



Autodesk Construction Cloud Project Admin API Updates

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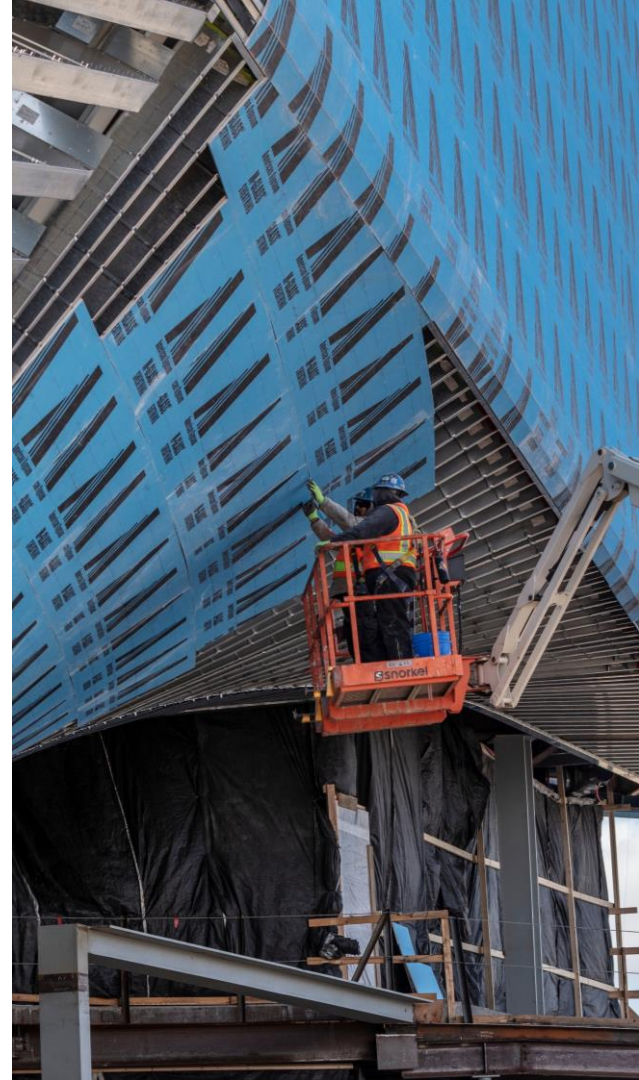
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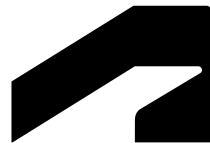
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Agenda

- 1 Project admin API updates overview
- 2 Project endpoints details
- 3 Available materials
- 4 Known limitations
- 5 Q & A





Admin API Updates

An aerial photograph of a winding asphalt road through rolling green hills. A small white car is driving on the road. A herd of dark-colored cattle is grazing on the grass to the right of the road. The hills are covered in lush green grass, and the scene is bathed in warm, golden light, suggesting late afternoon or early morning.

We want to
move to ACC.
But we cannot
without API.

Admin API

When do we have
ACC Admin API?

Admin



- Projects/Users read (June, 2023)

- GET projects/id
- GET project users/id
- Compatible: ACC and BIM 360
- 3LO, 2LO, 2LO+impersonation

New!

- Projects/Users write (Nov, 2023)

