

# Create Job plans in Maximo from Asset maintenance manuals.

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## 1. Background

Asset-intensive industries often rely on **OEM(Original Equipment Manufacturer)-provided maintenance manuals** to guide equipment upkeep. These manuals typically contain unstructured, narrative-style instructions that are difficult to operationalize directly within enterprise systems like **IBM Maximo**.

Traditionally, maintenance engineers manually interpret these manuals and input tasks into Maximo as job plans—a process that is **time-consuming, error-prone, and non-scalable**. This bottleneck delays maintenance planning, introduces inconsistencies across teams, and increases the risk of non-compliance with OEM standards.

To overcome these challenges, this use case proposes an **AI-powered solution** that automates the conversion of maintenance manual content into **structured Maximo job plans**.

Using IBM Watsonx capabilities:

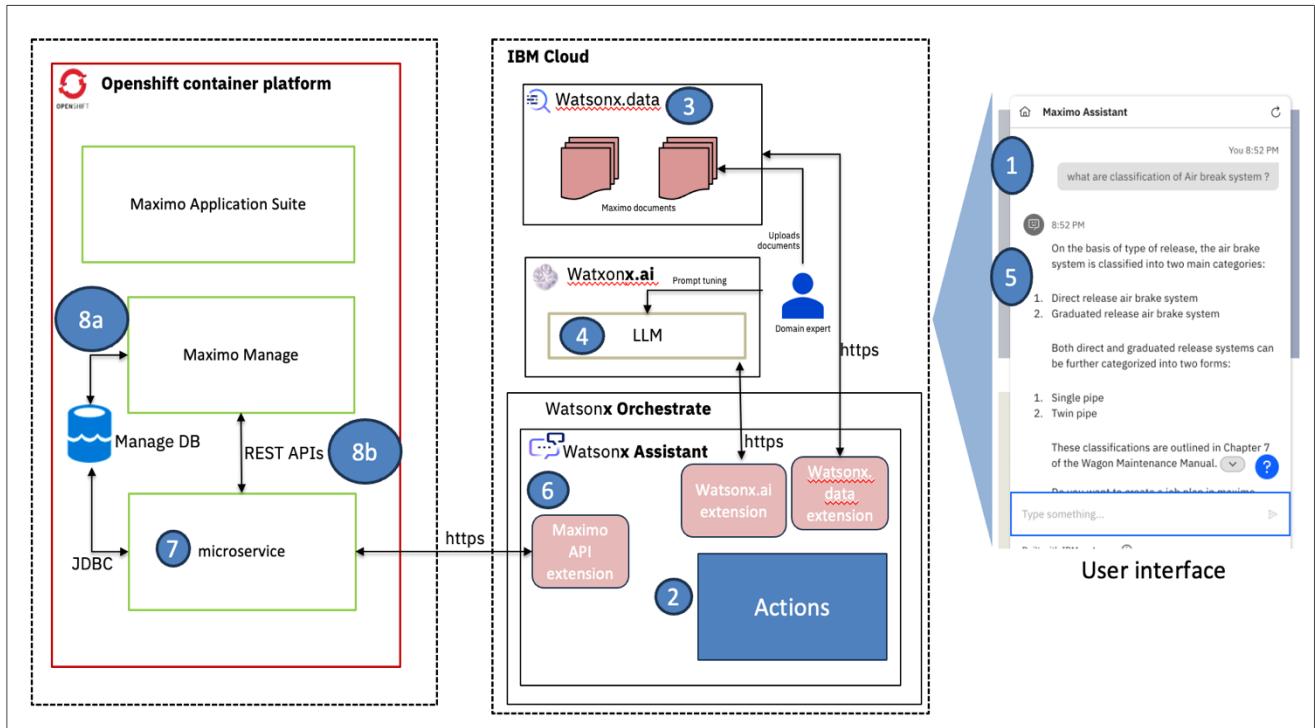
- **Watsonx.ai** is leveraged to interpret and extract task sequences from unstructured PDF manuals using large language models (LLMs).
- The extracted steps are transformed into a JSON structure compatible with Maximo's job plan schema.
- These plans are then ingested into Maximo via APIs, enabling **automated creation and updates of job plans**.
- **Watsonx.data** (with Milvus) supports intelligent retrieval and indexing of manual content for RAG (Retrieval Augmented Generation) scenarios.

This automated pipeline ensures:

- **Standardized job plan generation**
- **Reduced manual effort**
- **Faster turnaround for preventive and corrective maintenance planning**
- **Alignment with OEM-specified procedures**

By streamlining this process, your maintenance team can scale efficiently, improve data integrity, and minimize equipment downtime

## 2. Architecture Diagram



## 3. Technologies used

Services	Purpose
Watsonx.ai Studio	To generate structured responses using LLMs
Watsonx.ai Runtime	To host and run foundation models
Watsonx Assistant	For building conversational search applications
Watsonx.Data (Milvus DB)	Storing and retrieving vectorized document data
Maximo	Asset Management Tool

## 4. Benefits Milvus Database

We are extracting and generating **job plans from asset maintenance manuals** using AI. These manuals are often large, unstructured documents with complex procedures scattered across many pages. To accurately retrieve relevant maintenance steps in real time, we need a **high-performance vector database** that can:

Feature	Why It Matters in This Use Case
🔍 Vector Similarity Search	Enables retrieval of the most relevant content chunks from manuals based on semantic similarity to the user's question or task.
⚡ High Performance	Designed for large-scale vector data, Milvus ensures fast retrieval even with thousands of embedded manual pages.
🧩 RAG Enablement	Powers the <b>Retrieval Augmented Generation (RAG)</b> workflow by feeding only the most relevant context to Watsonx.ai for accurate and grounded responses.
📁 Unstructured Data Indexing	Stores and indexes large volumes of text embeddings from PDFs, maintenance guides, and documents.
☁️ Seamless Integration	Works well with <b>Watsonx.data</b> and is supported within the IBM Cloud environment via infrastructure manager.

## 5. Create API key

**Why to Create API key:** An API key is required to securely authenticate and authorize communication between services in your Watsonx and Maximo environment.

- Always keep API keys confidential.
- Rotate them periodically.
- Never hard-code them directly into source code (use .env or secrets managers instead).

