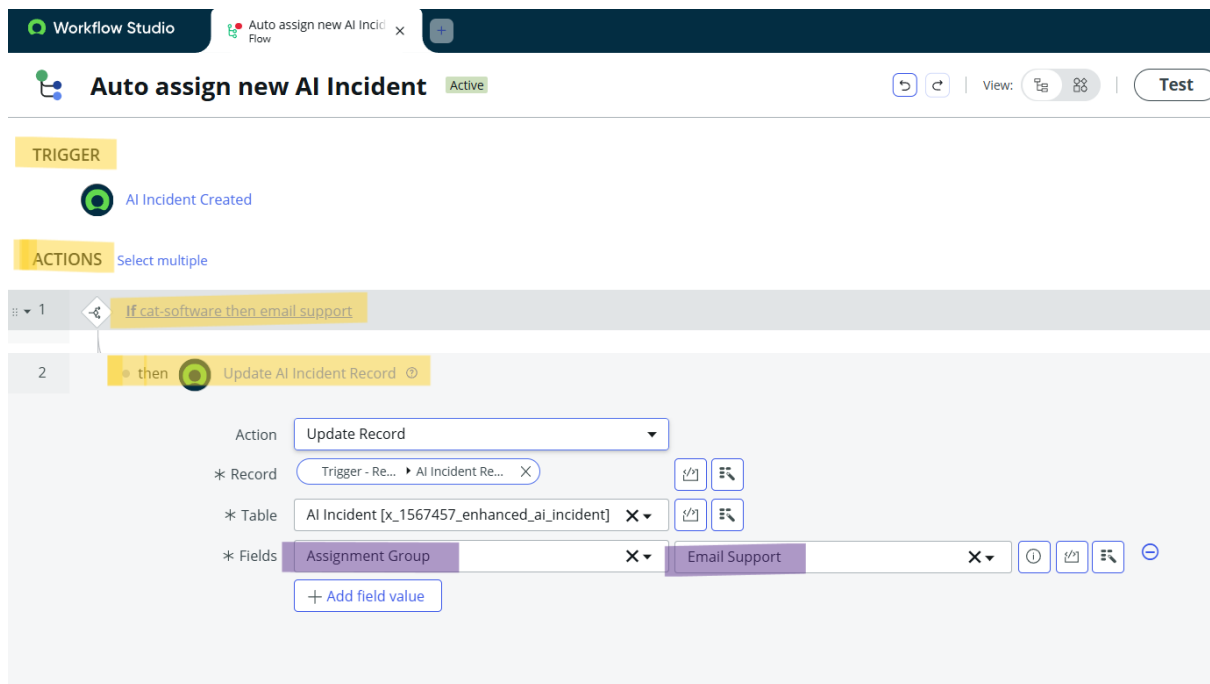


2. After Trigger → click + Add Action → Flow Logic → If.

3. **If block** (first branch):

- Condition: u_ai_category is **Software - Email**
- Action inside If: Add → **Update Record**
 - Table: AI Incident
 - Record: Trigger record
 - Field to set: assignment_group → select **Email Support**





4. Else If (add branch):

- Condition: u_ai_category is Infrastructure - Server
- Action: Update Record → assignment_group = **Server Team**

