

CS500023

ERP Integrations for Autodesk Construction Cloud

Josh Cheney, Senior Manager – Strategic Alliances at Autodesk Construction Solutions

Michael Newland, Director of Product Management at hh2

Sophat Sam, Integration Solutions Engineer Lead

Learning Objectives

- Review Autodesk Build – Cost Management Capabilities
- Meet hh2 and their Universal Construction Model integration platform
- Overview demo of Autodesk Build – Cost Management + Sage 300 CRE
- ACC Connect integrating Autodesk Build – Cost Management + QuickBooks Online

Description

This session will introduce an integration between Autodesk Construction Cloud and Construction Accounting Applications; Sage 300 CRE and QuickBooks Online. Participants learn more about Cost Management integrations, and get a sense of how your own ERP could potentially be integrated.

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Speaker(s)

Josh Cheney, Autodesk – Senior Manager - Strategic Alliances

Josh Cheney is part of Autodesk Construction Solutions at Autodesk, with a specific focus on the Integrations and ERPs. Josh has over 18 years of construction/construction tech experience, and a focus on ENR 400 firms. Relevant Experience and Highlights

- Viewpoint Construction Software – Construction-specific ERP
- ISEC, Inc. – International Specialty Subcontractor
- BuildingConnected – Bid Management Software
- Procore – Construction Management Software
- Autodesk – Project Lifecycle Management Software



Michael Newland, hh2 – Director of Product Management

With over 25 years of experience in the construction software space, Michael Newland joined the hh2 Cloud Services team as its Director of Product Management in early 2021. With a solid understanding of both construction information processes and software architecture, Michael has both a passion and track record of translating the needs of construction industry professionals into effective, outcome-focused, and award-winning software solutions. His previous roles have included –

- Founder and field consultant of Quality User Educators, a national consulting firm focused on construction accounting software.
- Founder, lead software architect, and executive of Event 1 Software, a successful software company focused on reporting solutions and business analytics for construction software users.



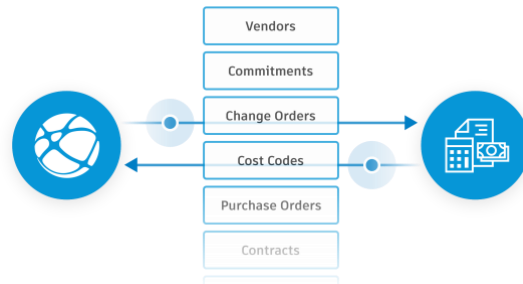
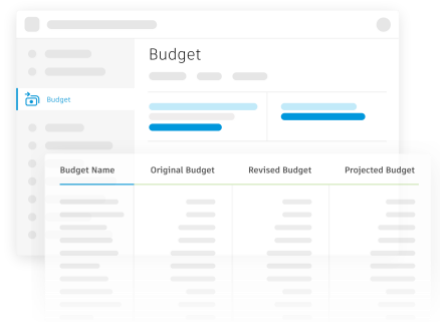
Sophat Sam, Autodesk – Lead, Integration Solutions Engineer

Sophat Sam is an Integration Solutions Engineer within Autodesk Construction Solutions based in New York City. He joined Autodesk through the PlanGrid acquisition and has been with PlanGrid since September 2016. In his role, he works with partners and customers to provide integration solutions between Autodesk and third-party products. Prior to PlanGrid, he worked with customers across the greater New York City region to implement IBM enterprise content management solutions. He has a Bachelor of Arts from Hampshire College and a Master of Architecture from University of Massachusetts-Amherst.



Autodesk Build – Cost Management Capabilities

Included in Autodesk Build is a robust set of cost management capabilities purpose-built for construction teams. Enabling teams to improve cost control, gain real-time visibility of cost-related risks, and forecast accurately by centralizing all cost activities in the cloud and within the context of the project.



[Cost Management Workflow Guide](#)

Key Functionality

Flexible Budget Structures: Set up custom budget structures that work with any accounting system and work breakdown structure.

Terminology Customization: Customize the terminology used throughout the system to suit your needs and preferences, including tool and tabs names.

Financial Markups: Create multiple project level markup configurations to apply to potential change orders, request for change orders or owner change orders before submitting to the owner.

