

OPENAPI TREK INTO FASTNESS

(fka. Secure and accelerate APIs' lifecycle with the OpenAPI specification,
which is a less cool title)

STARRING

ARNAUD

LAURET ^{AS}
@APIHANDYMAN

ALSO STARRING

APISTYLEBOOK.COM

INTRODUCING

API

FASTNESS AS
FAST AND SECURED API



**"WHAT IS THE OPENAPI
MADE OF?"**

Starfleet API

Get all informations about Starfleet

Fleet

Show/Hide | List Operations | Expand Operations

GET /starships

Gets all starships

Implementation Notes

The fleet

Response Class (Status 200)

A list of starships

Model | Example Value

```
[
  {
    "class": "Constitution",
    "code": "NCC-1701",
    "name": "Enterprise"
  }
]
```


THIS IS
SWAGGER UI
KEPTIN.

Fleet

Show/Hide | List Operations | Expand Operations

GET /starships

Gets all starships

Implementation Notes

The fleet

Response Class (Status 200)

A list of starships

Model | Example Value

```
[
  {
    "class": "Constitution",
    "code": "NCC-1701",
    "name": "Enterprise"
  }
]
```

A man with dark hair, wearing a yellow Star Trek uniform, is seated at a console. He is looking down at a device on the console, with his right hand on a joystick and his left hand on a keyboard. A speech bubble originates from the top left. The background shows a blurred view of a ship's interior with red railings and colorful lights.

THERE'S
SOMETHING
BEHIND THIS UI
CAPTAIN!

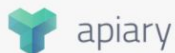
API FASTNESS SECRET...


```
paths:
  /starships:
    get:
      tags:
        - Fleet
      summary: Gets all starships
      description: The fleet
      responses:
        200:
          description: A list of starships
          schema:
            type: array
            items:
              $ref: "#/definitions/Starship"
```

AN API
DESCRIPTION
FILE!



The OAI is focused on creating, evolving and promoting a vendor neutral API Description Format based on the Swagger Specification.



STARDATE 2015-11



LET'S SEEK API FASTNESS IN OPENAPI UNIVERSE



**"A DESIGN OF
ARMAGEDDON"**



BUT WHY
THERE'S NO
SEATBELTS ON THIS
SHIP?!?!

MISSING CRUCIAL DATA OR ENDPOINT...



HOW DID YOU
GET THIS SENSITIVE
DATA?

I JUST USED
YOUR API



NOBODY WANTS TO USE A CRAPPY API...

YOU DIDN'T
RESPECT OUR API
GUIDELINES!





AREN'T FIRED
TORPEDOES SUPPOSED TO HIT
THE ENEMY SHIP?

API DESIGN USING WORD PROCESSOR DOCUMENTS...



OPENAPI FILES CAN BE CREATED AND USED BY MACHINES



BUT ALSO HUMANS, VULCANS AND KLINGONS



AND EVEN GORNS



CREATED BY
HUMANS...

USED BY
MACHINES...

FASCINATING

A close-up shot of a man with a grumpy expression, shouting the word 'AWESOME!!!!' with his mouth wide open. His face is covered in sweat, and his eyes are squinted. The background is a wall with a circular pattern. The text 'AWESOME!!!!' is written in a large, bold, yellow font with a black outline and a drop shadow, positioned at the bottom of the image. There are five orange dots following the text.

AWESOME!!!!

