

# Stoplight Onboarding Guide

This onboarding guide is now read only. The [current version](#) is located in the Stoplight app, in the \_Autodesk Stoplight Docs folder. Any updates should be made there.

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## Tool Overview

### What is Stoplight?

[Stoplight](#) is a third-party tool that includes capabilities for API design, documentation, mocking, testing, and discovery. It has been chosen as the primary Autodesk API design platform, supporting our [API-workflow](#).

### Accessing Stoplight

There are two versions of Stoplight. The legacy version is called Next; Platform is the new version.

This onboarding guide focuses on Stoplight Platform, which is where you should implement your API.

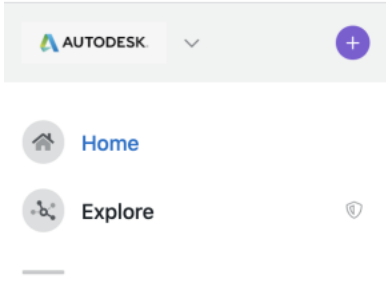
The new Platform instance will officially replace Next at Autodesk in the near future. We will run both Next and Platform in parallel until teams have migrated existing workflows from Next.

- Access the Autodesk instance of Stoplight Platform:  
<https://platform.stoplight.autodesk.com/>  
Chrome or Firefox are recommended. Editing in Stoplight Studio is not supported on Safari at this time.
  - The service leverages Github for authentication and authorization purposes. Users who log in for the first time must authorize Stoplight when prompted by Github.
- Go [here](#) for connection details for accessing the Autodesk instance of Next, as well as related documentation for using Next.
- There is also a desktop app version of Stoplight Studio for Platform. You can use either the web app or desktop app for editing your code and documentation.  
<https://meta.stoplight.io/docs/studio/docs/Basics/web-vs-desktop-app.md>

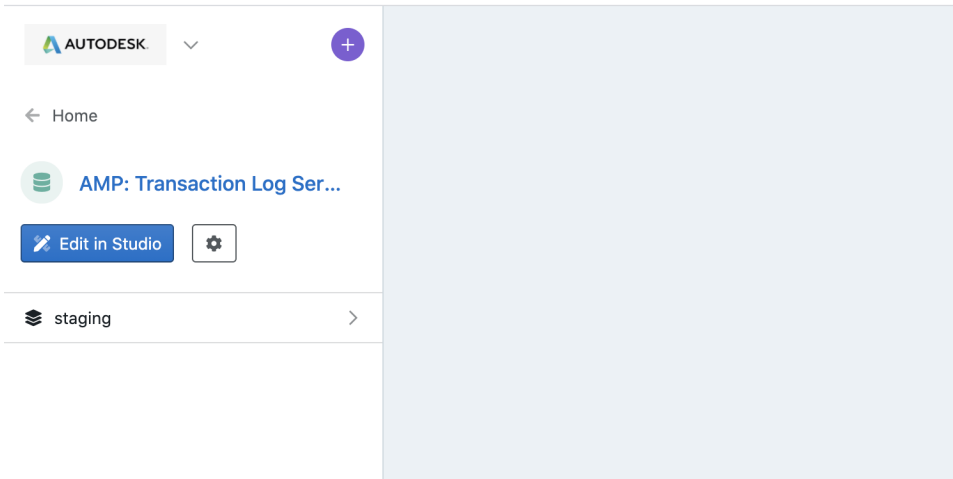
## Navigating Stoplight UI

The current Stoplight Platform UI can be a bit non-intuitive.

