

Cloud Studio Quick Start Guide

Introduction

This guide is intended for new users of [Cloud Studio](#), Jitterbit's next-generation, web-based project design application. This page covers the basics for getting started and provides an overview of project design concepts.

For a comprehensive guide and step-by-step walkthrough, sign up for the [Introduction to Jitterbit Harmony Cloud Studio](#) on Jitterbit University. As part of this course, you can also reference the supplemental [Lab Training Manual for Hands-On Modules](#) covering a variety of use cases to help get you started.

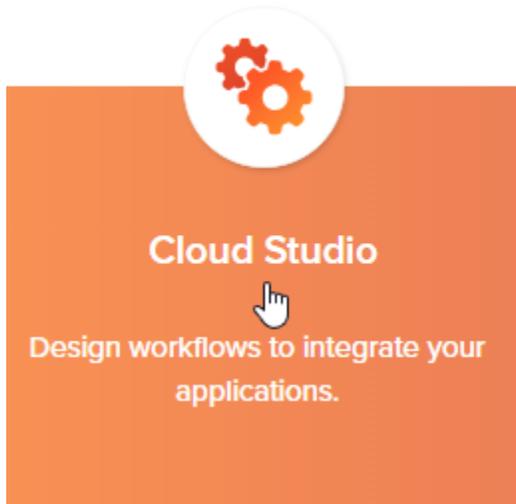


TIP: Before designing a project, you should have already registered for Jitterbit Harmony and set up an environment and Agent Group, as described in the [Jitterbit Quick Start Tutorial](#).

Accessing Cloud Studio

Cloud Studio is accessed directly through the [Jitterbit Harmony Portal](#).

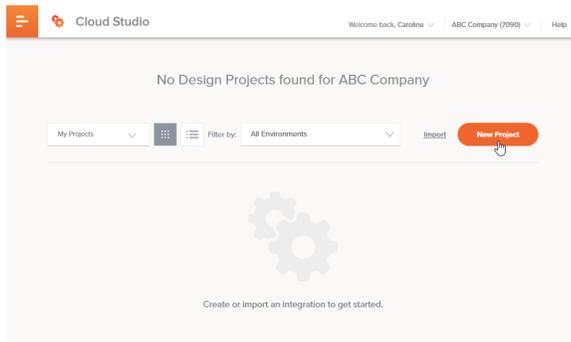
From the Harmony Portal landing page, click the **Cloud Studio** application card:



Cloud Studio will open on the project index, where you can create your first project, next.

Creating a Project

The project index shows a repository of all your Cloud Studio projects. The first time you access Cloud Studio, this screen will be blank. Click **New Project** to get started:



Fill out basic information for your project and then click **Start Designing** to open the project designer, next.

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Related Articles

- [Cloud Studio Overview for Design Studio Users](#)
- [Introduction to the Jitterbit Harmony Cloud Studio](#)
- [Jitterbit Harmony Portal](#)
- [Jitterbit Quick Start Tutorial](#)
- [Operation Actions](#)
- [Operation Deployment and Execution](#)
- [Operation Logs](#)

Related Topics

- [Connector Builder](#)
- [Connector SDK](#)
- [Connectors](#)
- [Cloud Studio](#)
- [Getting Started](#)
- [Introduction](#)
- [Management Console](#)
- [Scripts](#)
- [Transformations](#)

Last updated: Oct 09, 2019

Create **New Project** for ABC Company

PROJECT NAME*

ENVIRONMENT*

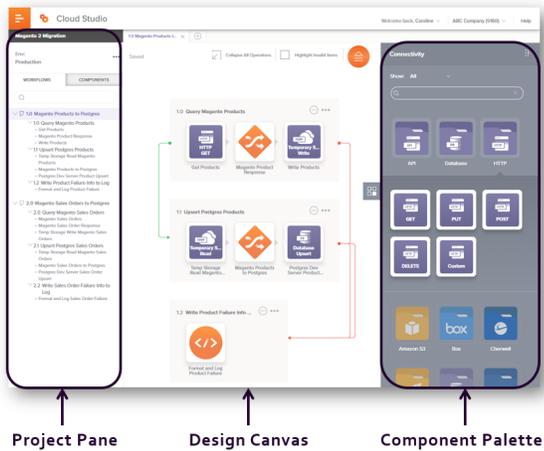
DESCRIPTION

Migrate Magento Products, Sales Orders, and Customers to PostgreSQL database.

