

Automate and Connect Workflows using Autodesk's Integrations Ecosystem

Aridam Kumar

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About the speaker

Aridam Kumar

- **Integration Solutions Engineer on the Partnerships team at Autodesk Construction Solutions.**
- **Works with Autodesk's customers, partners, and product teams to ensure an end-to-end integrated product experience.**
- **Supports the development and implementation of APIs**
- **Based in San Francisco, CA**

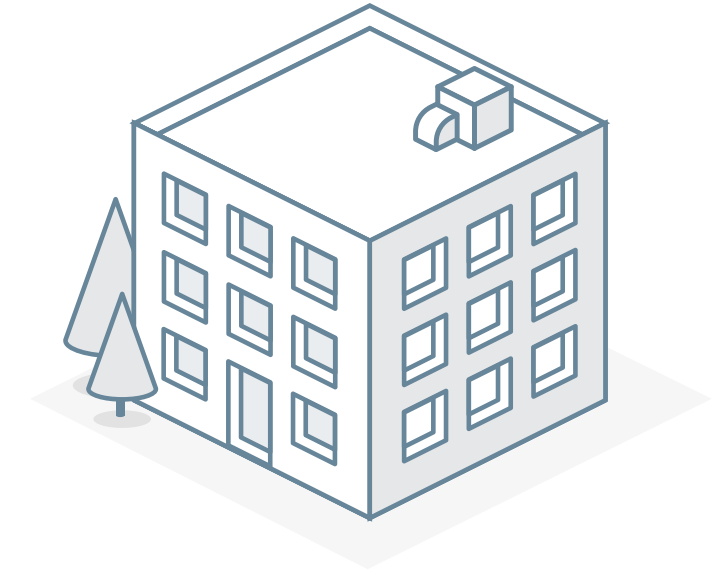
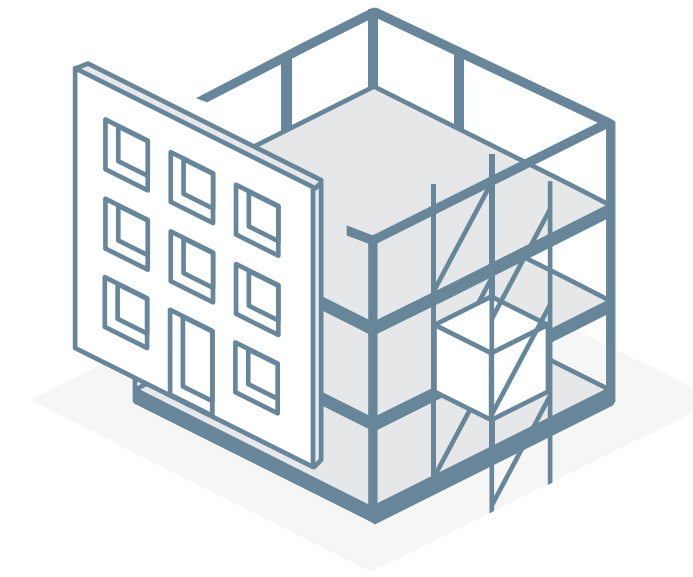
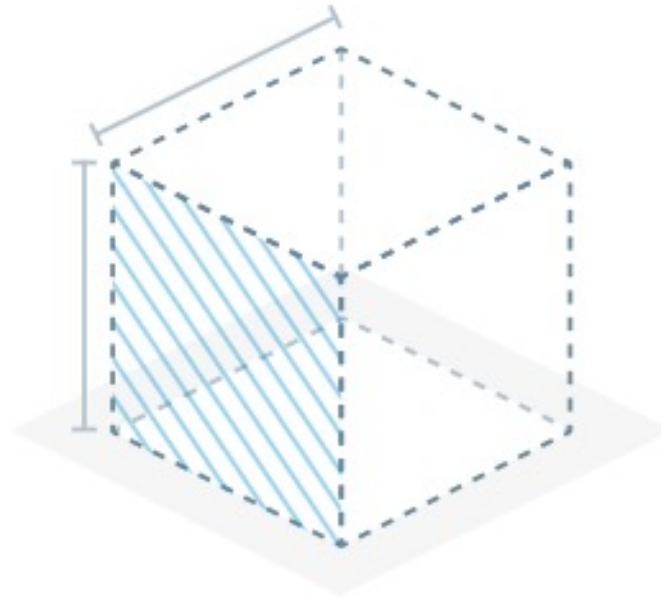
Today's Topics

IN THIS SESSION, YOU WILL:

- **Identify inefficient processes in a technology ecosystem and automate those workflows**
- **Know the APIs that surround ACC and the possibilities associated with them**
 - Demo: Integrating PlanGrid with Amazon Web Services by Nicholas Nelson
- **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**



AUTODESK CONSTRUCTION CLOUD™



	DESIGN	PLAN	BUILD	OPERATE
Workflows	<ul style="list-style-type: none">•Design Authoring•Design Collaboration	<ul style="list-style-type: none">•Model Conditioning•Model Coordination•Quantification•Bid Management•Qualification	<ul style="list-style-type: none">•Project Management•Field Collaboration•Quality & Safety•Cost Control•Commissioning	<ul style="list-style-type: none">•Facilities Maintenance•Asset Lifecycle
Shared Data	<div>Data</div> <div>Models · Drawings · Issues · Specifications · RFIs · Cost · Meeting Minutes · Assets · As-Built</div>			
Insight	<div>Predictive Analytics & Risk Management</div> <div>Predictive Analytics · Benchmark Reports · Mitigation Strategies</div>			
Network	<div>Builders Network</div>			

