Component Deployment

Introduction

Deployment of all project components (at once), and of selected workflows, operations, or transformations, is covered on these pages:

- **All Project Components:** Project Deployment, for deploying all project components
- **Workflows:** Workflow Deployment, for deploying selected workflows and dependent components
- **Operations:** Operation Deployment and Execution, for deploying and executing operations and dependent components
- **Transformations:** Preview Mode, for deploying a transformation and dependent components to preview the transformation with sample data

Project components such as activities, transformations, scripts, schemas, project variables, email notifications, and schedules, along with any components they are dependent on, can also be deployed independently of the rest of the project. This can be done either by deploying directly or by configuring a deploy, where you can pick and choose which project components to deploy.

Once all components that an operation is dependent on are deployed to the Jitterbit Harmony cloud, those operations can be executed (see Operation Deployment and Execution).
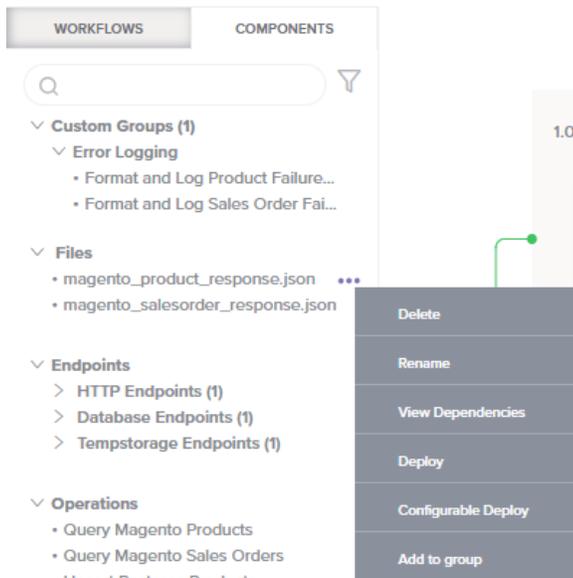
Deploying

There are two options for component deployment: deploying directly and configuring a deploy:

- **Deploy:** This option refers to direct deployment of a component and its dependent components. Selecting this option immediately deploys the component and all components it is dependent on, or reports validation errors preventing deployment.
- **Configurable Deploy:** This option refers to deployment of selected project components. Selecting this option opens a deployment configuration screen where you can choose which project components to deploy. Any project components that the selected project component is dependent on are selected by default.

With both options, if there are any project variables or schedules being deployed that have already been deployed in the Harmony cloud, a screen will present you with options for selecting which values to use. This is covered later on this page under Selecting Schedules and Project Variables.

The deployment options for most project components are accessible from the project pane in the **Components** tab. Hover over a component name and click the actions menu icon ••• to open the actions menu. From the menu, select **Deploy** or **Configurable Deploy**:

In addition, components used as operation steps can be deployed from **Workflows** tab of the project pane or from the design canvas:

- **Project Pane:** In the **Workflows** tab of the project pane, hover over an operation name and click the actions menu icon ••• to open the actions menu. From the menu, select **Deploy** or **Configurable Deploy**.

On This Page

- Introduction
- Deploying
  - Deploy
  - Configurable Deploy
- Selecting Schedules and Project Variables
  - Variables
  - Operation Schedules
  - Schedules

Related Articles

- Component Validity
- Design Canvas
- Operation Deployment and Execution
- Preview Mode
- Project Deployment
- Project Pane
- Workflow Deployment

Related Topics

- Cloud Studio
- Cloud Studio User Interface
- Connectors
- Notifications
- Operations
- Plugins
- Project Components
- Schemas
- Scripts
- Transformations
- Variables
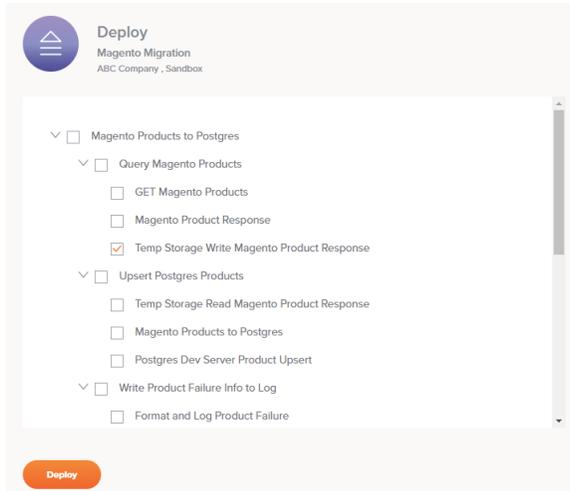- Workflows

Last updated: Oct 30, 2019

- **Design Canvas:** Within the operation, click on the component block to open the actions menu. From the menu, select **Deploy** or **Configurable Deploy**.

Deploy

Upon selecting the **Deploy** option, a deploy will immediately be attempted for the component and any other components it is dependent on. In order for the deploy to succeed, all dependent components must be valid. If any dependent components are invalid, the specific validation error(s) will be provided in a popup message. For documentation on each component error and how to resolve it, refer to Component Validity.

