CS473445

Automate and Connect Workflows using Autodesk's Integration Ecosystem

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Autodesk Construction Solutions

Learning Objectives

- Identify inefficient processes in a technology ecosystem and automate those workflows
- Know the APIs that surround ACC and the possibilities associated with them
- Join the session to see how PlanGrid and AWS have partnered to make construction jobsites safer and more efficient
- Evaluate when APIs or ACC Connect are the best path for integrations
- Create workflow recipes in ACC Connect to route files and data to better support business processes
- Transfer data between key construction and productivity tools with little to no code

Description

Autodesk has firmly committed to an open integration ecosystem to help construction firms collaborate and drive efficiency. As a result, technology partners offer over 150 direct integrations and Autodesk Construction Cloud™ Connect powers hundreds of possible custom integration workflows. Come learn about the APIs that surround Autodesk Construction Cloud and how to use these APIs to automate workflows and streamline inefficient processes. We will discuss how to identify inefficient processes in a technology ecosystem, how to evaluate whether to use APIs or ACC Connect to build integrations for those inefficient processes, and how to create recipes in ACC Connect to transfer data with little to no code.

Speakers

Aridam Kumar
Integration Solutions Engineer | Autodesk Construction Solutions

Based in San Francisco, Aridam is an Integration Solutions Engineer on the Partnerships team at Autodesk Construction Solutions. He works with Autodesk's customers, partners, and product teams to ensure an end-to-end integrated product experience across a wide array of construction technology solutions and supports the development and implementation of APIs.


Nicholas Nelson
Solutions Architect | Amazon Web Services

Based in Seattle, Nick is a Solutions Architect at Amazon Web Services, focused on technology in the construction industry and with over 10 years of construction experience.

Building a Robust Ecosystem of Construction Technology

At Autodesk, we strive to build not only strong products but also a robust ecosystem of integration partners. We understand that our customers leverage a variety of tools, and we want our solutions to work and integrate seamlessly with those tools by delivering connected workflows to our customers, supported by our flexible and open APIs and ACC Connect.

The integration partnerships team can help identify areas where your teams lack visibility into the processes, plans, or progress of other teams. Data silos can cause delays, inefficiencies, and pose a threat to informed decision making. Autodesk helps you eliminate double data entry and manual downloads and uploads by connecting and automating many areas of business as outlined below.
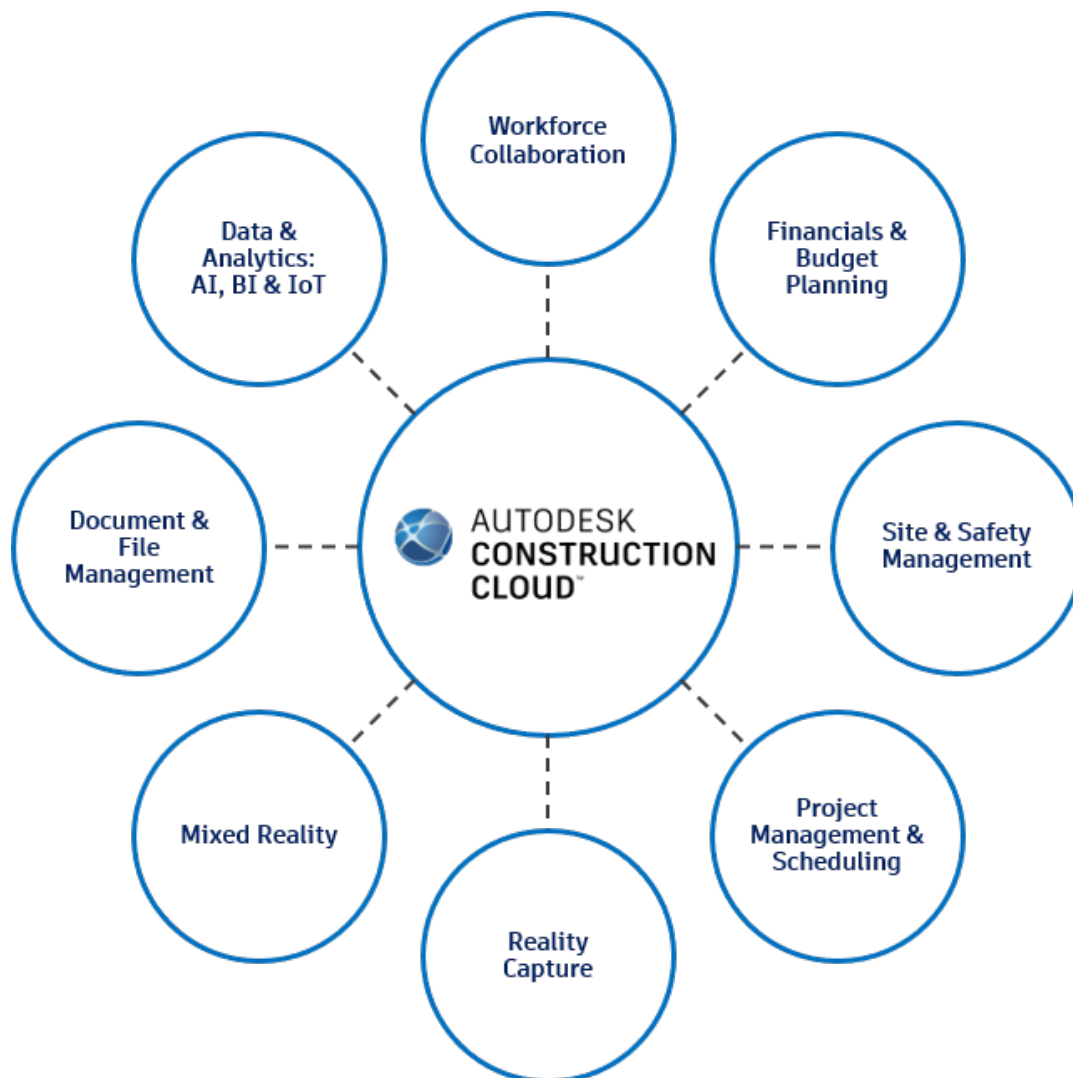

