

TECNOLOGIA EM TELEMÁTICA
ADMINISTRAÇÃO DE SISTEMA DE REDES
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JOSÉ DE ALENCAR DE SOUSA JÚNIOR

AVALIAÇÃO 10

```
root@hbt: /home/hbt/Documentos
hbt@hbt:~$ su
Senha:
root@hbt:/home/hbt# docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS                    NAMES
52badb295585   lamp_database  "docker-entrypoint.s..." 2 weeks ago   Up 13 days   127.0.0.1:3306->3306/tcp, 33060/tcp   lamp-mysql8
root@hbt:/home/hbt# ls
Área de Trabalho  Documentos  Imagens  Música  snap  Downloads  Modelos  Público  Vídeos
root@hbt:/home/hbt# cd Documentos
root@hbt:/home/hbt/Documentos# ls
docker-compose.yml
root@hbt:/home/hbt/Documentos# docker-compose up
Creating network "documentos_default" with the default driver
Creating volume "documentos_config" with default driver
Creating volume "documentos_data" with default driver
Creating volume "documentos_log" with default driver
Pulling eclipse-mosquitto (eclipse-mosquitto)...
latest: Pulling from library/eclipse-mosquitto
c926b61bad3b: Pull complete
a87e6a8c3b38: Pull complete
4e2ff55c815a: Pull complete
Digest: sha256:eca7dcecf2498396b5217bc06ffcc2da889d3a8f65fc0761fc5c4c071b3c272a
Status: Downloaded newer image for eclipse-mosquitto:latest
Creating documentos_eclipse-mosquitto_1 ... done