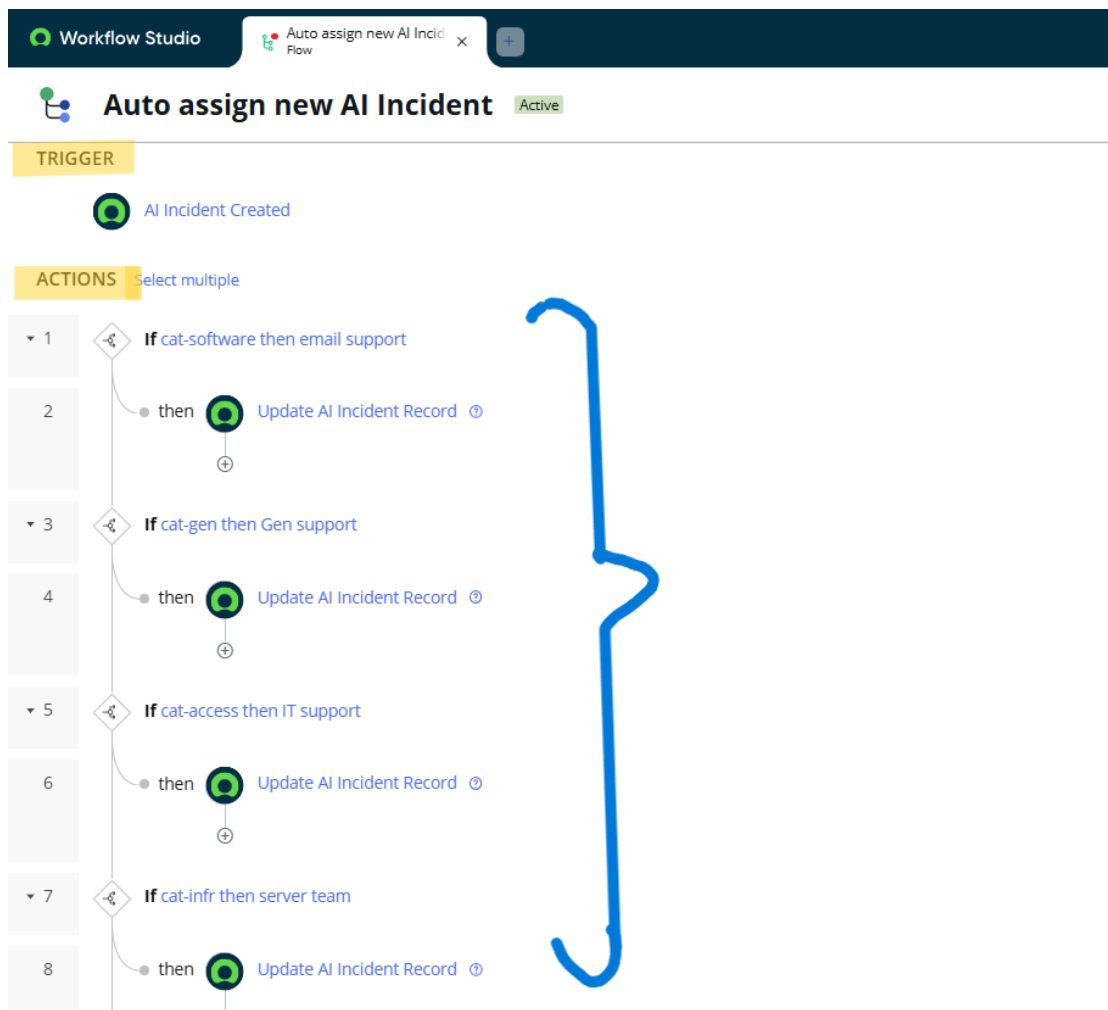
5. Else If (add branch):

- Condition: u_ai_category is Access - Login
- Action: Update Record → assignment_group = **IT Support**

