

AVALIAÇÃO 06

ATIVIDADE DE SISTEMAS OPERACIONAIS DE REDES 2

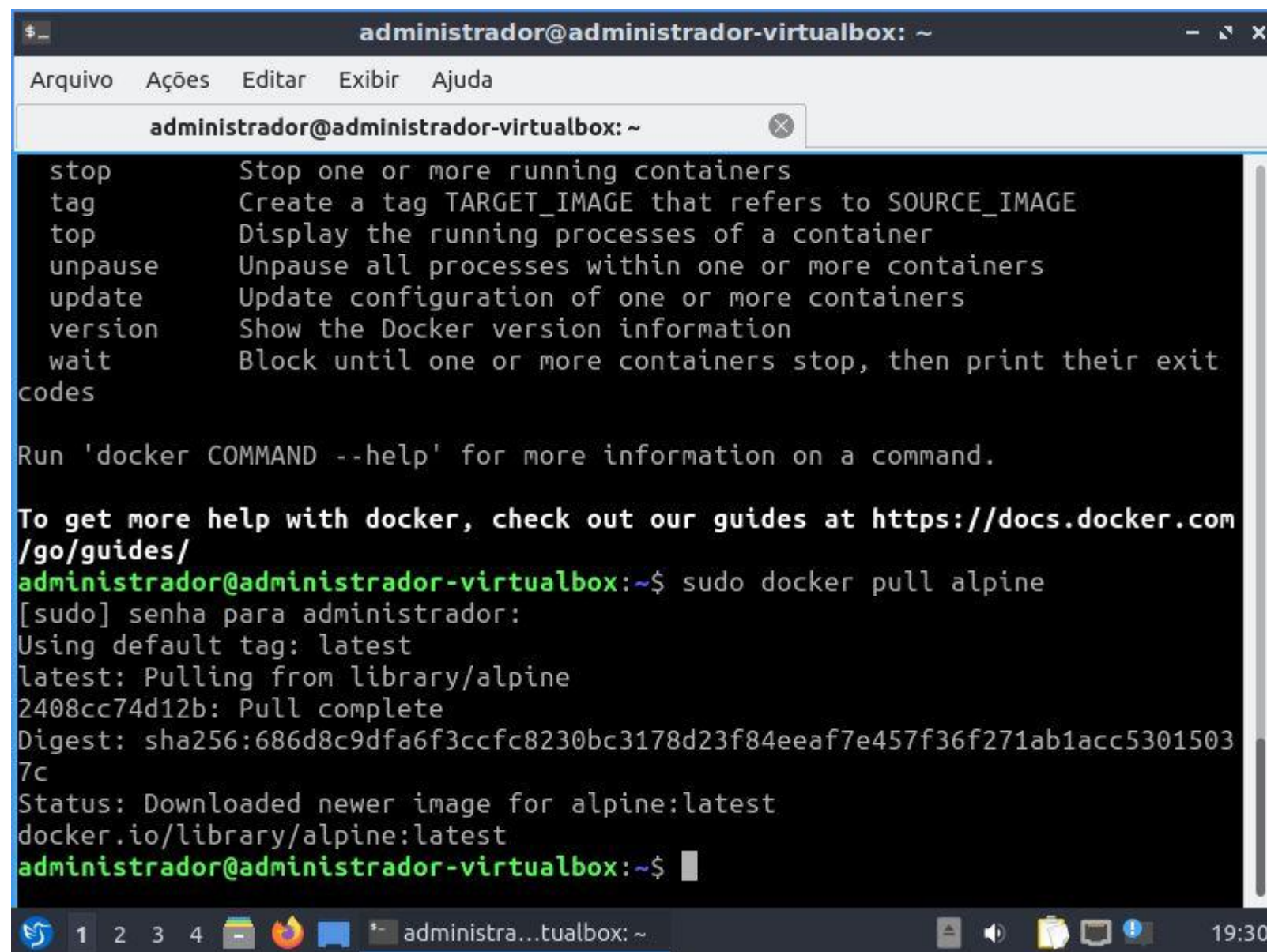
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ALUNO : ÁTILA OLIVEIRA DE ALMEIDA