- To browse projects and view details of specific APIs, use the **Explore** tab.
- To add an API, click the + icon on the main page

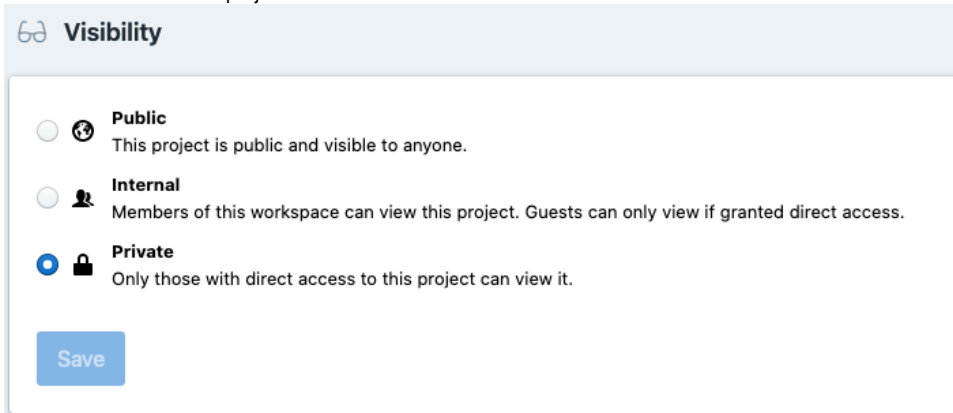


- To edit an API, scroll the list of projects in the left and click the API you want to edit. On the page that opens (with a big blank center pane), click **Edit in Studio**.



## Managing Access - Visibility Settings

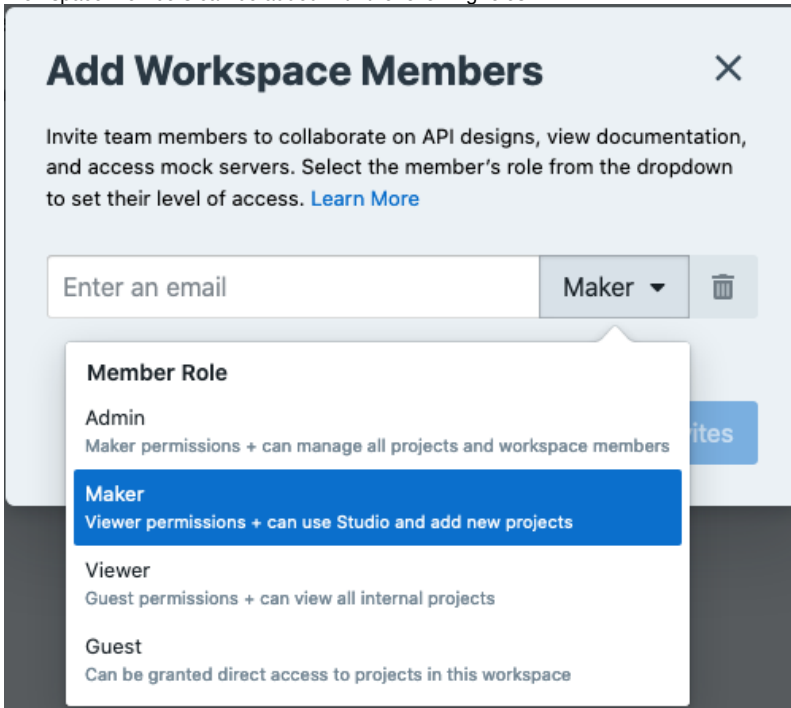
- There are three levels of project access:



New projects are set to Private by default. When you are ready to make your project visible to others, contact @stoplight-support in #tech-stoplight and request that they set your project visibility to **Internal**. (We generally won't use Public.)

- Visibility settings can be changed by anyone on Jason Niemczyk's team (@stoplight-support in #tech-stoplight).
- In Q2, we will roll out workgroup functionality, and that point project visibility settings will be managed at the domain level.

- Workspace members can be added with the following roles



## Stoplight CLI

Stoplight CLI is available here: <https://www.npmjs.com/package/@stoplight/cli>

- Note that the only configuration that seems to work is Stoplight CLI v4.0.81 running on Node JS 12.
  - In order to publish markdown files from the CLI, put them into a **/docs** subdirectory.
- <https://autodesk.slack.com/archives/C01ET571GKZ/p1607365201060000>

## Stoplight Resources

### Internal Resources

#### Slack

- #tech-stoplight - for general stoplight questions/issues

### Stoplight Support

Help Documentation:

- Platform: <https://meta.stoplight.io>
- Next: <https://docs.stoplight.io>

Wherever possible, we want to make use of the official Stoplight help docs. This will help us to get a better sense of how people are using the available documentation and where we need to supplement it with our own content.