Document Templates: Manage your own document templates using field names we can populate directly from the system to quickly generate standard format documentation for distribution.

Contracts & Contract Generator: Easily create, edit, and view supplier contracts using

Payment Applications: Effortlessly create and manage payment applications for owners and suppliers, connect payments to contracts, and automatically generate payment documents.

Tracking Actual Costs: Streamline the management of expenses by establishing a bi-directional relationship with your accounting system.

Method Related Cost Planning: In a Gantt type view, easily plan schedule related allowances such as General Conditions. Adjust the duration, unit rate and time allocated to the job to better plan the allowances with the ability to view actual costs vs. planned.

Forecasting: With all cost activities automatically pulled into the overall budget summary, gain have clear visibility into cost

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the details fly-out panel. Streamline the contract document creation process with the contract generator to compile appendices from multiple locations into a single package.

RFI to Potential Change Order: Track the origin of the change orders by creating a potential change order from an RFI or link existing RFIs to potential change orders.

Custom Approval Workflows: Utilize a decision-based workflow engine to create approval workflows to automate the approval routing of owner change orders, supplier change orders, contracts and cost payment applications based on specific conditions before sending to external recipients.

Streamline Change Orders: Manage all aspects of the change order process including logging and detailing all potential change orders, upstream budget request for change orders and formal owner change orders and downstream request for quotations, and supplier change orders.

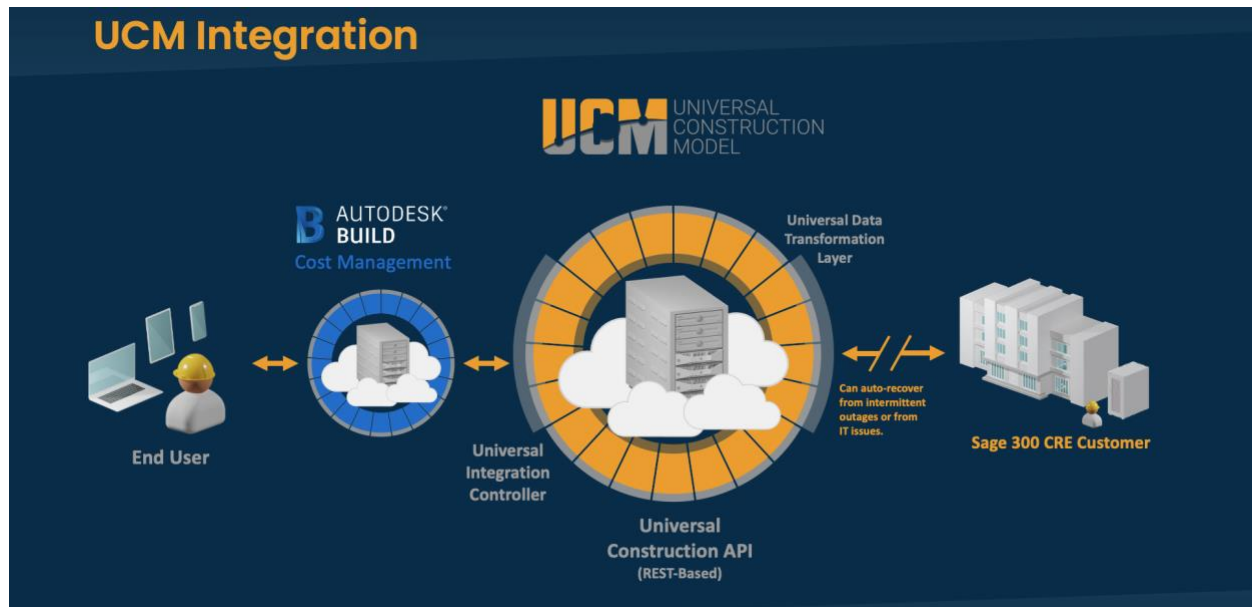
impacts, with a few clicks easily make necessary forecast adjustments.

Cash Flow Forecasting: Connect schedule tasks to budget items, perform forecast distributions, and access a project-level cash flow analysis with a dynamic time-versus-money chart for better visualization.