Error

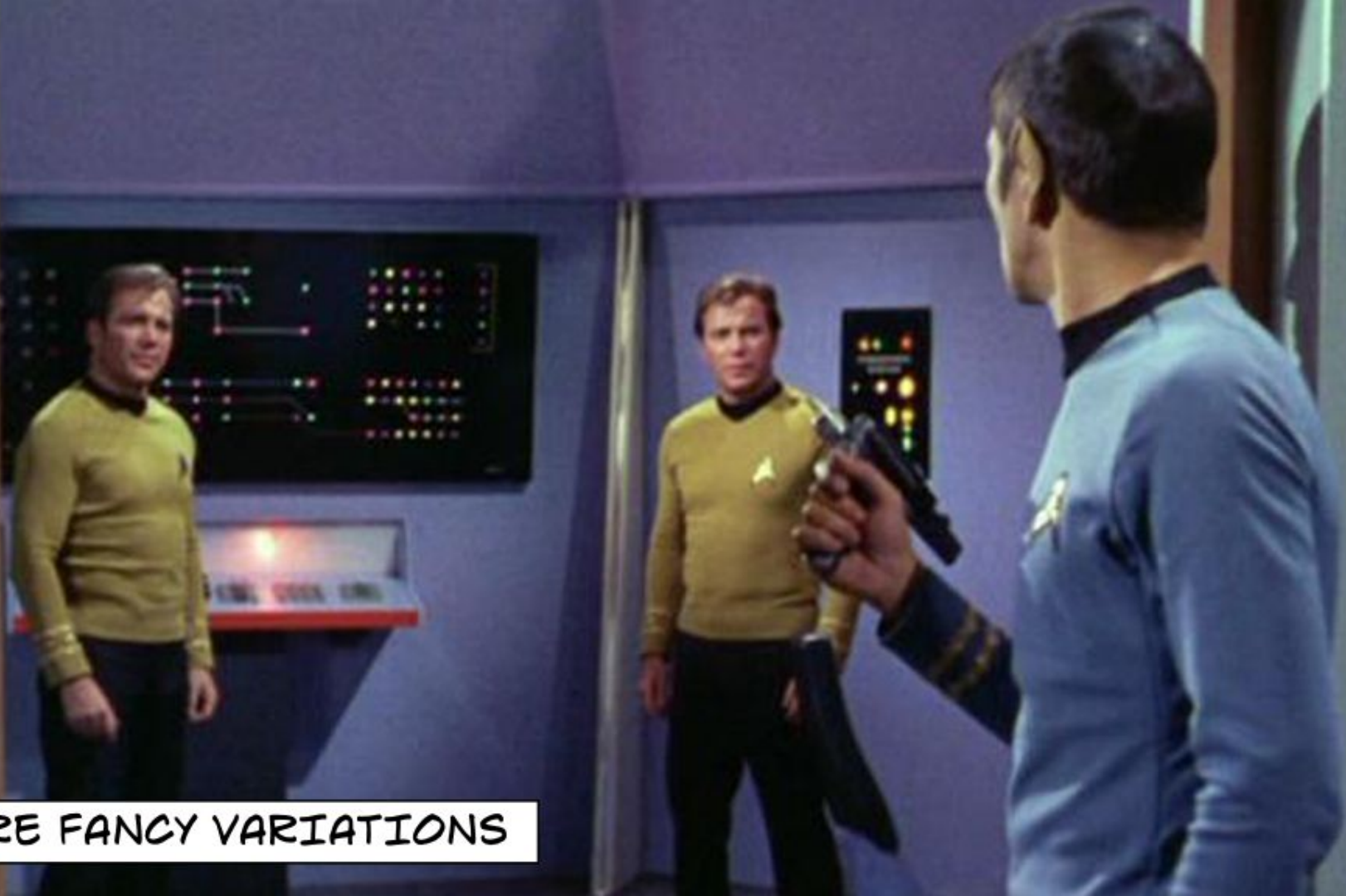
✖ Swagger Error

Path parameter is declared but is not defined: EnemyShip

[Jump to line 21](#)

TORPEDOES
COULD HAVE HIT OUR
OWN SHIP!

ENEMYSHIP
PARAMETER IS
MISSING!