5.1 Go to **IBM Cloud** dashboard → click on **Manage** → click on **Access (IAM)** → then click on **API Keys** on the left side → click on **Create**

The screenshot shows the IBM Cloud dashboard. At the top, there is a navigation bar with 'cloud.ibm.com' in the address bar, a search bar, and tabs for 'Catalog', 'Manage', and '2709027 - watsonx-events'. A dropdown menu is open under 'Manage' with options like 'Account', 'Billing and usage', 'Catalogs', 'Enterprise', 'Security and access', and 'Access (IAM)', which is highlighted with a red box. On the left, there is a sidebar with sections like 'For you', 'Build', 'Track emissions with Carbon Calculator', 'Use Watson Assistant', 'Use Watson Studio', and 'Retrieval Augmented Generation (RAG)'. Below the sidebar, the main dashboard area shows cards for 'Dashboard', 'Build', 'Track emissions with Carbon Calculator', 'Use Watson Assistant', 'Use Watson Studio', and 'Retrieval Augmented Generation (RAG)'. The 'Access (IAM)' section in the sidebar is also highlighted with a red box.

The screenshot shows the 'API keys' management page in the IBM Cloud 'Access (IAM)' section. The left sidebar has a 'Service IDs' section with 'API keys' highlighted with a blue box. The main area shows a table of existing API keys with columns for 'Status', 'Name', 'Description', 'Date created', and 'Enabled'. A 'Create' button is located at the bottom right of the table, also highlighted with a blue box.

5.2 Provide *Name* and *Description* → Click on *Create* → Copy & download the API key for future reference

**Create IBM Cloud API key**

Name  
api-key

Description (optional)  
Enter description

**Leaked action**  
If API key is discovered to have been leaked out in the world, what would you like the system to do?  
 Disable the leaked key  
 Delete the leaked key  
 Nothing

**Session creation**  
Will this API key create a session in the CLI?  
 Yes  No

**Cancel** **Create**

## 6. Watsonx.data Configurations Details

6.1 Copy the below connection details provided by the instructor.

GRPC host: <host name>

GRPC port: <port>

## 7. Watsonx.AI Configurations

### 7.1 Launch watsonx.ai

Click on *Resource list* from left side panel in *IBM Cloud* → Click on *watsonx.ai Studio* under *AI / Machine Learning* resource. (highlighted in image)

IBM Cloud

Resource list

Name	Group	Location	Product	Status	Tags
Watson Orchestrate-itz	itz-wxo-663003CR67_67efa2b5dbb	Dallas (us-south)	watsonx Orchestrate	Active	
Watson Orchestrate-itz	itz-wxd-68222c2ee52786c3f70bdc	Dallas (us-south)	watsonx Orchestrate	Active	
wa-itz-wxd-68222c2ee52786c3f70bdc	itz-wxd-68222c2ee52786c3f70bdc	Dallas (us-south)	watsonx Assistant	Active	
watsonx.ai Runtime-pe	itz-wxo-663003CR67_67efa2b5dbb	Dallas (us-south)	watsonx.ai Runtime	Active	cpdaas
wml-itz-wxd-68222c2ee52786c3f70bdc	itz-wxd-68222c2ee52786c3f70bdc	Dallas (us-south)	watsonx.ai Runtime	Active	
wml-itz-wxo-663003CR67_67efa2b5dbb	itz-wxo-663003CR67_67efa2b5dbb	Dallas (us-south)	watsonx.ai Runtime	Active	
ws-itz-wxd-68222c2ee52786c3f70bdc	itz-wxd-68222c2ee52786c3f70bdc	Dallas (us-south)	watsonx Studio	Active	
ws-itz-wxo-663003CR67_67efa2b5dbb	itz-wxo-663003CR67_67efa2b5dbb	Dallas (us-south)	watsonx Studio	Active	

### 7.2 Select Launch in *IBM watsonx*

### 7.3 Create New project

Click on *Navigation Menu* at top left side → Click on *Projects* → Click on *View all projects* → Click on *New project*.

### 7.4 Provide *Name* and *Select storage service* from drop down → Click on *Create*.

## Create a project

Start with a new, blank project or select from where to import an existing project.

name  
project1

Description (optional)

What's the purpose of this project?

Tags (optional)

Add tags

Define storage

Select storage service

Target Cloud Object Storage instance  
cos-itz-wxo-663003CR67\_67efa2b5dbb

Project includes integration with Cloud Object Storage for storing project assets.

Advanced settings

Create

7.5 Once project created, Navigate to *Manage* tab → select *Services & integrations* (left side panel)  
→ click on *Associate service* (highlighted in image)

IBM watsonx

Projects / project1

Overview Assets Jobs Manage

Project

- General
- Access control
- Environments
- Resource usage
- Services & integrations**

Services & integrations

IBM services Third-party integrations

Associate IBM Cloud services with this project to add tools, compute environments, or other capabilities. [Learn more](#).

Find services Name Service type

Associate service +

7.6 Select service name starts with wml(ex: wml-xxx-xxx-xxxxxx) → click on *Associate*.

Associate service

Choose an existing or add a new service to associate with your project.

Resource Groups ▾ Locations ▾

Find services

Name	Type	Plan	Location	Status	Group
wa-itz-wxd-6839edf0ad7aa2f318d96f	watsonx Assistant	Plus	Dallas	Not associated	itz-wxd-6839edf0ad7aa2f318d96f
<b>wml-itz-wxd-6839edf0ad7aa2f318d96f</b>	watsonx.ai Runtime	Essentials	Dallas	Not associated	itz-wxd-6839edf0ad7aa2f318d96f

Cancel Associate

Note: if wml-xxx service does not display. Then click on New Service + icon and then select watsonx.ai Runtime as shown below and click on create.

## Services

The screenshot shows the IBM Watsonx service catalog under the 'AI / Machine Learning' category. A search bar at the top left contains the placeholder 'Find services'. Below it, a sidebar lists categories: AI / Machine Learning, Analytics, Databases, Developer tools, and Storage. The main area displays three service cards:

- watsonx.ai Runtime**: AI / Machine Learning. Description: (Formerly known as Watson Machine Learning) Quickly build, run and manage generative AI and machine learning applications with built-in...  
Status: Lite • Free
- watsonx.ai Studio**: AI / Machine Learning. Description: (Formerly known as Watson Studio) Develop powerful AI solutions with an integrated collaborative studio and...  
Status: Lite • Free
- watsonx.governance**: AI / Machine Learning • Analytics. Description: Ensure accountability and transparency across your AI projects.  
Status: Lite • Free

7.7 Again on *Manage* tab → Click on *General* → Copy and Save *Project ID* for the future use

The screenshot shows the 'IBM Watsonx' interface for managing a project named 'project1'. The top navigation bar includes 'IBM Watsonx', 'Projects / project1', and tabs for 'Overview', 'Assets', 'Deployments', 'Jobs', and 'Manage'. The 'Manage' tab is highlighted with an orange box. On the left, a sidebar titled 'Project' has a 'General' section highlighted with an orange box. The main content area is titled 'General' and contains the 'Details' section. The 'Project ID' field is highlighted with an orange box and contains the value 'ffff429f6-1ee9-4ea8-b0cf-9ef2e03fbea1'.