Building a Robust Ecosystem of Construction Technology

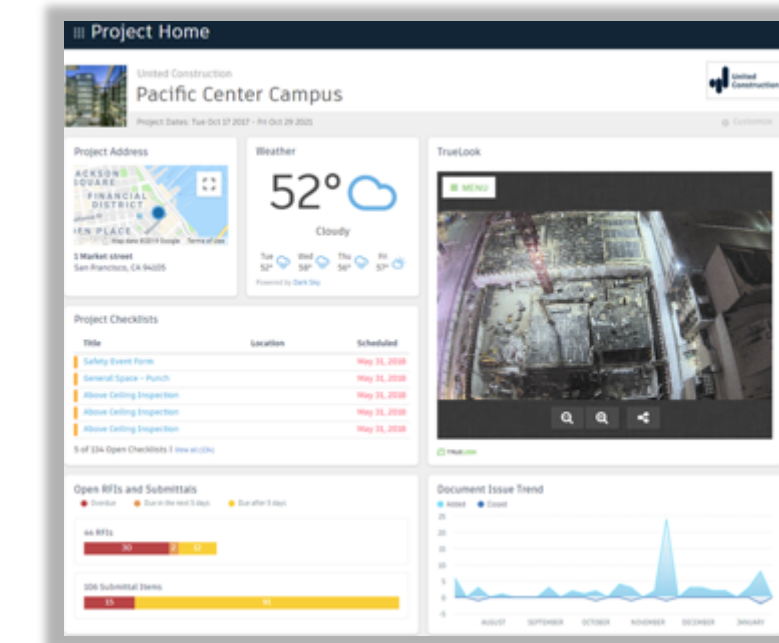
Best of breed applications integrate with Autodesk Construction Cloud



How do tools integrate?

PROJECT HOME PARTNER CARDS

Customers can view data from other tools



APIS

Customers can create connections between tools



BUILDINGCONNECTED



FORGE



assemble

AUTODESK CONSTRUCTION CLOUD CONNECT

Customers can create custom, intelligent connections without code



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How do I use the APIs?

BIM 360 API ON FORGE

Integrate with issues, RFIs, checklists and more



DATA MANAGEMENT API ON FORGE

Integrate with plans, project files, folders, and versioning



PLANGRID API

Integrate with sheets, documents, tasks, RFIs, Field Reports, and more





Integrating AWS Services with PlanGrid





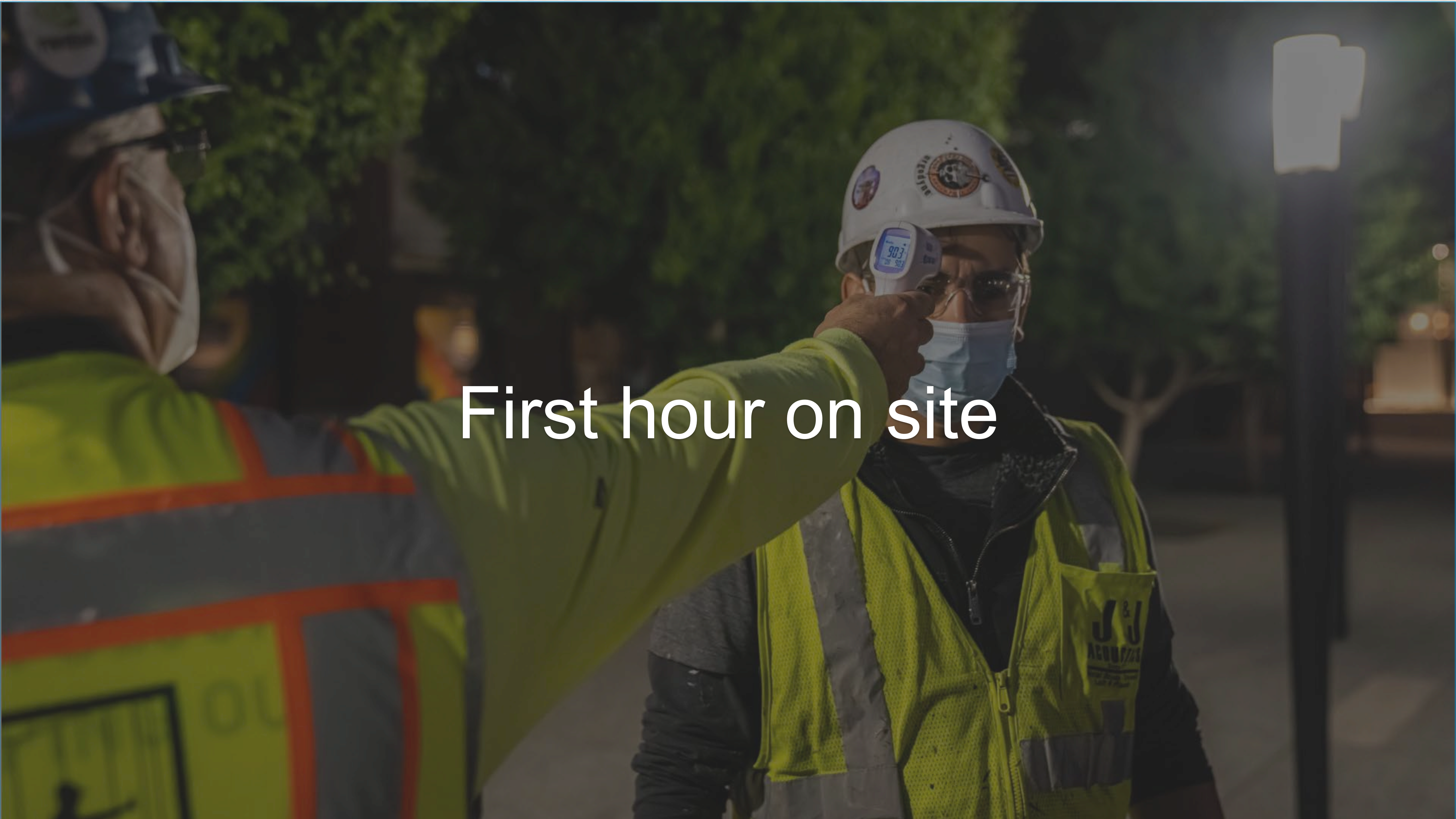
About the speaker

Nicholas Nelson

- Amazon Web Services(AWS) Solutions Architect
- Based out of Seattle, Washington, USA
- 10+ years of construction industry experience

What is Amazon Web Services (AWS)?





