Definitions & General Information

Docker - Docker is a set of platform as a service products that use OS-level virtualization to deliver software in packages called containers. More information at:

https://www.docker.com/

IPFS - IPFS is The InterPlanetary File System is a protocol and peer-to-peer network for storing and sharing data in a distributed file system. More information at:

https://ipfs.io/

Seed - Seed is an identifier of the Stellar wallet. You must create it before you are starting to deal with a dockers

Nickname- Nickname is some user friendly name that is used in Tor.

Prerequisites

# Install docker:

***curl -fsSL https://get.docker.com -o get-docker.sh***

***sh get-docker.sh***

***chmod +x /usr/bin/docker***

***sudo groupadd docker***

***sudo usermod -aG docker $USER && newgrp docker***

# Docker minimal requirements:

**Memory: 512MB *RAM* (2GB Recommended). Disk: Sufficient amount to run the Docker containers you wish to use. CPU: 2 cores**

# Create workspace directory:

***torplusworkspace=<yourworkspacedir>***

***mkdir -p ${torplusworkspace}***

***cd ${torplusworkspace}***

# Login to docker registry:

Use login and password is secret

***echo 'ide!$QjNSF@e$8xX' | docker login --username torplusdev --password-stdin***

Run IPFS client

# Pull image

***docker pull torplusdev/production:ipfs-latest***

# Run Tor-Plus container with IPFS:

***# create workspace***

***cd ${torplusworkspace}***

***nickname=tunick21 # set your nickname***

***seed=SCR27IGKMKXSOKUV7AC4T3HBTBVBL2MI45HHFSDNRYJFFVKWQAWBBKKZ # set your seed***

***# run docker container***

***docker run \***

***--name torplusipfs \***

***-p 28000:28080 \***

***-e nickname=${nickname} \***

***-e PP\_ENV=prod \***

***-e seed=${seed} \***

***-v ${PWD}/tor:/root/tor \***

***-v ${PWD}/ipfs:/root/.ipfs \***

***-v ${PWD}/hidden\_service:/root/hidden\_service \***

***--rm \***

***torplusdev/production:ipfs-latest***

| **#** | **Test Case Description** | **Test Case Procedure** | **Expected Output** |
| --- | --- | --- | --- |
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|  |
| **1** | **Check file access ipfs at docker startup. Uploading ipfs files to TorPlus network via docker** | | | |  |
| **1.1** | Checking the automatic creation of a test file ipfs | 1. Run step "Run IPFS client" of this instruction. 2. Go to the "<yourworkspacedir> / ipfs" folder 3. Open file "ifpstestfile.txt". 4. Open file "ipfs\_test\_cid.txt". 5. Copy cid and run the command "ipfs get <there should be a copied СID>" in the console on another computer with TorPlus installed and running services. | 1. Docker container and all TorPlus services are launched. 2. After 30 seconds after starting the container, 2 test files are created in the ipfs folder: "ifpstestfile.txt", "ipfs\_test\_cid.txt". 3. Displayed text: unique ID is online !! 4. The cid of the ipfs file is displayed. 5. A txt file with a message from the "ifpstestfile.txt" file is downloaded to the computer. |  |  |
| **1.2** | Checking the upload of ipfs files to TorPlus network via docker. | 1. Run step "Run IPFS client" of this instruction. 2. Go to the "<yourworkspacedir> / ipfs" folder and execute the command in the console "sudo mkdir -p ./data" 3. Execute command "sudo cp ~/<the path to the file that we will upload to the ipfs network> ~/<yourworkspacedir>/ipfs/data" 4. Execute commands "sudo docker exec -it torplusipfs /bin/bash"  "./ipfs add ~/.ipfs/data/<file name>" | 1. Docker container and all TorPlus services are launched. 2. The "data" directory is created. 3. Download file copied to "data" folder. 4. After successfully uploading the file to the ipfs, a message is displayed "added <cid> <file name>". To check file availability сopy cid and run the command "ipfs get <there should be a copied СID>" in the console on another computer with TorPlus installed and running services. |  |  |

Run web site as host

# Create folder for ssl and copy ssl to dir

***torplusworkspace=<yourworkspacedir>***

***cd ${torplusworkspace}***

***mkdir -p ssl***

# If use let's encrypt:

***# install certbot:***

***sudo apt update && sudo apt install -y certbot***

***domain=<yourdomains>***

***email=<youremail>***

***certbot certonly --standalone -d ${domain} \***

***--non-interactive --agree-tos --email ${email} \***

***--http-01-port=80***

***cat /etc/letsencrypt/live/${domain}/fullchain.pem /etc/letsencrypt/live/${domain}/privkey.pem > ${torplusworkspace}/ssl/${domain}.pem***

# Pull docker image:

***docker pull torplusdev/production:ipfs\_haproxy-latest***

# For host static files

***Set static files:***

***cd ${torplusworkspace}***

***mkdir static***

***echo "Hello" >> ./static/index.html # or copy your static files***

# Run docker image:

***cd ${torplusworkspace}***

***seed=SCR27IGKMKXSOKUV7AC4T3HBTBVBL2MI45HHFSDNRYJFFVKWQAWBBKKZ # set your seed***

***nickname=tum332 # set your nickname***

***docker run \***

***--name torplus \***

***-e nickname=${nickname} \***

***-e seed=${seed} \***

***-e role=hs\_client \***

***-e HOST\_PORT=80 \***

***-e PP\_ENV=prod \***

***-e WWW\_IP=127.0.0.1 \***

***-e useNginx=1 \***

***-p 80:80 \***

***-p 28000:28080 \***

***-v ${PWD}/tor:/root/tor \***

***-v ${PWD}/ipfs:/root/.ipfs \***

***-v ${PWD}/ssl:/etc/ssl/torplus/ \***

***-v ${PWD}/hidden\_service:/root/hidden\_service \***

***-v ${PWD}/static:/var/www/html \***

***--rm \***

***torplusdev/production:ipfs\_haproxy-latest***

# Add text record to DNS:

***cat ${torplusworkspace}/hidden\_service/hsv3/hostname***

***torplus=<onion address without .onion suffix>  
  
For check TXT record you can use   
https://www.whatsmydns.net/#TXT/torplus.{domain}***