6. Else (default):

- Action: Update Record → assignment_group = **General Support**

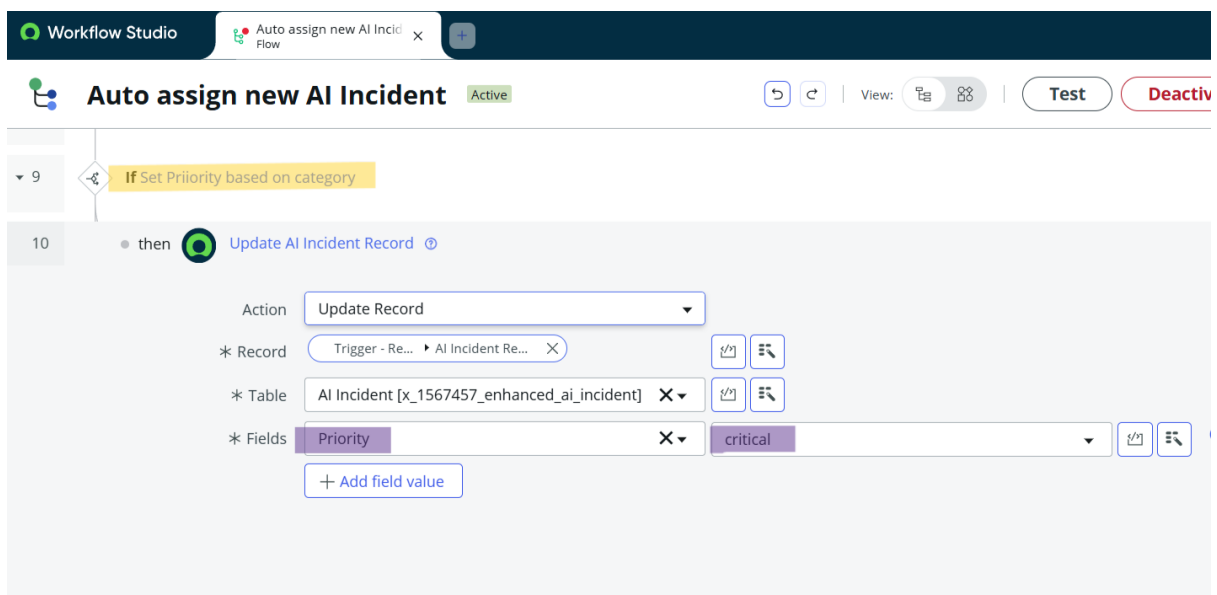
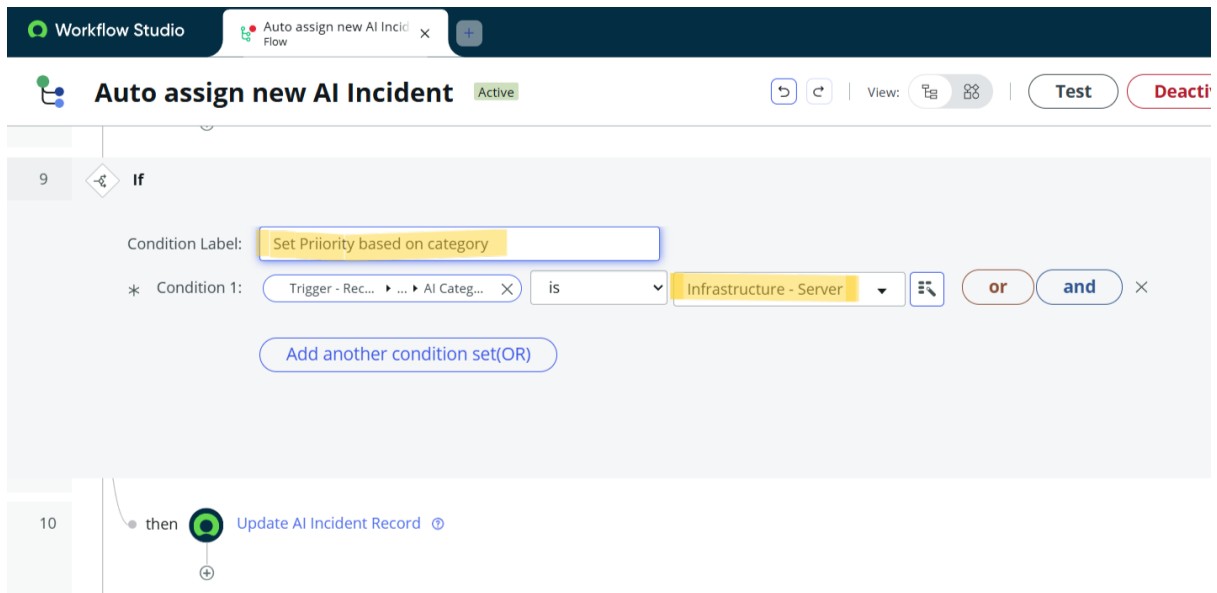
7. Repeat the same process and Click Save -> Activate the flow.



Step 6 - Flow Designer: Priority Auto-Set (Flow 2)