Controlled & Collaborative: Through user, role, and company-based permission levels easily control who has access to specific information. Bring owners and suppliers into the system to increase collaboration and streamline workflows.

Integrated: Seamlessly integrate accounting data from your ERP system with your cost data in Autodesk Build, keeping your project and accounting teams in sync and your financial information completely up to date. Leading to better visibility and informed decision-making.

Universal Construction Model (hh2) – Sage 300 CRE + Cost Management

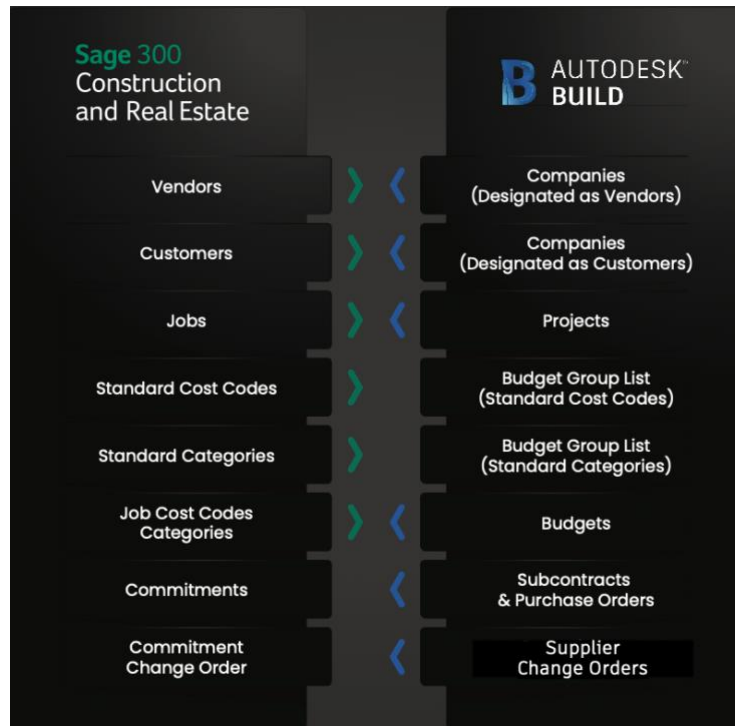


The Universal Construction Model (UCM) is a host of APIs that connect Sage 300 CRE to Autodesk Build's Cost Management module. The synchronization client is installed on a server hosting Sage 300 CRE, and pushing data to the cloud. UCM then communicates with Autodesk Build APIs to enable the seamless flow of information between Sage 300 CRE and Cost Management.

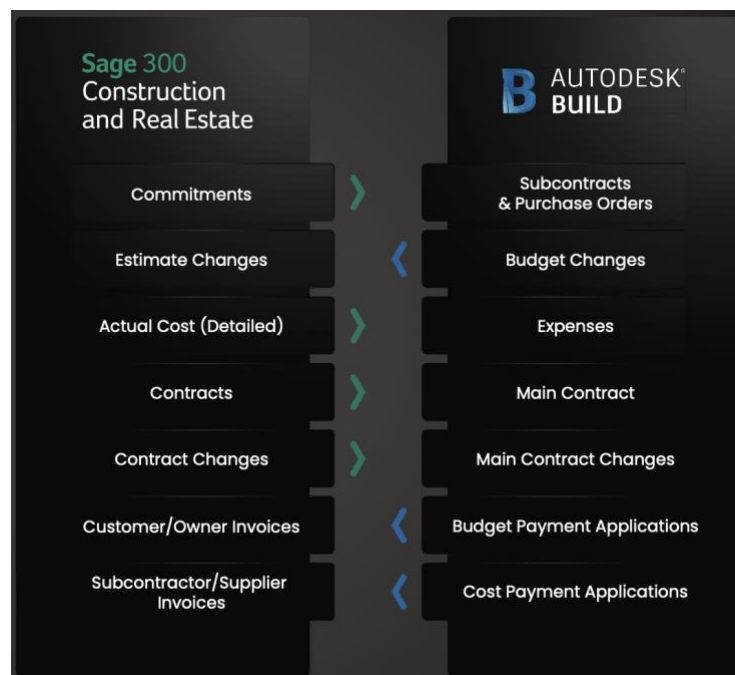
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Overview of Current and Future Integration Capabilities

