HP Service Manager 9.20 Integration Package for CCRM Solution 9.00

User Guide

Table of Contents

Overview

The HP Service Manager 9.20 Integration Package for Change Configuration and Release Management (CCRM) Solution 9.00 (referred to as "the CCRM integration package" throughout this document) provides the following for end users:

An enhancement to the out-of-box Operations Orchestration (OO) integration that is available in Service Manager 9.20. The enhanced OO integration now can link requests for change (RFCs) to OO flows. This enables users to implement automated deployment of changes by manually or automatically launching OO flows.

Implementing automated deployment of changes

The enhanced OO integration can be used as follows to enable automated deployment of RFCs:

Before a change moves to the Change Approval phase, you can link OO flows that will perform each of the change deployment steps and return the results. These OO flows were created by leveraging out-of-box content in OO intended to support common Change use cases, such as Database Script Execution, Service/Server Restart, and Running Batch Files.

To run the automated flow, select the relevant OO flows and supply all required parameters of the flows. These parameters can be fixed, or can be references to attributes of the RFC or Configuration Items (CIs) in the RFC. You also need to select when and how the change flows will be triggered - upon change approval, based on a schedule or manually.

When the change is approved and moves to the Change Implementation phase (or the Test and Build phase if the change has a category of Release Management), you can manually launch the OO flows from within Service Manager, or the OO flows are automatically executed based on the trigger conditions you set.

NOTE: This feature is not supported for the following change categories:

- KM document
- CI Group
- Subscription
- Unplanned Change

Web client users can perform the following tasks to implement automated deployment of changes.

Add OO flow links to a change record

User roles: Change Manager, Change Coordinator, and Release Manager

To add OO flow links to a new change record:

1. Log on to the Service Manager Web client.

2. Click **Change Management** > **Changes** > **Open New Change**.

3. Select a change category other than any of the following:

- KM document
- CI Group
- Subscription
- Unplanned Change

NOTE: The OO Flow Links feature is not available for a change record with any of the above change categories.

4. Complete the form with all required information and any additional information.

5. Go to the OO Flow Links section, select a path in the Select Path field, and click **Add Link**. The OO Flow Link Detail form displays.

6. In the **Sequence No** field, type a number. This number defines the order in which the OO flow is automatically launched. Each OO flow link must have a unique Sequence No.

7. In the **Target CIs** field, enter the target Configuration Items which will be used when the OO flow is launched. **NOTE**: If you are planning to manually launch the flow, you can skip this step.

8. In the **Parameters** section, complete the fields in the following table as necessary.

Field	Value	Description
Parameter Name	Name of an input for the operation(s) of the OO flow. Can be entered by the user running the flow; or set to a specific value; or obtained from information gathered by another step of the OO flow.	An OO field.
Required?	**true** or **false**	An OO field. Indicates whether the parameter is required or not.
Mapped Change Field	Select one from the drop-down list.	A custom field. This is a field from the change record used to launch the OO flow. The Change field value will be populated when launching the OO flow. The Change fields listed are defined in global list "OO RFC Fields".
Mapped CI Field	Select one from the drop-down list.	A custom field. Useful CI field to launch the OO flow. If there is no Mapped Change Field configured for the parameter, or there is no Mapped Change Field value, the CI field value will be populated when launching the OO flow. The CI fields listed are defined in global list "OO Fields".

| Default Value | Default value of the parameter. | A custom field. If there is neither Mapped Change Field nor Mapped CI Field configured for the parameter, or no value in Mapped Change Field or Mapped CI Field, the default value will be populated when launching the OO flow. **NOTE**: This field is not the same field in OO. |

9. Click **Add**. The OO flow link is added.

10. Click **Cancel**. You are returned to the Change form.

11. If necessary, add more OO flow links as described above.

12. Click **Save** to save the change record.

To add OO flow links to an existing change record:

Similarly, you can add OO flow links to an existing change record that meets the following conditions.

Category	Change Phase
Release Management	One of the following: • Assess • Plan and Design
Other than any of the following: • KM document • CI Group • Subscription • Unplanned Change • Release Management	One of the following: • Change Logging • Change Review • Change Assessment & Planning • Prepare for Change Approval

Update OO flow links in a change record

User roles: Change Manager, Change Coordinator, and Release Manager

NOTE: You can perform this task only on a change record that meets the following conditions.