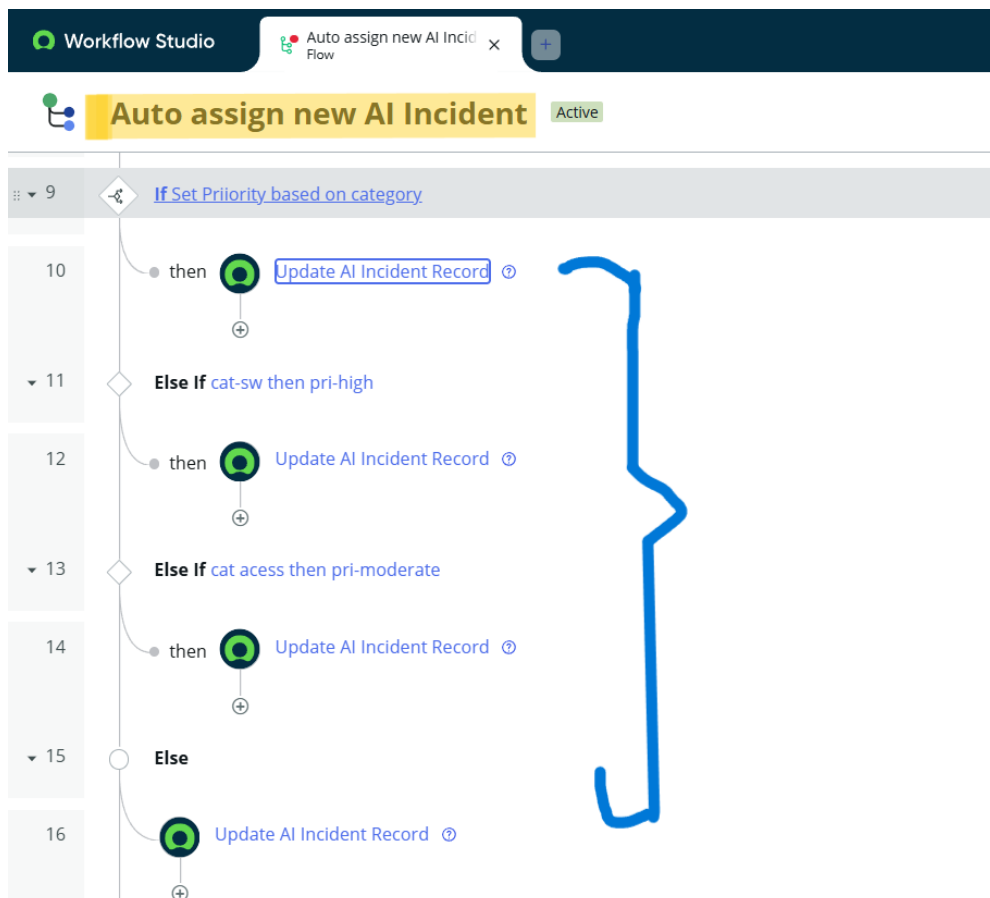
Goal: After assignment, automatically set the priority field based on u_ai_category.

1. Use the same flow Designer - Auto assign new AI Incident
2. **Trigger:** Created (or Created/Updated) → Table: AI Incident
3. Add + Add Action → Flow Logic → If.
 - Label: Set Priority Based on Category
4. Add the branches inside the If block (order matters):
 - **If u_ai_category is Infrastructure - Server**
 - Action: Update Record → priority = **1 – Critical**



- **Else If** u_ai_category is Software - Email
 - Action: Update Record → priority = **2 - High**
- **Else If** u_ai_category is Access - Login
 - Action: Update Record → priority = **3 - Moderate**
- **Else**
 - Action: Update Record → priority = **4 - Low**

5. Save and **activate** the flow.



Test Cases

Create the following incidents and verify assignment & priority:

1. u_ai_category = Software – Email

Expected Results:

Assignment Group = Email Support

Priority = 2 - High

2. u_ai_category = Infrastructure – Server

Expected Results:

Assignment Group = Server Team

Priority = 1 - Critical

Step 7 - Reports

Create these 3 simple reports first:

1. Incidents by Category

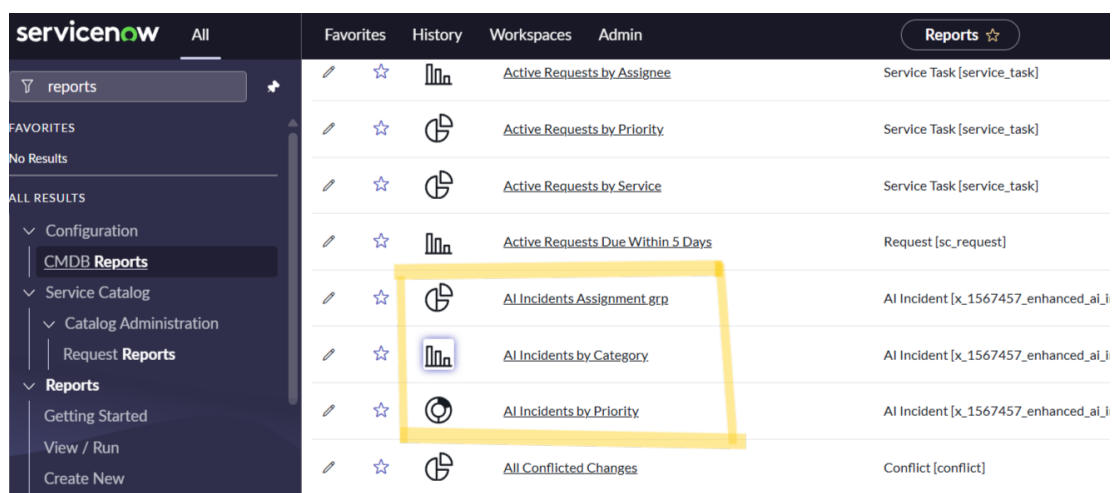
- Reports → Create New
- Table: AI Incident
- Type: **Bar Chart**
- Group by: u_ai_category (or Category)
- Save as: Incidents by Category - AI