Public Customer support portal: <https://support.stoplight.io>

User forum: <https://community.stoplight.io>

Internal Customer Support email: [stoplight.support@autodesk.com](mailto:stoplight.support@autodesk.com)

## API Design and Development Process Overview

If you start from ground zero, API design and development involves several major aspects:

1. Design
2. Verify
3. Code

## Designing an API

Though it sounds easy to write code and generate OpenAPI from code, it is actually not an optimal way of designing an API. Ideally, you should first identify the problems you are trying to solve and determine the data needed prior to coding. Planning the API beforehand allows you to receive input and feedback from those who will use it before it's too late to change. Designing the API first will ensure you're solving the right problems in the right way.

There are three major versions of the OpenAPI Specification:

- OpenAPI 2.0, formerly known as Swagger 2.0
- OpenAPI 3.0, the most recent official version from the community
- OpenAPI 3.1, a release candidate

Some other API spec formats that are somewhat popular are:

- RAML
- API Blueprint
- Postman Collections

As part of Stoplight API Portal, we will be using OpenAPI to define our APIs. With the Stoplight Studio, it becomes quite easy to create Open APIs.

**The following documentation are good resources for API design:**

- **Open API Specification** : <https://github.com/OAI/OpenAPI-Specification/blob/master/IMPLEMENTATIONS.md>
- **Forge API Design Guidelines**: <https://git.autodesk.com/forge/forge-api-standards/> (To understand and align with Autodesk standards, naming conventions and best practices please follow the Forge Guidelines)

As part of Stoplight Platform, we will be using the linter that enforces Forge standards.

See this example applying the Forge standards to enforce linting during PRs, using Spectral: <https://jira.autodesk.com/secure/attachment/2322426/stoplight-linting.mp4>

## Verify your Contract

To gather faster feedback and adoptability, reading your API endpoints and the related documentation may not be enough. Clients of your service can give better feedback, example responses and may even start prototyping how the API will be consumed.

Using Stoplight Mock API, we can provide clients with fake data to provide a way of giving clients how your final API server will look. This approach also will be helpful in performing contract testing of your APIs.

## Develop your API

**Once your API design is complete and contract is ready, the actual development starts. You can use the language of your choice to glue the contract to be backed with your database, or logic.**


Some of the tools that are helpful in doing these will be : <https://openapi.tools/>

To get started with Stoplight Platform and to use the features to fullest, please go through the following video sessions:

- <https://stoplight.io/video/stoplight-101-webinar/>
- <https://stoplight.io/video/studio-webinar/>
- <https://stoplight.io/video/mocking-apis-with-prism/>

## Mock your API

Here is a brief video tutorial on API mocking within Stoplight:

- [Mocking demo video](#)
  - Passcode 

## Guidelines

### Project Naming Convention

In order to facilitate discoverability, it is important to use a standard format when naming your APIs in Stoplight. Please follow these guidelines:

- [DPE Stoplight API naming convention](#)
- [ACS Stoplight API naming convention](#)

### Versioning

Please follow the [Forge API versioning standard](#).

## Migrating An Existing API from Stoplight Next to Stoplight Platform

<https://meta.stoplight.io/docs/platform/6.-migrations/next.md>

Note that because we are authenticated via git and connected to the repo where the API already is, not all steps in that tutorial need to be followed - some of the heavy lifting has already been done.

## Importing an Existing OpenAPI Spec into Stoplight

**Demo video:** [A quick video on Stoplight Platform onboarding](#)

## Creating a New API in Stoplight

**Demo video** for creating a new API in Stoplight:

- <https://autodesk.zoom.us/rec/share/XJfGJ5WoRitVQKFc4HotfOxG2QrtChj9gwUlsPTa-DOjiPWvPDIVRLJm8GIgsADo.gjWTi7PqptaCflBF>
  - Passcode: &#Ljr4o#

## Documenting your API in Stoplight

Good documentation of the APIs we maintain in Stoplight is critical to effective reuse. To facilitate this, we are working on a documentation template that will be generated for all DPE projects within Stoplight.