Attaching to documentos_eclipse-mosquitto_1
eclipse-mosquitto_1 | 1701952012: mosquitto version 2.0.18 starting
eclipse-mosquitto_1 | 1701952012: Config loaded from /mosquitto/config/mosquitto.conf.
eclipse-mosquitto_1 | 1701952012: Starting in local only mode. Connections will only be possible from clients running on this machine.
eclipse-mosquitto_1 | 1701952012: Create a configuration file which defines a listener to allow remote access.
eclipse-mosquitto_1 | 1701952012: For more details see https://mosquitto.org/documentation/authentication-methods/
eclipse-mosquitto_1 | 1701952012: Opening ipv4 listen socket on port 1883.
eclipse-mosquitto_1 | 1701952012: Opening ipv6 listen socket on port 1883.
eclipse-mosquitto_1 | 1701952012: Error: Address not available
eclipse-mosquitto_1 | 1701952012: mosquitto version 2.0.18 running
```

LEVANTANDO O DOCKER-COMPOSE COM O MQTT.

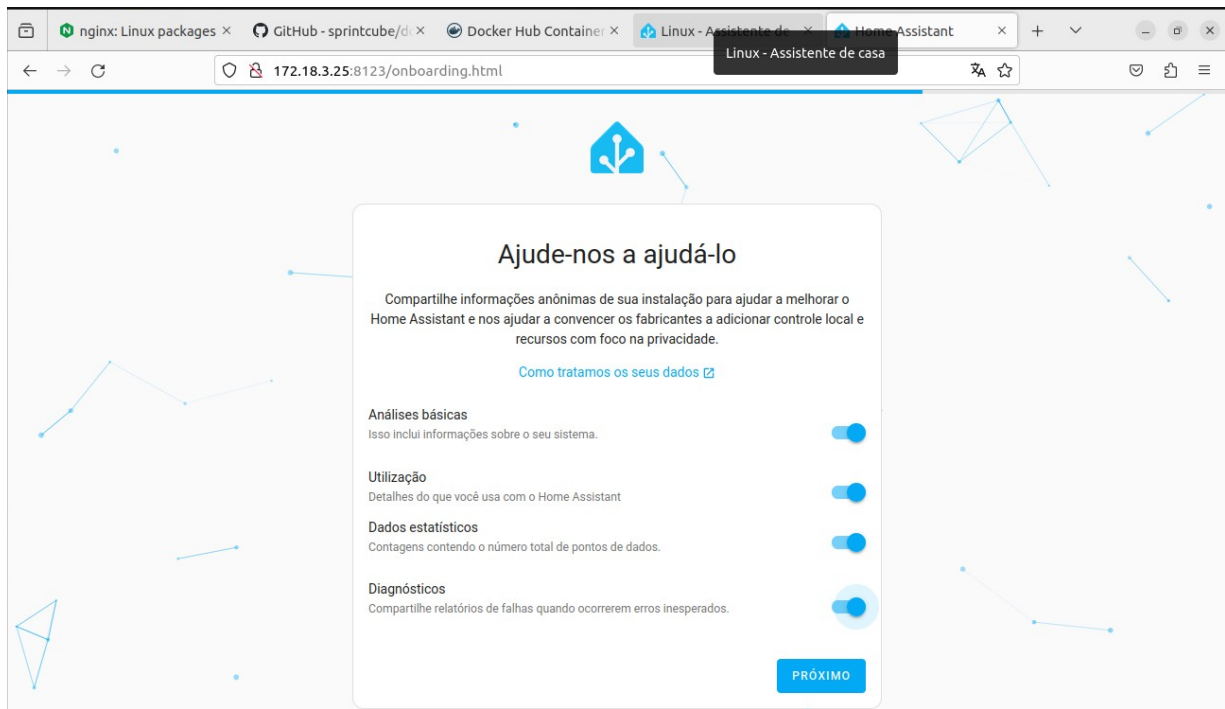
```
Abrir  docker-compose.yml
~/src/tele/avaluacao/avaluacao-10

1 version: "3"
2
3 services:
4   webserver:
5     build:
6       context: ./bin/${PHPVERSION}
7     container_name: "${COMPOSE_PROJECT_NAME}-${PHPVERSION}"
8     restart: "always"
9     ports:
10      - "${HOST_MACHINE_UNSECURE_HOST_PORT}:80"
11      - "${HOST_MACHINE_SECURE_HOST_PORT}:443"
