

INSTRUÇÕES API PAULOS AUTO

Pré-requisitos:

Docker-Toolbox: <https://github.com/docker/toolbox/releases>

PostMan: <https://www.postman.com/downloads/>

1. Instalar o Docker e arrancar com o mesmo, iremos ter um IP que deve ser este:

192.168.99.100

```

MINGW64: c:/Program Files/Docker Toolbox
Starting "default"...
(default) Check network to re-create if needed...
(default) Windows might ask for the permission to configure a dhcp server. Sometimes, such confirmation window is minimized in the taskbar.
(default) Waiting for an IP...
Machine "default" was started.
Waiting for SSH to be available...
Detecting the provisioner...
Started machines may have new IP addresses. You may need to re-run the `docker-machine env` command.
Regenerate TLS machine certs? Warning: this is irreversible. (y/n): Regenerating TLS certificates
Waiting for SSH to be available...
Detecting the provisioner...
Copying certs to the local machine directory...
Copying certs to the remote machine...
Setting Docker configuration on the remote daemon...

      ##
     ## ## ##
    ## ## ## ##
   /===== \
  /  O  \
 /        \
/          \
\          /
 \        /
  \      /
   \    /
    \  /
     ##

docker is configured to use the default machine with IP 192.168.99.100
For help getting started, check out the docs at https://docs.docker.com

Start interactive shell
  
```

2. Descompactar o ficheiro zip que contém:
 - a. A API (API_Final)
 - b. DockerFile e Docker-Compose-Api.yml
 - c. Os únicos ficheiros fornecidos pela Paulos Auto (Files)
3. Na janela do docker mudar de directoria para onde foram descompactados os ficheiros, após isso, fazer o build com o docker-compose
 - a. **docker-compose -f .\docker_compose_api.yml build**

```

PS C:\Users\jnap\Desktop\API> docker-compose -f .\docker_compose_api.yml build
paulos_auto_bd uses an image, skipping
Building paulos_auto_api
Step 1/6 : FROM mcr.microsoft.com/dotnet/core/aspnet:3.1
--> bc877ac43e02
Step 2/6 : COPY API_Final /app
--> Using cache
--> 2337a9582290
Step 3/6 : WORKDIR /app
--> Using cache
--> 88ee67e54435
Step 4/6 : VOLUME /app/wwwroot
--> Using cache
--> 01da75e782aa
Step 5/6 : EXPOSE 80/TCP
--> Using cache
--> 73a8a008af2b
Step 6/6 : ENTRYPOINT ["dotnet", "PaulosAuto.API.dll"]
--> Using cache
--> f16c8cf568fa
Successfully built f16c8cf568fa
Successfully tagged api_paulos_auto_api:latest
PS C:\Users\jnap\Desktop\API>
  