2. Incidents by Priority

- Table: AI Incident
- Type: **Donut**
- Group by: priority
- Save as: Incidents by Priority - AI

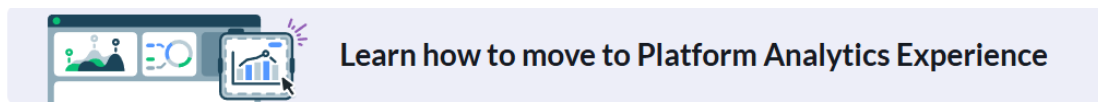
3. Incidents by Assignment Group

- Table: AI Incident
- Type: **Pie Chart**
- Group by: assignment_group
- Save as: Incidents by Assignment Group – AI



Step 8 - Dashboard (Create & Add Reports)

1. Left nav: Dashboards → Create New.
 - Name: **AI Incident Dashboard**
2. Click Add Content / Add Widget → select Reports.
3. Search and add:
 - Incidents by Category - AI
 - Incidents by Priority - AI
 - Incidents by Assignment Group - AI
4. Arrange widgets and save (charts on top, list or smaller widgets below).



Dashboards

Recent Owned by Me Shared with Me All




Group filter All Groups Search dashboard

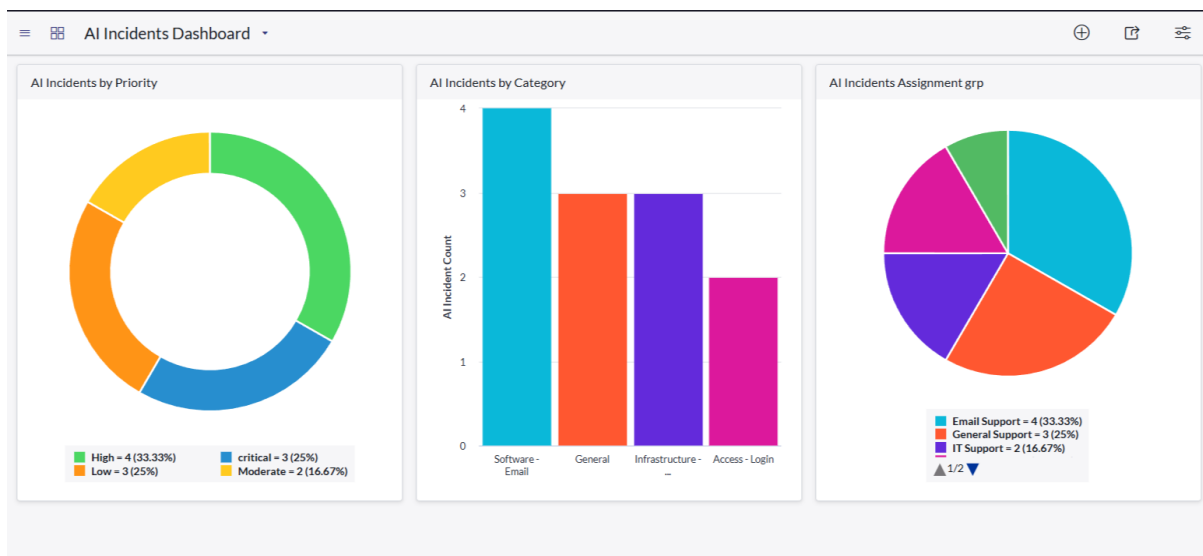
AI Incidents Dashboard

Other

Owned by System Administrator
Owner

Viewed 3h ago



Future Enhancements

- Use AI to analyze historical data and predict potential incidents before they occur.
- Extend OpenAI with ServiceNow Virtual Agent for real-time conversational support.
- Enable users to log incidents and get solutions in different languages for global accessibility.
- Enhance AI capabilities to identify the root cause of recurring incidents automatically.
- Implement automation scripts that not only suggest resolutions but also apply fixes without human intervention.

Conclusion

The Enhanced Incident Management with OpenAI project successfully demonstrated how AI can transform traditional IT service management within ServiceNow. By integrating OpenAI, the system achieves faster categorization, intelligent recommendations, and improved user experience. This not only reduces manual workload for IT agents but also ensures quicker resolution and higher customer satisfaction. The project highlights the strong potential of combining ServiceNow's ITSM framework with AI technologies to create smarter, more proactive, and future-ready IT operations.