## 8. Watsonx Assistant Configurations

8.1 Launch watsonx assistance from orchestrate

Go to Resource list in *IBM Cloud* → expand *AI/Machine Learning* → Click on *Watson Orchestrate-* (highlighted in image)

The screenshot shows the IBM Cloud Resource list interface. On the left, there's a sidebar with categories like Compute, Containers, Networking, Storage, Converged infrastructure, Enterprise applications, and AI / Machine Learning. Under AI / Machine Learning, two instances of Watson Orchestrate are listed. The second instance, 'itz-wxo-663003CR67\_67efa2b5db', is highlighted with a yellow border. The main table columns include Name, Group, Location, Product, Status, and Tags.

Name	Group	Location	Product	Status	Tags
Watson Knowledge Catalog-itz	watsonx	London (eu-gb)	watsonx.data.intelligence	Active	donote... +1
Watson Knowledge Catalog-itz	watsonx	Dallas (us-south)	watsonx.data.intelligence	Active	donote... +1
Watson OpenScale-itz	watsonx	Dallas (us-south)	watsonx.governance	Active	donote...
Watson Orchestrate-itz	itz-wxo-663003CR67_67efa2b5db	Dallas (us-south)	watsonx.Orchestrate	Active	-
Watson Orchestrate-itz	itz-wxo-663003CR67_67efa2b5db	Dallas (us-south)	watsonx.Orchestrate	Active	-

## 8.2 Click on *Launch watsonx Orchestrate*

The screenshot shows the 'Watson Orchestrate-itz' service details page. It has tabs for Manage (selected), Service credentials, Plan, and Esse. Under Manage, there's a 'Start by launching the tool' section with a 'Launch watsonx Orchestrate' button (which is highlighted with a yellow border) and a 'Getting started tutorial' link. Below this is a 'Credentials' section with an API key field and a URL field containing a specific API endpoint.

## 8.3 Click on *AI assistant builder*

The screenshot shows the Watson Orchestrate AI assistant builder interface. It features a 'Welcome, Chaitra J!' message, a 'Build' section with a 'Launch AI chat' button, and three main cards: 'AI assistant builder' (highlighted with a yellow border), 'Skill studio', and 'Upgrade'. The 'AI assistant builder' card contains text about boosting productivity and creating conversational experiences.

## 8.4 Click on drop down next to the *AI assistant builder* → Click on *Create new* for Creating new Assistant

The screenshot shows the IBM Watsonx Orchestrate interface. At the top, the URL is [us-south.watson-orchestrate.cloud.ibm.com/assistants#](https://us-south.watson-orchestrate.cloud.ibm.com/assistants#). The main title is "AI assistant builder" and the specific assistant is "get\_jobplan". A dropdown menu is open, showing options like "+ Create new", "JP1", "milvus\_data\_source", "milvus\_test", and "WXO-test". Below the dropdown, there's a message: "Your assistant now has new watsonx generative AI features! Learn more about intelligent information gathering." On the left, there's a sidebar with various icons. In the center, there's a section titled "Enhance your assistant" with a "Build actions" button and a "Customize your greeting" button.

Provide *Assistant name* (ex: Create\_job\_plan\_XX)

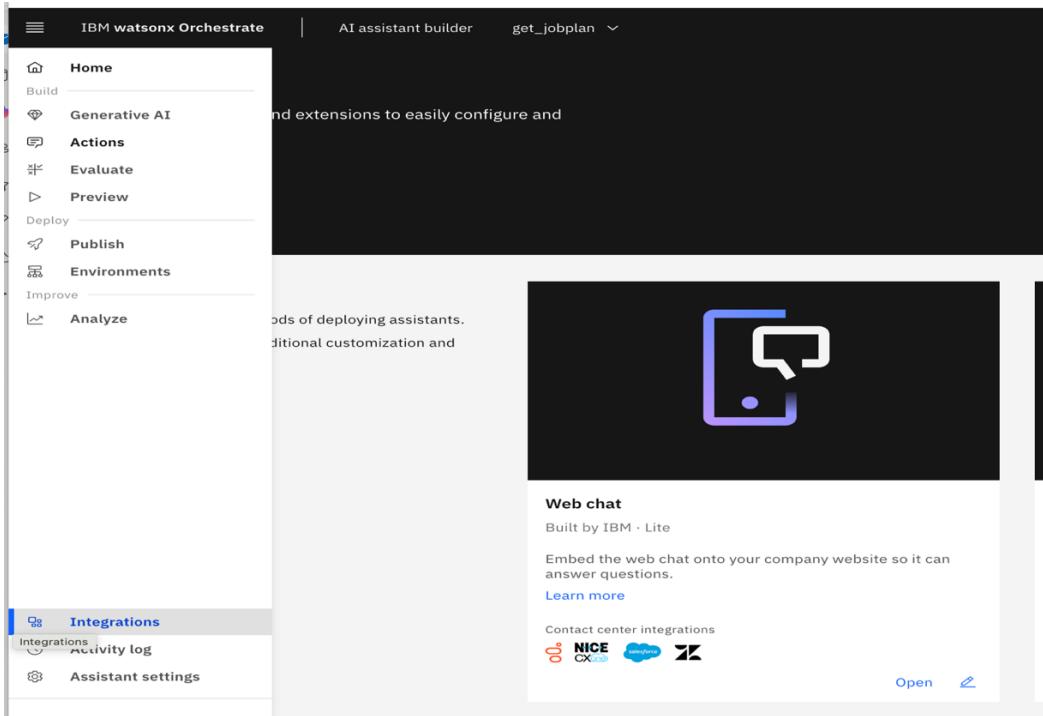
Replace XX with your initial name.

The screenshot shows the "Create a new assistant" dialog box. The "Assistant name" field is filled with "create\_job\_plan". Other fields include "Description (optional)" (empty), "Assistant language" (English (US)), and a "Create assistant" button at the bottom. The background shows the "get\_jobplan" assistant details page.

## 9. Adding Custom Extensions

### 9.1 Watsonx data extension (Milvus)

9.1.1 From Left Navigation, select *Integrations* option.



### 9.1.2 Look for *Search* → Click on *Add* → select *Milvus*

The image contains two screenshots of the 'Search' integration setup. The top screenshot shows the 'Search' extension card with an 'Add' button highlighted with a red box. The bottom screenshot shows a detailed view of the 'Set up a new search integration' dialog, where the 'Milvus' option is selected and highlighted with a red box.

