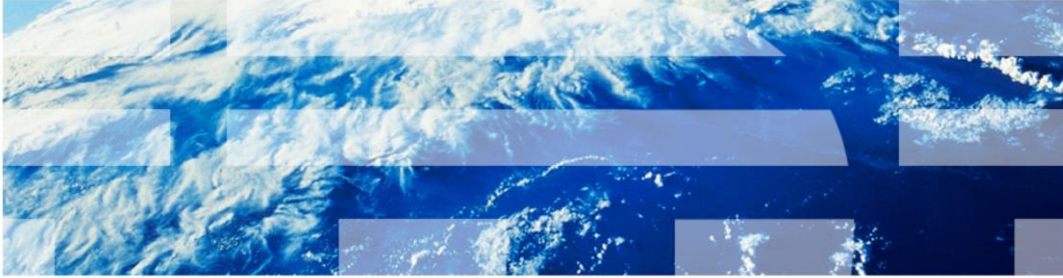


IBM Maximo Asset Management V7.1

Configuring work order status changes with the Automated Flow Control feature



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This training module for Maximo® Asset Management version 7.1 demonstrates how to use Automated Flow Control to govern the status change rules in a hierarchy.

Objectives

When you complete this module, you can perform these tasks:

- Define the start and completion statuses governing flow control
- Enable flow control on work orders and their tasks
- Set predecessor tasks
- Test the flow control by changing the status of the parent work order
- Test the flow control by changing the status of predecessor tasks

This training module covers enabling flow control on a work order record and its tasks, defining the start and completion statuses of a work order, adding tasks that have predecessors, and testing the flow control by changing the status of both the parent work order and the interim tasks.

Automated Flow Control overview

Automated Flow Control provides these capabilities:

- Allowing status changes to be processed automatically in work hierarchies
- Specifying the order that tasks are performed
- Automatically completing work orders when all tasks have been completed
- Blocking manual status changes

Maximo Asset Management work orders consist of individual tasks. Work order tasks are completed one before the other in a serial chain hierarchy.

Maximo Asset Management V7.1 provides the capability to define precedence connections between work orders and between work order tasks.

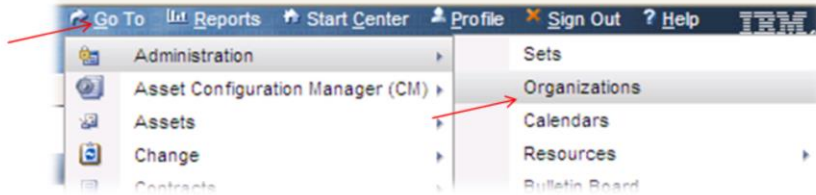
Configuration of the Automated Flow Control feature initiates an automated serial sequential update of work order statuses and work order task statuses.

For example, if flow control sequencing is enabled at the Job Plan level, each task generated when applying the Job Plan to a work order evaluates the one before it to determine if it has completed.

If the predecessor work order or work order task has started then its status is automatically changed to IN PROGRESS. Any successive tasks cannot have their status changed to IN PROGRESS until the immediate predecessor work order or work order task has completed. As such, the status of work orders cannot be changed to COMPLETE until all tasks have been completed in the order in which they are sequenced. When all tasks are completed, their work order statuses are automatically changed to COMPLETE.

Opening the Organizations application

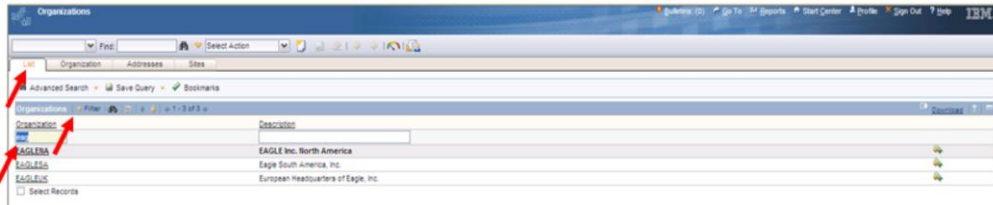
Click **Go To > Organizations**



From the **Go To** menu click **Organizations**.