- Released!!
- ACC only
- 3LO, 2LO+impersonation



- Partially compatible, e.g.,

- No method to distinguish hub type
- **High priority area**

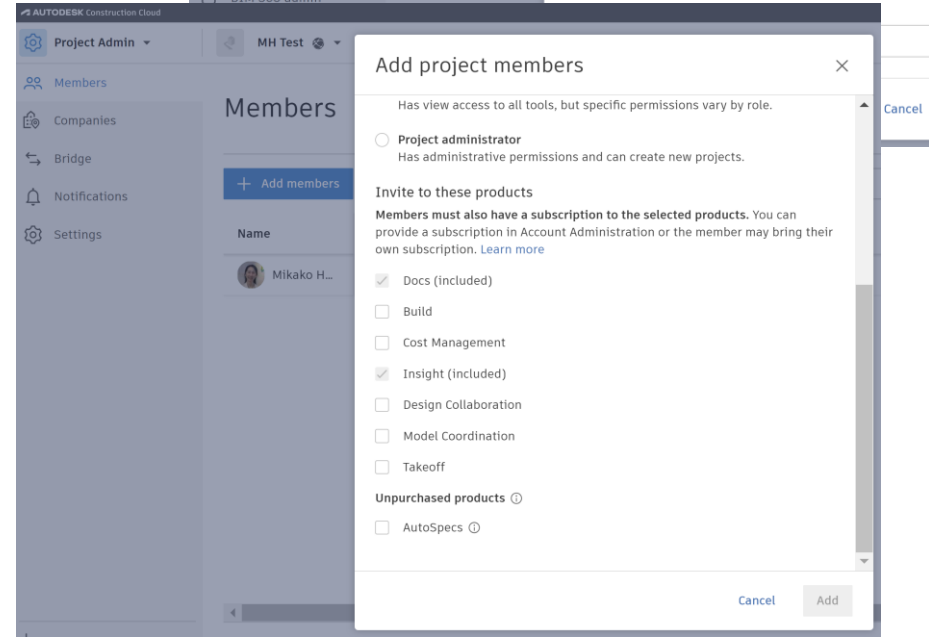
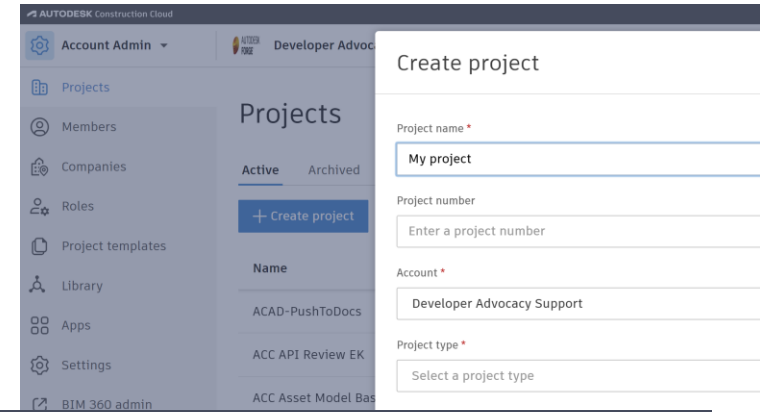


The screenshot displays the Autodesk Construction Cloud Account Admin interface. The top navigation bar includes 'Account Admin' and 'Autodesk Forge Partner Development'. Below this, a secondary navigation bar lists 'PROJECTS', 'MEMBERS', 'COMPANIES', 'ROLES', 'ANALYTICS', 'SETTINGS', and 'APPS'. The main content area is titled 'Project Directory' and states 'The Project Directory lists all projects in your account.' It features an 'Add' button and a search bar labeled 'Search project by name'. A table shows '185 Current Projects | View Archived' with columns for Name, Members, Companies, and Project Status. Below this, a detailed view of the 'Projects' section is shown, including a 'Create project' button and a table with columns for Name, Number, and Type. The table lists projects such as '000Woods', '001_CDE_ITALY', '003_CDE_ITALY', and '00-ADSK Docs'.

Name ^	Number	Type
000Woods	000	🌐
001_CDE_ITALY	001_2021	🌐
003_CDE_ITALY	1003	🌐
00-ADSK Docs	567483	🌐

Admin project/users creation

- *New!* **Now Public**
 - Create project from template
 - Assign products to users
 - Not compatible with BIM 360
- Not included in the current phase
 - Job status
 - Webhooks
 - Roles
 - Update projects



Project Admin API – New Endpoints

Category	Endpoints	
Projects	GET	accounts/:accountId/projects
	GET	projects/:projectId
	POST	accounts/:accountId/projects
Project Users	GET	projects/:projectId/users
	GET	projects/:projectId/users/:userId
	POST	projects/:projectId/users
	POST	/v2/projects/projectId/users:import
	PATCH	projects/:projectId/users/:userId
	DELETE	projects/:projectId/users/:userId

- 9 endpoints

Project Admin API – Retrieve Projects

Category	Endpoints	
Projects	GET	accounts/:accountId/projects
	GET	projects/:projectId
	POST	accounts/:accountId/projects
Project Users	GET	projects/:projectId/users
	GET	projects/:projectId/users/:userId
	POST	projects/:projectId/users
	POST	/v2/projects/projectId/users:import
	PATCH	projects/:projectId/users/:userId
	DELETE	projects/:projectId/users/:userId