12     links:
13      - database
14     volumes:
15      - ${DOCUMENT_ROOT}:/var/www/html:rw
16      - ${PHP_INI}:/usr/local/etc/php/php.ini
17      - ${SSL_DIR}:/etc/apache2/ssl
18      - ${VHOSTS_DIR}:/etc/apache2/sites-enabled
19      - ${LOG_DIR}:/var/log/apache2
20      - ${XDEBUG_LOG_DIR}:/var/log/xdebug
21     environment:
22      APACHE_DOCUMENT_ROOT: ${APACHE_DOCUMENT_ROOT}:/var/www/html
23      PMA_PORT: ${HOST_MACHINE_PMA_PORT}
24      MYSQL_ROOT_PASSWORD: ${MYSQL_ROOT_PASSWORD}
25      MYSQL_USER: ${MYSQL_USER}
26      MYSQL_PASSWORD: ${MYSQL_PASSWORD}
27      MYSQL_DATABASE: ${MYSQL_DATABASE}
28      HOST_MACHINE_MYSQL_PORT: ${HOST_MACHINE_MYSQL_PORT}
29      XDEBUG_CONFIG: "client_host=host.docker.internal remote_port=${XDEBUG_PORT}"
30     extra_hosts:
31      - "host.docker.internal:host-gateway"
32   database:
33     build:
34       context: "./bin/${DATABASE}"
35     container_name: "${COMPOSE_PROJECT_NAME}-${DATABASE}"
36     restart: "always"
37     ports:
38      - "127.0.0.1:${HOST_MACHINE_MYSQL_PORT}:3306"
39     volumes:
40      - ${MYSQL_INITDB_DIR}:/config/initdb:/docker-entrypoint-initdb.d
41      - ${MYSQL_DATA_DIR}:/data/mysql:/var/lib/mysql
42      - ${MYSQL_LOG_DIR}:/logs/mysql:/var/log/mysql
43     environment:
44      MYSQL_ROOT_PASSWORD: ${MYSQL_ROOT_PASSWORD}