### 9.1.3 Provide Milvus service details and Click Next

GRPC host: →Copy from Startup.txt

GRPC port: → Copy from Startup.txt

API key: → Copy from Startup.txt

The screenshot shows the Milvus Connect interface. At the top, there are three buttons: 'Connect Milvus' (with a blue icon), 'Select data source' (with a circular icon), and 'Conversational search (opt)' (with a magnifying glass icon). Below these, the title 'Connect your search provider' is displayed. A note says 'Fill in the information below to access your Milvus instance.' followed by a 'Learn more' link. The 'GRPC host' field contains the URL '99e7d1a3-1f67-4252-8dd8-619ce4f92929.crkkivsd0vdrn0rdjn2g.lakehouse.appdomain.cloud'. The 'GRPC port (required)' field has the value '31384'. Under 'Choose an authentication type', 'watsonx.data API key' is selected. The 'API key' field is filled with '.....' and has a copy icon (a blue square with a white '@' symbol) to its right.

#### 9.1.4 Select *Database* → as Default

*Collection name* → asset\_data

*Choose index* → embedding

*Choose embedding\_model\_Id* → all-minilm-l6-v2

Database

default

Choose collection

asset\_data

Choose index

embedding

Choose embedding\_model\_id

all-minilm-l6-v2

**Configure result content**

Specify the Milvus fields you want to map to the title, body, and URL of the search response.

Title

file\_name

Body

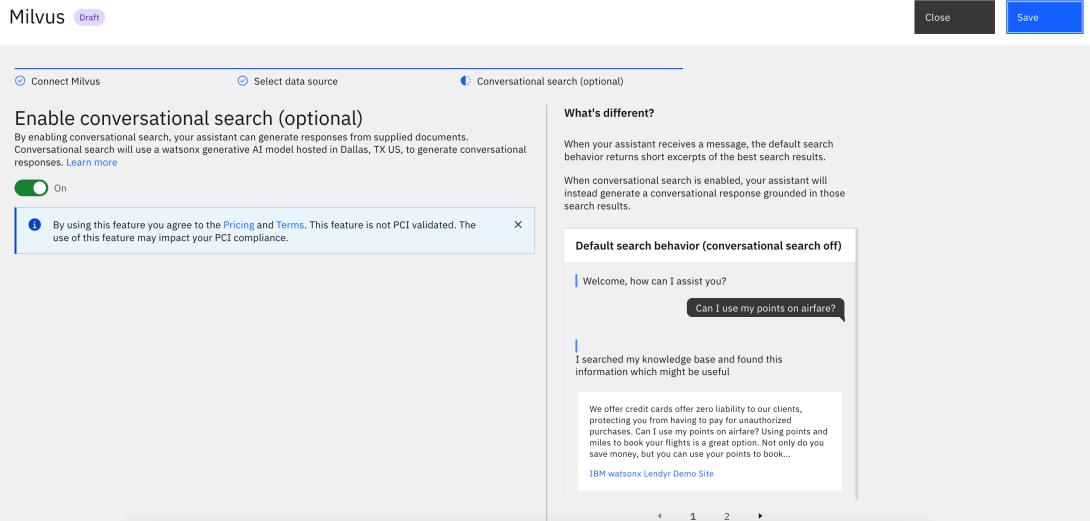
text

URL (optional)

Select one

This image shows the Milvus search configuration interface. It includes dropdown menus for selecting the database (default), collection (asset\_data), index (embedding), and embedding model ID (all-minilm-l6-v2). Below these, there's a section titled 'Configure result content' where users can map Milvus fields to search results. The 'Title' field is mapped to 'file\_name', 'Body' is mapped to 'text', and 'URL (optional)' has a placeholder 'Select one'. The interface is clean with a light gray background and white input fields.

### 9.1.5 Click Next then

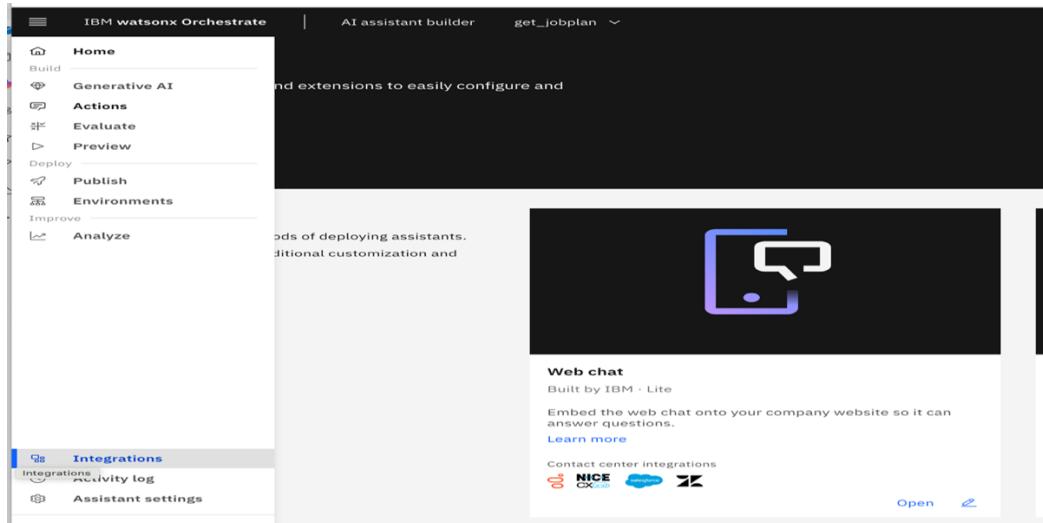


9.1.6 Click *Save* and *Close*.

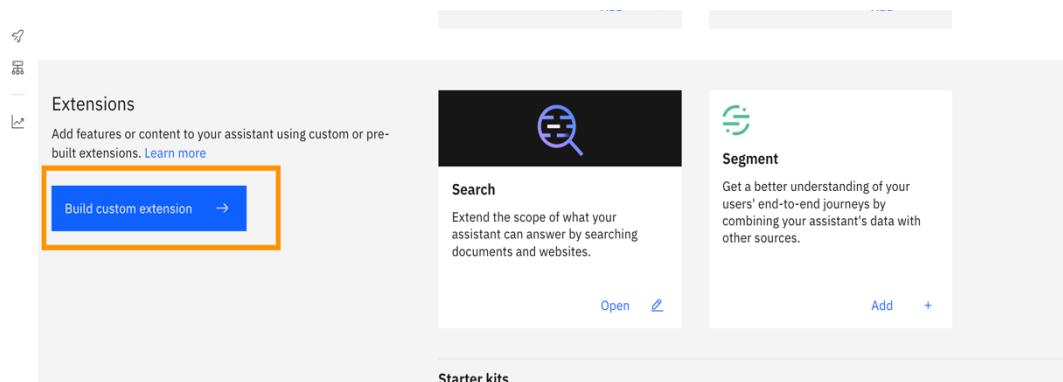
## 9.2 Maximo custom extension

9.2.1 Use `create_Jobplan.json` open Api file to add Maximo extension to the assistance

From Left Navigation, select *Integrations* option.