First hour on site



PlanGrid

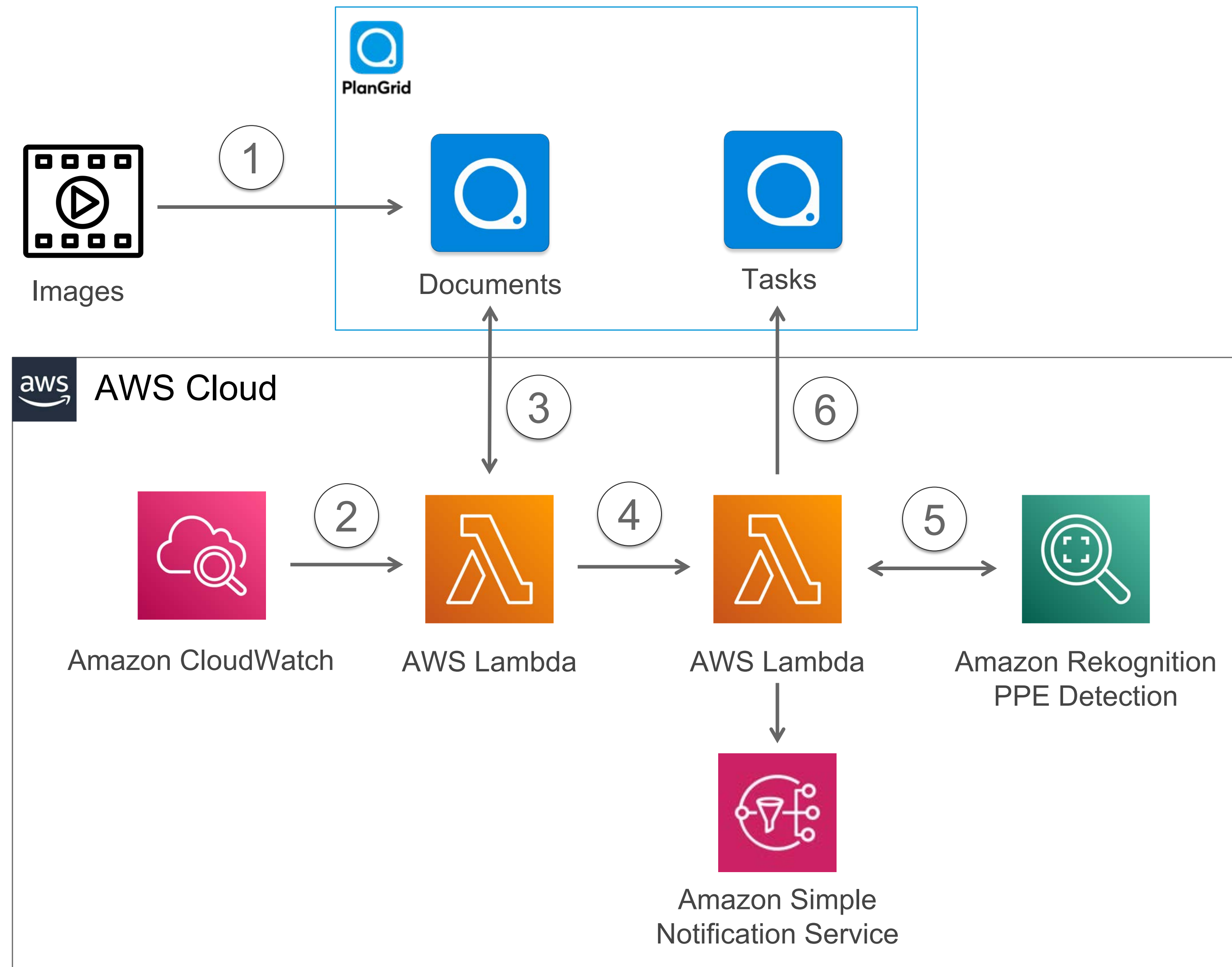
AN AUTODESK COMPANY

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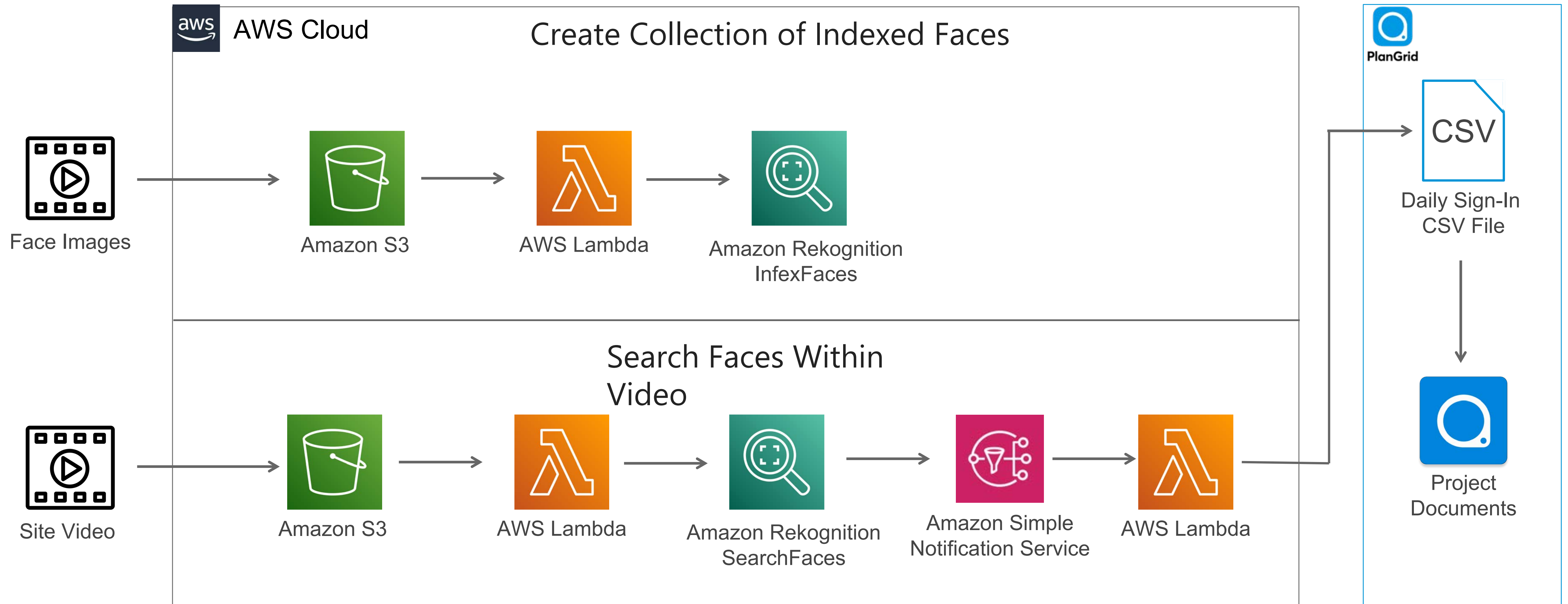