45      MYSQL_DATABASE: ${MYSQL_DATABASE}
46      MYSQL_USER: ${MYSQL_USER}
47      MYSQL_PASSWORD: ${MYSQL_PASSWORD}
48   phpmyadmin:
49     image: phpmyadmin
50     container_name: "${COMPOSE_PROJECT_NAME}-phpmyadmin"
51     links:
52      - database
53     environment:
54      PMA_HOST: database
55
```

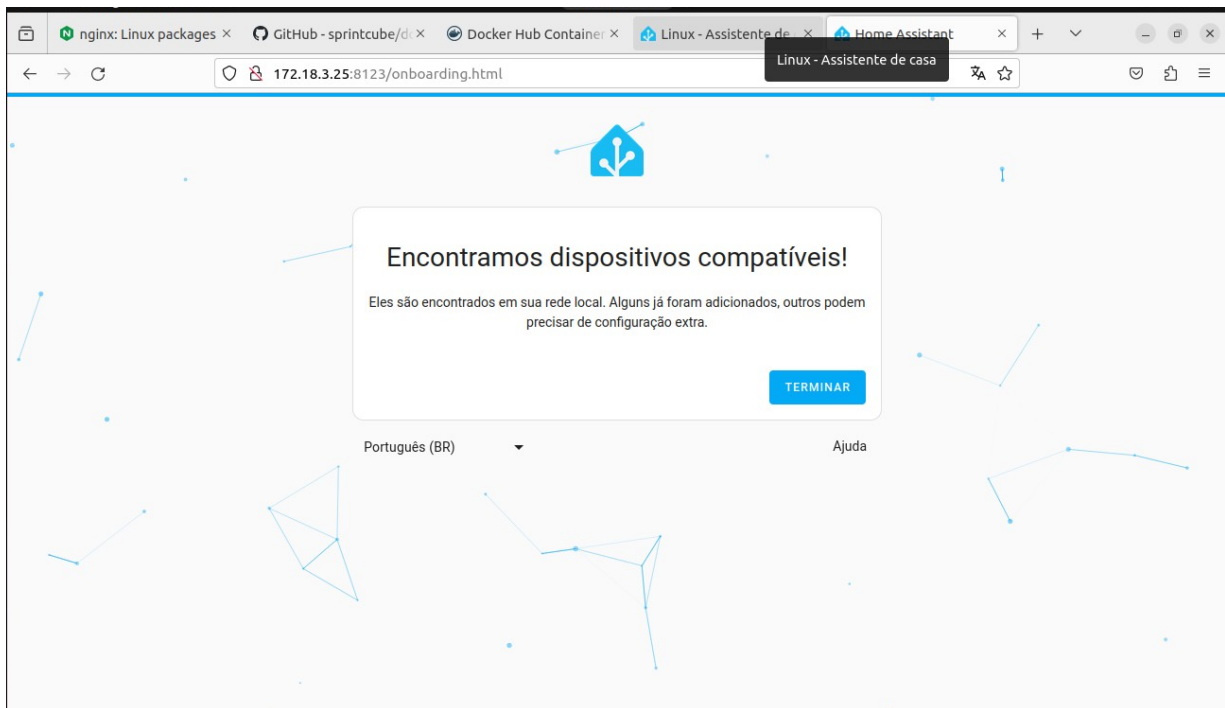
```
Abrir  docker-compose.yml
~/src/tele/avaluacao/avaluacao-10

20      - ${XDEBUG_LOG_DIR}:/var/log/xdebug
21     environment:
22      APACHE_DOCUMENT_ROOT: ${APACHE_DOCUMENT_ROOT}:/var/www/html
23      PMA_PORT: ${HOST_MACHINE_PMA_PORT}
24      MYSQL_ROOT_PASSWORD: ${MYSQL_ROOT_PASSWORD}
25      MYSQL_USER: ${MYSQL_USER}
26      MYSQL_PASSWORD: ${MYSQL_PASSWORD}
27      MYSQL_DATABASE: ${MYSQL_DATABASE}
28      HOST_MACHINE_MYSQL_PORT: ${HOST_MACHINE_MYSQL_PORT}
29      XDEBUG_CONFIG: "client_host=host.docker.internal remote_port=${XDEBUG_PORT}"
30     extra_hosts:
31      - "host.docker.internal:host-gateway"
32   database:
33     build:
34       context: "./bin/${DATABASE}"
35     container_name: "${COMPOSE_PROJECT_NAME}-${DATABASE}"
36     restart: "always"
37     ports:
38      - "127.0.0.1:${HOST_MACHINE_MYSQL_PORT}:3306"
39     volumes:
40      - ${MYSQL_INITDB_DIR}:/config/initdb:/docker-entrypoint-initdb.d