```

4. Quando o build terminar só temos de fazer o “up” dos serviços referenciados pelo docker-compose

- a. **docker-compose -f .\docker_compose_api.yml up**

```
PS C:\Users\jnap\Desktop\API> docker-compose -f .\docker_compose_api.yml up
Creating network "api_paulos_auto_network" with the default driver
Creating api_paulos_auto_bd_1 ... done
Creating api_paulos_auto_api_1 ... done
Attaching to api_paulos_auto_bd_1, api_paulos_auto_api_1
api_paulos_auto_bd_1 | 2020-06-01 20:21:51+00:00 [Note] [Entrypoint]: Entrypoint script for MySQL Server 8.0.20-1debian10 started.
api_paulos_auto_bd_1 | 2020-06-01 20:21:53+00:00 [Note] [Entrypoint]: Switching to dedicated user 'mysql'
api_paulos_auto_api_1 | Unable to connect to any of the specified MySQL hosts.
api_paulos_auto_api_1 | Unhandled exception. MySql.Data.MySqlClient.MySqlException (0x80004005): Unable to connect to any of the specified MySQL hosts.
api_paulos_auto_api_1 | at PaulosAuto.API.Startup.BuildConnectionStringMySQL() in C:\Users\jnap\source\repos\PaulosAuto\PaulosAuto.API\Startup.cs:li
api_paulos_auto_api_1 | at PaulosAuto.API.Startup.<__DisplayClass7_0.>ConfigureServices(b_1(DbContextOptionsBuilder options) in C:\Users\jnap\sou
PaulosAuto\PaulosAuto.API\Startup.cs:line 137
api_paulos_auto_api_1 | at Microsoft.Extensions.DependencyInjection.EntityFrameworkServiceCollectionExtensions.<__DisplayClass10_2.>AddDbContext<
eProvider p, DbContextOptionsBuilder b)
api_paulos_auto_api_1 | at Microsoft.Extensions.DependencyInjection.EntityFrameworkServiceCollectionExtensions.CreateDbContextOptions[TContext](ISe
applicationServiceProvider, Action`2 optionsAction)
api_paulos_auto_api_1 | at Microsoft.Extensions.DependencyInjection.EntityFrameworkServiceCollectionExtensions.<__DisplayClass10_0`1.>AddCoreSe
rviceProvider p)
```

Este processo demora um bocado, pois está a arrancar com o servidor mysql, e tenta arrancar com o .netcore quase em simultâneo, mas como o mysql está a arrancar, e o .netcore depende da base de dados para funcionar vai dando erros. Após uns segundos, deve conseguir finalmente arrancar e deve ficar tudo em condições, ou seja, devemos ter algo deste género:

```
api_paulos_auto_api_1 | at Microsoft.Extensions.DependencyInjection.ServiceProviderServiceExtensions
ype)
api_paulos_auto_api_1 | at Microsoft.Extensions.DependencyInjection.ServiceProviderServiceExten
api_paulos_auto_bd_1 | 2020-06-01T19:25:29.402824Z 0 [System] [MY-011323] [Server] X Plugin ready
ess: '::' port: 33060
api_paulos_auto_api_1 | at PaulosAuto.API.Program.Main(String[] args) in C:\Users\jnap\source\r
api_paulos_auto_bd_1 | 2020-06-01T19:25:30.354907Z 0 [warning] [MY-010068] [Server] CA certificat
api_paulos_auto_bd_1 | 2020-06-01T19:25:30.377391Z 0 [warning] [MY-011810] [Server] Insecure conf
is accessible to all OS users. Consider choosing a different directory.
api_paulos_auto_api_1 exited with code 139
warn: Microsoft.AspNetCore.DataProtection.Repositories.FileSystemXmlReposi
Storing keys in a directory '/root/.aspnet/DataProtection-Keys' that
ll be unavailable when container is destroyed.
info: Microsoft.Hosting.Lifetime[0]
Now listening on: http://[::]:80
info: Microsoft.Hosting.Lifetime[0]
Application started. Press Ctrl+C to shut down.
info: Microsoft.Hosting.Lifetime[0]
Hosting environment: Production
api_paulos_auto_bd_1 | 2020-06-01T19:25:30.674765Z 0 [System] [MY-010931] [Server] /usr/sbin/mysq
ysqld/mysql.sock' port: 3306 MySQL Community Server - GPL.
api_paulos_auto_bd_1 | mbind: Operation not permitted
```