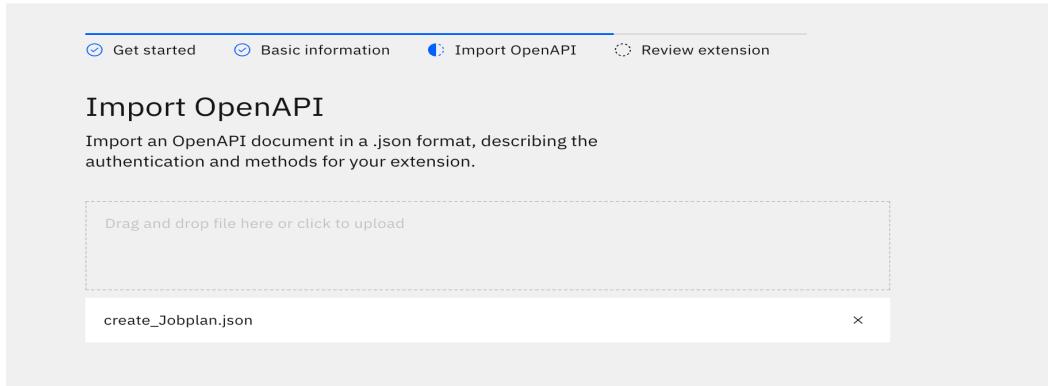
9.2.2 Click on *Build custom extension* and click *Next*



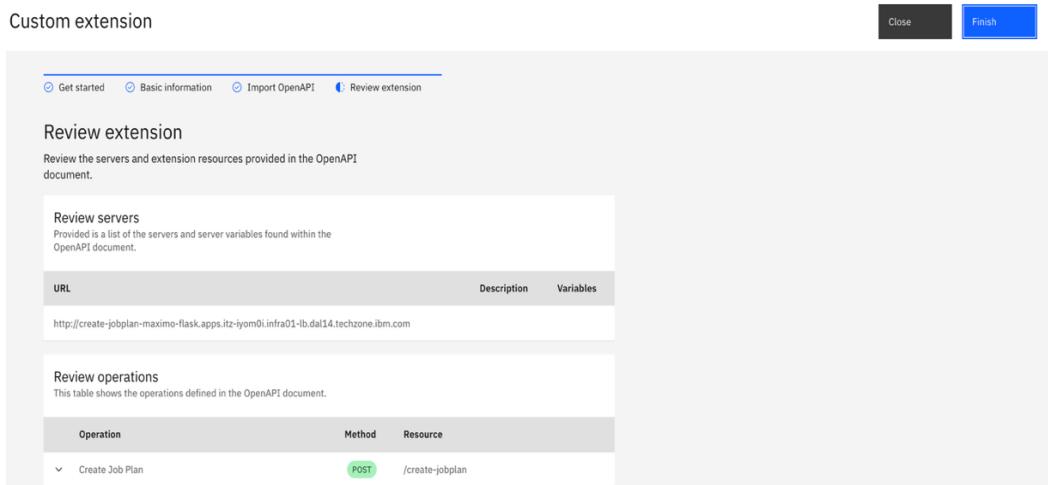
9.2.3 Enter Extension name as “maximo” and click next.

9.2.4 *Import open API* file “create\_jobplan.json” and Click Next.

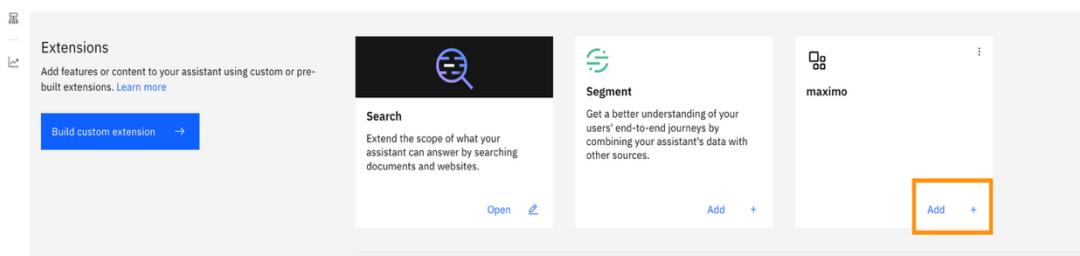
### Custom extension



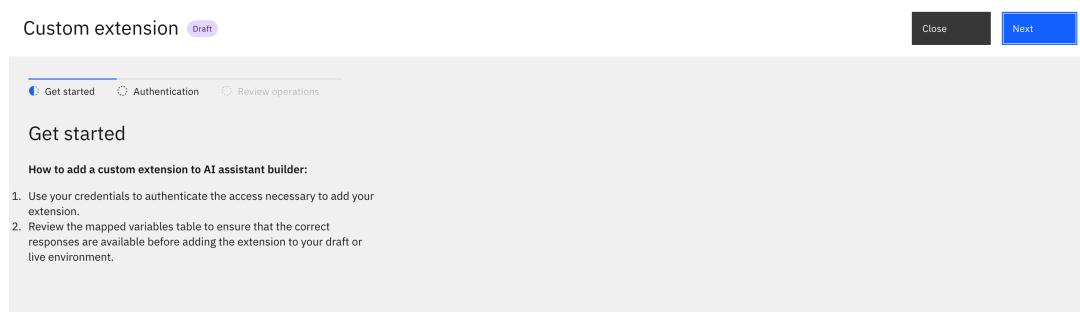
9.2.5 Review and *finish*.



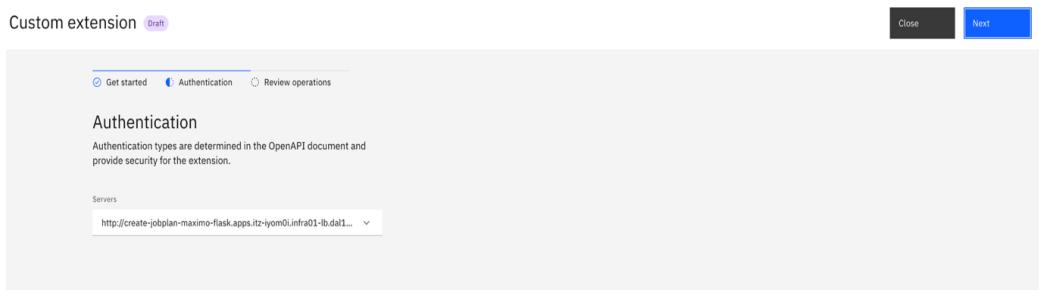
9.2.6 Then click on *Add*



9.2.7 In Custom extension, click Next.



- 9.2.8 Under **Authentication** you can see the Maximo URL (Same URL will be present in the open API file)