See the official Stoplight guide to documentation in Stoplight. It has helpful information on what constitutes good API documentation and how to implement it in Stoplight.

- [Documentation Quickstart Guide](#)
- [Directory Structure](#)
- [Using Markdown in Documentation](#)
- [Stoplight Flavored Markdown](#)
- [Using Images](#)
- [Linking Between Articles](#)
- [Publishing in Studio](#)

Note that in Stoplight, it's necessary that you put your project's markdown documentation file(s) in a /docs subdirectory (or else they won't appear in the UI).

In addition to reference documentation for your APIs, you are expected to provide description, examples, and tutorials as needed.

- Provide an overview document which gives a human readable summary of what your application is, what it does, and general description of how it works and what it is used for.
- Add friendly readable descriptions to all APIs, endpoints, operations, parameters, etc.
- Keep in mind that consumers may not know application-specific terms, think from the point of view of someone who has no knowledge of your domain

### Model the request and response

- Users should be able to see the schema of any requests and responses
- Again, detailed descriptions are very helpful to understand any parameters and what they are used for

### Providing Examples

- Good to provide examples for all scenarios, this will be one of the most useful parts of the documentation. Users will often go directly to this section for the quickest way to get started with an API.

# MDM account merge request

Schema

example-merge-request

```
1 {
2   "survivorId": "5000000001",
3   "mergeRequestId": "txn-000123",
4   "eventType": "Merge",
5   "recordIdType": "CSN",
6   "victimId": "5000000002"
7 }
```

## Finding and Sharing APIs in Stoplight

<https://meta.stoplight.io/docs/platform/5.-governance/bb.exploring-your-api-projects.md>

## FAQ

### How to connect to my Autodesk Git repo from the desktop version of Stoplight Studio?

A personal access token needs to be created with in the developer profile with appropriate access to repos (current SSO integration with web version of the studio grants the following scopes : read:org, read:user, repo, and user:email).

This personal access token is needed as the password to connect.

### Can I merge changes to my master/develop branch directly?

If you have the appropriate write permissions within a repo, you should be able to create branches, push to a branch while making changes. It is recommended to make the main branch e.g. master or develop being used for CI/CD be protected in git.

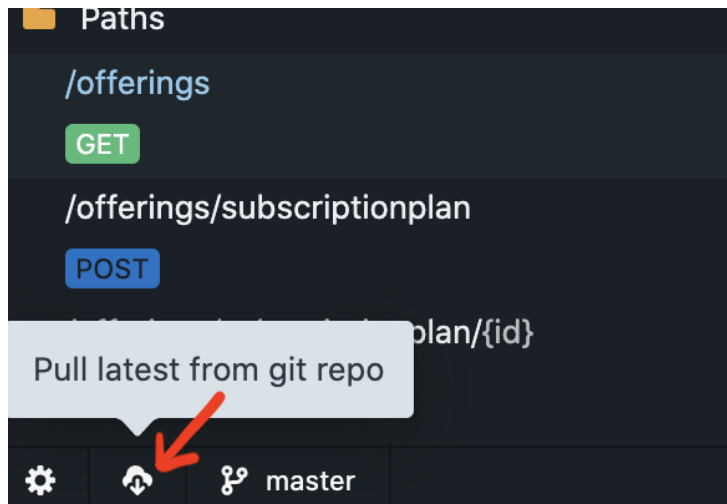
If trying to make changes directly to that branch and if only creating pull requests is allowed as recommended, you should see an error like :

! One or more branches were not updated: - refs/heads/master:  
protected branch hook declined

### How to check Stoplight Platform version

<https://poc.dev.platform.stoplight.autodesk.com/health>

### How to explicitly initiate a pull from git if the stoplight web hook is not automatically doing it



## Forking Workflow

- askJason what content is needed here

### OAuth2 For Endpoint testing Not Yet Supported in Stoplight Platform

OAuth2 is not yet supported in Stoplight Platform as authentication [for calling endpoints](#). This is expected in a future release. For now, you can use Stoplight Next or other tools.