41      - ${MYSQL_DATA_DIR}:/data/mysql:/var/lib/mysql
42      - ${MYSQL_LOG_DIR}:/logs/mysql:/var/log/mysql
43     environment:
44      MYSQL_ROOT_PASSWORD: ${MYSQL_ROOT_PASSWORD}
45      MYSQL_DATABASE: ${MYSQL_DATABASE}
46      MYSQL_USER: ${MYSQL_USER}
47      MYSQL_PASSWORD: ${MYSQL_PASSWORD}
48   phpmyadmin:
49     image: phpmyadmin
50     container_name: "${COMPOSE_PROJECT_NAME}-phpmyadmin"
51     links:
52      - database
53     environment:
54      PMA_HOST: database
55      PMA_PORT: 3306
56      PMA_USER: root
57      PMA_PASSWORD: ${MYSQL_ROOT_PASSWORD}
58      MYSQL_ROOT_PASSWORD: ${MYSQL_ROOT_PASSWORD}
59      MYSQL_USER: ${MYSQL_USER}
60      MYSQL_PASSWORD: ${MYSQL_PASSWORD}
61      UPLOAD_LIMIT: ${UPLOAD_LIMIT}
62      MEMORY_LIMIT: ${MEMORY_LIMIT}
63     ports:
64      - "${HOST_MACHINE_PMA_PORT}:80"
65      - "${HOST_MACHINE_PMA_SECURE_PORT}:443"
66     volumes:
67      - /sessions
68      - ${PHP_INI}:/usr/local/etc/php/conf.d/php-phpmyadmin.ini
69   redis:
70     container_name: "${COMPOSE_PROJECT_NAME}-redis"
71     image: redis:latest
72     ports:
73      - "127.0.0.1:${HOST_MACHINE_REDIS_PORT}:6379"
74
```

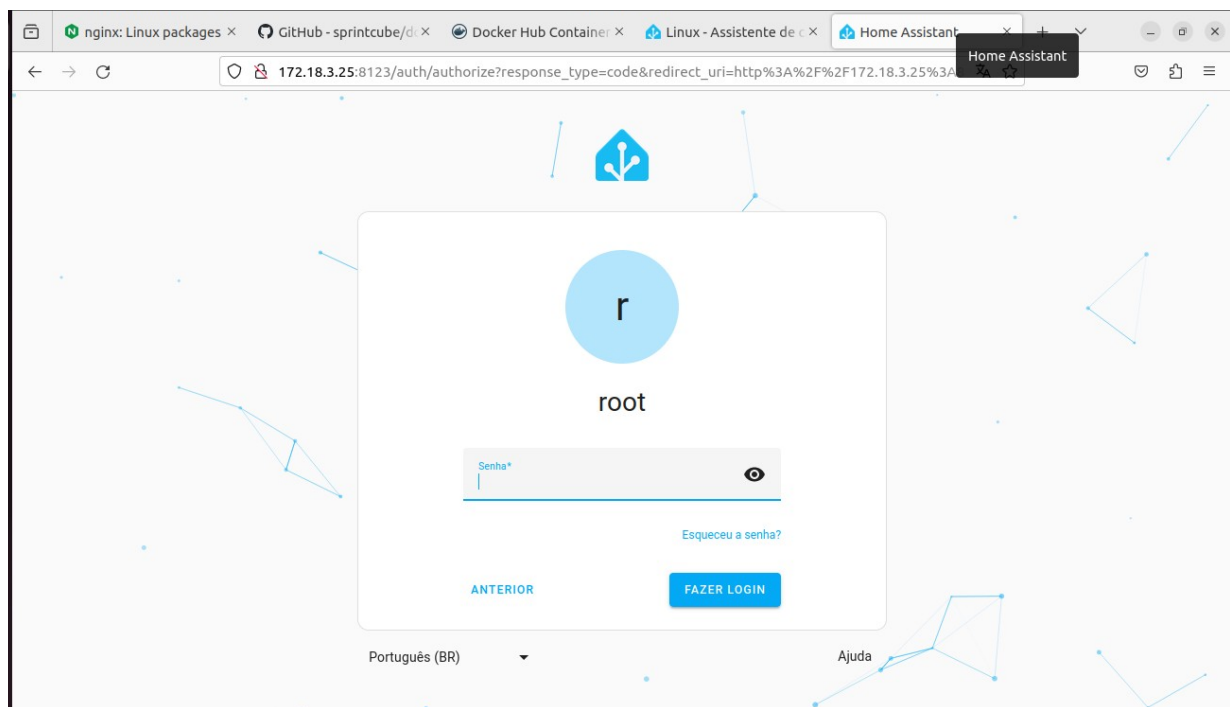
DOCKER-COMPOSE.YML



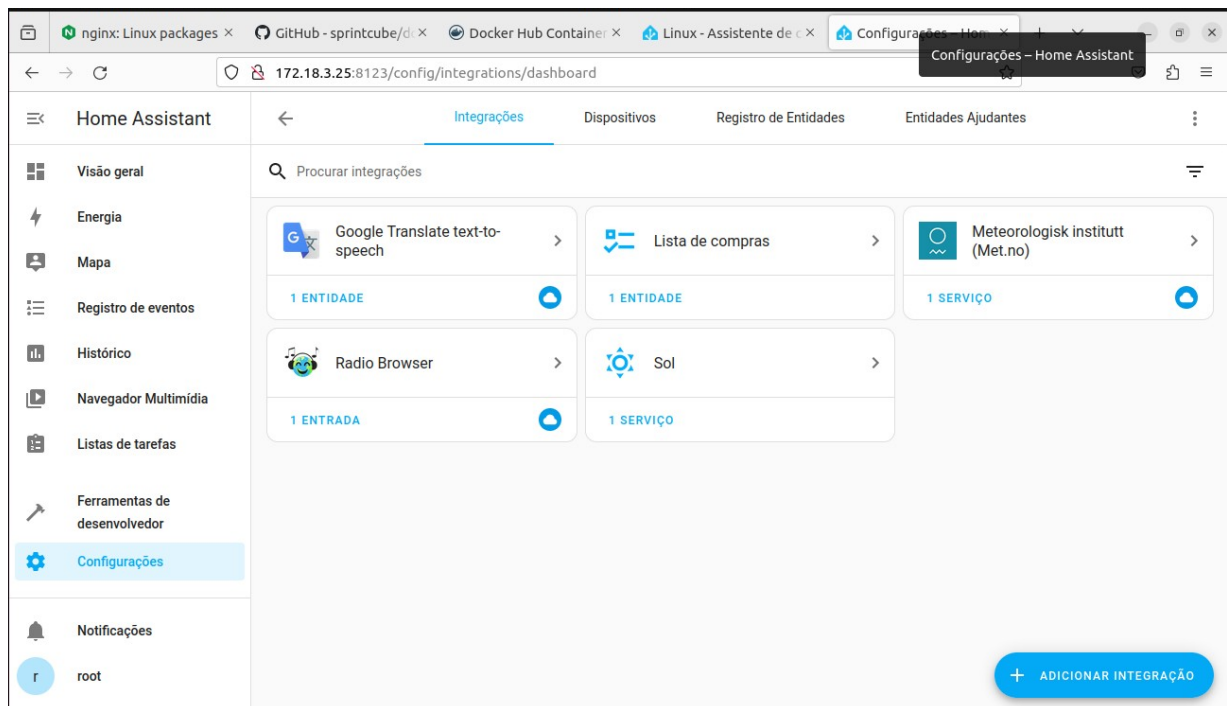
ACESSANDO O HOME ASSISTANT.