TURMA : P8 DE INFORMÁTICA

ENTREGA DAS EVIDÊNCIAS (PRINTS) :

A) *Criando imagem docker a partir da distribuição ALPINE :*



```
administrador@administrador-virtualbox: ~
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administrador@administrador-virtualbox: ~
stop      Stop one or more running containers
tag        Create a tag TARGET_IMAGE that refers to SOURCE_IMAGE
top        Display the running processes of a container
unpause    Unpause all processes within one or more containers
update     Update configuration of one or more containers
version    Show the Docker version information
wait       Block until one or more containers stop, then print their exit
codes

Run 'docker COMMAND --help' for more information on a command.

To get more help with docker, check out our guides at https://docs.docker.com/go/guides/
administrador@administrador-virtualbox:~$ sudo docker pull alpine
[sudo] senha para administrador:
Using default tag: latest
latest: Pulling from library/alpine
2408cc74d12b: Pull complete
Digest: sha256:686d8c9dfa6f3ccfc8230bc3178d23f84eeaf7e457f36f271ab1acc53015037c
Status: Downloaded newer image for alpine:latest
docker.io/library/alpine:latest
administrador@administrador-virtualbox:~$
```

B) *Instanciando um container a partir de uma imagem docker :*

administrador@administrador-virtualbox: ~

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administrador@administrador-virtualbox: ~

administrador@administrador-virtualbox:~\$ sudo docker run -it alpine

/ # apk update

fetch https://dl-cdn.alpinelinux.org/alpine/v3.16/main/x86_64/APKINDEX.tar.gz

fetch https://dl-cdn.alpinelinux.org/alpine/v3.16/community/x86_64/APKINDEX.tar.gz

v3.16.0-196-g143603d2cf [https://dl-cdn.alpinelinux.org/alpine/v3.16/main]

v3.16.0-201-g5317e55db7 [https://dl-cdn.alpinelinux.org/alpine/v3.16/community]

OK: 17026 distinct packages available

/ # apk upgrade

(1/4) Upgrading alpine-baselayout-data (3.2.0-r20 -> 3.2.0-r22)

(2/4) Upgrading busybox (1.35.0-r13 -> 1.35.0-r14)

Executing busybox-1.35.0-r14.post-upgrade

(3/4) Upgrading alpine-baselayout (3.2.0-r20 -> 3.2.0-r22)

Executing alpine-baselayout-3.2.0-r22.pre-upgrade

Executing alpine-baselayout-3.2.0-r22.post-upgrade

(4/4) Upgrading ssl_client (1.35.0-r13 -> 1.35.0-r14)

Executing busybox-1.35.0-r14.trigger

OK: 6 MiB in 14 packages

/ #

1234

administrador@administrador-virtualbox: ~

20:06

C)Entrando no container e instalando um LAMP (Apache/PHP/MySQL) :

administrador@administrador-virtualbox: ~

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administrador@administrador-virtualbox: ~

/ # apk add apache2

(1/6) Installing libuuid (2.38-r1)

(2/6) Installing apr (1.7.0-r2)

(3/6) Installing expat (2.4.8-r0)

(4/6) Installing apr-util (1.6.1-r12)

(5/6) Installing pcre (8.45-r2)

(6/6) Installing apache2 (2.4.54-r0)

Executing apache2-2.4.54-r0.pre-install

Executing busybox-1.35.0-r14.trigger

OK: 9 MiB in 20 packages

/ # apk add php

(1/9) Installing php8-common (8.0.20-r0)

(2/9) Installing argon2-libs (20190702-r1)

(3/9) Installing ncurses-terminfo-base (6.3_p20220521-r0)

(4/9) Installing ncurses-libs (6.3_p20220521-r0)