- Retrieve a list of projects & a project with a given id
- Compatible with BIM 360 and ACC projects
- 3LO, 2LO, 2LO+user impersonation
- Retrieve templates:
filter[classification]=template

Project Admin API – Create a Project

Category	Endpoints	
Projects	GET	accounts/:accountId/projects
	GET	projects/:projectId
	POST	accounts/:accountId/projects
Project Users	GET	projects/:projectId/users
	GET	projects/:projectId/users/:userId
	POST	projects/:projectId/users
	POST	/v2/projects/projectId/users:import
	PATCH	projects/:projectId/users/:userId
	DELETE	projects/:projectId/users/:userId

- Create a project w/ & w/o template
- ACC project only
- 3LO, 2LO + user impersonation (User context required)
- Create a template:
classification=template &
type=Template Project ^{*1}
- Return jobId. Future enhancement.
- No update API

*1) different from GET projects filter

Project Admin API – Retrieve Project Users

Category	Endpoints	
Projects	GET	accounts/:accountId/projects
	GET	projects/:projectId
	POST	accounts/:accountId/projects
Project Users	GET	projects/:projectId/users
	GET	projects/:projectId/users/:userId
	POST	projects/:projectId/users
	POST	/v2/projects/projectId/users:import
	PATCH	projects/:projectId/users/:userId
	DELETE	projects/:projectId/users/:userId

- Retrieve a list of project users & a project user with a given id
- Compatible with BIM 360 and ACC projects
- 3LO, 2LO, 2LO+user impersonation

Project Admin API – Add Project Users

Category	Endpoints	
Projects	GET	accounts/:accountId/projects
	GET	projects/:projectId
	POST	accounts/:accountId/projects
Project Users	GET	projects/:projectId/users
	GET	projects/:projectId/users/:userId
	POST	projects/:projectId/users
	POST	/v2/projects/projectId/users:import
	PATCH	projects/:projectId/users/:userId
	DELETE	projects/:projectId/users/:userId

- Add a project user or a list of users
- ACC project only
- 3LO, 2LO + user impersonation (User context required)
- Add template owners (Not default users)
- Import is /v2/. Others /v1/
- Import returns jobId. Future enhancement

Project Admin API – Update a Project User

Category	Endpoints	
Projects	GET	accounts/:accountId/projects
	GET	projects/:projectId
	POST	accounts/:accountId/projects
Project Users	GET	projects/:projectId/users
	GET	projects/:projectId/users/:userId
	POST	projects/:projectId/users
	POST	/v2/projects/projectId/users:import
	PATCH	projects/:projectId/users/:userId
	DELETE	projects/:projectId/users/:userId

- Update a project user
- ACC project only
- 3LO, 2LO + user impersonation (User context required)
- Update a configuration member

Project Admin API – Remove a Project User

Category	Endpoints	
Projects	GET	accounts/:accountId/projects
	GET	projects/:projectId
	POST	accounts/:accountId/projects
Project Users	GET	projects/:projectId/users
	GET	projects/:projectId/users/:userId
	POST	projects/:projectId/users
	POST	/v2/projects/projectId/users:import
	PATCH	projects/:projectId/users/:userId
	DELETE	projects/:projectId/users/:userId

- Remove a project user
- ACC project only
- 3LO, 2LO + user impersonation (User context required)
- Remove a configuration member

GET projects/project users

Account Admin

Projects

GET

accounts/:account_id/projects (beta)

GET projects/:project_id (beta)

PATCH

projects/:project_id/image

Companies

Account Users

Project Users

Business Units

Cost Management

Data Connector

Files (Document Management)

Model Coordination

Model Properties

Relationships

filter[products]

array: string

A comma-separated list of the products that the returned projects must use. Only projects that use one or more of the listed products are returned.

Note that when a project is created, every product that can be used in that project on the same platform (ACC or BIM 360) is activated for the project, regardless of whether the user is assigned to the product. All products associated with the project are returned in the response.

Some products are exclusive to ACC or to BIM 360, others are available on both platforms.

ACC

Possible ACC values: `build`, `docs`, `takeoff`, `cost`, `autospecs`, `financials`, `buildingConnected`, `capitalPlanning`, `accountAdministration`, `insight`, `projectAdministration`, `modelCoordination`, `designCollaboration`, and `cloudWorksharing`.

