

1 Запускаем и проверяем контейнер

docker pull tensorflow/serving

docker images

```
Командная строка
Microsoft Windows [Version 10.0.19042.804]
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C:\Users\root>cd C:\Users\root\PycharmProjects\Test_docker\DZ_22(Light)

C:\Users\root\PycharmProjects\Test_docker\DZ_22(Light)>docker pull tensorflow/serving
Using default tag: latest
latest: Pulling from tensorflow/serving
d519e2592276: Pull complete
d22d2dfcfa9c: Pull complete
b3afe92c540b: Pull complete
cd7dd7eb8873: Pull complete
7998bd37b38c: Pull complete
9de86a94bde8: Pull complete
0fa4da38b8d9: Pull complete
Digest: sha256:d984dbe2de34e131dbdd7f85ba993696da56c89b91f0b2559e482598919a2c5e
Status: Downloaded newer image for tensorflow/serving:latest
docker.io/tensorflow/serving:latest

C:\Users\root\PycharmProjects\Test_docker\DZ_22(Light)>docker images
REPOSITORY          TAG             IMAGE ID        CREATED         SIZE
tensorflow/serving  latest         784e871ab5a4   5 weeks ago    298MB

C:\Users\root\PycharmProjects\Test_docker\DZ_22(Light)>_
```

2 Клонировем сервер

git clone <https://github.com/tensorflow/serving>

```
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C:\Users\root>cd C:\Users\root\PycharmProjects\Test_docker\DZ_22(Light)

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REPOSITORY          TAG             IMAGE ID        CREATED         SIZE
tensorflow/serving  latest         784e871ab5a4   5 weeks ago    298MB

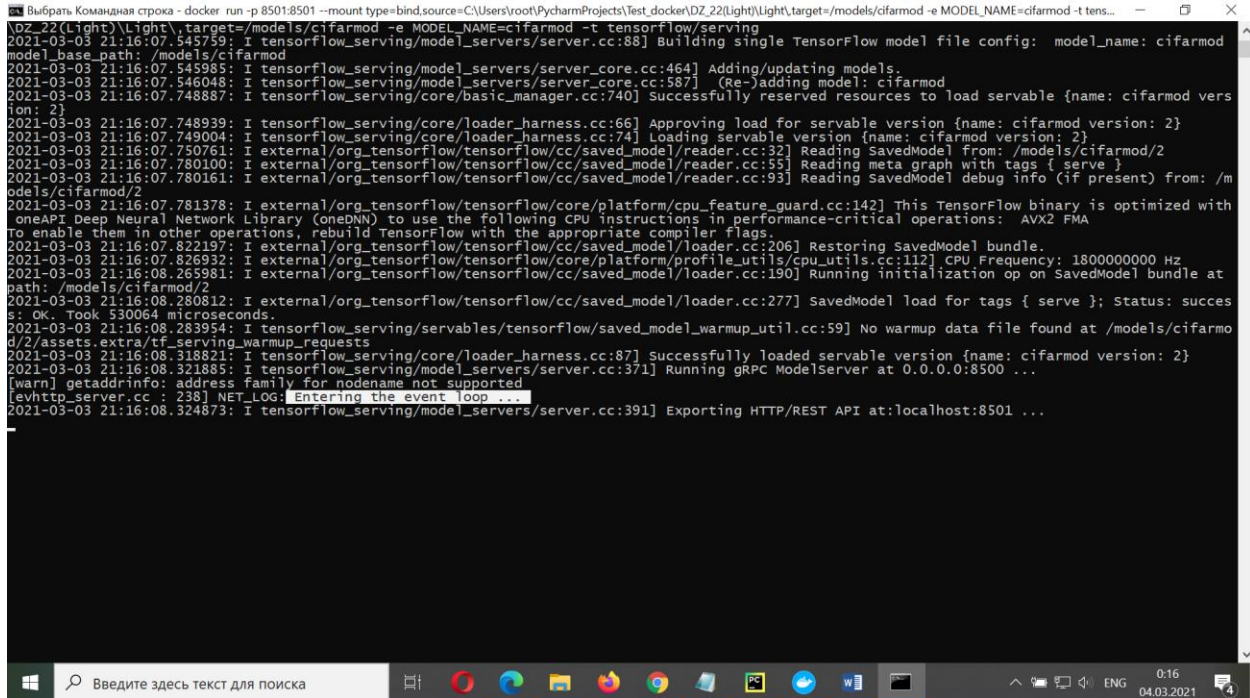
C:\Users\root\PycharmProjects\Test_docker\DZ_22(Light)>git clone https://github.com/tensorflow/serving
Cloning into 'serving'...
remote: Enumerating objects: 115, done.
remote: Counting objects: 100% (115/115), done.
remote: Compressing objects: 100% (115/115), done.
Receiving objects: 100% (25299/25299), 11.52 MiB | 9.84 MiB/s, done.
Resolving deltas: 100% (19635/19635), done.
Checking connectivity... done.

C:\Users\root\PycharmProjects\Test_docker\DZ_22(Light)>
```