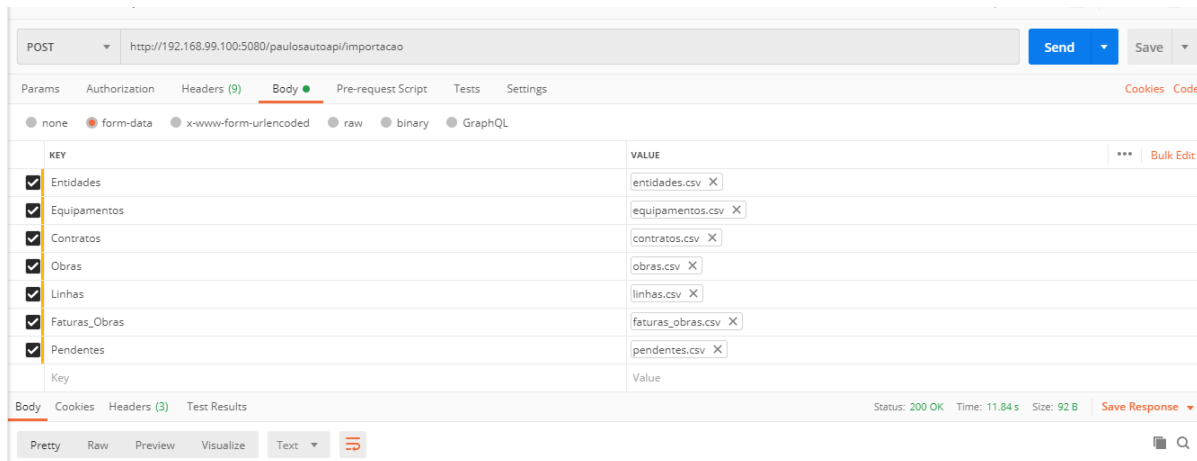
Neste momento temos o servidor com a API a correr e ligado à BD, ficando à escuta na porta **5080**.

Para parar o mesmo CTRL+C.

Se desejarmos remover tudo o que foi criado, correr:

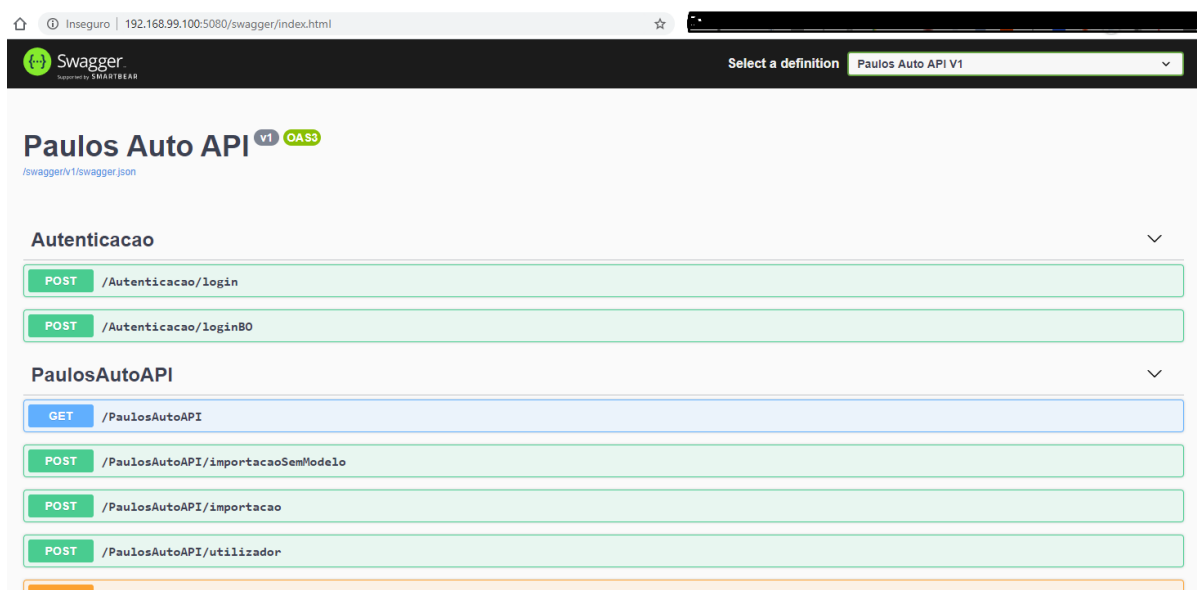
docker-compose -f .\docker_compose_api.yml down

5. Importar os dados dos ficheiros fornecidos pela PaulosAuto, apesar de a bd já ir com alguns dados de exemplo precisamos de dados “reais”, para tal precisamos do PostMan e dos ficheiros que estão no zip. Criamos um pedido post, igual ao da imagem abaixo e enviamos, o ip do servidor (192.168.99.100), que está na imagem supostamente será o vosso ip do docker:



6. No final temos a BD com os dados possíveis, para saberem os métodos disponibilizados pela API, podem ir ao endereço:

a. <http://192.168.99.100:5080/swagger/index.html>



Dados que têm conteúdo inserido por mim:

- **ClientNumber:** 744/3444
- **SerialNumber:** PRG00195/ Y9C00226
- **Utilizadores Login:**
-

	Id	Email	Password	CONTA_CLIENTE	NUM_CLIENTE
▶	1	admin@cabral.pt	ATcFA6qwSEjcGqaJoSeWh+tv4umYG0XAOZIN...	21111	744
	2	horas@cabral.pt	ASvwy0gTYDlr8wTptWD34eYyipBot9+WM+iIN9...	21111	744
	3	faturas@cabral.pt	ATPMV36OePQMEM+IMO3e1H0Lc827fwuC7gkw...	21111	744
	4	historico@cabral.pt	AQDuvU+psEK8eY0eC0H1HCfWpMRgK0BzbQn...	21111	744
	5	misto@cabral.pt	AVpjsBJKePg9MGDC+5fulrJt1vkzyZuP+X4N9PN...	21111	744
	6	outra@cabral2.pt	AcyWEdIXOJ/ftfbOS1lLkyOaD5YOlJ0Un3K3wI/...	21111	3444

A password de cada um deles é o que está antes do @.

Existe um método de reset de password, que faz com que a mesma passe a ser igual ao email.

A Api não tem a autorização ativa, ou seja, podem ser feitos os pedidos que quiserem sem token, é só por uma questão de vos simplificar a vida.

Alguns exemplos de pedidos:

- Consulta de equipamentos de um cliente

GET <http://192.168.99.100:5080/paulosautoapi/clientes/equipamentos/744> Send Save

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies Cc

Query Params

KEY	VALUE	DESCRIPTION
Key	Value	Description

Body Cookies Headers (4) Test Results Status: 200 OK Time: 1788 ms Size: 469 B Save Response

```

1  [
2    {
3      "brand": "Caterpillar",
4      "model": "313FL",
5      "serialNumber": "PRG00195",
6      "plate": null,
7      "currentHours": 2800.00,
8      "image": "http://192.168.99.100:5080/Equipamentos/PRG00195.png"
9    },
10   {
11     "brand": "Caterpillar",
12     "model": "120",
13     "serialNumber": "Y9C00226",
14     "plate": null,
15     "currentHours": 235.00,
16     "image": "http://192.168.99.100:5080/Equipamentos/Y9C00226.png"
17   }
18 ]

```

- Consulta de registo de avarias de um equipamento, com anexos

GET <http://192.168.99.100:5080/paulosautoapi/equipamentos/avarias/PRG00195> Send Save

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies Code

Query Params

KEY	VALUE	DESCRIPTION	...	Bulk Edit
Key	Value	Description		

Body Cookies Headers (4) Test Results Status: 200 OK Time: 240 ms Size: 564 B Save Response

Pretty Raw Preview Visualize JSON ≡

```

1  {
2    "email": "horas@cabral.pt",
3    "cliente": "21111",
4    "dataRegisto": "2020-05-15T13:00:00",
5    "descricao": "Avaria 1",
6    "imagens": [
7      "http://192.168.99.100:5080/Avarias/Imagens/erro1.jpg"
8    ],
9    "videos": []
10  },
11  {
12    "email": "admin@cabral.pt",
13    "cliente": "21111",
14    "dataRegisto": "2020-05-17T13:00:00",
15    "descricao": "Avaria 2",
16    "imagens": [
17      "http://192.168.99.100:5080/Avarias/Imagens/erro2.jpg"
18    ],
19    "videos": [
20      "http://192.168.99.100:5080/Avarias/Videos/avaria.mp4"
21    ]
22  }
23  ]
24  }
```