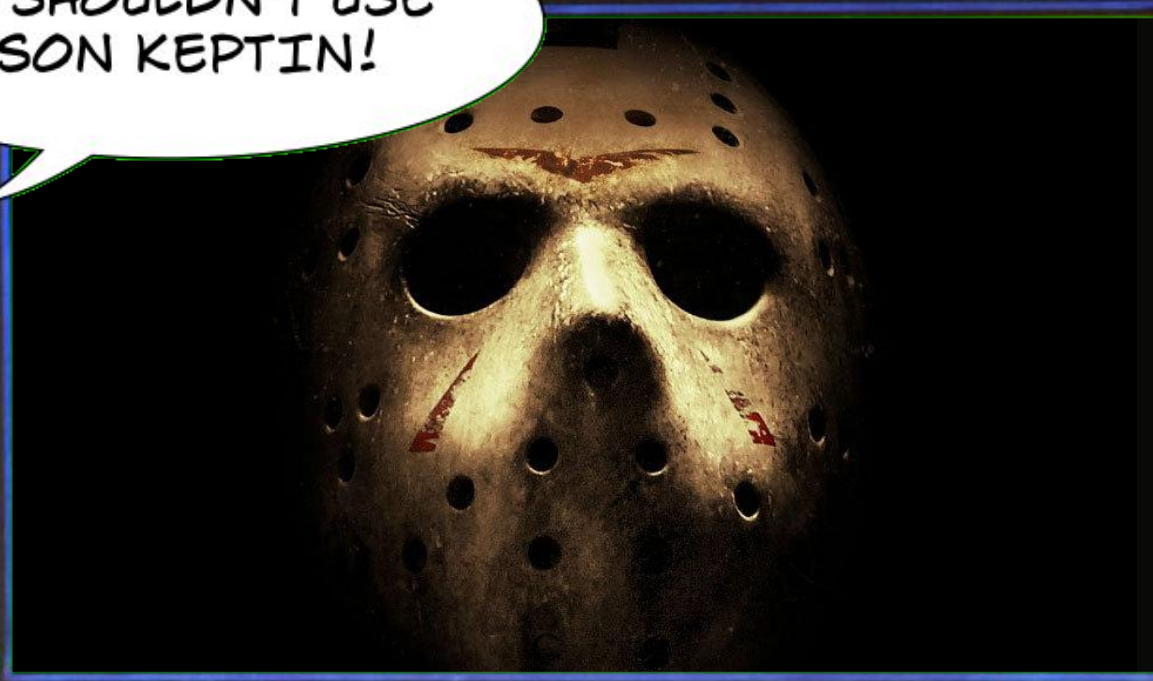


NO MORE FANCY VARIATIONS



EASY CONVERSION TO NEW VERSION OR FORMAT

WE SHOULDN'T USE
JSON KEPTIN!




```
paths:
  /starships:
    get:
      tags:
        - Fleet
      summary: Gets all starships
      description: The fleet
      responses:
        200:
          description: A list of starships
          schema:
            type: array
            items:
              $ref: "#/definitions/Starship"
```

INDEED CHEKOV, YAML
LOOKS BETTER.

A man with dark hair, seen from the back, is wearing a light blue long-sleeved shirt. He is sitting at a wooden desk, looking at a vintage computer monitor. The monitor displays a blurry, abstract image with green and yellow tones. Below the monitor is a computer unit with a slot-loading drive containing several orange and yellow floppy disks. To the right of the computer unit is a small, grey, rectangular device with a grid of buttons. A white thought bubble with a black outline is positioned above the man's head, containing the text "DID I MISS ANYTHING?".

DID
I MISS
ANYTHING?



COMPUTER
RUN

```
prism run --mock \  
--spec api.yaml
```



MORE CONTROLS. BEWARE: EXPERIMENTAL!



CONFESS
YOUR SINS

FORGIVE ME,
I USED CAMEL CASE IN
SOME URL

OPENAPI, DESIGN AND DATA SECURITY CHECK

A comic book panel featuring the main cast of Star Trek: Discovery. From left to right: T'Pol (Persi Khavarism), Captain Pike (Christopher Pike), Spock (Zachary Quinto), Ilia (Persi Khavarism), and T'Pol (Persi Khavarism). They are all looking towards the right side of the frame. The background is a dark, futuristic setting with some glowing elements. The characters are wearing their respective Starfleet uniforms. Two speech bubbles are present: one from Spock and one from Ilia. A text box is at the bottom left.

YOU
TOO, CAPTAIN.
FASCINATING.

SPOCK,
YOU LOOK...
DIFFERENT.

AVOID BREAKING CHANGE



SHORTER, MORE EFFICIENT, MORE CONTROLLED
AND MORE SECURED DESIGN TIME: API FASTNESS



**"THE DOCUMENTATION
MACHINE"**

A close-up photograph of the character Spock from the Star Trek franchise. He is shown from the chest up, wearing his characteristic blue Starfleet uniform. His face is the central focus, with his iconic pointed ears and Vulcan features clearly visible. He has a serious, almost stern expression, with his eyebrows slightly furrowed. A white speech bubble with a black outline is positioned on the right side of the image, overlapping his face. Inside the bubble, the text "THIS DOCUMENTATION IS HIGHLY ILLOGICAL" is written in a bold, black, sans-serif font, all in capital letters. The background is a plain, light blue-grey color.

THIS
DOCUMENTATION
IS HIGHLY
ILLOGICAL

MANY DIFFERENT
RENDERINGS, KEPT IN.

The screenshot displays the Swagger UI for 'A Demo API' (Source: [Swagger 2.0]). The interface is divided into several sections:

- Header:** 'A Demo API' and 'Source: [Swagger 2.0]'.
- Search Bar:** A search bar with the text 'GET /tools' and a 'View Results' button.
- Left Sidebar:** Contains a 'default' section with buttons for 'GET', 'POST', and 'GET'. Below this is a 'Parameters' section with a table showing 'Type' and 'Name' for 'Body' (Tool optional). At the bottom is a 'Responses' section with a table showing 'HTTP Code' and 'Description' for '200' (OK).
- Main Content Area:** Displays the endpoint 'GET /tools' with a description 'Gets some tools' and a 'View Documentation' link. Below this is a 'Sample Code' section with a 'Copy' button and a code block containing a JavaScript snippet using jQuery's \$.ajax() to fetch data from 'http://localhost:4010/tools'.
- Right Sidebar:** Shows a JSON response structure for the endpoint, including an 'items' array with objects containing 'URL', 'id', 'name', and 'type'.