3 Загружаем обученную модель

`docker run -p 8501:8501 --mount`

`type=bind,source=C:\Users\root\PycharmProjects\Test_docker\DZ_22(Light)\Light,target=/models/cifarmod -e MODEL_NAME=cifarmod -t tensorflow/serving`



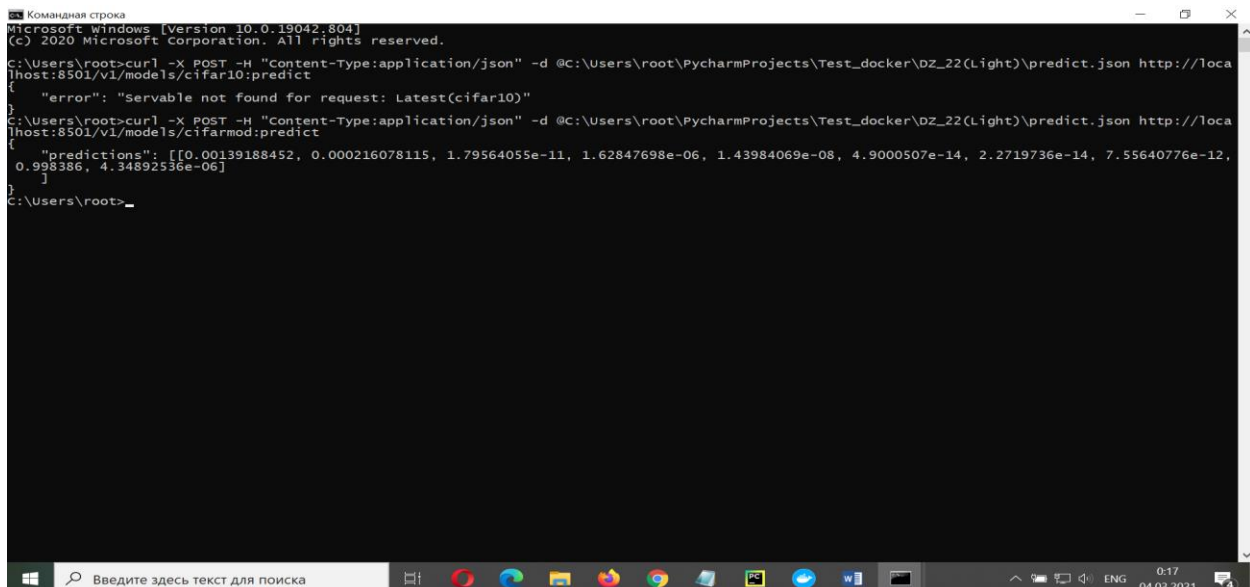
```
Выбрать Командная строка - docker run -p 8501:8501 --mount type=bind,source=C:\Users\root\PycharmProjects\Test_docker\DZ_22(Light)\Light,target=/models/cifarmod -e MODEL_NAME=cifarmod -t tensorflow/serving
2021-03-03 21:16:07.545759: I tensorflow_serving/model_servers/server.cc:88] Building single TensorFlow model file config: model_name: cifarmod
model_base_path: /models/cifarmod
2021-03-03 21:16:07.545985: I tensorflow_serving/model_servers/server_core.cc:464] Adding/updating models.
2021-03-03 21:16:07.546048: I tensorflow_serving/model_servers/server_core.cc:587] (Re-)adding model: cifarmod
2021-03-03 21:16:07.748887: I tensorflow_serving/core/basic_manager.cc:740] Successfully reserved resources to load servable {name: cifarmod version: 2}
2021-03-03 21:16:07.748939: I tensorflow_serving/core/loader_harness.cc:66] Approving load for servable version {name: cifarmod version: 2}
2021-03-03 21:16:07.749004: I tensorflow_serving/core/loader_harness.cc:74] Loading servable version {name: cifarmod version: 2}
2021-03-03 21:16:07.750761: I external/org_tensorflow/tensorflow/cc/saved_model/reader.cc:32] Reading SavedModel from: /models/cifarmod/2
2021-03-03 21:16:07.780100: I external/org_tensorflow/tensorflow/cc/saved_model/reader.cc:55] Reading meta graph with tags { serve }
2021-03-03 21:16:07.780161: I external/org_tensorflow/tensorflow/cc/saved_model/reader.cc:93] Reading SavedModel debug info (if present) from: /models/cifarmod/2
2021-03-03 21:16:07.781378: I external/org_tensorflow/tensorflow/core/platform/cpu_feature_guard.cc:142] This TensorFlow binary is optimized with oneAPI Deep Neural Network Library (oneDNN) to use the following CPU instructions in performance-critical operations: AVX2 FMA
to enable them in other operations, rebuild TensorFlow with the appropriate compiler flags.