Category	Change Phase
Release Management	One of the following: • Assess • Plan and Design

Other than any of the following:	One of the following:
• KM document • CI Group • Subscription • Unplanned Change • Release Management	• Change Logging • Change Review • Change Assessment & Planning • Prepare for Change Approval

To update OO flow links in a change record:

1. Log on to the Service Manager Web client.

2. Open an existing change record that meets the above conditions.

3. In the OO Flow Links section, click the **Seq No** of an OO flow link that you want to update. The OO Flow Link Detail form opens.

4. Update the fields as necessary, and then click **Save**.

5. Click **Cancel**. You are returned to the Change form.

6. Click **Save** to save the change record.

Remove OO flow links from a change record

User roles: Change Manager, Change Coordinator, and Release Manager

NOTE: You can perform this task only on a change record that meets the following conditions.

Category	Change Phase
Release Management	One of the following: • Assess • Plan and Design
Other than any of the following: • KM document • CI Group • Subscription • Unplanned Change • Release Management	One of the following: • Change Logging • Change Review • Change Assessment & Planning • Prepare for Change Approval

1. Log on to the Service Manager Web client.

2. Open an existing change record that meets the above conditions.

3. In the OO Flow Links section, click the **Seq No** of an OO flow link that you want to remove. The OO Flow Link Detail form displays.

4. Click **Delete**, and then click **YES** to confirm the deletion.

   You are returned to the Change form, in which the OO flow link is removed.

5. Click **Save** to save the change record.

Manually launch change flows

User roles: Change Manager, Change Coordinator, and Release Manager

Once a change record is approved and advances to the Change Implementation (or Build and Test) phase, you can select to manually launch the OO flows linked to the change record.

NOTE: You can perform this task only on a change record that meets the following conditions. You can always perform this task regardless of the Automation Type of the change.

Category	Change Phase
Release Management	• Build and Test
Other than any of the following: • KM document • CI Group • Subscription • Unplanned Change • Release Management	• Change Implementation

1. Log on to the Service Manager Web client.

2. Open an existing change record that meets the above conditions.

3. Click **More**, and then select **Execute OO Flow**.

   - If there is no OO flow linked to the change, an error message displays: "No related OO flows found."
   - If there is only one OO flow linked to the change, the Select Affected CI for OO Flow page opens.
   - If there are multiple OO flows linked to the change, the Select an OO Flow page opens. Select an OO flow from the table. The Select affected CI for OO flow page opens.

4. Select an affected CI from the table or click **Skip** to go to the next page if there are no CIs related to this OO flow. The Set Parameters page opens.

   - If the selected OO flow has a parameter with a Mapped Change Field (for example, Impact) and the change has a corresponding value for this Mapped Change Field, this Impact field value from the change will be automatically populated as the value of this OO flow parameter. If the Mapped Change Field is an array type field, the values of the array will be combined and separated by ",".
   - If the selected OO flow has a parameter with a Mapped CI Field (for example, Ip Address) and the Affected CI of the change has a corresponding value (for example, an IP address)

for this Mapped CI Field, this affected CI field value from the change will be automatically populated as the value of this OO flow parameter. If the mapped CI field is an array type field, the values of the array will be combined and separated by ",".

- If the selected OO flow has a parameter without a Mapped Change Field or Mapped CI Field, the value specified in its Default Value field will be populated.

5. Provide all the required parameter values for the selected OO flow.

   NOTE: You may need to add additional parameter names and provide their values in some cases.

6. (Optional) If you want the OO flow to be executed asynchronously, select **Asynchronous**.

7. Click **Next**. The selected OO flow is launched, and you are returned to the Select an OO Flow page when the change is linked to more than one OO flow.

   NOTE: If you do not want to launch more OO flows, click **Finish** instead of **Next** to launch the selected OO flow and return to the change form.

8. Continue to launch more OO flows from the list on the Select an OO Flow page.

9. Click **Finish**.

10. Once an OO flow execution is complete, a dialog box opens, stating that the execution is done and asking if you want to view the execution result.

    - Click **Yes** to view the execution result in Operations Orchestration.
      If LW-SSO is configured in both the Service Manager Web client and Operations Orchestration, the execution result in Operations Orchestration displays without any login prompt. If LW-SSO is not configured, an Operations Orchestration log-in page opens; after you log on to Operations Orchestration, the execution result displays. For information about how to configure LW-SSO in Service Manager and Operations Orchestration, see the following topics in the Service Manager 9.20 help:
        - *Configure LW-SSO in Operations Orchestration*
        - *Configure LW-SSO in Service Manager*
    - Click **No** to exit the dialog box.

Automatically launch change flows upon approval

User roles: Change Manager, Change Coordinator, and Release Manager

You can set a change record so that the linked OO flows are executed automatically once it has been approved and moved to the Change Implementation phase (or the Build and Test phase if it is a Release Management change).