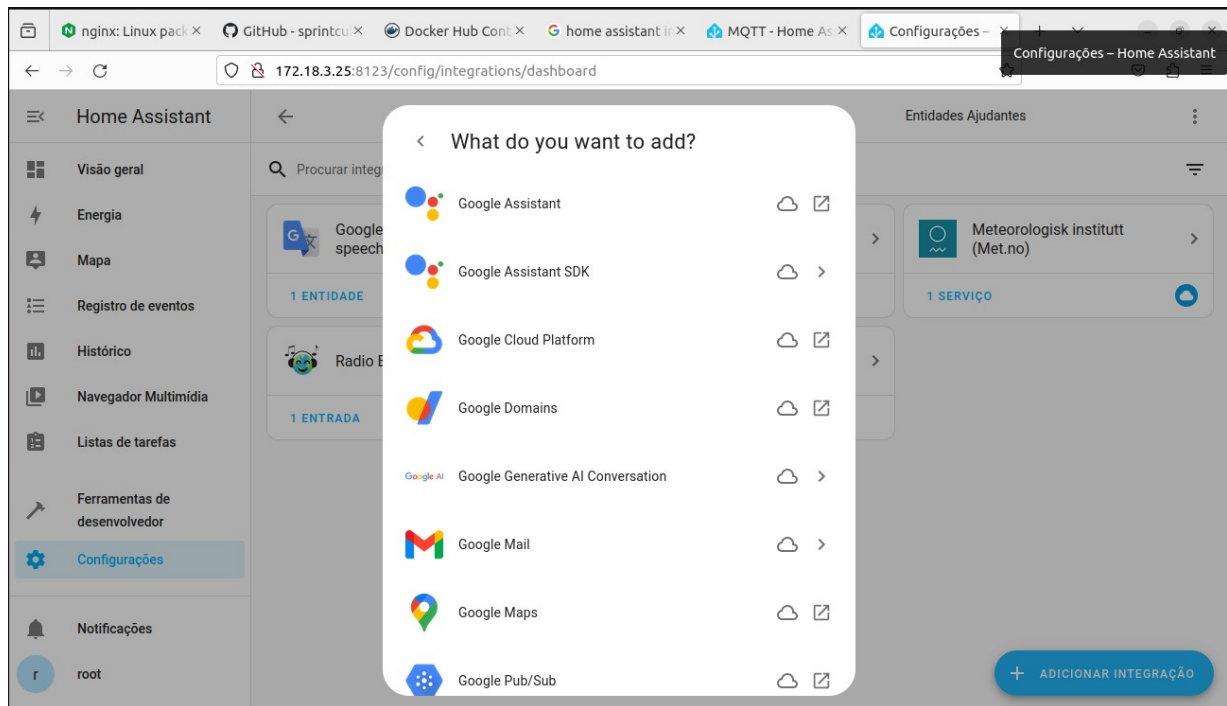
IDENTIFICANDO, VIA HOME ASSISTANT, DISPOSITIVOS IOT COMPATÍVEIS PARA DEMONSTRAÇÃO.



ACESSO IDENTIFICADO/SEGURO NO HOME ASSISTANT.