BIM 360

Possible BIM 360 values: `fieldManagement`, `costManagement`, `glue`, `documentManagement`, `projectHome`, `assets`, `quantification`, `plan`, `field`, `projectManagement`, `accountAdministration`, `insight`, `projectAdministration`, `modelCoordination`, `designCollaboration`, and `cloudWorksharing`.

filter[name]

A project name or name pattern to filter projects by. Can be a partial match based on the

<https://aps.autodesk.com/en/docs/acc/v1/reference/http/admin-accounts-accountidprojects-GET/>

ACC Unified Products Service Access

The screenshot displays the Autodesk Construction Cloud (ACC) Project Admin interface. The top navigation bar includes the 'Project Admin' dropdown menu, which is circled in yellow. The main content area is titled 'Members' and shows a list of project members. On the right, a sidebar displays the profile of Mikako Harada, including her contact information and role. Below the profile, there are dropdown menus for 'Company' (Developer Advocacy and Support), 'Role' (BIM Manager), and 'Access level' (Project administrator). At the bottom right, a section titled 'Assigned products and permissions' is circled in yellow, showing a list of products with toggle switches for their status. The products listed are Docs, Design Collaboration, Model Coordination, Takeoff, Build, Cost Management, Insight, and AutoSpecs. The 'AutoSpecs' product is currently turned off.

Project Admin

Members

Members List:

Name	Email	Phone	
BN Bohdan N...	bohdan.nakone...	-	
Mikako G	mikakoharada3...	-	
Mikako H...	mikako.harada...	603 206 9169	
Xiao Dong...	xiaodong.liang...	18511530	

Mikako Harada
603 206 9169 (office)
mikako.harada@autodesk.com
Active

Company: Developer Advocacy and Support

Role: BIM Manager

Access level: Project administrator

Assigned products and permissions

- > Docs ☒
- > Design Collaboration ☒
- > Model Coordination ☒
- > Takeoff ☒
- > Build ☒
- > Cost Management ☒
- > Insight ☒
- Unpurchased products**
AutoSpecs ☐

Showing 1-4 of 4

ACC Unified Products Licenses (not in scope)

- You can assign license in two ways
 - In manage.autodesk.com by contract owner
 - In ACC by any Account admin
- No API for this part in this release

The image displays two screenshots from Autodesk's user management interfaces. The top screenshot shows the 'AUTODESK Construction Cloud' 'Account Admin' interface. The 'Account Admin' menu item is circled in yellow. The 'Account members' section shows a list of users with columns for Name and Status. The bottom screenshot shows the 'manage.autodesk.com' 'User Management by Product' interface. The URL 'manage.autodesk.com/user-access/products/product-list' is circled in yellow. The interface shows a table of products and their available seats.

Name	Seats available
BIM Collaborate	499 of 500
BIM Collaborate Pro	470 of 500
Build - 5000	499 of 500

ACC Unified Products Licenses (not in scope)

- **Workaround** is to use import from csv
(although does not fully automate in this way...)

The screenshot shows the Autodesk user management interface. On the left is a navigation sidebar with sections: Account, Home, Products and Services, User Management, and Billing and Orders. The 'User Management' section is expanded, showing 'By User', 'By Product' (selected), and 'By Group'. The main content area displays details for 'BIM Collaborate Pro', including 'Includes 11 items', 'Assigned groups: BIM Collaborate Pro can't be assigned to groups.', and '470 seats available | 500 seats total'. A yellow circle highlights the 'Assign users' button. Below this, a list of 'Assigned users (30)' is shown, with two users visible: Adam Nagy and Augusto Goncalves, each with an 'Unassign' button. An 'Assign users' modal is open on the right, with the 'Import to assign' tab selected. A yellow circle highlights the 'Upload CSV file' button. The modal text states 'You can assign 499 more users.' and 'Assign by uploading a CSV file with user information.' It includes 'Import instructions' and a table example for CSV format.

Assign users

Assign **Import to assign**

You can assign 499 more users.

Assign by uploading a CSV file with user information.

Upload CSV file

Import instructions

Create a comma-separated file (CSV) listing the users to import and assign.