Selecting from available organization names

- Select the **List** tab in the Organizations application
- Enter a value in the **Organization** box to assist in the organization search
- Click **Filter** to see the available organizations



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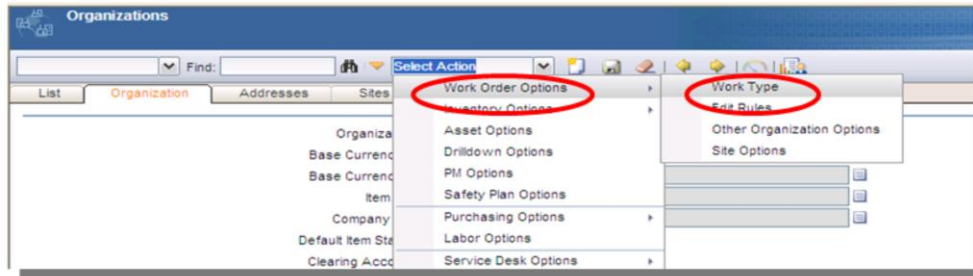
Configuring work order status changes with the Automated Flow Control feature

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Enter the name of the organization by entering the name into the **Organization** field. Optionally, you can click **Filter** to help find the organization name. Select an organization from that list.

Selecting the work type

- From the Organizations application click the **Select Action** menu
- Select **Work Order Options** > **Work Type**



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Configuring work order status changes with the Automated Flow Control feature

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Work orders have tasks and work types. Work types are templates designed for a specific work order category. To set the start and finish statuses go to the **Select Action** menu. From the **Select Action** menu select **Work Order Options**. Next, select **Work Type**. This action opens the Work Type window.

The default statuses governing flow control are In Progress (INPRG) and COMPLETE (COMP).

Configuring work type parameters

- Click the **View Details** icon to expand a row
- Click the **Select Value** icon to select the applicable status

The screenshot shows the 'Work Type' application window. At the top, there's a title bar and a menu bar. Below that is a table with columns: Work Order Class, Work Type, Description, Type, Downtime Prompt, and Failure Prompt. The first row is expanded, showing details for 'Preventive Maintenance'. Below the table, there's a 'Details' section with fields for Work Order Class, Work Type, and Type. To the right of these fields are checkboxes for 'Downtime Prompt?' and 'Failure Prompt?'. Below the details section is a 'Process Flow' section with two fields: 'Start Status' and 'Complete Status'. Red arrows point to the 'View Details' icon in the table and the 'Select Value' icon for the 'Start Status' field.

| Work Order Class | Work Type | Description | Type | Downtime Prompt | Failure Prompt |
|------------------|-----------|------------------------|------|--------------------------|--------------------------|
| WORKORDER | PM | Preventive Maintenance | NONE | <input type="checkbox"/> | <input type="checkbox"/> |
| WORKORDER | CP | Capital Project | NONE | <input type="checkbox"/> | <input type="checkbox"/> |
| CHANGE | MINOR | Minor Change | NONE | <input type="checkbox"/> | <input type="checkbox"/> |
| CHANGE | SIG | Significant Change | NONE | <input type="checkbox"/> | <input type="checkbox"/> |
| CHANGE | MAJOR | Major Change | NONE | <input type="checkbox"/> | <input type="checkbox"/> |

Details

Work Order Class: WORKORDER
 Work Type: PM
 Type: NONE

Downtime Prompt?
 Failure Prompt?

Process Flow

Start Status:
 Complete Status:

Buttons: New Row, OK, Cancel

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Configuring work order status changes with the Automated Flow Control feature

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Open the Work Type application. Expand a row by clicking the **View Details** icon. The icon is located to the left of the row. Click the **Search** icon located to the right of the **Start Status** field. Select from the available values for the start status. Repeat this search and select the procedure for the **Complete Status**.

Enabling automated flow control on a work order and its tasks

- Click **New Work Order**
- Select the **Under Flow Control** check box
- Clear the **Inherit Status Changes** check box

Work Order Tracking

Work Order Tracking

Find Select Action

List Work Order Plans Related Records Actuals Safety Plan Log Failure Reporting Specifications

Work Order: 1160

Location

Asset

Configuration Item

Parent WO

Classification

Class Description

Launch Entry Name

Site: BEEFORD

Class: WORKORDER

Work Type

GL Account

Failure Class

Problem Code

Attachments

Status: BAPPR

Status Date: 190512 19:18

Inherit Status Changes?

Accepts Charges?

Is Task?

Under Flow Control?

Suspend Flow Control?

Flow Action

Flow Action Asset?

Job Details

Asset Details

Priority

Job Plan

Asset Up?

Asset Location Priority

Job

Warranty End?

Priority

Safety Plan

SLA Applied?

Priority Justification

Contract

Charge to Store?