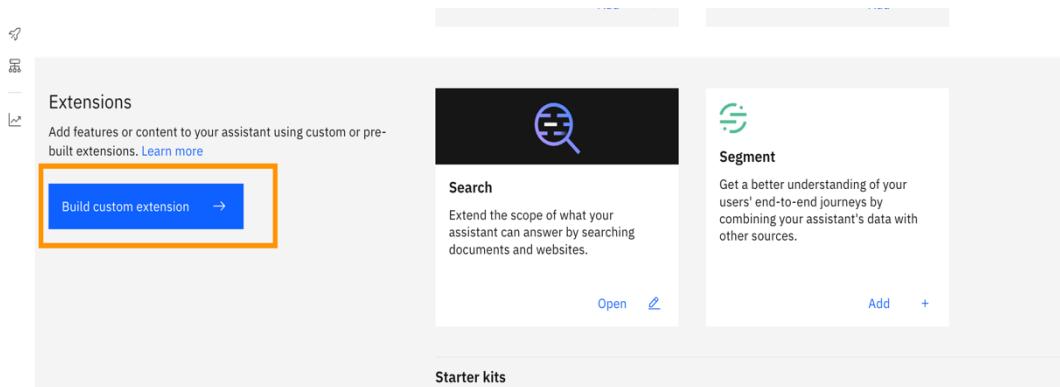
- 9.2.9 Click next & *finish*.



## 9.3 Watsonx AI integration

- 9.3.1 On the same Integrations page.

- 9.3.2 Click on **Build custom extension** again.



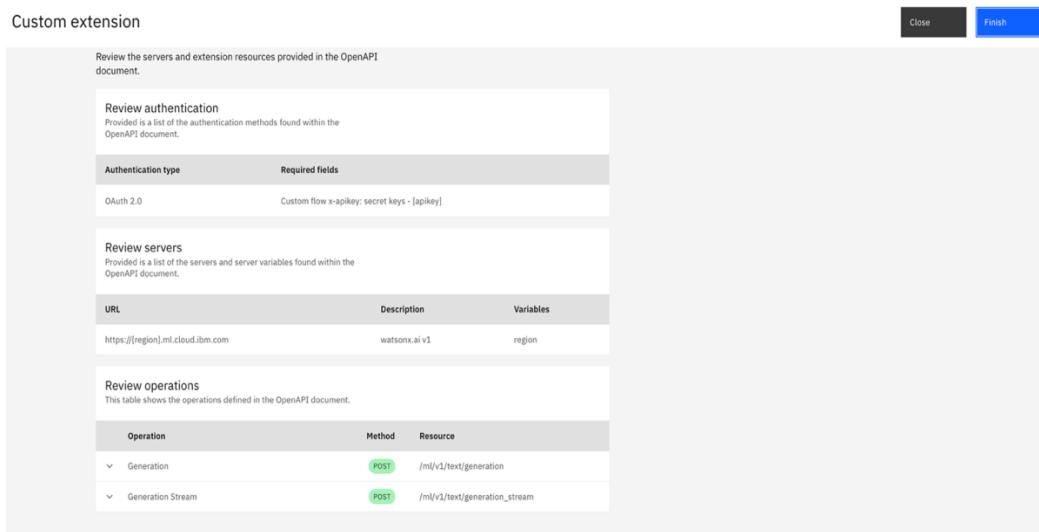
- 9.3.3 Enter Extension name as “watsonx ai”

- 9.3.4 In Import OpenAPI, select “watsonx-openapi.json” and click Next.