Amazon Rekognition

PPE Detection Architecture



Site Sign In Architecture





PlanGrid

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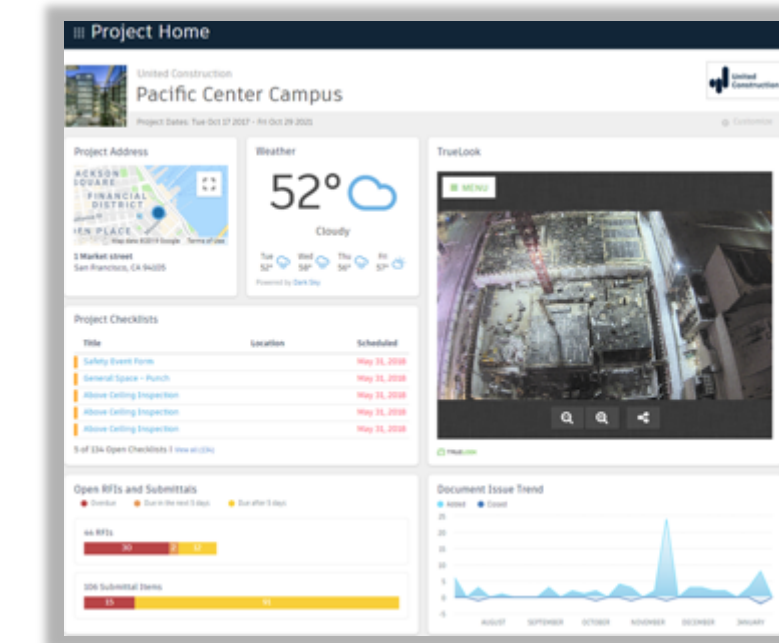


Amazon Rekognition

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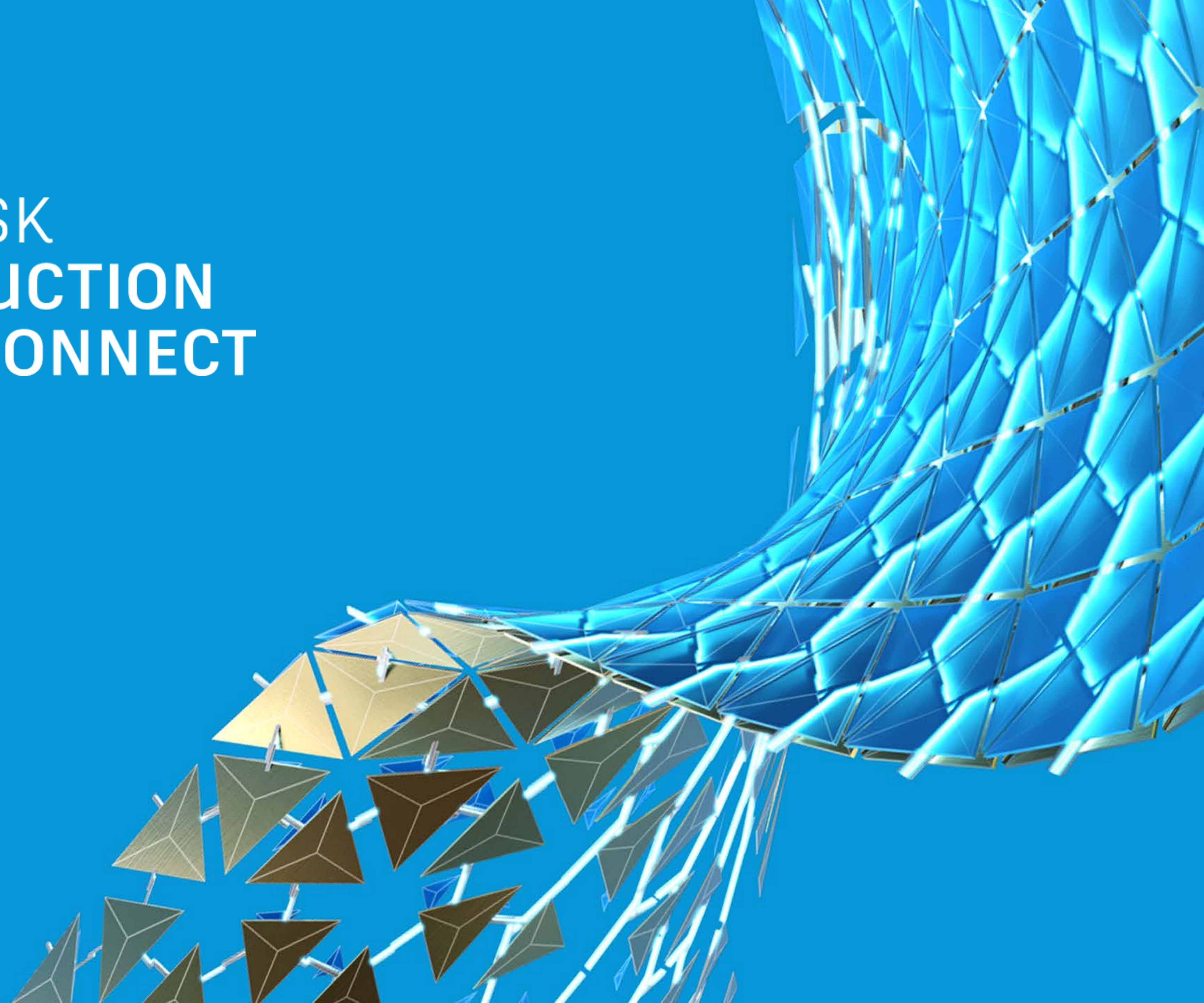
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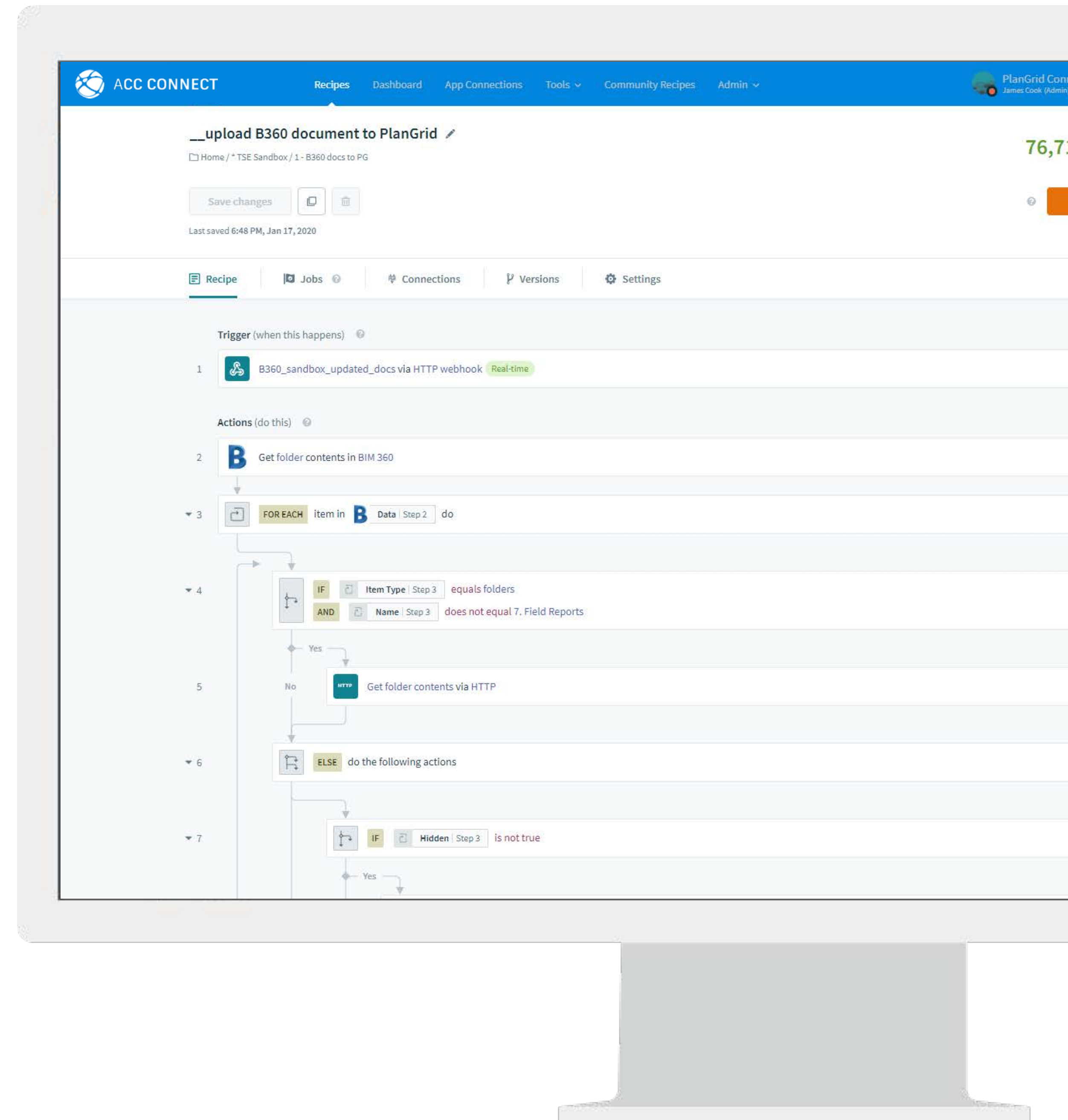
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Integrate Assemble, BIM 360,
BuildingConnected & PlanGrid
with critical software systems