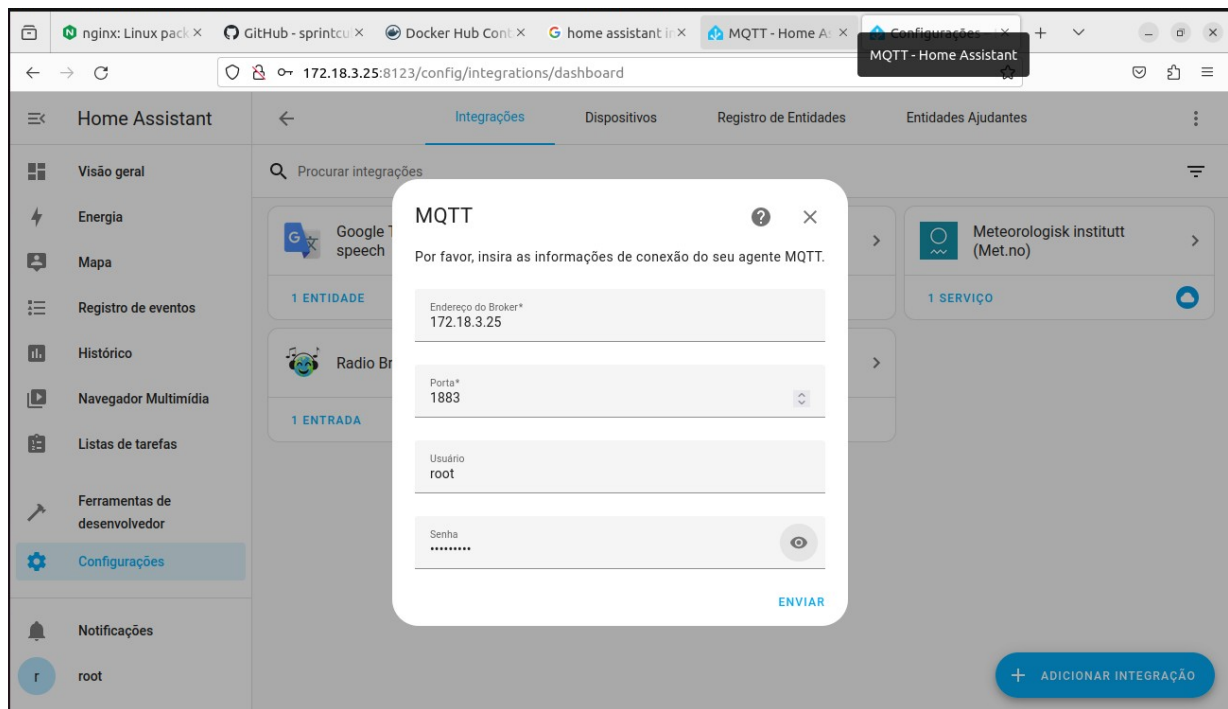
VISUALIZAÇÃO DAS INTEGRAÇÕES POSSÍVEIS.