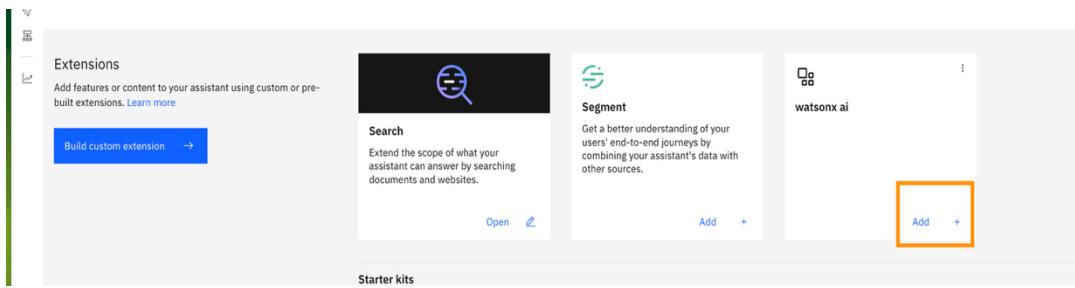
## Custom extension



### 9.3.5 Review and click on *Finish*

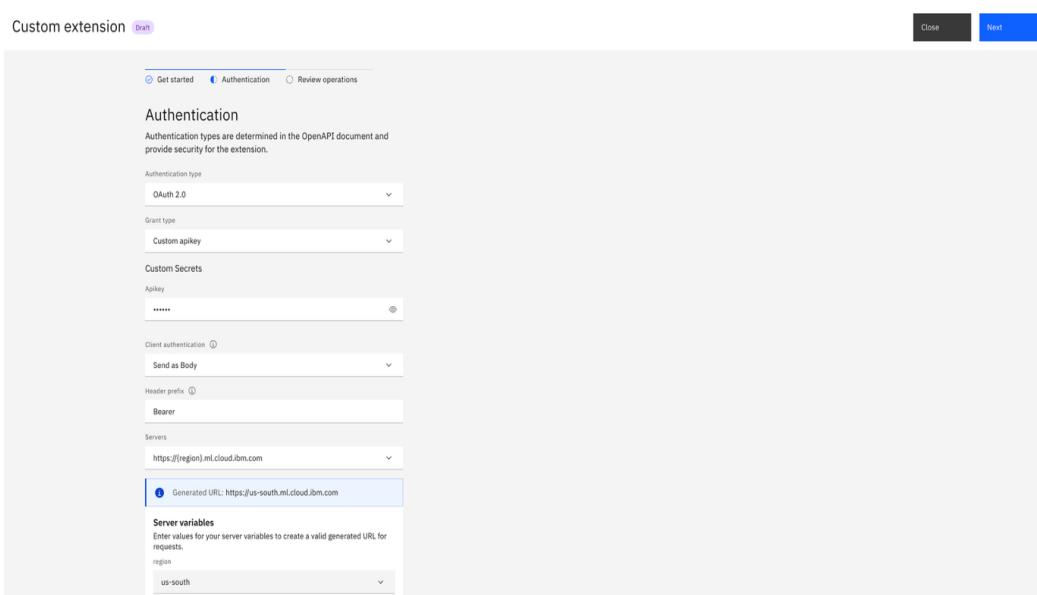


### 9.3.6 Click on *Add*

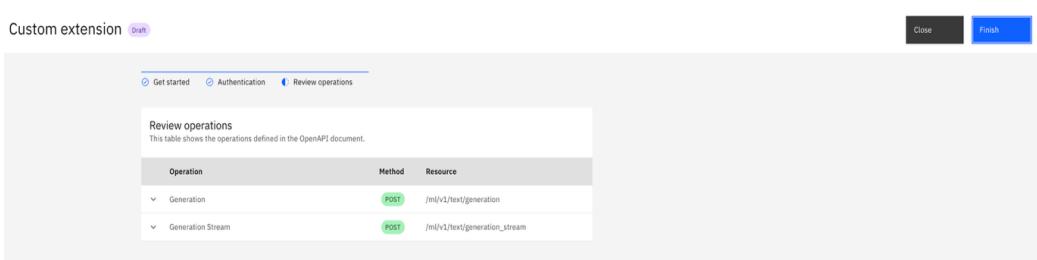


### 9.3.7 In Authentication screen, Select/Provide below fields

- Authentication type: OAuth 2.0
- Grant type: Custom apikey
- Api key: provide apikey
- Client authentication: sent as body



### 9.3.8 Click on next, Review & *Finish*



## 10. Import Actions

### 10.1 Use the file [actions.json](#) file

#### 10.1.1 Select *Actions* form the left side panel

The screenshot shows the IBM Watsonx Orchestrate interface. The left sidebar has several options: Home, Generative AI, Actions (which is selected and highlighted in grey), Preview, Publish, Environments, and Analyze. The main area shows a log entry under the 'SOURCE' heading:

```

2025 10:20:21 AM GMT+5:30
as new watsonx generative AI features! Learn more about intelligent
assistant
Customize your assistant with these

```

A dark overlay window is open over the main content, containing the text "Build actions" and "Enhance and improve".

#### 10.1.2 Click on *Created by You*

#### 10.1.3 Select *Global settings* on right top corner

#### 10.1.4 Navigate to *Upload/Download* option

#### 10.1.5 Click on *Drag and drop file here* option & select “actions.json” file → Click on *Upload*

### 10.1.6 Click on *Q&A\_backup* title

### 10.1.7 Click on Step3 → Make sure it is having *Search for the answer*

### 10.1.8 if not their select *Search for the answer*

### 10.1.9 Click on *Edit settings* → Click on *After generation* → select 2<sup>nd</sup> option (highlighted in image) → Click on *Apply*

This step has no content

↓ Continue to next step

query\_text is not Defined

This step has no content

↓ Continue to next step

This step has no content

Search for the answer

is Defined

Do you want to create a job plan in maximo based on above information ?

Confirmation

Continue to next step

is No

Job plan creation skipped.

The screenshot shows the 'Search for the answer' settings page. At the top, there's a 'Search configuration' dropdown set to 'After generation'. Below it, a section titled 'After generation' contains three radio button options: 'Display the response to the end user without storing it in an action variable', 'Store response in an action variable and display it to your user' (which is selected), and 'Store response in an action variable only'. Further down, there are sections for 'Search results' (with an info icon) and 'Action completion' (with a checkbox for 'End the action after this step'). At the bottom, there are 'Cancel' and 'Apply' buttons, with 'Apply' being highlighted by a blue border.

10.1.10 Select step 7 and click on *Edit extension* and use watsonx.ai extension.

The screenshot shows a workflow editor interface with two main sections: a left sidebar and a right main area.

**Left Sidebar:**

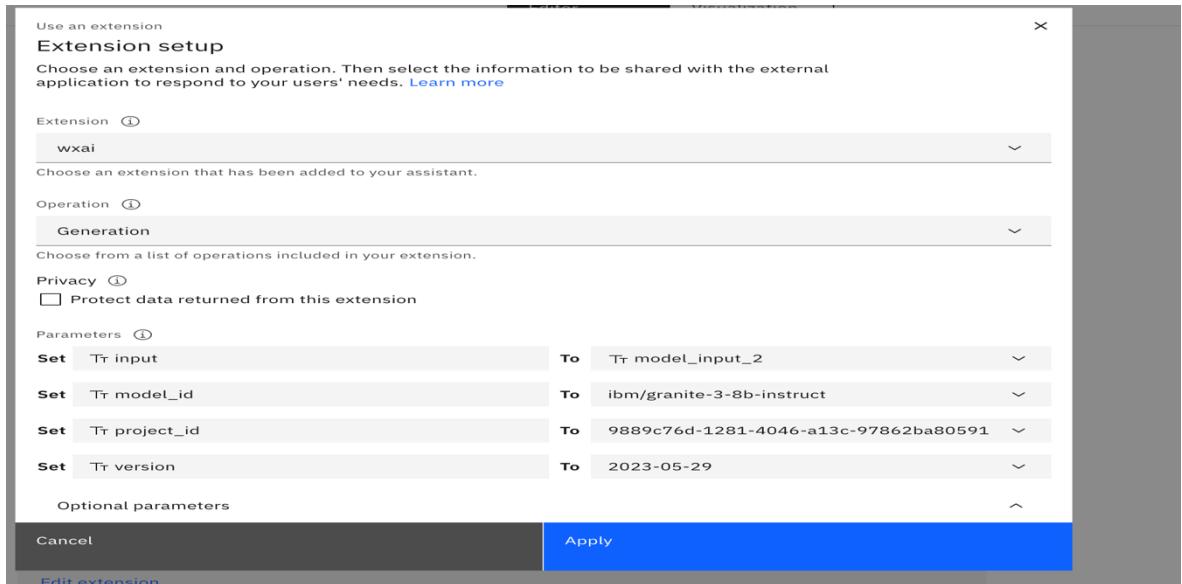
- Step 4: "is No" - Job plan creation skipped.
- Step 5: "Action complete"
- Step 4: "is Yes" - This step has no content.
- Step 6: "Continue to next step"
- Step 7: "is Yes" - Processing your request through AI integration. This step is highlighted with a red box. It includes a "Use an extension" button with a file icon and a trash bin icon.
- Step 8: "is Yes" - This step has no content.
- Step 9: "is Yes" - Response is: `model_response_2`

**Main Area:**

- New condition group +**
- Assistant says**: B I O f x q k m h t Processing your request through AI integration
- Define customer response**
- And then**: Use an extension
- Extension**: Extension not fully configured (highlighted with a red box)
- Edit extension**

### 10.1.11 Update below fields → Click on *Apply*

Field name	Fetching from
input	Previous step output (ex: model_input_2)
Project_id	project id from watsonx.ai → step 4.7
Model_id	ibm/granite-3-8b-instruct
Version	2023-05-29
Max_tokens	500 & above (based on generated answer)
Min_tokens	0