Start Designing

Designing a Project

Upon opening a project, the project designer interface is displayed. This interface includes three parts: the project pane, design canvas, and design component palette, as shown in the example below for a project that has already been designed:



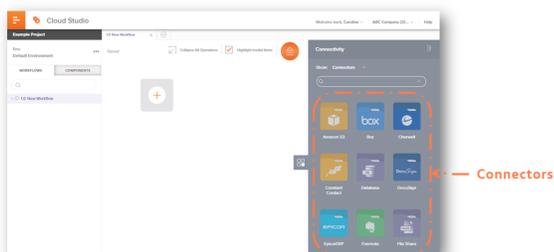
Generally, you design workflows – or collections of operations grouped for the convenience of the user – within the design canvas using the tools provided in the component palette, project pane, and on the design canvas itself.

The next sections walk through the basic design process:

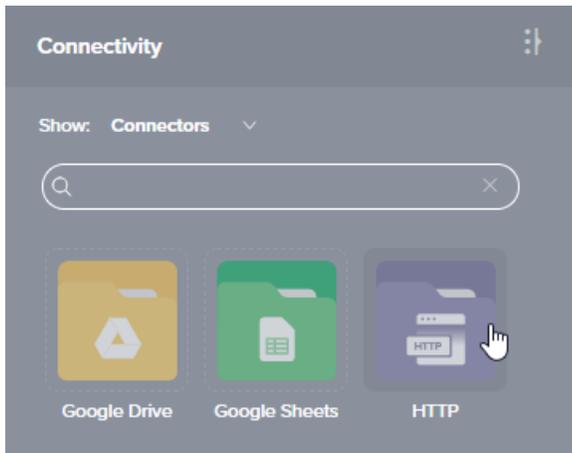
1. [Establish Connectivity](#)
2. [Create Operation Steps to Interact with Endpoints, Transform Data, or Use Scripts](#)
3. [Chain Operations Together Using Operation Actions](#)
4. [Deploy and Run Operations](#)

Establish Connectivity

The component palette provides access to connectivity resources. Here, *connectors* provide the interface entering user-provided input such as credentials to create an authenticated connection. Within the component palette, the **Connectors** filter shows the types of connectors that can be configured:

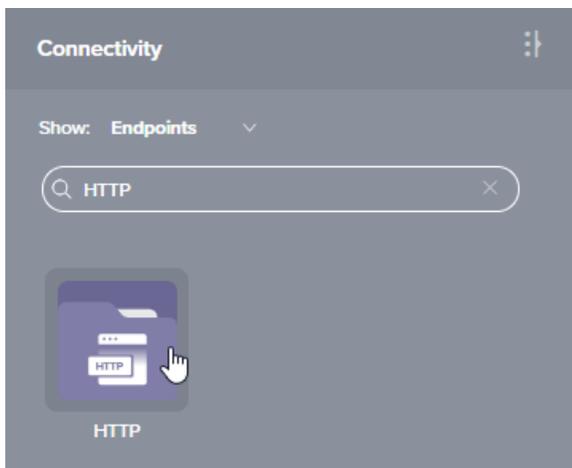


Each connector is represented by a block shape surrounded by a dotted border, beneath which is the connector name. Click a connector block to open a configuration screen to set up a new connection for authenticated access to a particular data resource:

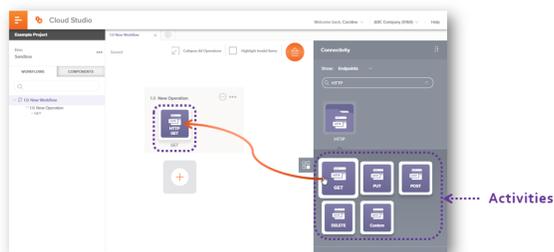


For detailed instructions on completing the configuration, see each specific connection under [Connectors](#). Each time you configure a new connection, you must do so from the connector blocks accessible in the **C**onnectors filter.

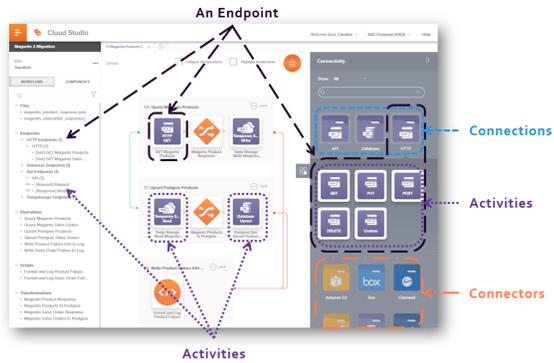
The **Endpoints** filter shows the configured connections, which can be edited by double-clicking on the connection in the palette:



Once a connection has been established, click it to reveal the types of activities, or interactions with that connection, that can be configured for that connection. Those activities are then able to be dragged to operations on the design canvas where they are configured:



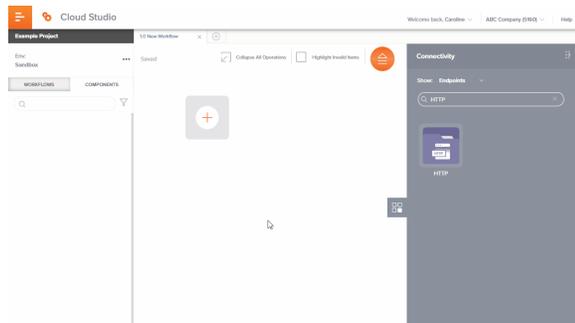
An endpoint refers to a specific connection and its activities, which are added to an operation and then configured as sources or targets within the operation. For reference, this diagram shows the relationship between connectors, connections, activities, and endpoints:



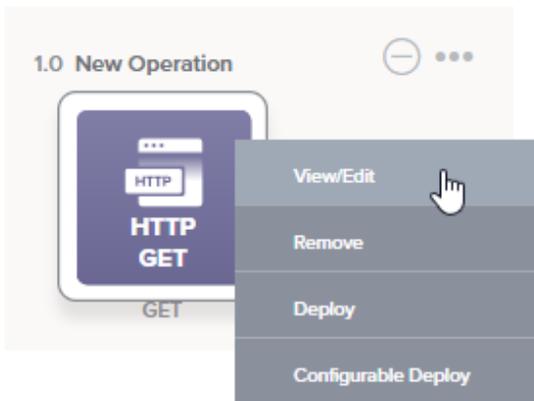
Create Operation Steps to Interact with Endpoints, Transform Data, or Use Scripts

Operations that define what the integration should do are created by adding and configuring operation steps, made up of activities, transformations, and/or scripts, on the design canvas.

To add activities, drag and drop them from the component palette to a "+" block on the canvas:



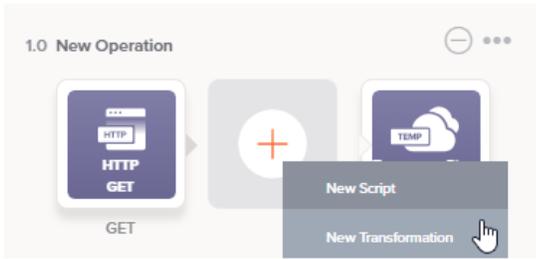
Then double-click on the activity on the canvas or click it and select **View/Edit** to configure it as described for each specific activity under [Connectors](#):



To add additional activities, drag them from the component palette to a "+" block on the canvas, which appears upon hovering to the left or right of an existing block. A common configuration is to configure one activity as the source of data, and a second activity to its right as the target of data.

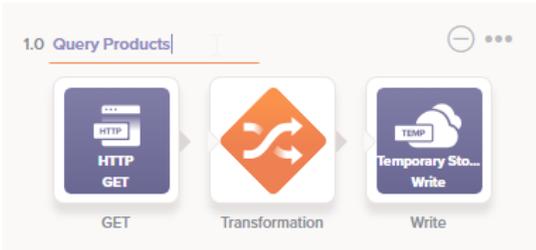
You may also want to add transformations or scripts to an operation. Transformations are used when you want to transform data prior to reaching its target. Scripts can be used within transformations on target fields and nodes to apply specified logic or conditions to the data. Scripts can also be used as optional steps within an operation for a variety of purposes, such as error handling or looping through data records.

To add transformations and scripts, hover to the left or right of the existing blocks and click on the "+" block to open a menu with options to add a script or a transformation:



When you add a script or transformation, its configuration screen will open automatically. For details on configuration, see [Transformations](#) and [Scripts](#), respectively.

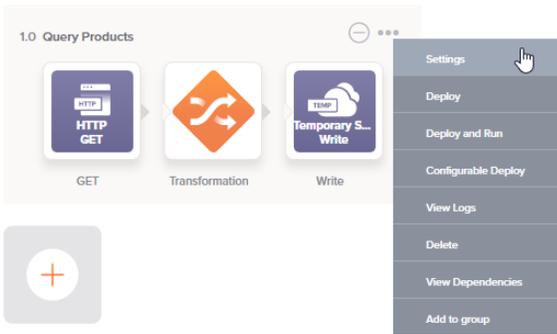
To rename operations, click on the operation name and enter the new name:



Chain Operations Together Using Operation Actions

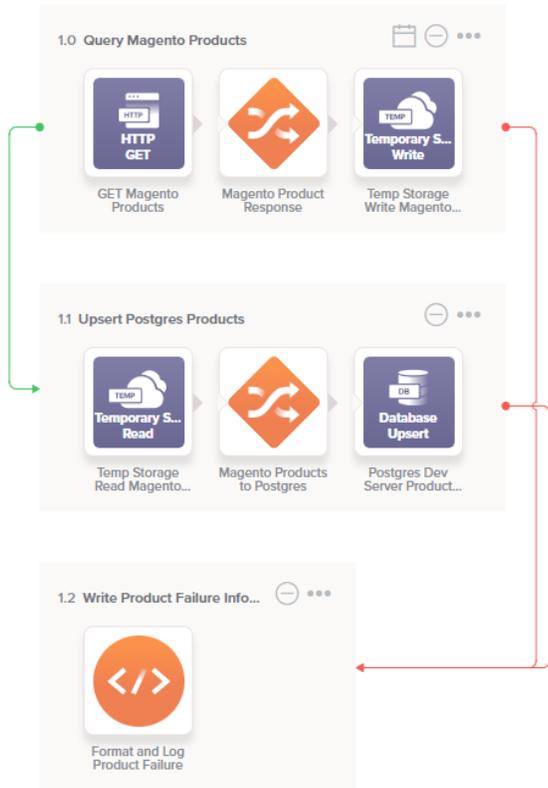
After more than one operation is created, you can configure operation actions to trigger other operations to run, send emails, or write messages to the log after an operation succeeds or fails.

To configure these actions, click the actions menu icon  in the top right of an operation and select **S**ettings:



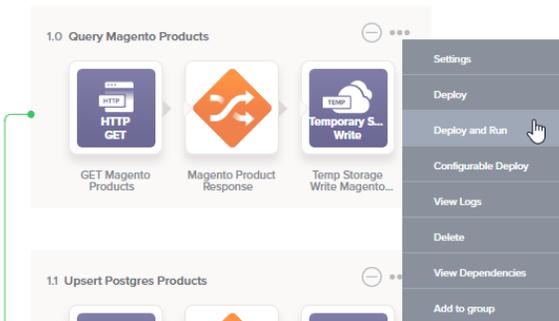
On the **Actions** tab of the settings, use the dropdowns to select the condition that should trigger the action, what action should be taken, and any additional parameters such as what other operation should be configured to run. For details, see [Operation Actions](#).

Once these actions are configured, lines will appear on the design canvas to visually indicate any "on success" (green lines) and "on failure" (red lines) actions. An operation being kicked off based on operation actions is said to be downstream of an upstream operation before it.



Deploy and Run Operations

After you have developed a chain of operations, you can deploy it to the Harmony Agent and execute it. To deploy and run an operation, click the actions menu icon  in the top right of an operation and select **Deploy and Run**:



Any operations that are downstream of the operation being deployed and executed will also be included.

Instead of manual execution, you can also configure operations to run on a schedule or an API trigger. For more information, see [Operation Deployment and Execution](#).

After the project is executed, you can validate proper behavior by viewing logs. To view logs for a particular operation and downstream operations, click the actions menu icon  in the top right of an operation and select **View Logs**. For more information see [Operation Logs](#).

Additional Resources

While you design a project, refer to the in-depth information organized by topic under [Cloud Studio](#):

- **Projects:** Learn basics about project permissions, collaboration, and saving, and about how to create, configure, deploy, migrate, export, import, and delete projects.
- **Project Components:** Browse information about what project components exist and what shared actions you can take with each component.

- **Workflows:** Find information about creating, deploying, and deleting workflows, dependencies, and what makes a workflow valid.
- **Operations:** Reference details on creating operations; configuring operation settings such as actions, options, and schedules; viewing operation logs; deploying and executing operations; viewing dependencies and deleting operations; and what makes an operation valid.
- **Connectors:** Refer to endpoint-specific documentation on configuring connections and activities to connect to and interact with a specific endpoint.
- **Transformations:** Read up on the basics and learn the intricacies of mapping data inputs to the desired target output.
- **Schemas:** Get introduced to the various types of schemas and learn how to tell when to use them.
- **Scripts:** Discover the flexibility and power of scripts to transform data, perform calculations, or perform logic validation within operations or transformations.
- **Functions:** Look up descriptions and examples of functions that are able to be used in scripts to enhance and refine data processes.
- **Variables:** Check out the different types of variables and how they can help you be more efficient in designing a project.
- **Notifications:** See how to customize email messages that can be triggered upon success or failure of an operation or called from a script.
- **Plugins:** Educate yourself on how you can extend Harmony's native capabilities using Jitterbit- or user-provided plugins.

Advanced users may also be interested in creating their own connectors for Cloud Studio using Jitterbit's [Connector Builder](#) or [Connector SDK](#).