Configurable Deploy

Upon selecting the **Configurable Deploy** option, a deployment configuration screen opens where you can choose which project components to deploy:

The component and its dependent components will be selected by default. Clear the checkbox selections as desired to deploy only selected project components. Components that are dependencies of other selected components cannot have their selections cleared, as failure to deploy these items would cause the component that has the dependency to become invalid.

To collapse or expand workflows, operations, and operation steps, use the disclosure triangles ∨ ⟩ displayed to the left of the component name.

The names of invalid components appear in the color red and italics. In addition, the names of components that are not used directly in a workflow are preceded by a tilde ~, as demonstrated with this schedule:
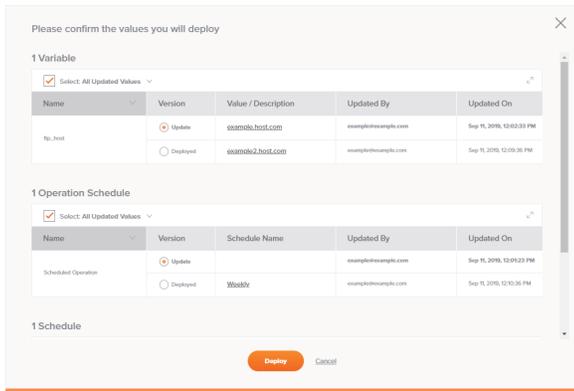

When all the desired project components you want to be deployed are selected, click the **Deploy** button.

If any selected components are invalid, the specific validation error(s) will be provided in a popup message. For documentation on each component error and how to resolve it, refer to Component Validity.

Selecting Schedules and Project Variables

If there are any project variables or schedules being deployed that have already been deployed in the Harmony cloud, a screen will present you with options for selecting which values to use. This allows you to keep or override values set outside of Cloud Studio, such as through the Management Console Projects page.

Each category, of variables, operation schedules, and schedules, is covered below. Once you have made your selections, click **Deploy** to continue with the deploy or configurable deploy as configured, or **Cancel** to return to the design canvas without deploying.

Variables

This table includes any project variables that have a different value or description from those already deployed in the Harmony cloud:

- **Select:** When selected, this checkbox is used to toggle the selections in the **Version** column. When cleared, the option selected in the dropdown has no effect on the table. These dropdown options are available:
  - **All Updated Values:** When the checkbox and this option are selected, all selections in the **Version** column are toggled to **Update**.
  - **All Deployed Values:** When the checkbox and this option are selected, all selections in the **Version** column are toggled to **Deployed**.
- **Popout:** Click the popout icon ⤡ to show only the table of variables, hiding any operation schedules and schedules. Once within this view, click the return icon ⤢ to come back to the full screen.
- **Name:** The names of any project variables that have a different value or description from those already deployed in the Harmony cloud are listed.

  This *doesn't include* project variables that are already deployed but have the same value and description as that in the Cloud Studio project, or project variables that are only within the Cloud Studio project and haven't yet been deployed.

  > ✅ **TIP:** A project variable may have already been deployed in the Harmony cloud if you previously deployed the project or if you edited the project variable through the Management Console Projects page.

- **Version:** Select between the two versions of the project variable:
  - **Update:** Use the value and description of the project variable that is present in the Cloud Studio project. This will override the value and description currently deployed in the Harmony cloud. Once deployed, the project variable value and description in Cloud Studio and in the Harmony cloud will be in sync.
  - **Deployed:** Use the value and description of the project variable that is currently deployed in the Harmony cloud.

    > ⚠ **WARNING:** Once deployed, the project variable value and description in Cloud Studio will not be updated. To continue using the version deployed in the Harmony cloud, you will need to make this selection each time you deploy the Cloud Studio project, or you can update the project variable in Cloud Studio to match that deployed in the Harmony cloud to prevent it from appearing on this screen.

- **Value / Description:** The value of the project variable is listed. If the value is configured to be hidden in the UI, asterisks that mask the value are displayed. Additional details can be viewed by hovering over the cell:

- **Value:** The value of the project variable is listed. If the value is configured to be hidden in the UI, asterisks that mask the value are displayed.
- **Description:** The description of the project variable is listed.
- **Updated By:** The Jitterbit Harmony username of the user who last updated the project variable component is listed. The update may have been made in Cloud Studio or the Management Console.
- **Updated On:** The date and time that the project variable component was last updated, reported in your local browser time zone.

Operation Schedules

This table includes any operations that have a difference in applied schedules compared with those already deployed in the Harmony cloud:

- **Select:** When selected, this checkbox is used to toggle the selections in the **Version** column. When cleared, the option selected in the dropdown has no effect on the table. These dropdown options are available:
    - **All Updated Values:** When the checkbox and this option are selected, all selections in the **Version** column are toggled to **Update**.
    - **All Deployed Values:** When the checkbox and this option are selected, all selections in the **Version** column are toggled to **Deployed**.
- **Popout:** Click the popout icon ⬈ to show only the table of operation schedules, hiding any variables and schedules. Once within this view, click the return icon ⬋ to come back to the full screen.
- **Name:** The names of any operations that have a difference in applied schedules compared with those already deployed in the Harmony cloud are listed.