### How to update the Autodesk Stoplight tool documentation

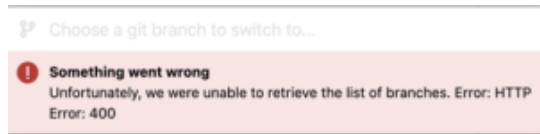
- Anyone can create a pull request as per <https://git.autodesk.com/dpe/stoplight-user-docs/blob/main/.github/CONTRIBUTING.md>
- People who are in this Github team have the right to merge pull requests: <https://git.autodesk.com/orgs/dpe/teams/stoplight-user-docs-contributors/members>

## Troubleshooting

**When in doubt, first try clearing your cache or using an incognito window.**

Stoplight has known issues with caching that can affect various operations. Stoplight product/engineering is aware of these issues and working on resolving them.

### Error switching branches

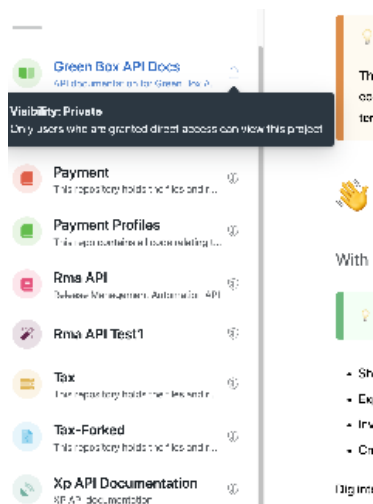


If getting an error while trying to switch branches for a project within the Stoplight Studio, some of the things to try are:

- clear the browser cache
- use an incognito window if using the web version of the Studio

### Documentation not visible to all

If the api docs are published and correct branch is set to default and set up for publishing, confirm if the workspace has at least Internal visibility and not Private



### apline doesn't work with the CLI

- will update when I get it to work end-to-end (Brian)
- see Jason comment in [DESESTOOL-892 - Getting issue details...](#) STATUS
- see also CLI section above in Accessing Stoplight section

### Issue with deprecating endpoints

The Stoplight functionality for [deprecating endpoints](#) is not working as expected. Endpoints you mark as deprecated:true do not display that status. This is a known issue we reported to Stoplight.

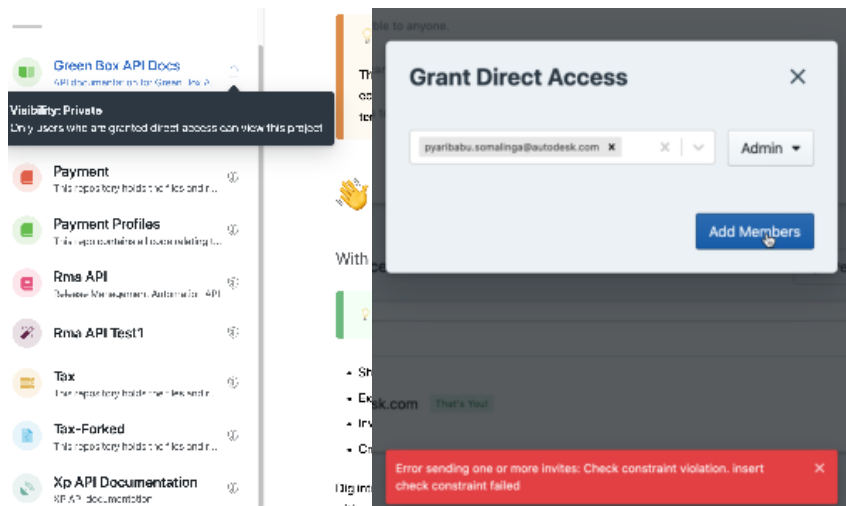
### 'Invalid cookie value' error message

```
Something went wrong
Invalid cookie value
```

If you get this error message, clearing your cache or using an incognito window should resolve it.

## Unable to invite teammates

You may get an error message when trying to invite teammates to edit a project:



There's a bug in Stoplight preventing this function to work. The vendor is aware of it and working on a fix. The workaround that allows you to add team members is for the user to log in first, so that their account is provisioned in Stoplight. You will then be able to grant them access to your project.