- Each entry should be on its own line and follow this format:

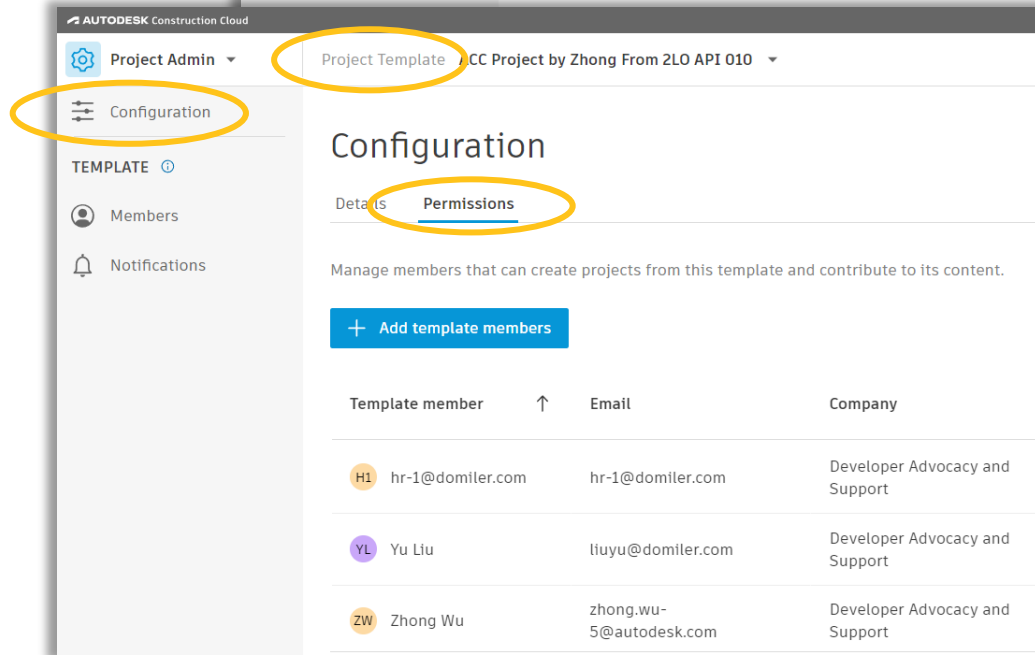
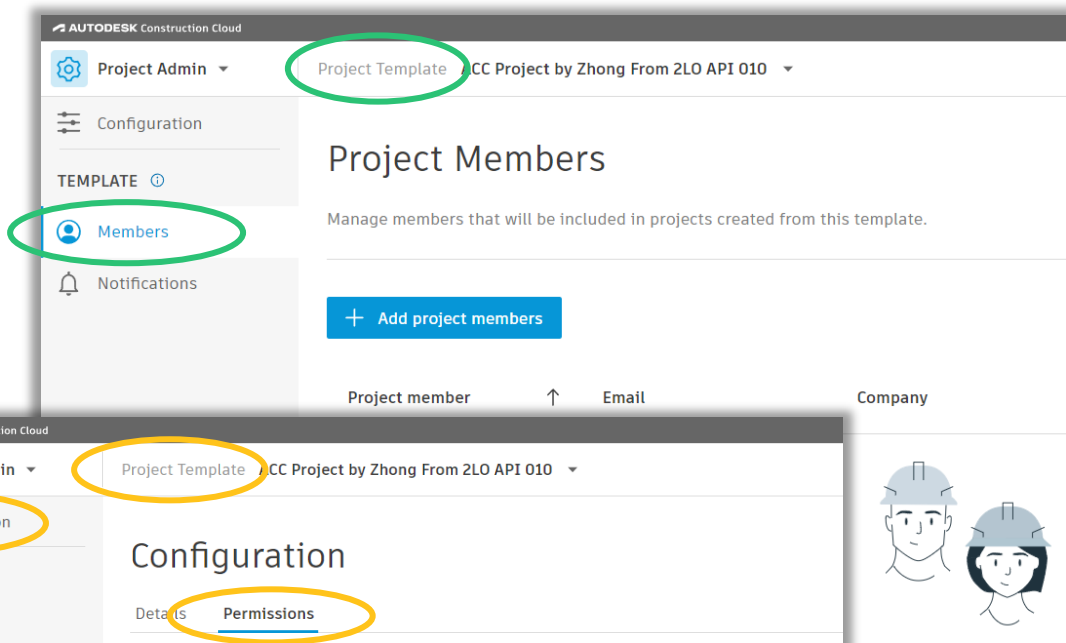
	A	B	C
1	First name	Last name	E-mail address
2	John	Smith	jsmith@email.com

- Users that already have access to this product will not be assigned another seat.