COMMON INTEGRATION CATEGORIES - AUTODESK CONSTRUCTION CLOUD

Autodesk Construction Cloud Connect

ACC Connect is an integration tool that allows users to integrate and transfer data between Autodesk Construction Cloud applications such as PlanGrid, BIM 360, BuildingConnected, and Assemble with other construction technology applications including cloud storage tools, project management applications, ERPs, CRMs, e-signature applications, and more. The primary objective of this class is to share knowledge about Autodesk's construction product APIs and ACC Connect, so that attendees can develop, manage, and operate automation workflows.

Recipes

Recipe is another term for a workflow in ACC Connect. Each recipe consists of a trigger that initiates the workflow, followed by a sequence of actions that execute each time the trigger is detected. This allows for simple but powerful methods to build automated integrations. By using application-based triggers or time-based schedulers, your recipes can be set to handle real time, scheduled, or batch events. Recipes can utilize powerful logic including branching, looping, and try/catch that allow you to build very specific integrations that fit your business needs or processes, while automatically handling errors and keeping your organization informed and connected.
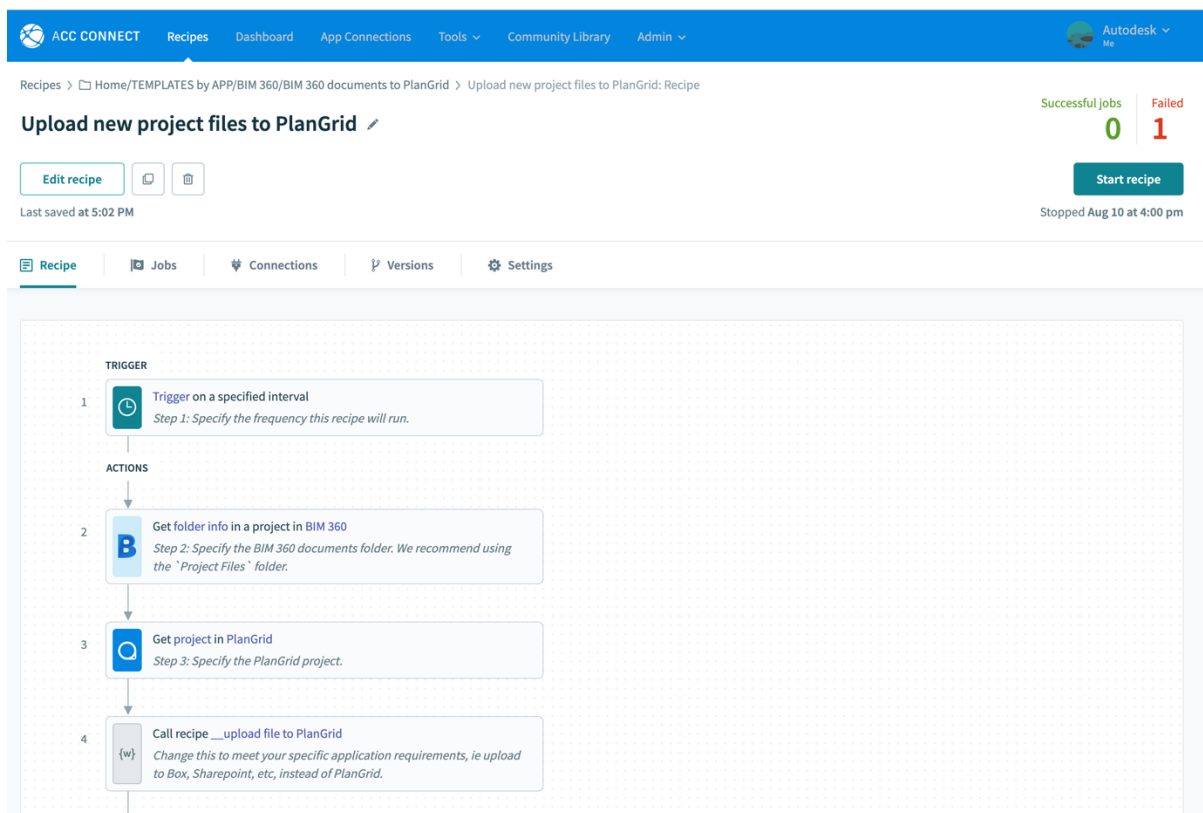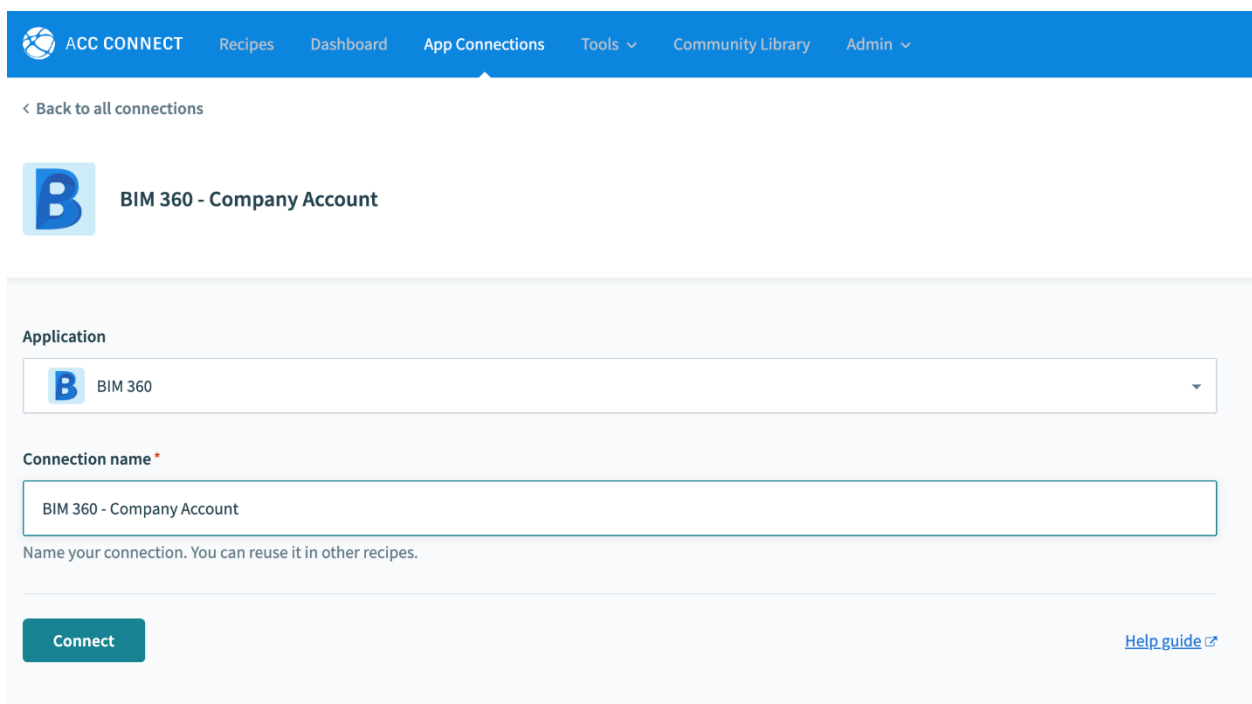