2021-03-03 21:16:07.822197: I external/org_tensorflow/tensorflow/cc/saved_model/loader.cc:206] Restoring SavedModel bundle.
2021-03-03 21:16:07.826932: I external/org_tensorflow/tensorflow/core/platform/profile_utils/cpu_utils.cc:112] CPU Frequency: 1800000000 Hz
2021-03-03 21:16:08.265981: I external/org_tensorflow/tensorflow/cc/saved_model/loader.cc:190] Running initialization op on SavedModel bundle at path: /models/cifarmod/2
2021-03-03 21:16:08.280812: I external/org_tensorflow/tensorflow/cc/saved_model/loader.cc:277] SavedModel load for tags { serve }; Status: success: OK. Took 530064 microseconds.
2021-03-03 21:16:08.283954: I tensorflow_serving/servables/tensorflow/saved_model_warmup_util.cc:59] No warmup data file found at /models/cifarmod/2/assets.extra/tf_serving_warmup_requests
2021-03-03 21:16:08.318821: I tensorflow_serving/core/loader_harness.cc:87] Successfully loaded servable version {name: cifarmod version: 2}
2021-03-03 21:16:08.321885: I tensorflow_serving/model_servers/server.cc:371] Running gRPC ModelServer at 0.0.0.0:8501 ...
[warn] getaddrinfo: address family for nodename not supported
[evhttp_server.cc : 238] NET_LOG: Entering the event loop ...
2021-03-03 21:16:08.324873: I tensorflow_serving/model_servers/server.cc:391] Exporting HTTP/REST API at:localhost:8501 ...
```

4 Отправляем POST запрос

`curl -X POST -H "Content-Type:application/json" -d`

`@C:\Users\root\PycharmProjects\Test_docker\DZ_22(Light)\predict.json`

`http://localhost:8501/v1/models/cifarmod:predict`



```
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C:\Users\root>curl -X POST -H "Content-Type:application/json" -d @C:\Users\root\PycharmProjects\Test_docker\DZ_22(Light)\predict.json http://localhost:8501/v1/models/cifar10:predict
{"error": "Servable not found for request: Latest(cifar10)"}
C:\Users\root>curl -X POST -H "Content-Type:application/json" -d @C:\Users\root\PycharmProjects\Test_docker\DZ_22(Light)\predict.json http://localhost:8501/v1/models/cifarmod:predict
{"predictions": [[{"0.00139188452, 0.000216078115, 1.79564055e-11, 1.62847698e-06, 1.43984069e-08, 4.9000507e-14, 2.2719736e-14, 7.55640776e-12, 0.998386, 4.34892536e-06}]}]}
C:\Users\root>
```