Cancel

Project Template

- Members >> Project Members
 - Will be copied to a new project
 - No API to populate
- Configuration >> Permissions >> template members
 - users who manages Template
 - POST project users API will add users here

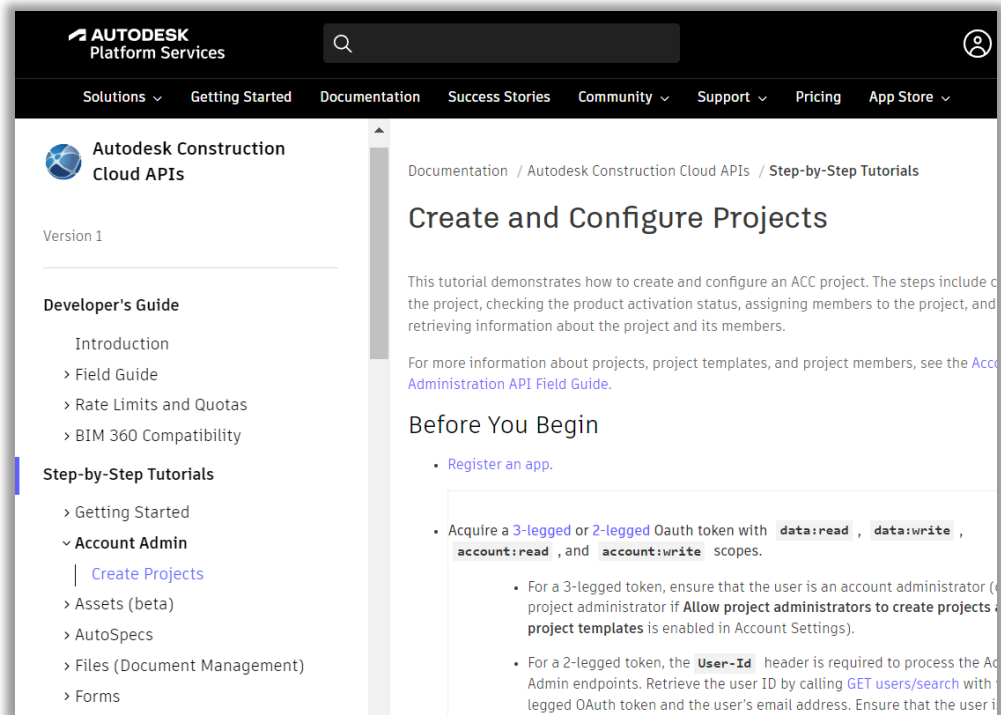


Available Resources


Documentation

- aps.autodesk.com >>
 - Step-by-Step tutorials
 - Reference Guide


Postman Collection






Postman Collection

 **aps-acc.admin.api-postman.collection** Public Edit Pins Unwatch 7

main 1 Branch 0 Tags Add file Code

 **JohnOnSoftware** Add ACC Admin postman collection db411aa · 2 weeks ago 1 Commits

 ACCProjectSetupTutorial	Add ACC Admin postman collection	2 weeks ago
 LICENSE	Add ACC Admin postman collection	2 weeks ago
 README.md	Add ACC Admin postman collection	2 weeks ago

README MIT license

ACC Admin API Postman Collection

This repository contains API collection as follow for different purpose which could help you understand the usage of ACC Admin API:

- [ACC Project Setup Tutorial](#), includes a set of API working as tutorial of ACC Project Setup workflow.

ACC Project Setup Tutorial

2 Legged Token Tutorial

VIEW Prep Step 0: Reset the environment variables

POST Prep Step 1: Get 2 legged access token

GET Prep Step 2: Get ACC Account

GET Prep Step 3: Find Account Admin Id by Email

GET Prep Step 4: Find the template project

POST Step 1: Create a Production Project from template

GET Step 2: Check the Project Status by Polling

POST Step 3A: Add Project Admin to Trigger Copy Template Members Process (if applicable)