1. Log on to the Service Manager Web client.

2. Open a change in the Change Assessment & Planning phase (or in the Assess or the Plan and Design phase if the change has a category of Release Management).

3. In the OO Flow Links section, select **When approved** as the Automation Type.

4. Click **Save** to save the change record.

5. Once the change has been approved, click **Close Phase** to move the change to the Change Implementation (or Build and Test) phase.

   A scheduler of OO Flow Automation is created and starts in 50 seconds, and the alert stage is **SMOO Auto-Approval**.

   The OO flows are automatically executed, and all the execution reports are saved in one activity log, in which the operator is **smoo-automation**.

Automatically launch change flows based on a schedule

User roles: Change Manager, Change Coordinator, and Release Manager

You can select to trigger automatic execution of change flows at a scheduled time: either a specific date and time, or a future time based on the value of a change field (Planned Start, Planned End, or Requested End Date). Once the change is approved and advances to the Change Implementation phase (or Test and Build phase if it is a Release Management change), the OO flows linked to this change record will be automatically launched based on the schedule you set.

To set an automation execution time for OO flows of a new change:

1. Log on to the Service Manager Web client.

2. From Change Management, click **Open New Change**.

3. Select a change category other than any of the following:

   - KM document
   - CI Group
   - Subscription
   - Unplanned Change

   NOTE: The OO Flow Links feature is not available for a change record with any of the above change categories.

4. Complete the form with all required information and any additional information.

5. In the OO Flow Links section, do either of the following:

   - Select **Use a fixed date** as the Automation Type. The **Scheduled Time** field displays. Select a date and specify a time. For example, 06/04/10 10:00:00.
     NOTE: The date/time format is determined by your profile date/time format.
   - Select **Use a field in the record + interval** as the Automation Type. The **Change Field** and **Interval** fields display. Select a field in the Change Field list as the base time, and then enter a value in the Interval field using the "+/-ddd hh:mm:ss" format. Note that a space is required between ddd and hh, and you can omit the plus sign (+) for positive intervals.

For example, if you select **Requested End Date** in Change Field and enter **-1 02:30:10** in Interval, the OO flows of the change will be automatically launched one day, two hours, thirty minutes, and ten seconds before the Requested End Date.

NOTES:

- The automation execution time should be a future time between the Planned Start and Planned End.

- The automation execution time you selected is not validated at this point. Instead, the time will be validated when the change moves to the Change Implementation (or Test and Build) phase. If the validation fails, you will receive a warning and the change cannot advance to implementation. In this case, you have to reset the execution time. To do so, click **Cancel** and move the change back to a phase prior to Change Approval (or back to "Assess" or "Plan and Design"), reset the automation execution time, and then go through the change phases again.

To set an automation execution time for OO flows of an existing change:

Similarly, you can set an automation execution time for the OO flows linked to an existing change record that meets the following conditions.

Category	Change Phase
Release Management	One of the following: • Assess • Plan and Design
Other than any of the following: • KM document • CI Group • Subscription • Unplanned Change • Release Management	One of the following: • Change Logging • Change Review • Change Assessment & Planning • Prepare for Change Approval

View execution results of change flows

User roles: Change Manager, Change Coordinator, and Release Manager

OO flow execution results are saved in Service Manager in different ways depending on how they are executed: manually or automatically.

To view an OO flow execution result from a change record:

1. Log on to the Service Manager Web client.

2. From Change Management, search for a change record and open it.

3. In the Activities section, do one of the following:

- Select an activity of the **OO Response** type from the activities list. The Activity Log - Change Management page opens, displaying the execution details of an OO flow manually launched from this change.
- Select an activity that has a type of **OO Response** and an operator of **smoo-automation**. The execution results of all the OO flows automatically executed are saved in this log as separate links.

4. Click **Open Report**.

   NOTE: For automatically executed OO flows, clicking **Open Report** opens only the report link of the first OO flow. You can view the reports of the other OO flows directly in OO.

If Lightweight Single Sign-On (LW-SSO) is configured in both the Service Manager Web client and Operations Orchestration, the execution result in Operations Orchestration displays without any login prompt. If LW-SSO is not configured, an Operations Orchestration log-in page opens, and the execution result displays after you log in. For information about how to configure LW-SSO in Service Manager and Operations Orchestration, see the following topics in the Service Manager 9.20 help:

- *Configure LW-SSO in Operations Orchestration*
- *Configure LW-SSO in Service Manager*