- Current Integration Capabilities (MVP)



- Forthcoming Integration Capabilities (GA)



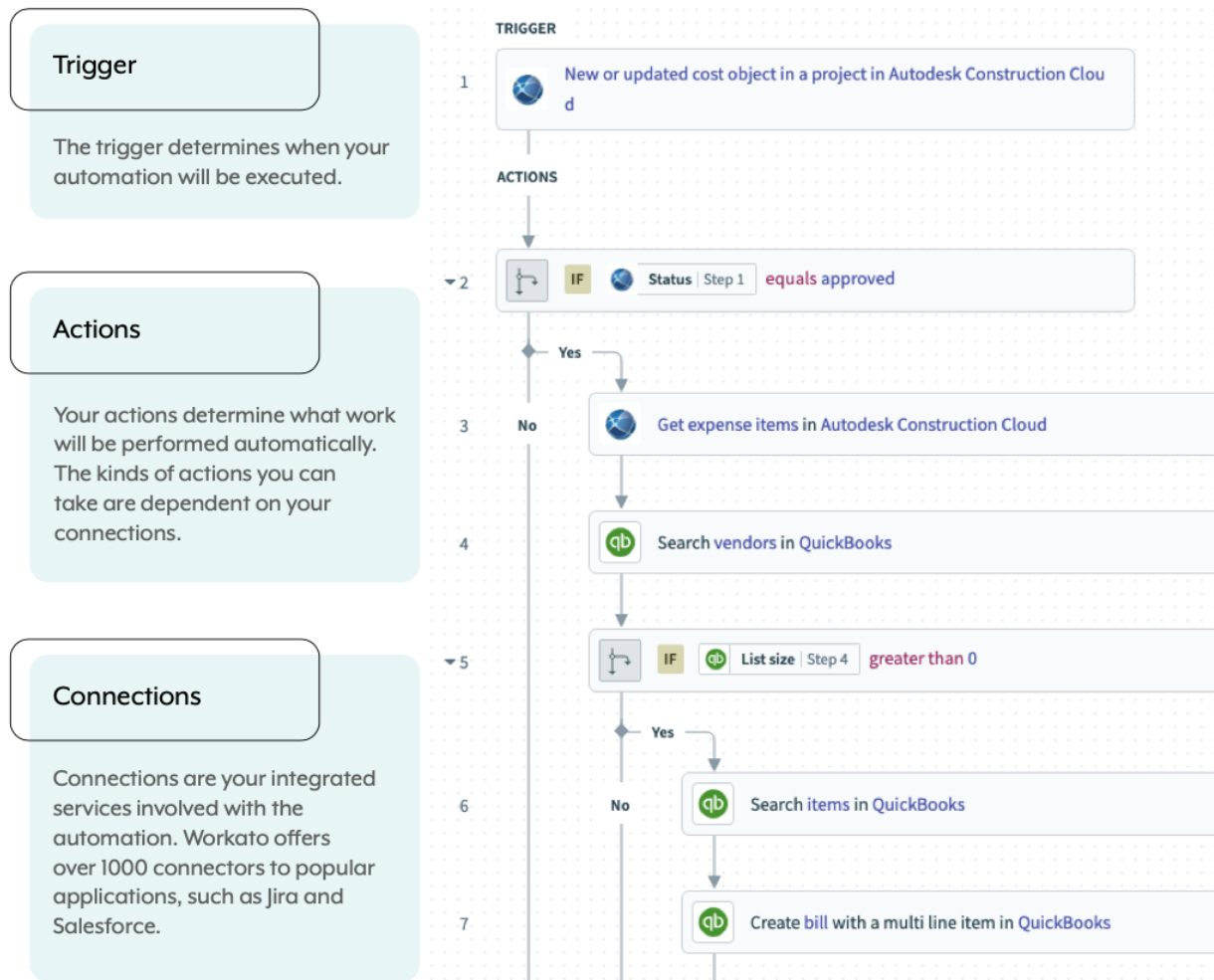
System Requirements and Supported Sage Versions

- Latest Version of Sage 300 CRE (or One Version Behind)
- Accounting Server Requirements
 - Windows 2008 Server 64 Bit
 - 64 Bit Multi-Core Processor
 - 8 GB RAM (16 GB Recommended)
 - 40 GB Hard Drive Free Space on System Partition (50% Free Recommended)
 - .NET Framework 4.5
- Updated Technical Requirements
 - <https://www.hh2.com/tech-specs>

ACC Connect + QuickBooks Online

Autodesk Construction Cloud Connect is an integration platform as a service (iPaaS) that allows customers to build custom integrations without writing software code. ACC Connect leverages the Workato platform to allow integrations to 300+ cloud applications, including Quickbooks Online among others.