POST Step 3B: Assign Multiple Users to the Project

GET Step 4: Confirm That Each User Was Added to the Project

PATCH Step 5: Configure Project Member Access to Products

GET Step 6: Check the Project Member Status

DEL Step 7: Remove a Project Member

3 Legged Token Tutorial

VIEW Prep Step 0: Reset the environment variables

VIEW Prep Step 1: Get 3 legged access token(please setup 3 Legged Token in parent folder)

GET Prep Step 2: Get ACC Account

GET Prep Step 3: Retrieve the Account Admin Id

GET Prep Step 4: Find the template project

POST Step 1: Create a Production Project from template

GET Step 2: Check the Project Status by Polling

POST Step 3A: Add Project Admin to Trigger Copy Template Members Process (if applicable)

POST Step 3B: Assign Multiple Users to the Project

GET Step 4: Confirm That Each User Was Added to the Project

PATCH Step 5: Configure Project Member Access to Products

GET Step 6: Check the Project Member Status

DEL Step 7: Remove a Project Member

<https://github.com/autodesk-platform-services/aps-acc.admin.api-postman.collection>

Q1: Missing project members from a template

- **Question:**

- *I'm trying to create a project from a template project. However, if I use the API, members in the template are not copied to the new project.*

- **Answer:**

- **Reason 1:** When creating a project from a template, you need to assign a project admin to trigger the process to copy users from template project members. Please see [Step-by-Step Tutorials: Create Project - Step 3A](#).
- **Reason 2:** Also, you need to add project admin right after POST projects ([within about one hour](#)). Otherwise, the member won't be copied.
- **Reason 3:** Project members in template will be copied. (not Configuration template members.)

Call POST Project Users or Users:imports to assign a project admin right after POST projects

Q2: How to tell the new project ready?

- **Question:**

- I created a project by the API and I need to upload files to the Docs folder. How can I tell when the project is ready to make such an operation?

- **Answer:**

- Currently, you will need to poll the project information and check the **status** of project and each product as shown in right picture.

Note: when calling POST projects, Admin service launches an asynchronous job to create the project and activate all the products, and the jobId is returned in the response body. However, currently there is no public way to check the details using the jobId. This will be a future enhancement.

```
GET {{base_domain}}/construction/admin/v1/projects/:project_id

Params • Authorization Headers (9) Body Pre-request Script Tests • S

Body Cookies Headers (16) Test Results (1/1)

Pretty Raw Preview Visualize JSON ↕

16 "deliveryMethod": "Unit Price",
17 "endDate": "2015-12-31",
18 "imageUrl": "https://bim360-ea-ue1-prod-storage.s3.amazonaws.com",
19 "jobNumber": "HP-0002",
20 "lastSignIn": null,
21 "latitude": "37.791799",
22 "longitude": "-122.394428",
23 "memberCount": 0,
24 "memberGroupId": "326205650",
25 "name": "ACC Project by Zhong From 3LO API 031",
26 "platform": "acc",
27 "postalCode": "94001",
28 "projectValue": {
29   "key": "docs",
30   "name": "docs",
31   "status": "activating",
32   "language": "en",
33   "icon": "https://bim360-ea-ue1-prod-storage.s3.amazonaws.com"
34 },
35 "sheetCount": null,
36 "startDate": "2010-01-01",
37 "stateOrProvince": "CA",
38 "status": "active",
39 "thumbnailImageurl": "https://bim360-ea-ue1-prod-storage.s3.amazonaws.com",
40 "timezone": "America/Los_Angeles",
41 "type": "School",
42 "updatedAt": "2023-12-08T21:17:36.372Z"
```