- Cloud Storage
- PM/ERPs
- CRMs
- eSignature
- *Each Other*
- and more

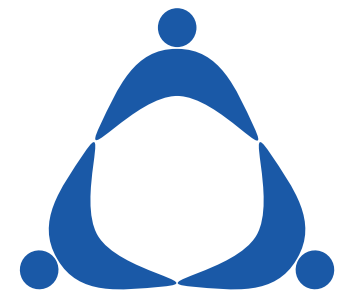
Create custom workflows between systems

- Route files and data per YOUR processes
- Leverage triggers between systems
- Keep different applications up to date



Comprehensive Integration Options

Expanding support to the entire Autodesk Construction Cloud



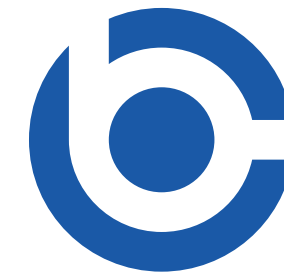
Assemble

Export custom attributes and properties from models, including quantity data.



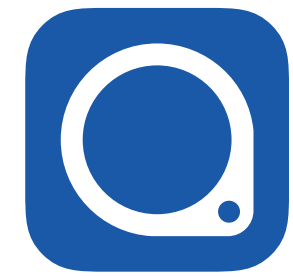
BIM 360

Integrate with Docs, Plans, Issues, and Cost.



BuildingConnected

Export bid, qualification, and contact data.



PlanGrid

Integrate with Sheets, Documents, Tasks, Photos, Field Reports, and more.