Risk Assessment

Multiple Assets, Locations and Cls

| Asset | Location | Configuration Item | Target Description | Sequence | Process | Site |
|-------|----------|--------------------|----------------------|----------|---------|------|
| | | | No items to display. | | | |

Subcontract Information

Select Clear All New Row

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In this slide, flow control is being enabled on a work order. First, open the Work Order Tracking application. Next, click the **New Work Order** icon. Select the **Under Flow Control** check box and clear the **Inherit Status Changes** check box.

Creating work order tasks

To create multiple tasks:

- Go to the Work Order Tracking application
- Select the **Plans** tab, then click **New Row**
- Enter summary content for a task and save the record
- Repeat these steps for the next task

The screenshot shows the IBM Work Order Tracking application interface. The 'Plans' tab is selected. A red circle labeled '1' highlights the 'New Row' button in the 'Plans' section. A red circle labeled '2' highlights the 'New Row' button in the 'Tasks for Work Order 1180' table. A red circle labeled '3' highlights the 'Summary' field in the 'Tasks for Work Order 1180' table. The table contains the following data:

| Sequence # | Task | Summary | Estimated Duration | Status | Owner | Owner Group |
|------------|-----------------------------------|---------|--------------------|--------|-------|-------------|
| 10 | Service Engine per TO33E-32-2-100 | | 0:00 | VSAPPR | | |
| 20 | Service Engine per TO33E | | 0:00 | VSAPPR | | |
| 30 | Service Engine per TO | | 0:00 | VSAPPR | | |

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In this slide, the task creation procedure is demonstrated. Go to the **Plans** tab and click **New Row**. A new task row appears. Add summary text in the **Summary** field that describes the new task.

Setting a predecessor task

Use this method to begin setting a predecessor task:

- Click the **View Details** icon to expand line Task 20
- Click the arrow to the right of the **Predecessors** field

The screenshot displays the 'Tasks for Work Order 1168' interface. At the top, a table lists tasks with columns for Sequence, Task, Summary, Estimated Duration, and Status. Task 20, 'Service Engine per T039E', is selected. Below the table, the 'Task Information' section shows details for Task 20, including its sequence, status (WAPRR), and classification. The 'Work Reference Information' section includes fields for Reference WO (T1086), Location (CONF400), Asset (1000), Service Group, and Service. The 'Scheduling Information' section contains fields for Target Start, Target Finish, Scheduled Start, Scheduled Finish, Start No Earlier Than, Finish No Later Than, Actual Start, Actual Finish, Estimated Duration (0:00), Time Remaining, and a 'Predecessors' field. A red circle with the number '1' highlights the 'View Details' icon to the left of Task 20 in the table. Another red circle with the number '2' highlights the 'Predecessors' field in the Scheduling Information section.

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Configuring work order status changes with the Automated Flow Control feature

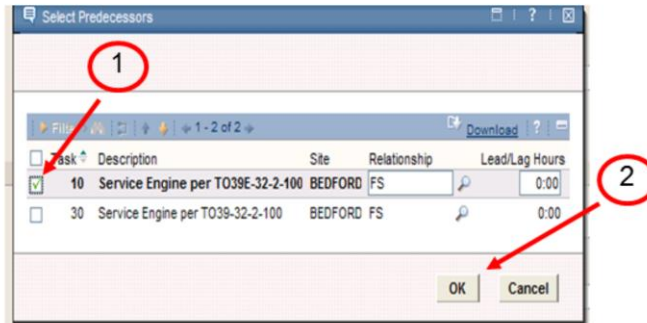
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In this slide, the **Tasks for Work Order 1168** appears. Click the **View Details** icon located to the left of Task 20. The information sections for Task 20 appear. Next, click the arrow located to the right of the **Predecessors** text box of the **Scheduling Information** section.

Selecting predecessor tasks

Use this method to add a predecessor to Task 20:

- Select the **Task 10** check box under **Task**
- Click **OK**



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Configuring work order status changes with the Automated Flow Control feature

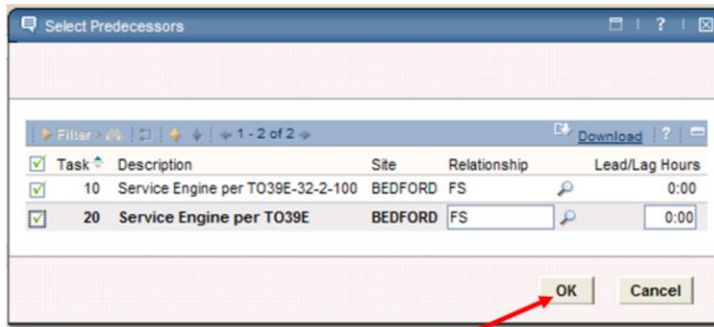
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In this slide, the **Select Predecessors** text box opens. These are the two tasks under work order 1168. Select the **Task 10** check box to configure Task 10 as a predecessor for Task 20. Click **OK** to complete the predecessor selection.