### 10.1.12 Select step 10 and click on *Edit extension* and use Maximo extension → provide *Parameters* value (previous step output in the actions (ex:body))

The screenshot shows the AI assistant builder interface. On the left, the flow editor displays a sequence of steps:

- Step 4: Condition "is Yes" (true)
- Step 6: Condition "is true"
- Step 7: "This step has no content" with "Continue to next step" link
- Step 8: "this is response ▲ model\_response\_2" with "Continue to next step" link
- Step 9: "Tr model\_response\_2 is Defined" with "Use an extension" link
- Step 10: "Job Plan is successfully created in Maximo." with "Action complete" link

On the right, the configuration panel for step 10 is open, showing:

- And then**: "Use an extension" selected.
- Extension**: maximo\_exten
- Operation**: Create Job Plan
- Parameters**: body set to Tr body

### 10.1.13 Save the actions → Click on *Close*

The screenshot shows the AI assistant builder interface with the completed flow. The flow editor on the left includes steps 8 through 12, and the configuration panel on the right shows the "End the action" step.

**Flow Editor (Left):**

- Step 5: Condition "is Yes"
- Step 6: Condition "is true"
- Step 7: "Processing your request through AI integration" with "Continue to next step" link
- Step 8: "Response is: ▲ model\_response\_2" with "Continue to next step" link
- Step 9: "Tr model\_response\_2 is Defined" with "Use an extension" link
- Step 10: "Initiating Maximo job plan creation" with "Action complete" link
- Step 11: "11 is true" with "11 body.message And job plan number is: 11 body.jobPlan\_number" link
- Step 12: "11 is true" with "11 body.message And job plan number is: 11 body.jobPlan\_number" link

**Configuration Panel (Right):**

- Step 11:** "Is taken with conditions" (selected), "Set variable values" button.
- Conditions:** "If All of this is true:"  
11 Ran successfully == true  
and Add condition +
- New condition group +**
- Assistant says:** 11 body.message And job plan number is: 11 body.jobPlan\_number
- Define customer response** dropdown.
- And then**: "End the action" selected.

### 10.1.14 From left Navigation Click on *Preview*

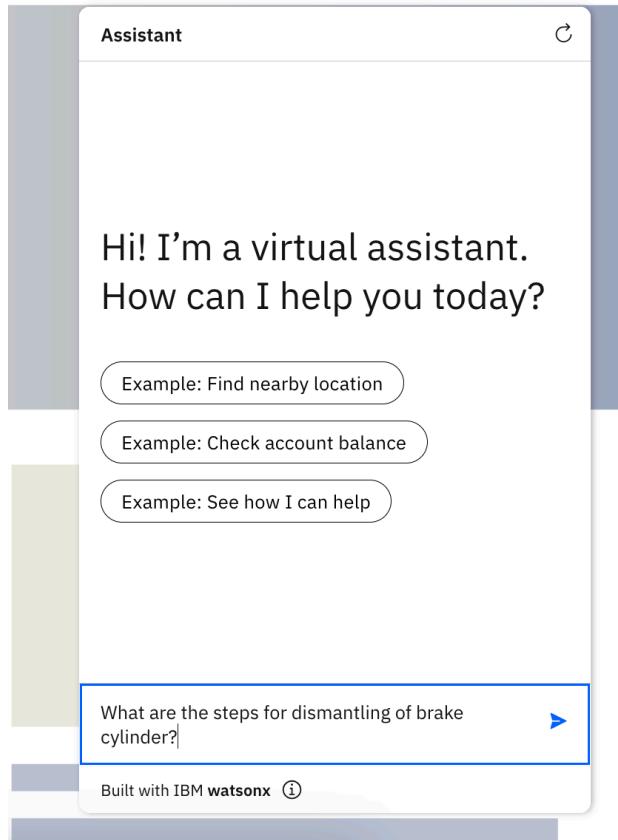
The screenshot shows the IBM Watsonx Orchestrate home page. The navigation bar at the top includes "IBM watsonx Orchestrate", "AI assistant builder", and "milvus\_test".

The left sidebar menu includes:

- Home**
- Build**
- Generative AI**
- Actions** (selected): Includes "Evaluate", "Preview" (highlighted with an orange box), "Deploy", "Publish", and "Environments".
- Improve**
- Analyze**

The main content area shows a search bar and a list of actions under "Created by you /".

### 10.1.15 Ask Question like - What are the steps for dismantling of brake cylinder?



10.1.16 Answer will be generated and displayed on the interface.

The screenshot shows a Watson Assistant interface. At the top, there's a header with a home icon, the word "Assistant", and a refresh icon. Below the header, a message from "Watson" at 8:21 AM states: "The process of dismantling a brake cylinder involves several steps, as outlined in the provided documents:" followed by a numbered list of four steps. After the list, another message from "Watson" says: "After these initial steps, the document does not provide further details about the dismantling process. However, it does mention a procedure for overhauling the brake cylinder, which includes:" followed by a partial list. At the bottom, there's a text input field with a placeholder "Type something..." and a blue "Send" arrow icon. A question mark icon is also present. At the very bottom, it says "Built with IBM Watsonx" and has an info icon.

8:21 AM

The process of dismantling a brake cylinder involves several steps, as outlined in the provided documents:

1. Ensure that the brakes are released and the brake cylinder is completely vented.
2. Retract the brake cylinder using a pry bar between the wheels and brake blocks on both the secondary beam and the primary beam.
3. Disconnect the air hose from the cylinder assembly flange.
4. Remove the dowel pin.

After these initial steps, the document does not provide further details about the dismantling process. However, it does mention a procedure for overhauling the brake cylinder, which includes:

1. Unscrewing the CSK, head screw and separating the piston, pin, piston trunk, and

Type something... ➤

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## 11. Conclusion/Summary

The automated creation of job plans in Maximo from asset maintenance manuals streamlines a traditionally manual, error-prone process. By leveraging IBM Watsonx technologies—including Watsonx.ai, Watsonx.data with Milvus, and Watson Assistant—organizations can extract structured maintenance tasks from unstructured manuals and convert them into standardized job plans within Maximo.

This AI-powered workflow enables:

- Digitization of OEM maintenance procedures
- Faster and more accurate job plan creation
- Intelligent retrieval of relevant content using vector search (Milvus)
- Seamless integration with Maximo through custom APIs

Ultimately, this solution enhances operational efficiency, improves asset reliability, ensures compliance with manufacturer guidelines, and reduces the time and effort required by maintenance teams.

By adopting this approach, customers can modernize their maintenance strategy and unlock real value from existing technical documentation.