(5/9) Installing libedit (20210910.3.1-r0)

(6/9) Installing pcre2 (10.40-r0)

(7/9) Installing xz-libs (5.2.5-r1)

(8/9) Installing libxml2 (2.9.14-r0)

(9/9) Installing php8 (8.0.20-r0)

Executing busybox-1.35.0-r14.trigger

OK: 21 MiB in 29 packages

/ # apk add mysql -client

apk: unrecognized option: c

apk: unrecognized option: e

apk: unrecognized option: n

apk: option requires an argument: t

apk-tools 2.12.9, compiled for x86_64.

usage: apk add [<OPTIONS>...] PACKAGES...

Description:

apk add adds the requested packages to WORLD and installs (or upgrades)

them if not already present, ensuring all dependencies are met.

Global options:

-f, --force Enable selected --force-* options (deprecated)

-i, --interactive Ask confirmation before performing certain operations

-p, --root <ROOT> Manage file system at ROOT

-q, --quiet Print less information

-U, --update-cache Alias for '--cache-max-age 1'

-v, --verbose Print more information (can be specified twice)

-V, --version Print program version and exit

-X, --repository <REPO>

--allow-untrusted Specify additional package repository

Install packages with untrusted signature or no

1234

administrador@administrador-virtualbox: ~

20:10

```
administrador@administrador-virtualbox: ~
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administrador@administrador-virtualbox: ~
--progress-fd FD      Write progress to the specified file descriptor
--purge              Delete modified configuration files on package
                    removal and uninstalled packages from cache on cache
                    clean
--repositories-file REPOFILE
                    Override system repositories, see repositories
--wait TIME          Wait for TIME seconds to get an exclusive repository
                    lock before failing

Commit options:
-s, --simulate        Simulate the requested operation without making any
                    changes
--clean-protected     Do not create .apk-new files in configuration
                    directories
--overlay-from-stdin  Read list of overlay files from stdin
--no-scripts          Do not execute any scripts
--no-commit-hooks     Skip pre/post hook scripts (but not other scripts)
--initramfs-diskless-boot
                    Used by initramfs when it's recreating root tmpfs

Add options:
--initdb             Initialize a new package database
-l, --latest         Always choose the latest package by version
-u, --upgrade        Upgrade PACKAGES and it's dependencies
-t, --virtual NAME   Create virtual package NAME with given dependencies
--no-chown           Do not change file owner or group

For more information: man 8 apk-add
/ # apk add mysql mysql-client
(1/13) Installing mariadb-common (10.6.8-r0)
(2/13) Installing libaio (0.3.112-r2)
(3/13) Installing ca-certificates (20211220-r0)
(4/13) Installing brotli-libs (1.0.9-r6)
(5/13) Installing nghttp2-libs (1.47.0-r0)
(6/13) Installing libcurl (7.83.1-r1)
(7/13) Installing libgcc (11.2.1_git20220219-r2)
(8/13) Installing linux-pam (1.5.2-r0)
(9/13) Installing libstdc++ (11.2.1_git20220219-r2)
(10/13) Installing mariadb (10.6.8-r0)
Executing mariadb-10.6.8-r0.pre-install
(11/13) Installing mysql (10.6.8-r0)
(12/13) Installing mariadb-client (10.6.8-r0)
(13/13) Installing mysql-client (10.6.8-r0)
Executing busybox-1.35.0-r14.trigger
Executing ca-certificates-20211220-r0.trigger
OK: 194 MiB in 42 packages
/ #
```