Adding a predecessor task

Use this method to add some predecessors to Task 30:

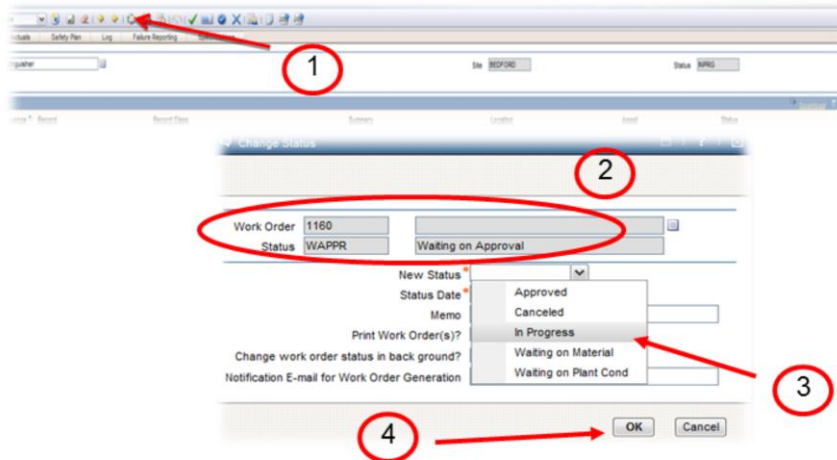
- Select **Task 10** and **Task 20** as predecessors
- Click **OK**



Here two predecessors are added to Task 30 of a work order. All listed tasks are selected as predecessors to Task 30. To accomplish this configuration, three check boxes are selected: the **Task** check box, the **10** check box, and the **20** check box.

Changing the status of the parent work order

- Click the **Change Status** icon
- The Change Status window opens
- Select the **In Progress** status and click **OK**



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In this slide, a parent work order is having its status changed manually. The parent work order in the **Work Order** field is 1160 and the current status in the **Status** field is Waiting on Approval. The Change Status screen has been opened for this parent work order in order to change its status from Waiting on Approval to In Progress. The **New Status** field and the **Status Date** field must be filled in for all parent work order status changes. The other **Change Status** fields are optional.

Changing the status of a parent work order

- The status of the parent work order changes to INPRG
- The status of the first task in the sequential chain changes to INPRG

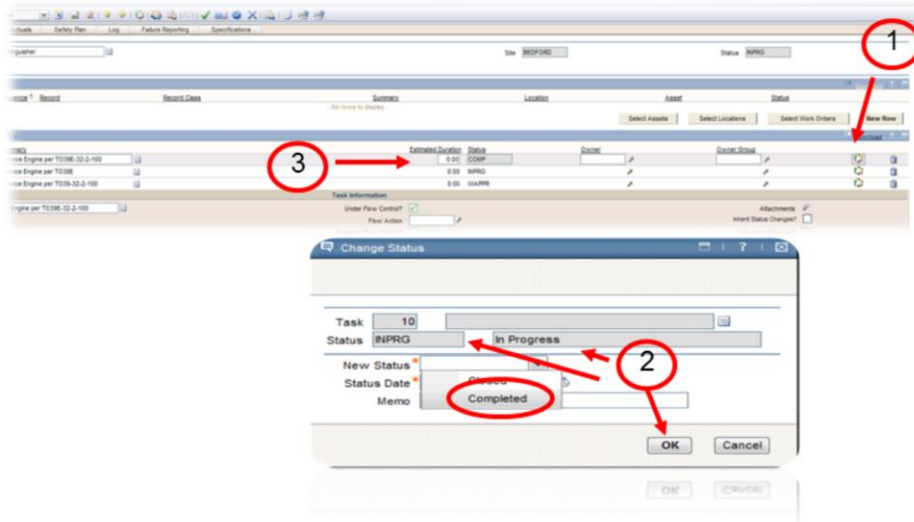
The screenshot displays the IBM Work Order Management interface. At the top, there are tabs for 'Related Records', 'Actuals', 'Safety Plan', 'Log', 'Failure Reporting', and 'Specifications'. Below these, a search bar contains '1000 Fire Extinguisher' and a 'Status' dropdown menu is highlighted with a red circle, showing 'INPRG'. Below the search bar, there are buttons for 'Select Assets' and 'Select Locations'. The main table shows a list of tasks with columns for 'Task', 'Summary', 'Estimated Duration', 'Status', 'Owner', and 'Owner Group'. A red arrow points to the 'Status' column of the first task, which is 'INPRG'.