A RECIPE IN ACC CONNECT

Connectors

A connector is a pre-configured set of actions and triggers for a given application. You must authorize a connector with your application account (see *connection* below) in order to connect with the application.

Connections

A connection is an authorized instance of a connector. Connect authenticates via OAuth 2.0 for most applications, but also supports basic authentication and SSO where necessary.
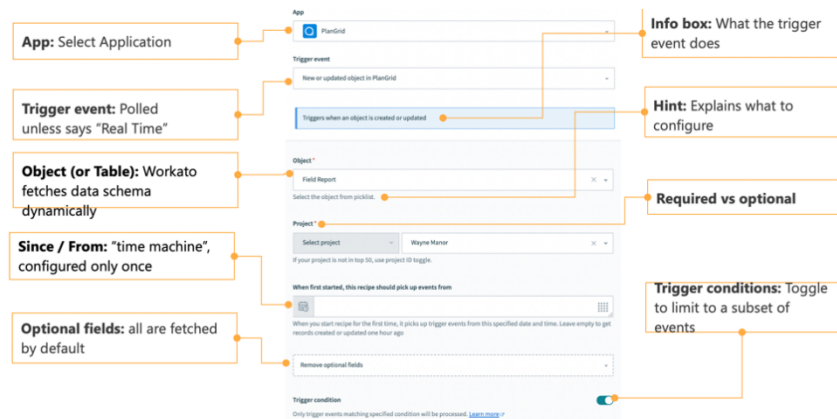

THE BIM 360 CONNECTION AUTHENTICATION SCREEN

Triggers

Triggers monitor applications for activity and kick off recipes. They can be classified into different types based on how they check for and retrieve new events. The most common triggers include real-time, scheduled, and polling-based triggers. These triggers can detect either single events or bulk actions and are delivered in the same order as events are created or modified in their respective applications.
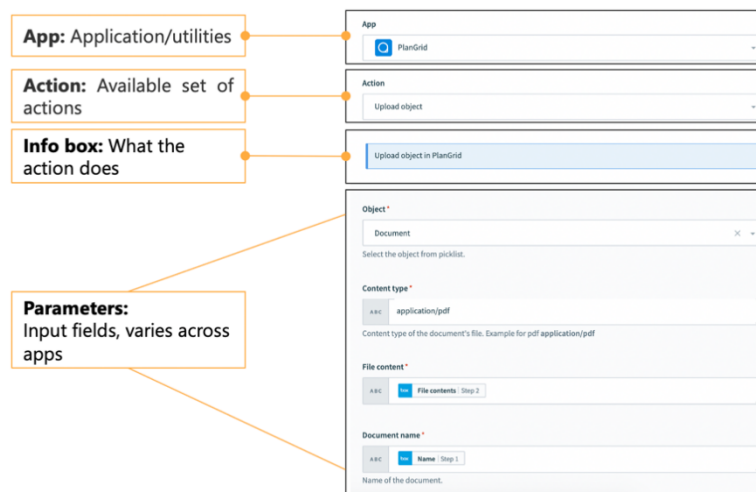
Actions

Once you have established your trigger to initiate your recipe, you can proceed with your action steps, which define what your workflow will do. Recipe steps can be simple actions, or control flow statements that help you describe business logic. Action steps vary by connector and in addition to application specific actions, ACC Connect makes several utility actions available for common tasks such as creating a CSV or sending an email.

Join the class at AU 2020 to learn more about how customers use APIs and ACC Connect to streamline and automate their business workflows.