Within ACC Connect, **recipes** are the building blocks of any automation. They are automated workflows built by users that can span multiple applications. A recipe is made up of one Trigger, one or more Actions, and Connections



Trigger capabilities depend on the connections and can be used to periodically query an application to see if new events are available.

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Example trigger categories can include:



Polled: Periodically queries app to see if new events are available.



Real-time: Instantaneous when event occurs in app.



Scheduled: At regular intervals of time.

Find Show optional fields

HELP ^

Triggers when an object is created or updated in a project.

Object *

Cost object

Select the object from picklist.

Account name *

Imperium

Project name *

ACC Turner Towers

Cost object *

Select cost object type

Budget

Change order

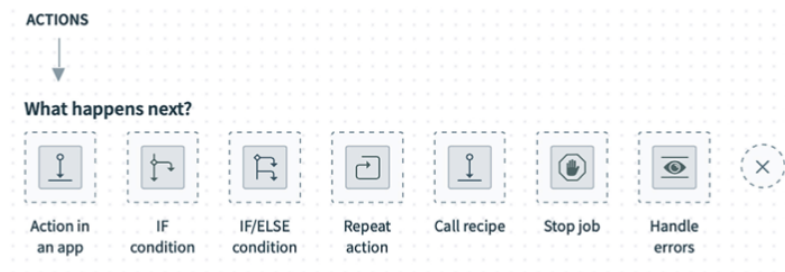
Contract

When first started, this recipe should start on

01/01/2021 12:00 am

When you start recipe for the first time, enter a date and time. Leave empty to get next trigger.

After the initial trigger, recipe steps contain **Actions** that help you describe automation logic.



Action in an app: Carry out operations in your target app, like create, update or search.



IF condition: Commits action(s) if a condition you define is true. Otherwise, continues to next step.



IF/ELSE condition: Commits action(s) if a condition you define is true. Otherwise commits a step you define, then continues to the next step.



Repeat action: Repeats action(s) for each item in a list. Ensures every item in the list is processed.



Call recipe: Runs a callable recipe. Can be thought of as function calls in programming language.



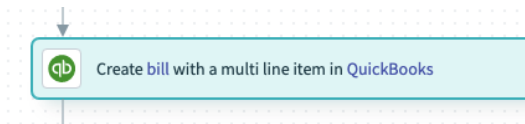
Stop job: Ends a single job from being processed further. Can be configured to mark the job as failed or successful.



Handle errors: Monitor for errors, retry a sequence of actions, and/or take remedial actions, like sending notifications.

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For example, you can use an action to create a bill in Quickbooks Online as shown:



qb Create bill with a multi line item in QuickBooks

Find Show optional fields Group map data

HELP ^

Bill requires anyone of Account line or Item line.
Tax code is required for non US locales unless Amounts are 'NotApplicable'

Bill date

Start date Step 7

Bill date is set to current date when not provided

Statement memo

ABC

Vendor ID * Text Formula

ABC qb Vendor ID Step 13

Linked transaction

Links to Check / Cheque, Expense, Credit card credit objects only

Show

Sales term ID

ABC

When left blank sets to default sales term settings

You can find a complete example of how to push expenses from Autodesk Cost to Quickbooks Online in the following recipe: <https://app.workato.com/recipes/1612394?st=e10717>

1. Expense is captured and approved within Autodesk Cost.

2. Bill is automatically created in accounting system awaiting payment.



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CONSTRUCTION
CLOUD CONNECT

Approved expense is detected and pushed to accounting system.



AUTODESK®
COST

intuit
QuickBooks®
Online