Common Integrations with ACC Connect

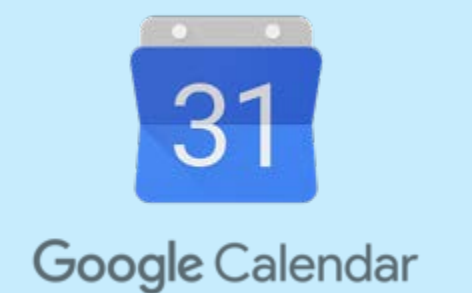
Cloud Storage & Documents



Project Management, Reporting, & Analytics

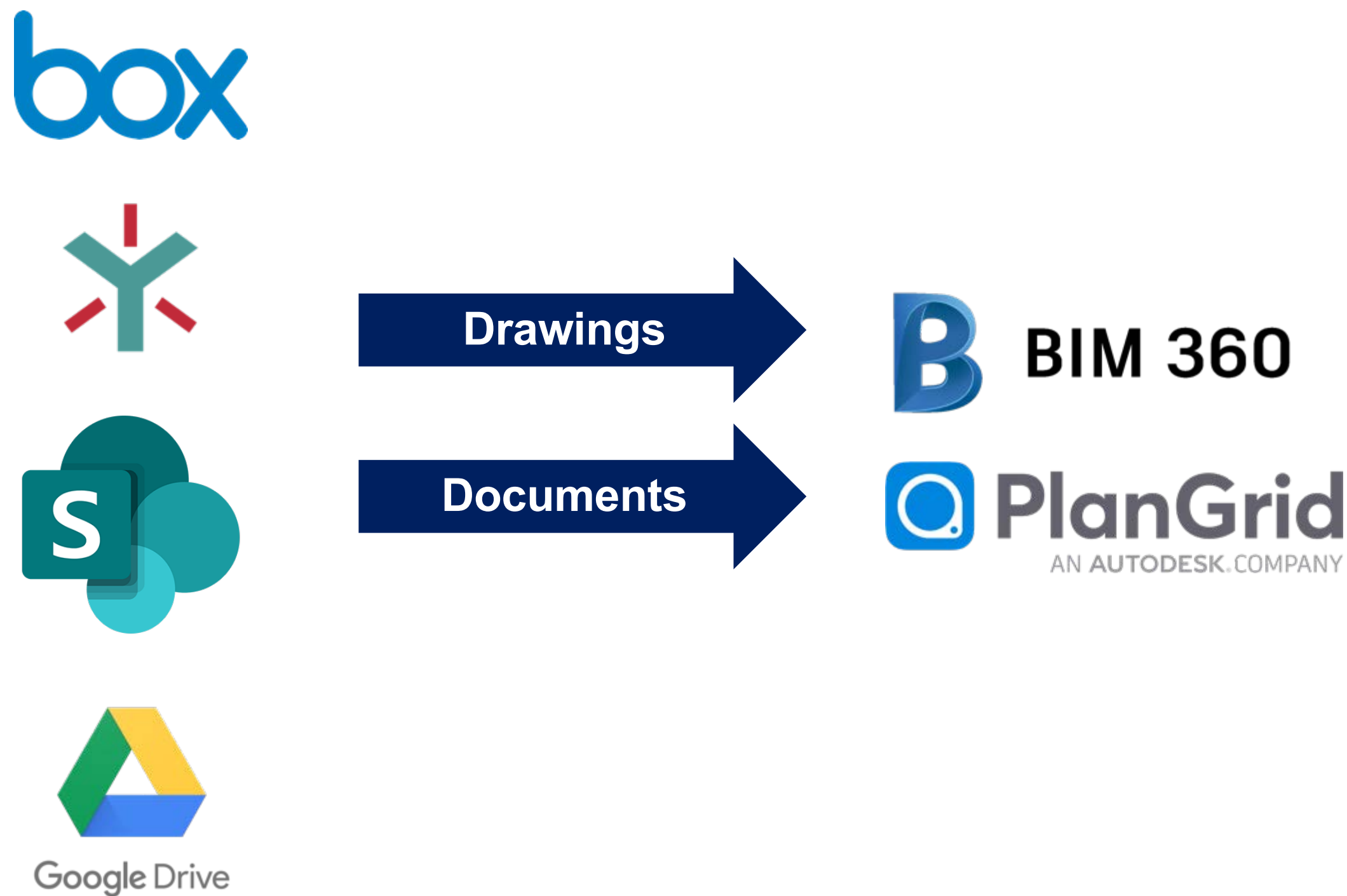


Communication & Collaboration

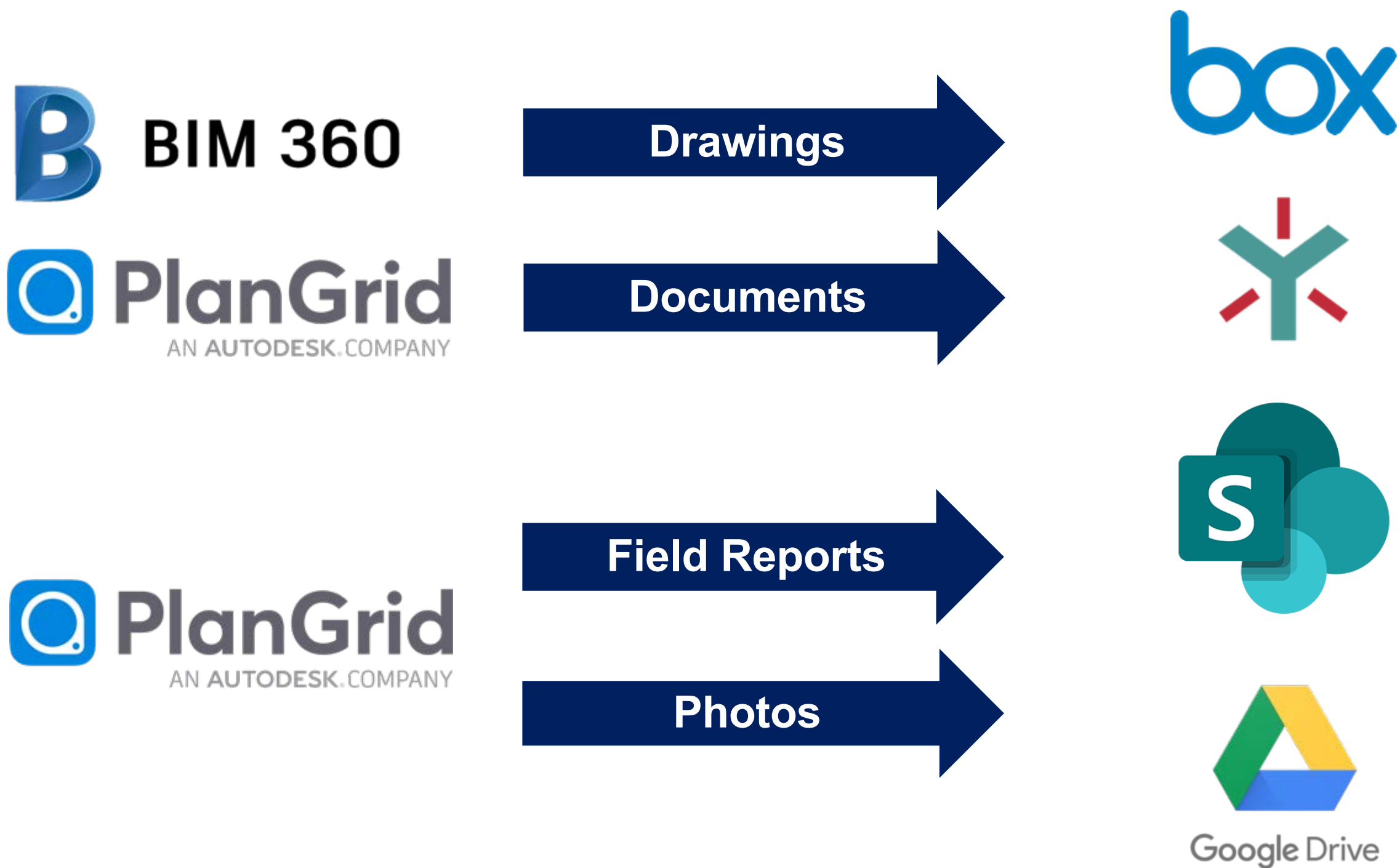


Connect with Cloud Storage

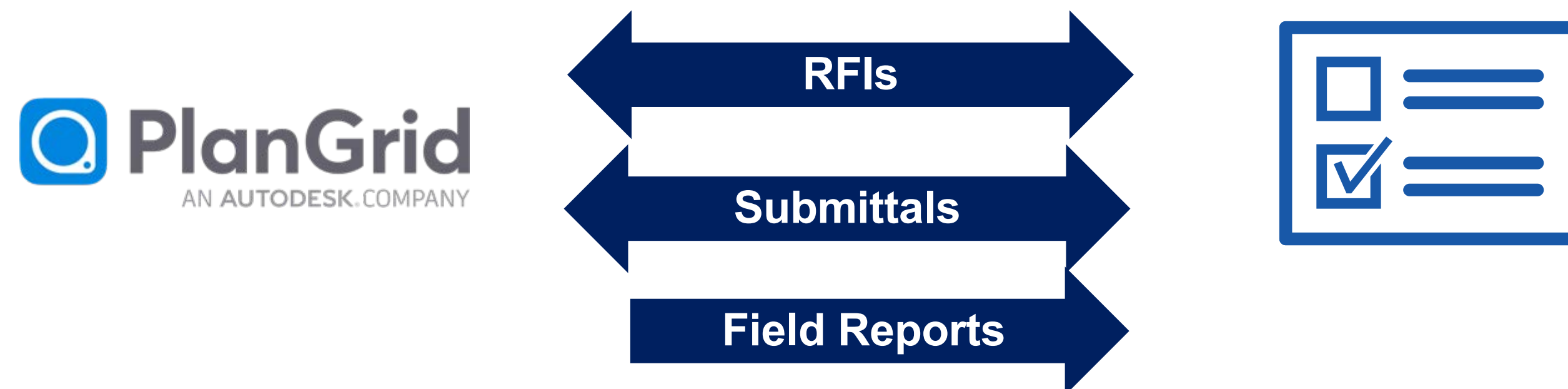
Automate Import



Automate Export



Connect with Project Management



Connect with Autodesk Construction Cloud



Connect Terminology

Recipe

Workflows in ACC Connect. Consist of a trigger followed by actions.

Connector

A set of triggers and actions pre-configured for a given application.

Connection

A user authorization connecting ACC Connect with each integrated application.