# Host from another ip or host or localhost site

# Create folder for ssl and copy ssl to dir

***torplusworkspace=<yourworkspacedir>***

***cd ${torplusworkspace}***

***mkdir -p ssl***

# If use let's encrypt:

***# install certbot:***

***apt update && apt install -y certbot***

***domain=<yourdomains>***

***email=<youremail>***

***certbot certonly --standalone -d ${domain} \***

***--non-interactive --agree-tos --email ${email} \***

***--http-01-port=80***

***cat /etc/letsencrypt/live/${domain}/fullchain.pem /etc/letsencrypt/live/${domain}/privkey.pem > ${torplusworkspace}/ssl/${domain}.pem***

# Pull docker image:

***docker pull torplusdev/production:ipfs\_haproxy-latest***

# Run docker container:

***cd ${torplusworkspace}***

***seed=SCR27IGKMKXSOKUV7AC4T3HBTBVBL2MI45HHFSDNRYJFFVKWQAWBBKKZ # set your seed***

***nickname=tum33212 # set your nickname***

***www\_ip=1.1.1.1 # set your webserver ip/name***

 ***docker run \***

***--name torplus \***

***-e nickname=${nickname} \***

***-e seed=${seed} \***

***-e role=hs\_client \***

***-e HOST\_PORT=80 \***

***-e PP\_ENV=prod \***

***-e WWW\_IP=${www\_ip} \***

***-p 80:80 \***

***-p 28000:28080 \***

***-v ${PWD}/tor:/root/tor \***

***-v ${PWD}/ipfs:/root/.ipfs \***

***-v ${PWD}/ssl:/etc/ssl/torplus/ \***

***-v ${PWD}/hidden\_service:/root/hidden\_service \***

***--add-host host.docker.internal:host-gateway \***

***--rm \***

***torplusdev/production:ipfs\_haproxy-latest***

# Add text record to DNS:

***cat ${torplusworkspace}/hidden\_service/hsv3/hostname***

***torplus=<onion address without .onion suffix>  
  
For check TXT record you can use   
https://www.whatsmydns.net/#TXT/torplus.{domain}***

**Setting and testing Video site**

# Replace media files on the site

| **#** | **Test Case Description** | **Test Case Procedure** | **Expected Output** | **Result** | **Priority** |
| --- | --- | --- | --- | --- | --- |
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| **1** | **Video file replacement check** | | | |  |  |
| **1.1** | Checking the login to the admin panel | 1. Go to the site https://torplus.videotpdemo.com/wp-admin/ 2. Enter login "admin" and password "pP6LPt9IQ9e@0BkJIA" and click on the login button. 3. At the top left, move the cursor over the drop-down menu "da-video" and click on "Visit Site". | 1. Fields for entering login and password with a login button are displayed. 2. The admin panel of the site is displayed. 3. The site is displayed with an additional admin panel on top. |  |  |  |
| **1.2** | Checking the replacement of a video file via the "Edit video" button | 1. Repeat steps 1-3 of case 1.1. 2. Go to the video page (for example https://torplus.videotpdemo.com/video/sefozie-world/). 3. Click on the "Edit Video" button. 4. In the "Video data" block, change the path to the video in the field "Embed Video". (for example <iframe src="https://torplus.videotpdemo.com/ipfs/QmeLHpysG2YQDPLRxMgLc99Ve1JU5hhKK5Z55upTkkVQpY" allowfullscreen></iframe>). Сlick on the update button. | 1. The site https://torplus.videotpdemo.com/ is displayed with an additional admin panel on top. 2. The video page opens, the "Edit Video" button appears on the admin panel. 3. The page with the post settings is displayed, including the "Video datа" block. 4. The video on the previously selected page changes to the one that was inserted. |  |  |  |
| **1.3** | Checking the upload of ipfs files to TorPlus network via docker. | 1. Run step "Run torplus container with ipfs" instructions "Readme for Linux". 2. Go to the "<yourworkspacedir> / ipfs" folder and execute the command in the console "sudo mkdir -p ./data" 3. Execute command "sudo cp ~/<the path to the file that we will upload to the ipfs network> ~/<yourworkspacedir>/ipfs/data" 4. Execute commands "sudo docker exec -it torplusipfs /bin/bash"  "./ipfs add ~/.ipfs/data/<file name>" 5. Copy the cid of the uploaded file and paste it into the site (step 1.2) | 1. Docker container and all TorPlus services are launched. 2. The "data" directory is created. 3. Download file copied to "data" folder. 4. After successfully uploading the file to the ipfs, a message is displayed "added <cid> <file name>". To check file availability сopy cid and run the command "ipfs get <there should be a copied СID>" in the console on another computer with TorPlus installed and running services. 5. When you go to the site page, the file uploaded to the ipfs is played. |  |  |  |