Type	Name
Body	Tool optional

HTTP Code	Description
200	OK

```
// Built by LucyBot. www.lucybot.com
var url = "http://localhost:4010/tools";
$.ajax({
  url: url,
  method: 'GET',
}).done(function(result) {
  console.log(result);
}).fail(function(err) {
  throw err;
});
```

```
{
  "items": [
    {
      "URL": "http://",
      "id": "3FC39C1D",
      "name": "tempor",
      "type": "softwa"
    },
    {
      "URL": "https://",
      "id": "CFAE346D",
      "name": "ullanc",
      "type": "softwa"
    },
    {
      "URL": "http://",
      "id": "896867CF",
      "name": "velit",
      "type": "librar"
    },
    {
      "URL": "https://",
      "id": "7C56A53B",
      "name": "do"
    }
  ]
}
```



GIT PUSH IN
PROGRESS

DOCUMENTATION CONTINUOUS DELIVERY



RESPIRATION

PULSE

ADJUST
FOR NORMAL

REORDER



AUTOMATIC CONTROLS

A man with dark hair, wearing a red long-sleeved Star Trek uniform, is shown from the chest up. He is looking upwards and to the right with a concerned expression. He is holding a small red object in his hands. The background is a complex, metallic interior with various pipes, panels, and mechanical components. A speech bubble is positioned above his head, and a text box is at the bottom left.

BUT WHERE IS
THE PHASER
CONTROLLER?

INTERNAL DOCUMENTATION

THE OPENAPI
SPECIFICATION IS
EXTENSIBLE KEPTIN!

```
paths:  
  /starships:  
    get:  
      tags:  
        - Fleet  
      x-unscore: 123  
      summary: Gets all starships  
      description: The fleet
```




I'M AN
INTERNAL USER
JIM, NOT A
CUSTOMER!

ADAPTING DOCUMENTATION TO THE AUDIENCE AND CONTEXT



CONTROLLED INTERNAL/EXTERNAL DOCUMENTATION
FROM A SINGLE SOURCE: API FASTNESS



**"AND THE CODE SHALL
BE GENERATED"**

COOL
MUM!
A GENERATED
ICE-DK!

CODE SYNTHETIZER



THE
IMPLEMENTATION
I AM

I AM THE
SPECIFICATION

TESTING AND SYNCING



FASTER IMPLEMENTATION COMPLYING
WITH THE SPECIFICATIONS: API FASTNESS



**"THE ULTIMATE
SOFTWARES"**

A man with brown hair, wearing a green Star Trek uniform with a black V-neck and gold cuffs, is sitting in a nest made of many brown and white Muppet sheep. He is looking directly at the camera with a neutral expression. A speech bubble is positioned in the upper right corner of the image.

SO MANY
SOFT-WARES USE
THE OPENAPI
SPEC.

DESIGN, TESTING, MONITORING, DOC, CODE
GENERATION, BAAS, API GATEWAYS...



WITHOUT OPENAPI SUPPORT



WITH OPENAPI SUPPORT

A deep space photograph showing a vast field of stars against a black background. In the center, there is a dense, bright cluster of stars, some of which appear to have a blueish tint. The stars are scattered throughout the frame, with varying brightness and colors, including white, yellow, and blue.

A BOUNDLESS GALAXY OF POSSIBILITIES




SIMPLIFY API SOFTWARES: API FASTNESS



"TO BOLDY GO..."

A close-up of Spock from Star Trek: The Motion Picture, performing the Vulcan salute with his right hand. He has a serious expression and is wearing his blue uniform. The background is a solid red color.

USE THE OPENAPI
SPECIFICATION TO LIVE
LONG AND PROSPER

A scene from Star Trek: The Motion Picture showing the transporter room. In the foreground, the back of a man's head (likely Captain Kirk) is visible as he looks towards the transporter. In the background, a man in a blue uniform (likely Ilia) stands near a transporter console. A translucent, golden figure of a man is being transported in the center. The room has a red floor and large windows showing a starry space background.

A
apihandyman.io
PRODUCTION

STAR TREK CREATED BY
Gene Roddenberry

DON'T MISS NEW STAR TREK EPISODES
www.startreckcontinues.com