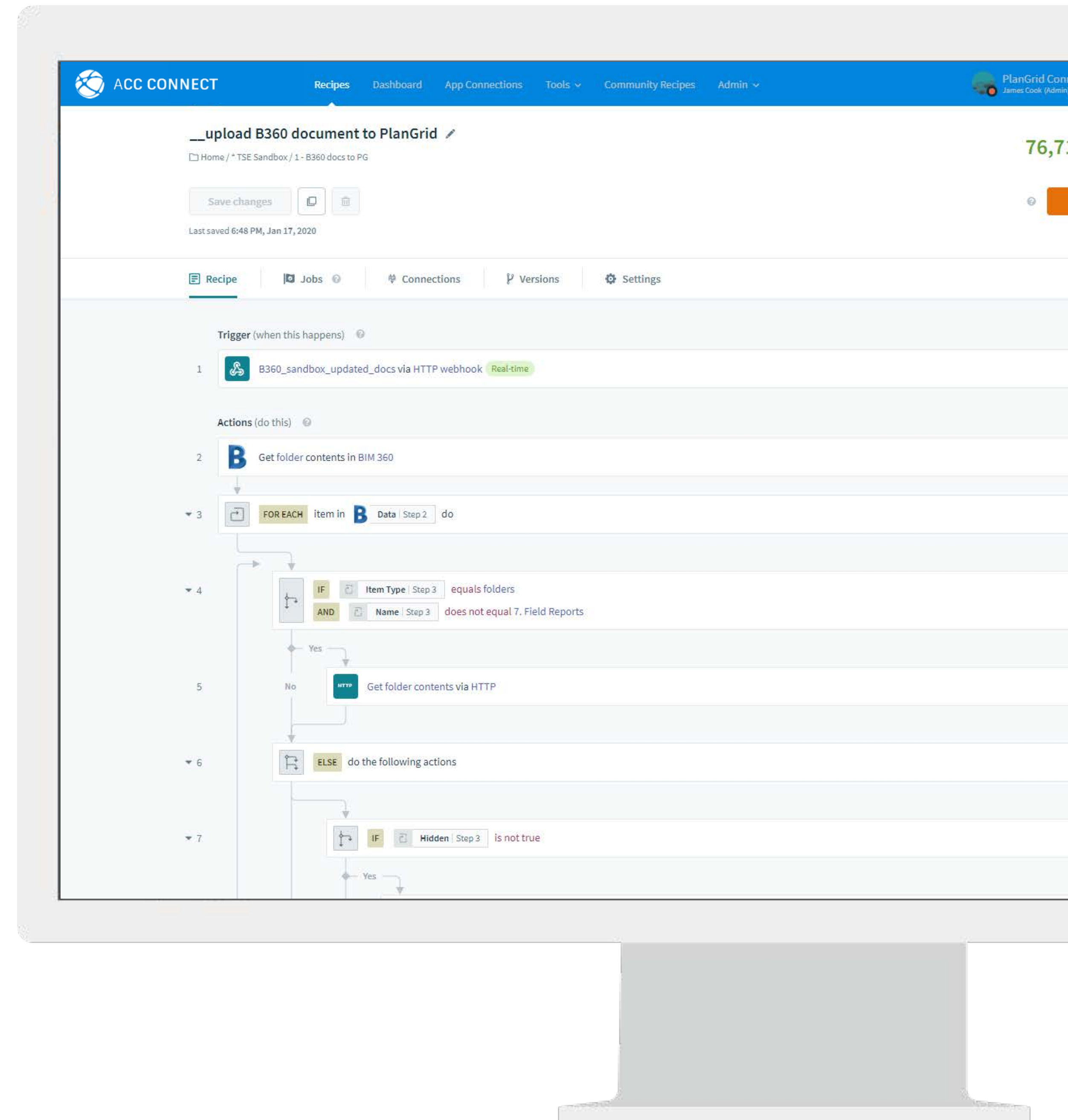
Collaborator

A member of your organization on ACC Connect. Collaborators can login and build recipes.



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DEMO



Data Export

Leverage construction data from Autodesk Construction Cloud in external sources



AUTODESK®
BIM 360™



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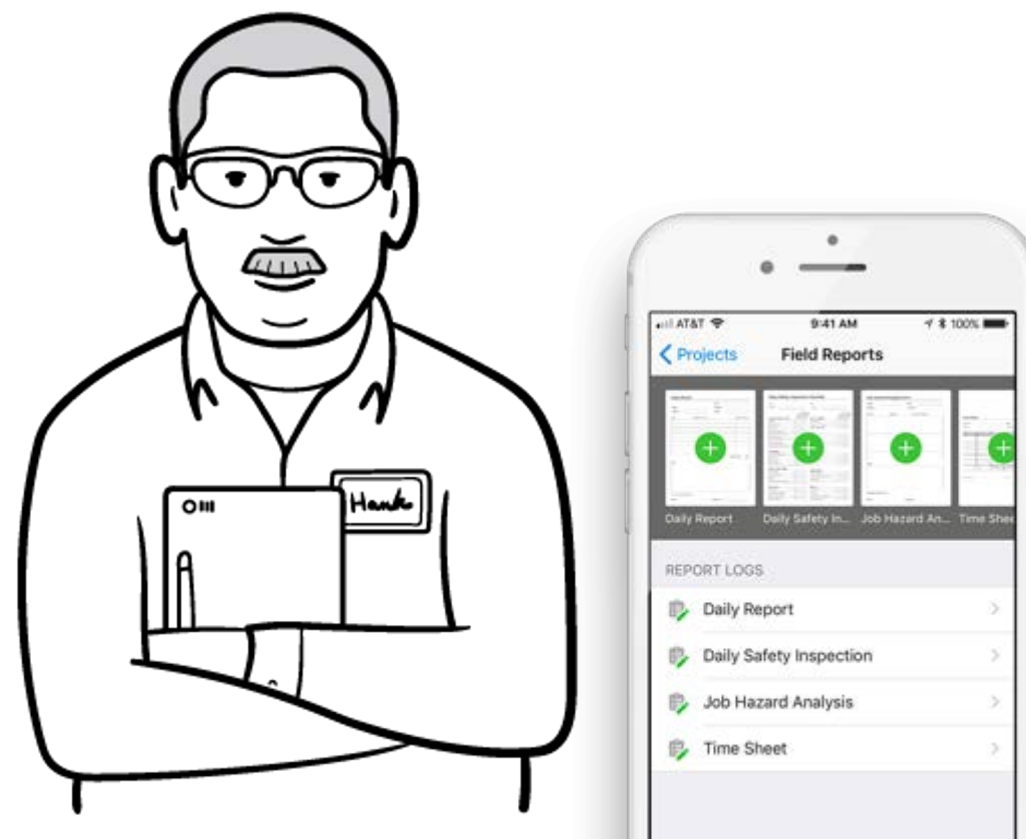
PlanGrid



PlanGrid + BIM 360 Cost + QuickBooks Online

Automate purchase order workflows through PlanGrid, BIM 360 Cost and QuickBooks

1. PlanGrid user submits requisition using a custom field report



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Connect creates PO in
BIM 360 Cost

2. BIM 360 user reviews cost item, assigns cost code, & approves



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Connect generates PO in
QuickBooks Online

3. Accounting team pays the PO via QuickBooks



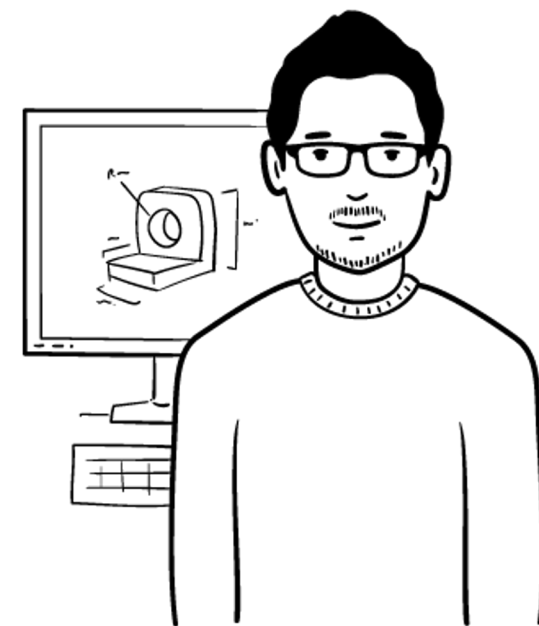
BIM 360 Docs + DocuSign

Send approved documents for digital signature

1. Addendum is posted to the project



2. Addendum is reviewed and approved within BIM 360 workflow



Connect sends addendum for signature



3. Addendum is approved and signed with digital signature



Connect posts signed addendum



4. Addendum is posted in appropriate system





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