



Swagger. Docs.

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Agenda

- 1 What is Swagger ?
- 2 Creating Swagger documents via Swagger Tools
- 3 Swagger specification
- 4 Introduction into Node.js REST API development with Swagger
- 5 Live demo

What is Swagger?

Swagger is a specification for describing, producing, consuming, testing, and visualizing a RESTful API. It provides a number of tools for automatically generating documentation based on a given endpoint.

- Swagger development began in early 2010
- On 1-January 2016 the Swagger specification was renamed into the OpenAPI Specification

OpenAPI(Swagger) specification

The OpenAPI Specification (OAS) defines a standard, language-agnostic interface to RESTful APIs which allows both humans and computers to discover and understand the capabilities of the service without access to source code, documentation, or through network traffic inspection.

```
1  openapi: 3.0.0
2  # Added by API Auto Mocking Plugin
3  servers:
6  info:
20 tags:
33 paths:
34   /pet:
35     post:
36       tags:
37         - pet
38       summary: Add a new pet to the store
39       operationId: addPet
40       responses:
43       security:
47       requestBody:
49     put:
50       tags:
52       summary: Update an existing pet
53       operationId: updatePet
54       responses:
61       security:
65       requestBody:
66         $ref: '#/components/requestBodies/Pet'
67   /pet/findByStatus:
109  /pet/findByTags:
149  '/pet/{petId}':
239  '/pet/{petId}/uploadImage':
270  /store/inventory:
289  /store/order:
314  '/store/order/{orderId}':
369  /user:
386  /user/createWithArray:
397  /user/createWithList:
408  /user/login:
450  /user/logout:
459  '/user/{username}':
529 externalDocs:
532 components:
```

Swagger Editor

Swagger Editor

File Edit Generate Server Generate Client

```
1 swagger: '2.0'
2 info:
3   description: Move your app forward with the Uber API
4   version: 1.0.0
5   title: Uber API
6 host: api.uber.com
7 basePath: /v1
8 schemes:
9   - https
10 produces:
11   - application/json
12 paths:
13   /estimates/price:
14     get:
15       tags:
16         - Estimates
17       summary: Price Estimates
18       description: |
19         The Price Estimates endpoint returns an estimated price range
20         for each product offered at a given location. The price estimate is
21         provided as a formatted string with the full price range and the localized
22         currency symbol.<br><br>The response also includes low and high estimates,
23         and the [ISO 4217](http://en.wikipedia.org/wiki/ISO_4217) currency code for
24         situations requiring currency conversion. When surge is active for a
25         particular
26         product, its surge_multiplier will be greater than 1, but the price estimate
27         already factors in this multiplier.
28       parameters:
29         - name: start_latitude
30           in: query
31           description: Latitude component of start location.
32           required: true
33           type: number
34           format: double
35         - name: start_longitude
36           in: query
37           description: Longitude component of start location.
38           required: true
39           type: number
40           format: double
41         - name: end_latitude
42           in: query
43           description: Latitude component of end location.
44           required: true
45           type: number
46           format: double
```

Uber API ^{1.0.0}

[Base URL: api.uber.com/v1]

Move your app forward with the Uber API

Schemes

HTTPS

Estimates

GET /estimates/price Price Estimates

GET /estimates/time Time Estimates

User

GET /history User Activity

GET /me User Profile

Products

GET /products Product Types

The Products endpoint returns information about the *Uber* products offered at a given location. The response includes the display name and other details about each product, and lists the products in the proper display order.

Uber API

1.0.0

[Base URL: api.uber.com/v1]