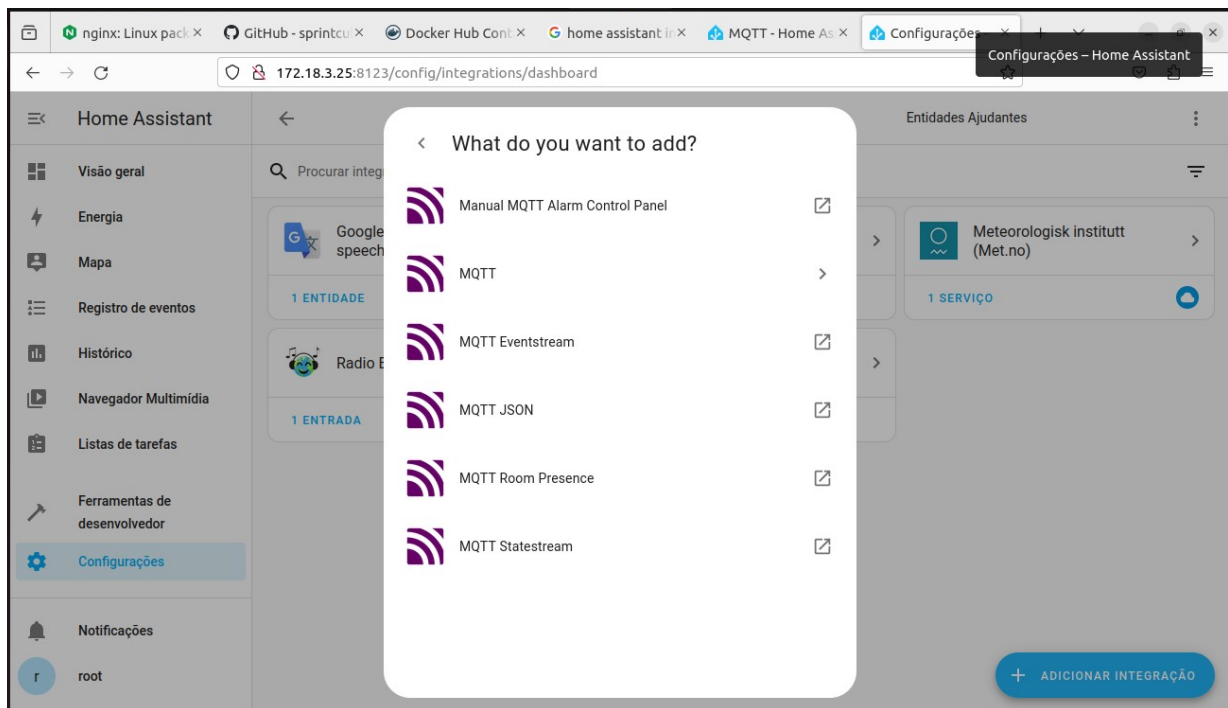
CONTINUAÇÃO DA INTERFACE DE INTEGRAÇÃO.

```
root@hbt: /home/hbt/Documentos/mosquitto
Error: failed to start containers: mosquitto
root@hbt: /home/hbt/Documentos/mosquitto# docker logs mosquitto
Error response from daemon: No such container: mosquitto
root@hbt: /home/hbt/Documentos/mosquitto# docker run -d \
  --name homeassistant \
  --privileged \
  --restart=unless-stopped \
  -e TZ=MY_TIME_ZONE \
  -v /PATH_TO_YOUR_CONFIG:/config \
  -v /run/dbus:/run/dbus:ro \
  --network=host \
  ghcr.io/home-assistant/home-assistant:stable
Unable to find image 'ghcr.io/home-assistant/home-assistant:stable' locally
stable: Pulling from home-assistant/home-assistant
96526aa774ef: Pulling fs layer
2651e446c136: Pulling fs layer
26e7df1e0c2: Pulling fs layer
c22dae4ddf24: Waiting
9753bdf9f52f: Waiting
79cd4486b380: Waiting
822b003ad36f: Pull complete
7987c48f9983: Pull complete
848dca8e44b3: Pull complete
3b7699cfe55b: Pull complete
07cae634c81c: Pull complete
4f4fb700ef54: Pull complete
f22496d5719e: Pull complete
0b7eda61ce93: Pull complete
64263b24511b: Pull complete
b4f93ebd778d: Pull complete
e76142c97a96: Pull complete
9cd40877b58b: Pull complete
cd413b9af134: Pull complete
c80912edceb6: Pull complete
1b6e08d10580: Pull complete
4f907b54d9c2: Pull complete
e8b8e31829d7: Pull complete
4f543de4dac2: Pull complete
...
```

INTEGRANDO VIA DOCKER.



INFORMAÇÕES DE CONEXÃO DO MQTT.



MQTT DISPONÍVEL.