



INSTITUTO FEDERAL DE EDUCAÇÃO, CIÊNCIA E TECNOLOGIA DO CEARÁ
IFCE *CAMPUS* FORTALEZA
TELEMÁTICA

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Disciplina: **Administração de serviços de rede** (01.302.25)

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Avaliação 4 - LAMP

Instalar o LAMP(Linux/Apache/MariaDB-MYSQL/PHP) conforme o tutorial definido em <https://ubunlog.com/pt/lamp-instala-apache-mariadb-php-ubuntu-20-04/> Evidenciar com prints das etapas de conclusão do Apache, do Banco de Dados e do PHP.

Apache:

```
root@asr3:~# apt-get install libapache2-mod-php
Setting up libapache2-mod-php (2.3.3-1ubuntu0.20.04.1) ...
Processing triggers for mime-support (3.60-1ubuntu1) ...
Processing triggers for libdb5.3 (5.3.28-1ubuntu1) ...
Processing triggers for man-db (2.9.1-1) ...
Processing triggers for libgd-pixbuf2.0-0:amd64 (2.40.0+dfsg-3ubuntu0.4) ...
Processing triggers for dbus (1.12.16-2ubuntu2.3) ...
Processing triggers for shared-mime-info (1.15-1) ...
Processing triggers for fontconfig (2.13.1-2ubuntu3) ...
Processing triggers for desktop-file-utils (0.24-1ubuntu3) ...
Processing triggers for initramfs-tools (0.134ubuntu6.7) ...
update-initramfs: Generating /boot/initrd.img-5.15.0-83-generic
Processing triggers for ca-certificates (20230311ubuntu0.20.04.1) ...
Updating certificates in /etc/ssl/certs...
0 added, 0 removed, done.
Running hooks in /etc/ca-certificates/update.d...
done.
root@asr3:~#
```

```
root@asr3:~# a2enmod php
Enabling module authz_core.
Enabling module authz_host.
Enabling module authn_core.
Enabling module authn_basic.
Enabling module access_compat.
Enabling module authn_file.
Enabling module authz_user.
Enabling module alias.
Enabling module dir.
Enabling module autoindex.
Enabling module env.
Enabling module mime.
Enabling module negotiation.
Enabling module setenvif.
Enabling module filter.
Enabling module deflate.
Enabling module status.
Enabling module reqtimeout.
Enabling conf charset.
Enabling conf localized-error-pages.
Enabling conf other-vhosts-access-log.
Enabling conf security.
Enabling conf serve-cgi-bin.
Enabling site 000-default.
Created symlink /etc/systemd/system/multi-user.target.wants/apache2.service -> /lib/systemd/system/apache2.service.
Created symlink /etc/systemd/system/multi-user.target.wants/apache-htcacheclean.service -> /lib/systemd/system/apache-htcacheclean.service.
Processing triggers for libpam0g (1.3.0-5ubuntu1) ...
Processing triggers for systemd (245.4-4ubuntu3.22) ...
Processing triggers for man-db (2.9.1-1) ...
Processing triggers for libc-bin (2.31-0ubuntu9.9) ...
root@asr3:~#
```

```
root@asr3:~# systemctl status apache2
apache2.service - The Apache HTTP Server
Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)
Active: active (running) since Sat 2023-09-16 11:46:33 -03; 1min 24s ago
Docs: https://httpd.apache.org/docs/2.4/
Main PID: 37530 (apache2)
Tasks: 55 (limit: 15511)
Memory: 5.0M
CGroup: /system.slice/apache2.service
├─37530 /usr/sbin/apache2 -k start
├─37531 /usr/sbin/apache2 -k start
└─37532 /usr/sbin/apache2 -k start
Sep 16 11:46:33 asr3 systemd[1]: Starting The Apache HTTP Server...
Sep 16 11:46:33 asr3 systemd[1]: Started The Apache HTTP Server.
root@asr3:~#
```

```
root@asr3:~# apache2 -v
Server version: Apache/2.4.41 (Ubuntu)
Server built: 2023-03-08T17:32:54
root@asr3:~#
```

MariaDB:

The image displays five terminal windows from an Ubuntu VM, showing the step-by-step installation and configuration of MariaDB. The windows are arranged in a 2x2 grid with a fifth window centered below them.

- Top Left:** Shows the initial installation of MariaDB packages. The command `dpkg-query -f='${Package} ${Version} ${Architecture}\n'` is used to list installed packages. The output shows `libmysqlclient18:amd64 (1:10.3.38-0ubuntu0.20.04.1)` and `libmysqld-dev:amd64 (1:10.3.38-0ubuntu0.20.04.1)`.
- Top Right:** Shows the status of the MariaDB service using `systemctl status mariadb`. The output indicates that the service is loaded, active (running), and has been running since Sat 2023-09-16 11:53:09 -03; 1m 44s ago. The main PID is 39661 (mysqld).
- Middle Left:** Shows the command `sudo systemctl enable mariadb` being executed to enable the service at boot.
- Middle Right:** Shows the command `mariadb --version` being executed, displaying the version 10.3.38-MariaDB, for debian-linux-gnu (x86_64) using readline 5.2.
- Bottom:** Shows the final configuration steps, including removing anonymous users, reloading privilege tables, and cleaning up. The output shows that the test database has been dropped and the privilege tables have been reloaded.