Move your app forward with the Uber API

Schemes

HTTPS

Show Comments

Estimates >

User

GET

/history

User Activity

GET

/me

User Profile

Products

GET

/products

Product Types

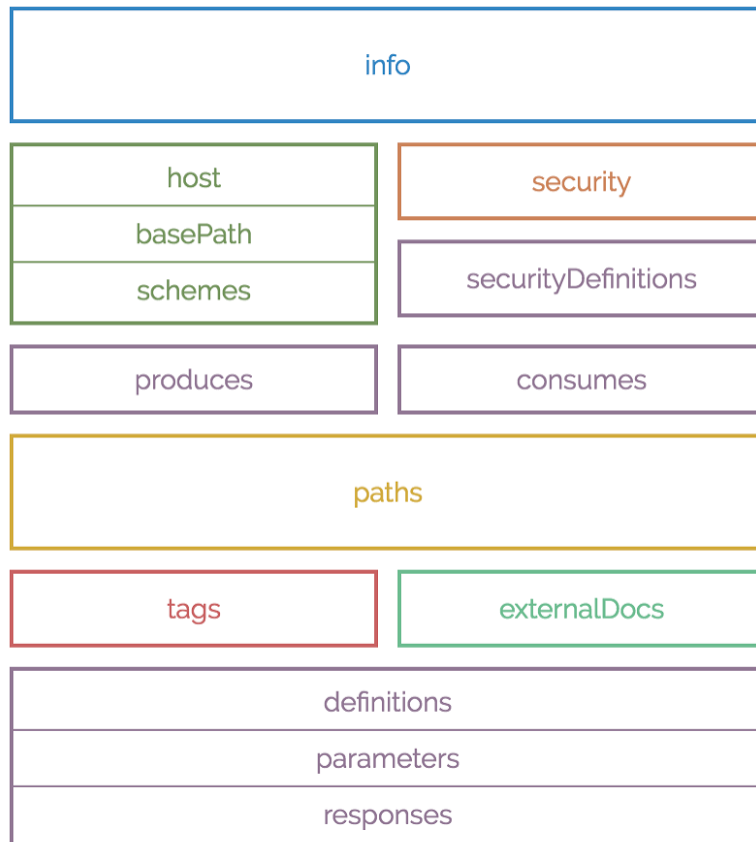
Swagger Hub

SwaggerHub is an integrated API Development platform, built for teams, that brings the core capabilities of the Swagger framework to design, build, document and deploy APIs. SwaggerHub enables development teams to collaborate and coordinate the entire lifecycle of an API with the flexibility to integrate with the toolset of your choice.

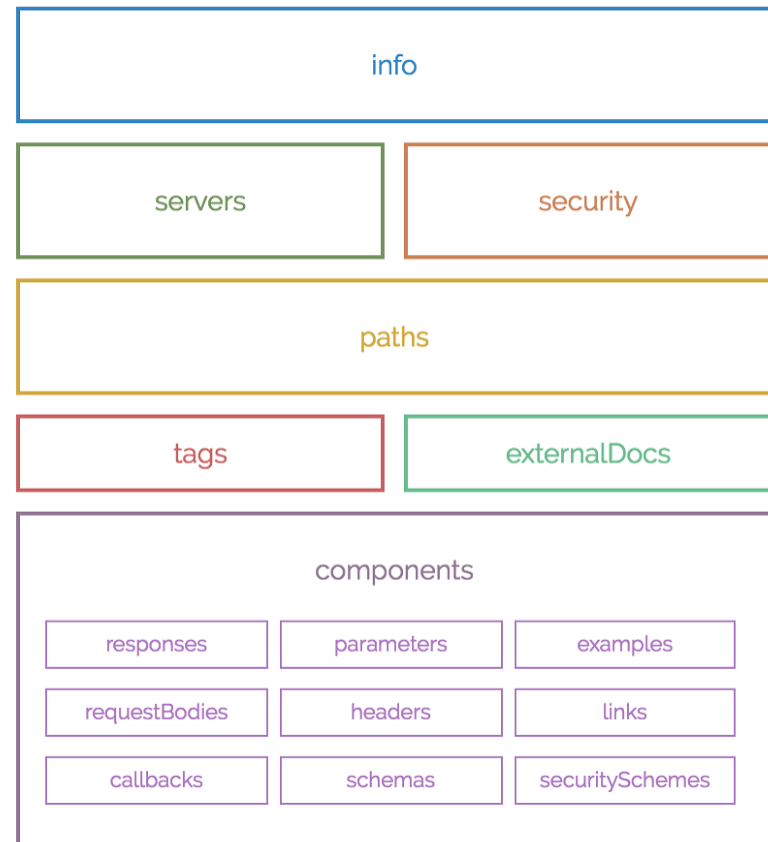


Syntax: Swagger 2.0 vs OpenAPI 3.0

Swagger 2



OpenAPI 3



Swagger + Node.js Demo Project

1. `npm install -g swagger` #install swagger npm module
2. `swagger project create chat-api` #create a swagger skeleton project
3. `swagger project start chat-api` # run API server project
4. `swagger project edit chat-api` # start Swagger Editor + UI
5. `npm install -g pretty-swag` #install pretty-swag module
6. `pretty-swag -i ./api/swagger/swagger.yaml` #generate stand-alone doc.html

THANK YOU