- Faturas de um cliente, com pdfs carregados

GET <http://192.168.99.100:5080/paulosautoapi/clientes/faturas/744> Send Save

Pretty Raw Preview Visualize JSON ≡

```

1  [
2    {
3      "diario": "FA01",
4      "ano": "2020",
5      "number": 24323,
6      "docNumber": 155,
7      "issueDate": "2020-02-29T17:23:43",
8      "dueDate": "2020-02-29T00:00:00",
9      "totalAmount": 323.950,
10     "paidAmount": 0.000,
11     "docURL": "http://192.168.99.100:5080/Faturas/2020_FA01_155.pdf"
12   },
13   {
14     "diario": "FA01",
15     "ano": "2020",
16     "number": 23778,
17     "docNumber": 101,
18     "issueDate": "2020-02-07T17:17:48",
19     "dueDate": "0001-01-01T00:00:00",
20     "totalAmount": 0.000,
21     "paidAmount": 0.000,
22     "docURL": null
23   },
24   {
25     "diario": "FA01",
26     "ano": "2020",
27     "number": 24207,
28     "docNumber": 136,
29     "issueDate": "2020-02-24T10:48:25",
30     "dueDate": "0001-01-01T00:00:00",
31     "totalAmount": 0.000,
32     "paidAmount": 0.000,
33     "docURL": "http://192.168.99.100:5080/Faturas/2020_FA01_136.pdf"
34   }
35 ]
```

- Registo de intervenções/obras equipamento (dados dos ficheiros), método teve de ser alterado ao dummy disponibilizado, devido ao formato dos dados disponibilizados pela empresa.

GET <http://192.168.99.100:5080/paulosautoapi/equipamentos/intervencoes/PRG00195> Send Save

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies Code

Query Params

KEY	VALUE	DESCRIPTION
Key	Value	Description

Body Cookies Headers (4) Test Results Status: 200 OK Time: 529 ms Size: 1.6 KB Save Response

Pretty Raw Preview Visualize JSON

```

1 {
2   {
3     "intervencoes": [
4       {
5         "data": "2017-03-15T00:00:00",
6         "horas": 5.000
7       }
8     ],
9     "descricaoIntervencao": [],
10    "finalizada": false
11  },
12  {
13    "intervencoes": [
14      {
15        "data": "2018-01-03T00:00:00",
16        "horas": 583.000
17      },
18      {
19        "data": "2018-01-03T00:00:00",
20        "horas": 583.000
21      },
22      {
23        "data": "2018-02-05T00:00:00",
24        "horas": 583.000
25      }
26    ],
27    "descricaoIntervencao": [],
28    "finalizada": false
29  },
30  ]
31 }
```

- Registo de horas de um equipamento

POST <http://192.168.99.100:5080/paulosautoapi/equipamentos/utlizacao> Send Save

Params Authorization Headers (9) Body Pre-request Script Tests Settings Cookies Code

none form-data x-www-form-urlencoded raw binary GraphQL JSON Beautify

```

1 {
2   "email": "aaa@aaa.pt",
3   "serialNumber": "FTR00957",
4   "horasAtuais": 999.99
5 }
```

- Registo de uma avaria com vídeos e imagens, pode ser feito sem nenhum dos anexos.

POST <http://192.168.99.100:5080/paulosautoapi/equipamentos/avarias> Send

Params Authorization Headers (9) Body Pre-request Script Tests Settings Cookies Code

none form-data x-www-form-urlencoded raw binary GraphQL

KEY	VALUE
<input checked="" type="checkbox"/> serialNumber	FTR00957
<input checked="" type="checkbox"/> videos	avaria.mp4 X
<input checked="" type="checkbox"/> images	5WvdtVT.png X
<input checked="" type="checkbox"/> numeroCliente	2111
<input checked="" type="checkbox"/> descricao	texto com a avaria
<input checked="" type="checkbox"/> email	aaa@aaa.pt
Key	Value