    This *doesn't include* operations that have applied schedules that are already deployed but are the same in the Cloud Studio project, or applied schedules that are only within the Cloud Studio project and haven't yet been deployed.

    This *doesn't consider* whether the schedule has been enabled or disabled from the Management Console, as that isn't a setting that can be toggled in Cloud Studio.

    > ✅ **TIP:** A schedule applied on an operation may have already been deployed in the Harmony cloud if you previously deployed the project or if you applied or removed a schedule from an operation through the Management Console Projects page.

- **Version:** Select between the two versions of the operation that has schedule applied:
    - **Update:** Use the schedule that is applied on the operation in the Cloud Studio project. This will override the applied schedule setting currently deployed in the Harmony cloud. Once deployed, the applied schedule in Cloud Studio and in the Harmony cloud will be in sync.
    - **Deployed:** Use the schedule that is applied on the operation that is currently deployed in the Harmony cloud.

    > ⊘ **WARNING:** Once deployed, the operation to which the schedule is applied in Cloud Studio will not be updated. To continue using the version deployed in the Harmony cloud, you will need to make this selection each time you deploy the Cloud Studio project, or you can update the applied schedule in Cloud Studio to match that deployed in the Harmony cloud to prevent it from appearing on this screen.

- **Schedule Name:** The name of the schedule applied on the operation is listed. If the operation doesn't have an applied schedule, this cell will be empty. Additional details can be viewed by hovering over the cell:
    - **Name:** The name of the schedule applied on the operation.
    - **Occurs:** The days on which the schedule is configured to run.
    - **Frequency:** The times at which the schedule is configured to run. The time zone is that of the agent running the operation.
    - **Start Date:** The date on which the schedule is configured to start.
    - **End Date:** The date on which the schedule is configured to end.
- **Updated By:** The Jitterbit Harmony username of the user who last updated the applied schedule. The update may have been made in Cloud Studio or the Management Console.
- **Updated On:** The date and time that the applied schedule was last updated, reported in your local browser time zone.

Schedules

This table includes any operation schedules that have a different configuration from those already deployed in the Harmony cloud. Schedules in this category are listed regardless of whether they are applied on any operations:

- **Select:** When selected, this checkbox is used to toggle the selections in the **Version** column. When cleared, the option selected in the dropdown has no effect on the table. These dropdown options are available:
    - **All Updated Values:** When the checkbox and this option are selected, all selections in the **Version** column are toggled to **Update**.
    - **All Deployed Values:** When the checkbox and this option are selected, all selections in the **Version** column are toggled to **Deployed**.
- **Popout:** Click the popout icon ↗ to show only the table of schedules, hiding any variables and operation schedules. Once within this view, click the return icon to come back to the full screen.
- **Name:** The names of any schedules that have a different configuration from those already deployed in the Harmony cloud are listed. Schedules in this category are listed regardless of whether they are applied on any operations.

  This *doesn't include* schedules that are already deployed but have the same configuration in the Cloud Studio project, or schedules that are only within the Cloud Studio project and haven't yet been deployed.

  > ✅ **TIP:** A schedule may have already been deployed in the Harmony cloud if you previously deployed the project or if you created, edited, or deleted a schedule through the Management Console Projects page.

- **Version:** Select between the two versions of the schedule:
    - **Update:** Use the schedule configuration that is present in the Cloud Studio project. This will override the configuration currently deployed in the Harmony cloud. Once deployed, the schedule configuration in Cloud Studio and in the Harmony cloud will be in sync.
    - **Deployed:** Use the schedule configuration that is currently deployed in the Harmony cloud.

  > ⚠ **WARNING:** Once deployed, the schedule configuration in Cloud Studio will not be updated. To continue using the version deployed in the Harmony cloud, you will need to make this selection each time you deploy the Cloud Studio project, or you can update the schedule configuration in Cloud Studio to match that deployed in the Harmony cloud to prevent it from appearing on this screen.

- **Value:** A summary of the schedule configuration is listed. Additional details can be viewed by hovering over the cell:
    - **Name:** The name of the schedule.
    - **Occurs:** The days on which the schedule is configured to run.
    - **Frequency:** The times at which the schedule is configured to run. The time zone is that of the agent running the operation.
    - **Start Date:** The date on which the schedule is configured to start.
    - **End Date:** The date on which the schedule is configured to end.
- **Updated By:** The Jitterbit Harmony username of the user who last updated the schedule is listed. The update may have been made in Cloud Studio or the Management Console.
- **Updated On:** The date and time that the schedule was last updated, reported in your local browser time zone.