D)Instalando o PhpMyAdmin :

```
administrador@administrador-virtualbox: ~
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administrador@administrador-virtualbox: ~
/ # apk add phpmyadmin
(1/28) Installing php8-openssl (8.0.20-r0)
(2/28) Installing php8-mysqldb (8.0.20-r0)
(3/28) Installing php8-mysqli (8.0.20-r0)
(4/28) Installing libbz2 (1.0.8-r1)
(5/28) Installing php8-bz2 (8.0.20-r0)
(6/28) Installing php8-ctype (8.0.20-r0)
(7/28) Installing php8-curl (8.0.20-r0)
(8/28) Installing libxau (1.0.9-r0)
(9/28) Installing libxdmcp (1.1.3-r0)
(10/28) Installing libxcb (1.15-r0)
(11/28) Installing libx11 (1.8-r0)
(12/28) Installing libxext (1.3.4-r0)
(13/28) Installing libice (1.0.10-r0)
(14/28) Installing libsm (1.2.3-r0)
(15/28) Installing libxt (1.2.1-r0)
(16/28) Installing libxpm (3.5.13-r0)
(17/28) Installing libpng (1.6.37-r1)
(18/28) Installing freetype (2.12.1-r0)
(19/28) Installing libjpeg-turbo (2.1.3-r1)
(20/28) Installing libwebp (1.2.2-r0)
(21/28) Installing php8-gd (8.0.20-r0)
(22/28) Installing oniguruma (6.9.8-r0)
(23/28) Installing php8-mbstring (8.0.20-r0)
(24/28) Installing php8-session (8.0.20-r0)
(25/28) Installing zstd-libs (1.5.2-r1)
(26/28) Installing libzip (1.8.0-r1)
(27/28) Installing php8-zip (8.0.20-r0)
(28/28) Installing phpmyadmin (5.2.0-r0)
Executing phpmyadmin-5.2.0-r0.post-install
*
* phpmyadmin has been installed to:
* /usr/share/webapps/phpmyadmin
* phpmyadmin config file has been installed to:
* /etc/phpmyadmin/config.inc.php
* If you use apache2:
* 1) Change the ownership of the config directory:
* chown -R apache:apache /etc/phpmyadmin
* 2) See if you need to modify the apache2 config:
* /etc/apache2/conf.d/phpmyadmin.conf
* 3) Restart apache2 when done.
*
Executing busybox-1.35.0-r14.trigger
OK: 262 MiB in 70 packages
/ #
```


E) Salvando a imagem usando o comando para <nome-conta-docker-hub>/phpmyadmin e o Push para o repositório do DockerHub :

```
administrador@administrador-virtualbox: ~
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administrador@administrador-virtualbox: ~
administrador@administrador-virtualbox:~$ sudo docker commit 60626787d296 atila2022/phpmyadmin
sha256:75243d549fbedda9e43aec2c3b3958850cc6138c7c7412e51eae273c551f207a
administrador@administrador-virtualbox:~$ sudo docker images
REPOSITORY          TAG          IMAGE ID      CREATED       SIZE
atila2022/phpmyadmin latest       75243d549fbe  2 seconds ago 262MB
<none>              <none>       7428601f947c  2 minutes ago 262MB
bin/sh              latest       f32572c6a187  3 minutes ago 262MB
alpine              latest       e66264b98777  4 weeks ago  5.53MB
postgres            9.6         027ccf656dc1  4 months ago 200MB
administrador@administrador-virtualbox:~$ sudo docekr login
sudo: docekr: comando não encontrado
administrador@administrador-virtualbox:~$ sudo docker login
Login with your Docker ID to push and pull images from Docker Hub. If you don't have a Docker ID, head over to https://hub.docker.com to create one.
Username: atila2022
Password:
WARNING! Your password will be stored unencrypted in /root/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store

Login Succeeded
administrador@administrador-virtualbox:~$ sudo docker push atila2022/phpmyadmin
Using default tag: latest
The push refers to repository [docker.io/atila2022/phpmyadmin]
76adf9fd4ff2: Pushed
24302eb7d908: Mounted from library/alpine
latest: digest: sha256:080fd2ef455a9bf914ab765a2014ed1a4dfe8a667f0c55adc03fde66c27a0f20 size: 740
administrador@administrador-virtualbox:~$
```