Known Limitations

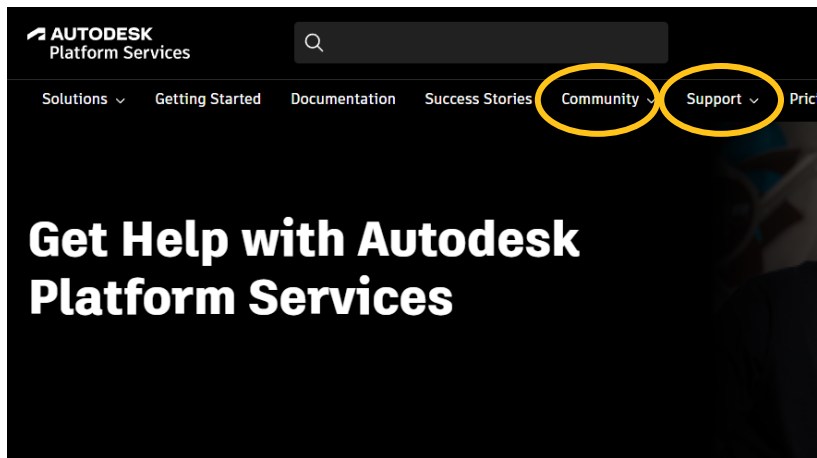
Missing API

- **Update and remove projects**
- **Add default members to a template projects.** (API works for configuration members or template owner.)
- ACC compatible version of **GET Industry Roles** -
(BIM 360 version works while it is written as not compatible. Workaround is to use Data Connector API.)
- Assign product license to a user (Account Admin)
- Check a job status with **JobId**
- Webhooks API

Where to get help

<https://aps.autodesk.com>

- Support
 - Stackoverflow
 - aps.help@autodesk.com
 - Calendly 1-1
- Community >> Events
 - Accelerator
 - Boot camp
 - Registration link under Community >> Events
 - Jan – incl. AEC Data Model
 - April – include ACC (TBD) – ideas welcome



Accelerator



DECEMBER 11 - 14

**Developer Accelerator,
Shanghai, China**



FEBRUARY 26 - MARCH 1

**Developer Accelerator,
Online**



FEBRUARY 26 - MARCH 1

**Developer Accelerator,
Boston**



APRIL 15 - 19

**Developer Accelerator,
Munich**



JUNE 3 - 7

**Developer Accelerator,
London**

Bootcamp – online event January

January 22nd

Simple Viewer



Authentication API



Data Management



Model Derivative



Viewer

January 23rd

Dashboards



Viewer

January 24th

Design
Automation



Design Automation



AutoCAD / Civil 3D



Revit



Inventor



3Ds Max

January 25th

Data Model



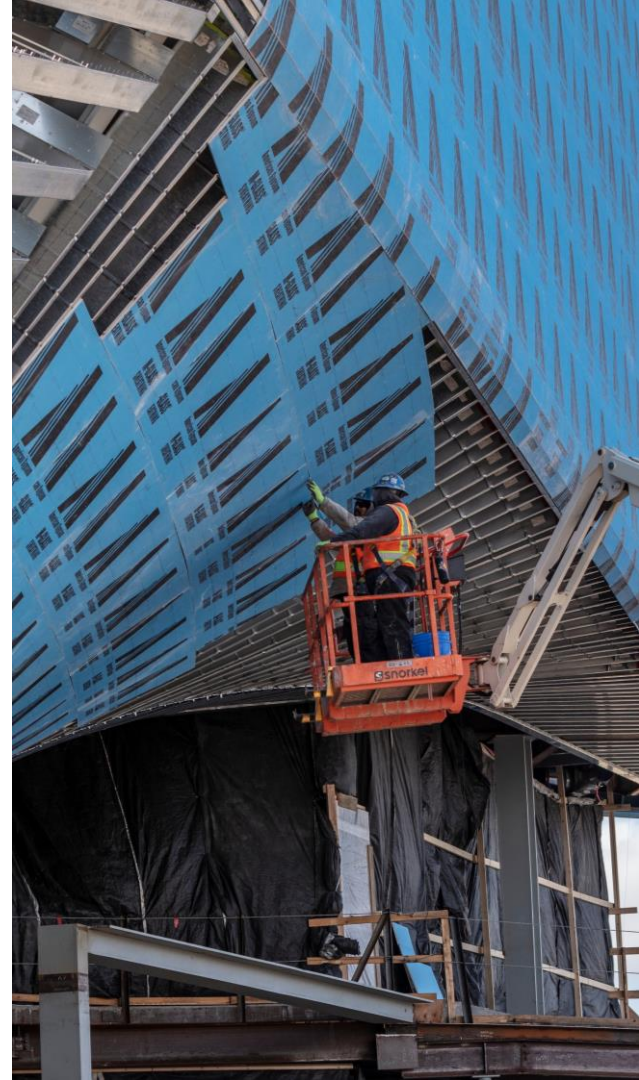
AEC Data Model API



Docs

Summary

- 1 Project admin API updates overview
- 2 Project endpoints details
- 3 Available materials
- 4 Known limitations
- 5 Q & A



Thank you!



Make Anything