PHP:

The following code blocks represent the content shown in the screenshots:

```
root@asr3:~# sudo apt-get install php7.4
Creating config file /etc/php/7.4/mods-available/mysqlnd.ini with new version
Creating config file /etc/php/7.4/mods-available/mysqli.ini with new version
Creating config file /etc/php/7.4/mods-available/pdo_mysql.ini with new version
Setting up php7.4-readline (7.4.3-4ubuntu2.19) ...
Creating config file /etc/php/7.4/mods-available/readline.ini with new version
Setting up php7.4-opcache (7.4.3-4ubuntu2.19) ...
Creating config file /etc/php/7.4/mods-available/opcache.ini with new version
Setting up php7.4-json (7.4.3-4ubuntu2.19) ...
Creating config file /etc/php/7.4/mods-available/json.ini with new version
Setting up php7.4-cli (7.4.3-4ubuntu2.19) ...
update-alternatives: using /usr/bin/php7.4 to provide /usr/bin/php (php) in auto mode
update-alternatives: using /usr/bin/phar7.4 to provide /usr/bin/phar (phar) in auto mode
update-alternatives: using /usr/bin/phar.phar7.4 to provide /usr/bin/phar.phar (phar.phar) in auto mode
Creating config file /etc/php/7.4/cli/php.ini with new version
Setting up libapache2-mod-php7.4 (7.4.3-4ubuntu2.19) ...
Creating config file /etc/php/7.4/apache2/php.ini with new version
Module mpm_event disabled.
Enabling module mpm_prefork.
apache2_switch_mpm Switch to prefork
apache2_invoke: Enable module php7.4
Setting up php7.4 (7.4.3-4ubuntu2.19) ...
Processing triggers for man-db (2.9.1-1) ...
Processing triggers for php7.4-cli (7.4.3-4ubuntu2.19) ...
Processing triggers for libapache2-mod-php7.4 (7.4.3-4ubuntu2.19) ...
root@asr3:~#
```

```
root@asr3:~# sudo a2enmod php7.4; sudo systemctl restart apache2
Considering dependency mpm_prefork for php7.4:
Considering conflict mpm_event for mpm_prefork:
Considering conflict mpm_worker for mpm_prefork:
Module mpm_prefork already enabled
Considering conflict php7.4 for php7.4:
Module php7.4 already enabled
root@asr3:~#
```

```
root@asr3:~# php --version
PHP 7.4.3-4ubuntu2.19 (cli) (built: Jun 27 2023 15:49:59) ( NTS )
Copyright (c) The PHP Group
Zend Engine v3.4.0, Copyright (c) Zend Technologies
with Zend OPcache v7.4.3-4ubuntu2.19, Copyright (c), by Zend Technologies
root@asr3:~#
```

```
root@asr3:~# phpinfo();
```

PHP Version 7.4.3-4ubuntu2.19	
System	Linux asr3 5.15.0-83-generic #92~20.04.1-Ubuntu SMP Mon Aug 21 14:00:49 UTC 2023 x86_64
Build Date	Jun 27 2023 15:49:59
Server API	Apache 2.0 Handler
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/etc/php/7.4/apache2
Loaded Configuration File	/etc/php/7.4/apache2/php.ini
Scan this dir for additional .ini files	/etc/php/7.4/apache2/conf.d
Additional .ini files parsed	/etc/php/7.4/apache2/conf.d/00-mysqlnd.ini, /etc/php/7.4/apache2/conf.d/00-opcache.ini, /etc/php/7.4/apache2/conf.d/00-pdo.ini, /etc/php/7.4/apache2/conf.d/00-calendar.ini, /etc/php/7.4/apache2/conf.d/00-curl.ini, /etc/php/7.4/apache2/conf.d/00-ffi.ini, /etc/php/7.4/apache2/conf.d/00-gd.ini, /etc/php/7.4/apache2/conf.d/00-geoip.ini, /etc/php/7.4/apache2/conf.d/00-ldap.ini, /etc/php/7.4/apache2/conf.d/00-memcached.ini, /etc/php/7.4/apache2/conf.d/00-mongo.ini, /etc/php/7.4/apache2/conf.d/00-mongodb.ini, /etc/php/7.4/apache2/conf.d/00-mssql.ini, /etc/php/7.4/apache2/conf.d/00-oci8.ini, /etc/php/7.4/apache2/conf.d/00-odbc.ini, /etc/php/7.4/apache2/conf.d/00-openssl.ini, /etc/php/7.4/apache2/conf.d/00-pdo_mysql.ini, /etc/php/7.4/apache2/conf.d/00-pdo_pgsql.ini, /etc/php/7.4/apache2/conf.d/00-pdo_sqlite.ini, /etc/php/7.4/apache2/conf.d/00-redis.ini, /etc/php/7.4/apache2/conf.d/00-soap.ini, /etc/php/7.4/apache2/conf.d/00-sockets.ini, /etc/php/7.4/apache2/conf.d/00-sysvmsg.ini, /etc/php/7.4/apache2/conf.d/00-sysvsem.ini, /etc/php/7.4/apache2/conf.d/00-tidy.ini, /etc/php/7.4/apache2/conf.d/00-tokenizer.ini
PHP API	20190902
PHP Extension	20190902
Zend Extension	320190902
Zend Extension Build	AP320190902.NTS
PHP Extension Build	AP20190902.NTS
Debug Build	no
Thread Safety	disabled