

Data Platform IoT Workflows

Estimated time to read: 3 minutes

This document will provide a quick guide for the creation and configuration of **IoT Workflows** within the scope of **IoT Data Platform**.

Overview

An **IoT Workflow** is a structured sequence of tasks designed to automate processes related to IoT Event handling and Data Platform tasks. **IoT Workflows** enable seamless integration of IoT event data into broader data pipelines, including tasks like machine learning (ML), DEE rules or service calls.

IoT Workflows are based on the Connect IOT Engine and they are version-controlled, ensuring changes are tracked and can be iterated upon to meet evolving requirements. This flexibility allows organizations to effectively adapt to new challenges while maintaining a robust framework for IoT-driven data management.

With IoT Workflows, you can:

- Trigger real-time alerts or downstream tasks based on IoT events.
- Integrate data into the Data Platform for advanced analytics and AI applications.
- Automate event enrichment and transformation.

Steps to create an IoT Workflow

There are two ways of creating **IoT Workflows** for Data Platform tasks:

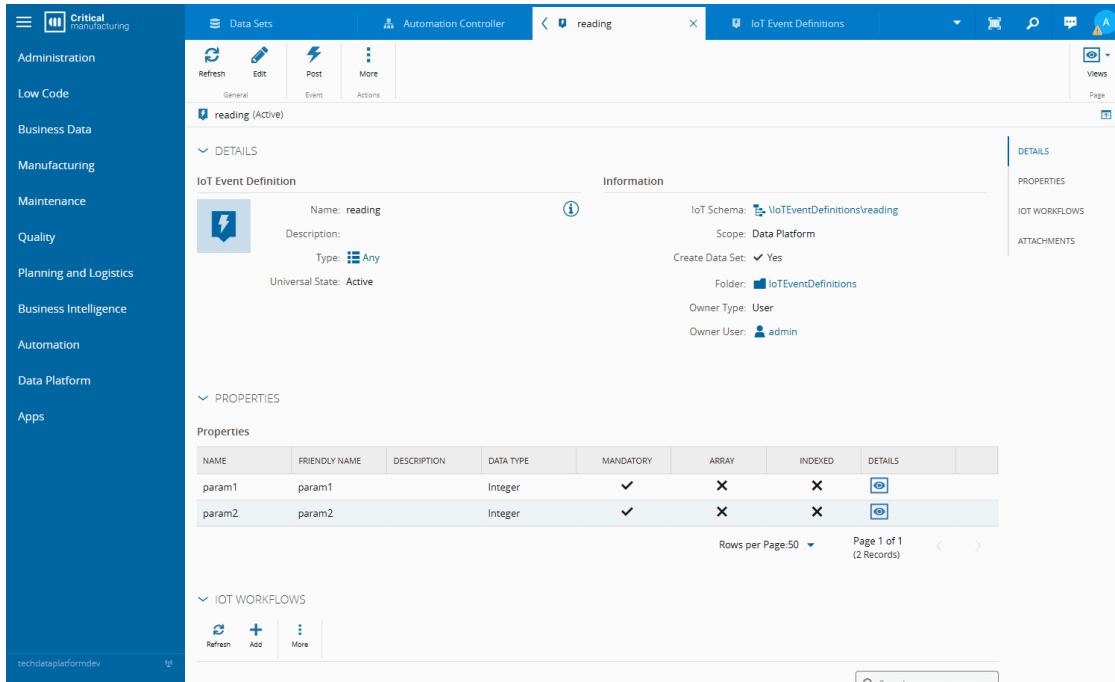
- Via IoT Event Definition view (recommended)
- Via Data Platform Workflows button in Data Platform submenu

Here are the steps to create an **IoT Workflow**:

Via IoT Event Definition view

1. Navigate to the **IoT Event Definition** view.
2. Select the **IoT Event Definition** for which you want to create the IoT Workflow.

3. Select the **IoT Workflow** section. Select the **+** button to add a new **Automation Controller**.



The screenshot shows the 'reading' IoT Event Definition details in the Critical Manufacturing 11.1 interface. The left sidebar contains navigation links: Administration, Low Code, Business Data, Manufacturing, Maintenance, Quality, Planning and Logistics, Business Intelligence, Automation, Data Platform, and Apps. The main area displays the 'reading' event definition with the following details:

- Name:** reading
- Description:**
- Type:** Any
- Universal State:** Active
- IoT Schema:** IoTEventDefinitions/reading
- Scope:** Data Platform
- Create Data Set:** Yes
- Folder:** IoTEventDefinitions
- Owner Type:** User
- Owner User:** admin

The **PROPERTIES** section shows a table with 2 records:

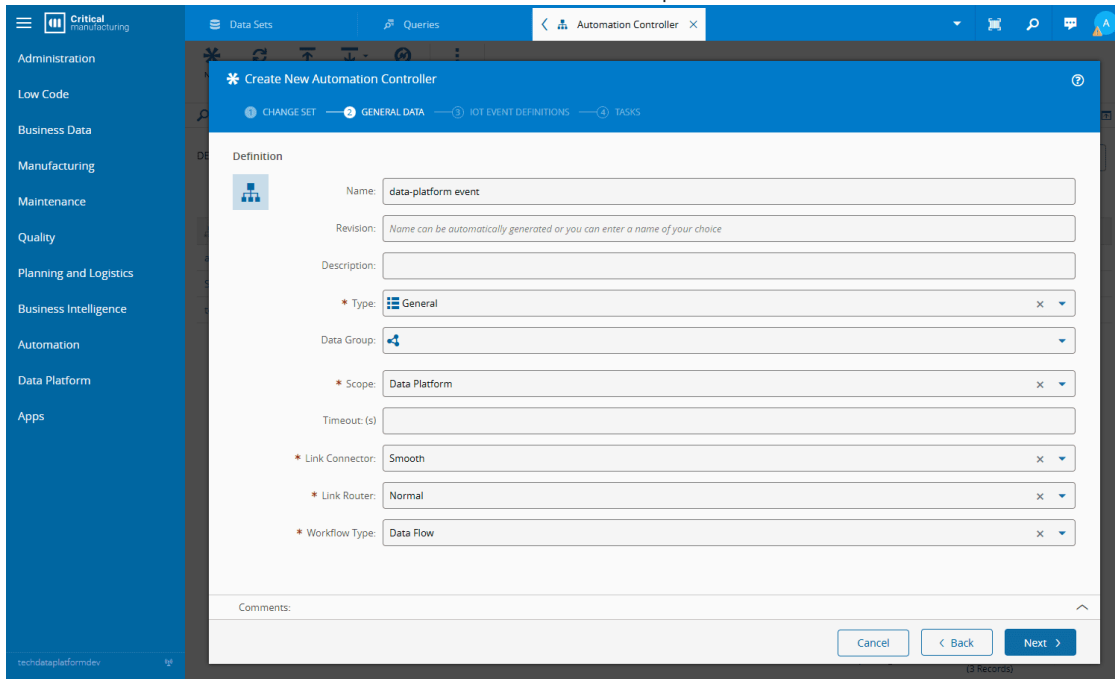
NAME	FRIENDLY NAME	DESCRIPTION	DATA TYPE	MANDATORY	ARRAY	INDEXED	DETAILS
param1	param1		Integer	✓	✗	✗	
param2	param2		Integer	✓	✗	✗	

The bottom of the screen shows the 'IOT WORKFLOWS' section with a 'Refresh' button and a 'More' button. The status bar at the bottom indicates 'Page 1 of 1 (2 Records)'.

4. The **Automation Controller** wizard will open as the workflows derive from the Connect IoT Engine.

5. Define a **Change Set** since the IoT workflows are versioned objects.

6. Define the **IoT Workflow** name and confirm the workflow scope defaults to Data Platform.



The screenshot shows the 'Create New Automation Controller' wizard in the Critical Manufacturing 11.1 interface. The wizard has four steps: 1. CHANGE SET, 2. GENERAL DATA, 3. IOT EVENT DEFINITIONS, and 4. TASKS. The current step is 'GENERAL DATA'.

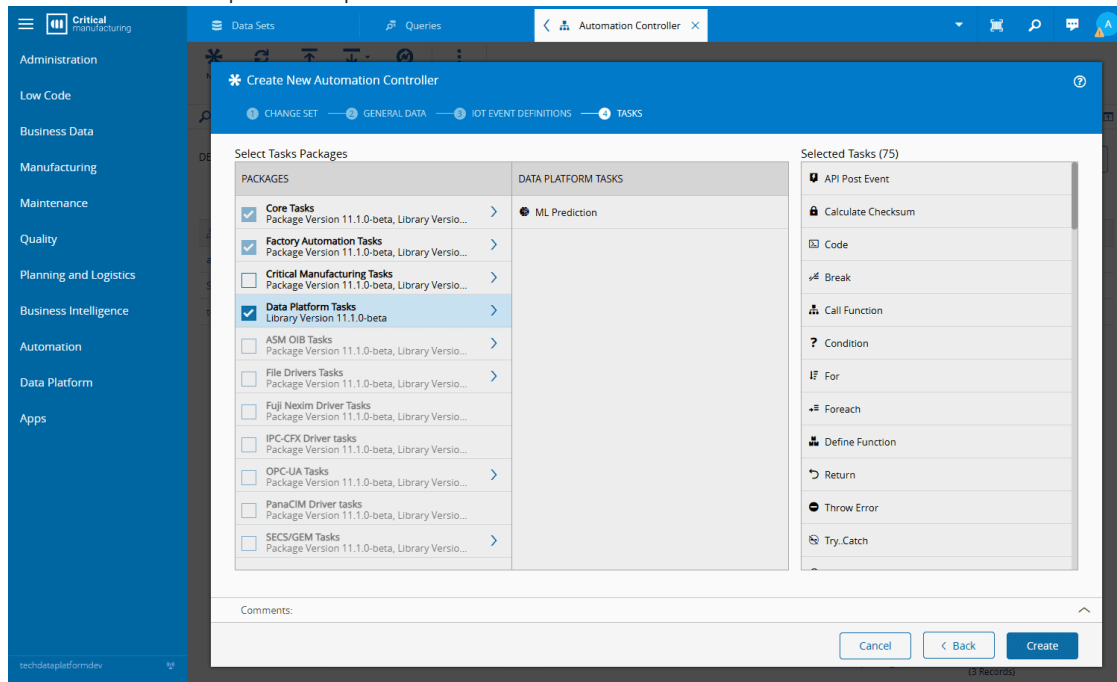
The **Definition** section contains the following fields:

- Name:** data-platform event
- Revision:** Name can be automatically generated or you can enter a name of your choice
- Description:**
- Type:** General
- Data Group:**
- Scope:** Data Platform
- Timeout (s):**
- Link Connector:** Smooth
- Link Router:** Normal
- Workflow Type:** Data Flow

The **Comments** section is empty. The bottom of the wizard has 'Cancel', 'Back', and 'Next' buttons.

7. In the **Tasks** section, choose the Data Platform tasks - you will see the ML task there.

8. Select **Create** to complete the operation.

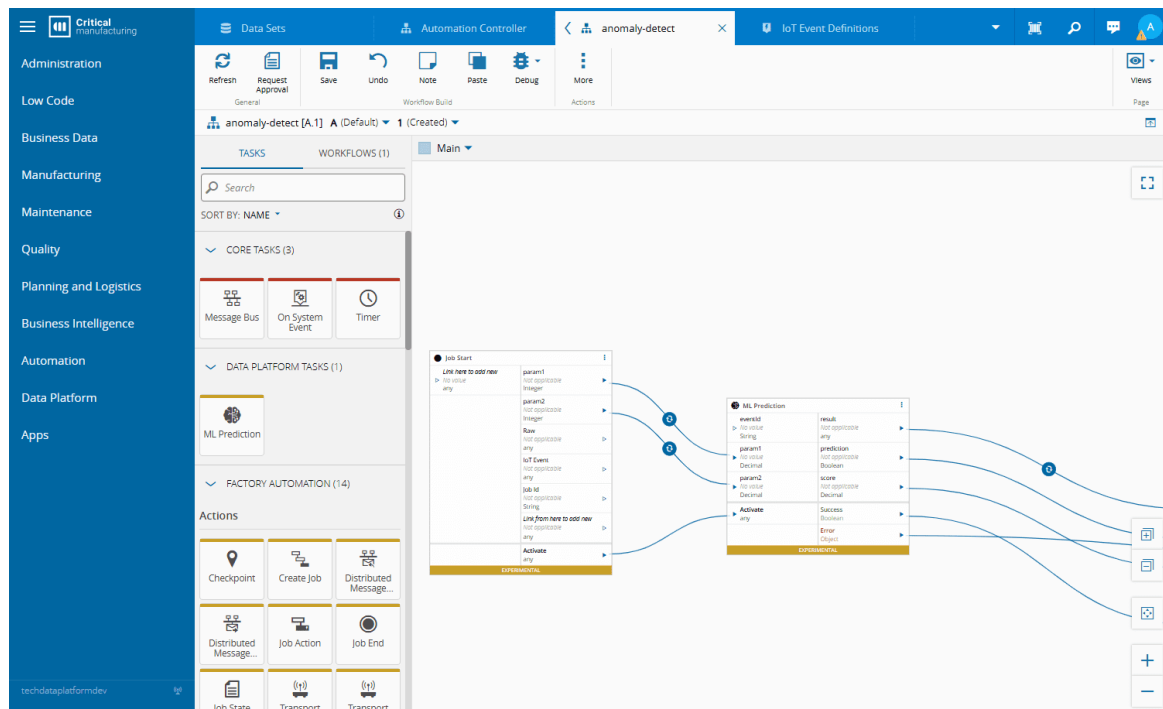


Via Data Platform Workflows button in Data Platform submenu

1. Navigate to the Data Platform submenu.
2. Select on the **Data Platform Workflows** button.
3. Select New to open the **Automation Controller** wizard.
4. The **Automation Controller** wizard will open as the workflows derive from the Connect IoT Engine.
5. Define a **Change Set** since the IoT workflows are versioned objects.
6. Define the **IoT Workflows** name and **set the scope to Data Platform**.
7. In the **Tasks** section, choose the Data Platform tasks - you will see the ML task there.
8. Select **Create** to complete the operation.

Configure your Workflow

When it is created, you can configure your workflow using the available tasks on your left:



When the workflow is created for a given IoT event, it will run every time a new event of that type is published to Data Platform (via the Post Event API in the Host).