| Task | Summary | Estimated Duration | Status | Owner | Owner Group |
|------|-----------------------------------|--------------------|--------|-------|-------------|
| 10 | Service Engine per 10196-SJ-D-100 | 0:00 | INPRG | | |
| 20 | Service Engine per 10196 | 0:00 | INPRG | | |
| 30 | Service Engine per 10196-SJ-D-100 | 0:00 | INPRG | | |

The **Plans** tab content is viewed here. The **Status** field of the parent work order and the **Status** field of the first task in the parent work order have both been changed to in progress.

Changing the status of a task

- Click the **Change Status** icon for Task 10 and notice that the status is set to INPRG
- Select **Completed** from the **New Status** menu and click **OK**



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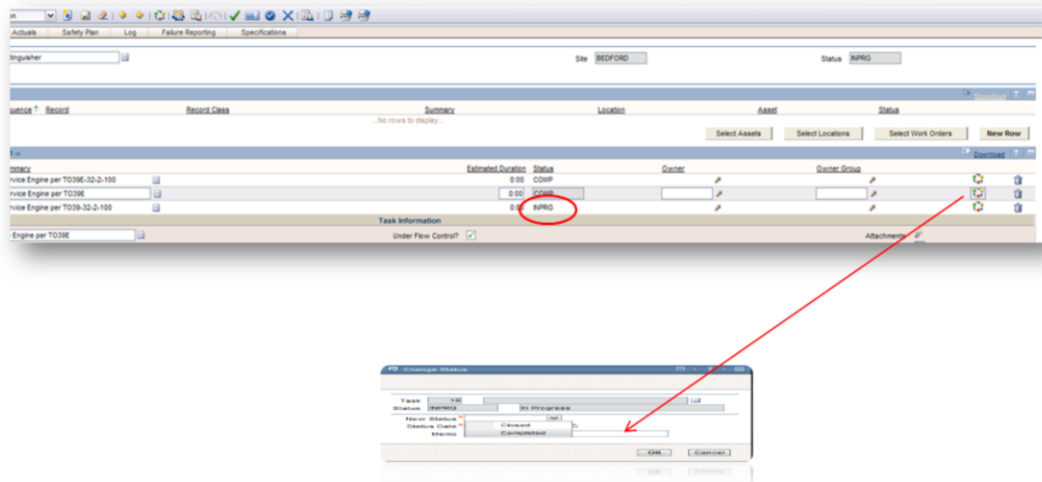
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A change in status of one task automatically changes the status of successor tasks. Change the status of Task 10 to **Completed** and click **OK**. Notice that the next task in the sequential chain goes to in progress.

Changing the status of task 20

Changing the status of task 20 to COMP changes the status of Task 30 to INPRG



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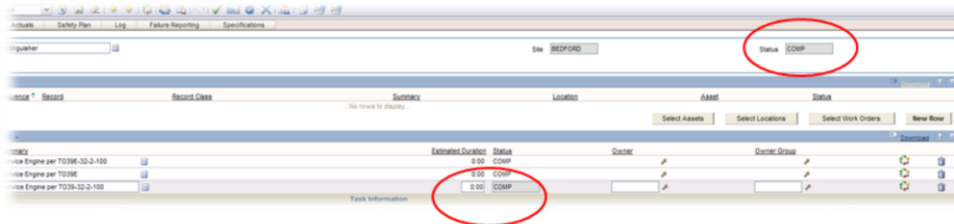
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The next sequential task is Task 20. The status of Task 20 changes from in progress to complete. The next task in the sequential chain, Task 30 in this case, changes to in progress.

Completing the final task

Use the same method to change the status of the last task and click **OK**



Use the same method to change the status of the last task and click **OK**. This action completes the task. This action also completes the parent work order.

Summary

Now that you have completed this unit, you can perform these tasks:

- Enable flow control on a work order record and its tasks
- Define the start and complete status of the work order
- Add predecessors to tasks
- Test the flow control by changing the status of the parent work order
- Test the flow control by changing the status of predecessor tasks

Now that you have completed this unit, you can perform these tasks:

Enable flow control on a work order record and its tasks .

Define the start and complete status of the work order

Add predecessors to tasks

Test the flow control by changing the status of both the parent work order and work order tasks

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