How can I represent 'Authorization: Bearer <token>' in a Swagger Spec (swagger.json)

Asked 3 years, 11 months ago Active 6 months ago Viewed 100k times



I am trying to convey that the authentication/security scheme requires setting a header as follows:

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Authorization: Bearer <token>



This is what I have based on the swagger documentation:



securityDefinitions:
 APIKey:
 type: apiKey
 name: Authorization
 in: header
security:
 - APIKey: []

swagger

swagger-2.0

swagger-editor

edited Mar 26 at 19:32

Telarian

540 4 19

asked Oct 2 '15 at 14:57



Elmer Thomas **815** 1 7 11

3 Answers



Maybe this can help:

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swagger: '2.0'



```
description: >
    An example for how to use Auth with Swagger.
host: basic-auth-server.herokuapp.com
schemes:
  - http
  - https
securityDefinitions:
  Bearer:
    type: apiKey
    name: Authorization
    in: header
paths:
  /:
    get:
      security:
        - Bearer: []
      responses:
        '200':
          description: 'Will send `Authenticated`'
        '403':
          description: 'You do not have necessary permissions for the resource'
```

You can copy&paste it out here: http://editor.swagger.io/#/ to check out the results.

There are also several examples in the swagger editor web with more complex security configurations which could help you.



answered Oct 7 '15 at 14:56

David Lopez

1.371 1 7 7

- I don't see how you tell the editor what user and password or Basic token to send so you can get a 200. Am I missing something? Rob Feb 11 '16 at 18:00
- OK, nevermind. Apparently the "Authenticate" is something you can click on to get a login form. Rob Feb 11 '16 at 20:27

So how do i set a value to the token? i tried curl -x get --header "Authorization: apiKey=123" but nothing happened - Gobliins Apr 4 '16 at 10:35

- 2 @Goblins you want curl -X GET -H "Authorization: Bearer your_token", Where your_token is your bearer token. E.g. curl -X GET -H "Accept: application/json" -H "Authorization: Bearer 00000000-0000-0000-0000-0000000000" "http://localhost/secure-endpoint" − Steve K Apr 8 '16 at 16:25 ✓
- 8 Unfortunately this doesn't work well with Swagger UI clicking "Authorize" and providing a bare token will generate "Try it out" curl examples with -H



Bearer authentication in OpenAPI 3.0.0

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OpenAPI 3.0 now supports Bearer/JWT authentication natively. It's defined like this:



```
openapi: 3.0.0
...

components:
    securitySchemes:
    bearerAuth:
        type: http
        scheme: bearer
        bearerFormat: JWT # optional, for documentation purposes only
security:
    - bearerAuth: []
```

This is supported in Swagger UI 3.4.0+ and Swagger Editor 3.1.12+ (again, for OpenAPI 3.0 specs only!).

UI will display the "Authorize" button, which you can click and enter the bearer token (just the token itself, without the "Bearer" prefix). After that, "try it out" requests will be sent with the Authorization: Bearer xxxxxx header.

Adding Authorization header programmatically (Swagger UI 3.x)

If you use Swagger UI and, for some reason, need to add the Authorization header programmatically instead of having the users click "Authorize" and enter the token, you can use the requestInterceptor. This solution is for **Swagger UI 3.x**; UI 2.x used a different technique.

```
// index.html

const ui = SwaggerUIBundle({
  url: "http://your.server.com/swagger.json",
  ...

requestInterceptor: (req) => {
  req.headers.Authorization = "Bearer xxxxxxx"
  return req
}
```

answered Aug 2 '17 at 21:07 Helen



How do I implement this in flask-restplus generated swagger documentation? - Chang Zhao Dec 6 '18 at 2:03

I doubt if answer aligns with the question that was asked. – Vishrant May 26 at 18:17



Why "Accepted Answer" works... but it wasn't enough for me

This works in the specification. At least swagger-tools (version 0.10.1) validates it as a valid.



But if you are using other tools like swagger-codegen (version 2.1.6) you will find some difficulties, even if the client generated contains the Authentication definition, like this:

```
this.authentications = {
  'Bearer': {type: 'apiKey', 'in': 'header', name: 'Authorization'}
};
```

There is no way to pass the token into the header before method(endpoint) is called. Look into this function signature:

```
this.rootGet = function(callback) { ... }
```

This means that, I only pass the callback (in other cases query parameters, etc) without a token, which leads to a incorrect build of the request to server.

My alternative

Unfortunately, it's not "pretty" but it works until I get JWT Tokens support on Swagger.

Note: which is being discussed in

- security: add support for Authorization header with Bearer authentication scheme #583
- Extensibility of security definitions? #460

```
swagger: '2.0'
info:
  version: 1.0.0
 title: Based on "Basic Auth Example"
 description: >
   An example for how to use Auth with Swagger.
host: localhost
schemes:
  - http
  - https
paths:
 /:
   get:
      parameters:
          name: authorization
          in: header
          type: string
         required: true
      responses:
        '200':
          description: 'Will send `Authenticated`'
          description: 'You do not have necessary permissions for the resource'
```

This will generate a client with a new parameter on method signature:

```
this.rootGet = function(authorization, callback) {
   // ...
   var headerParams = {
      'authorization': authorization
   };
   // ...
}
```

To use this method in the right way, just pass the "full string"

```
// 'token' and 'cb' comes from elsewhere
var header = 'Bearer ' + token;
sdk.rootGet(header, cb);
```

edited Jan 17 '17 at 14:06



answered Aug 2 '16 at 17:36

Paulo Oliveira

1,945 23 37

"token comes from elsewhere"... I'm interested in the elsewhere. What when you logged got directed to your login and redirected to your swagger api, how can you use the access token you received? – Nadine May 10 at 9:29