

App2

Create instance

The screenshot shows the 'Launch an instance' wizard in the AWS Management Console. The left sidebar lists 'Nome e tags' (Name and tags) and 'Imagens de aplicação e de sistema operacional (imagem de máquina da Amazon)' (Application and operating system images (Amazon Machine Image)). The main area displays the following configuration:

- Nome e tags (Informações):** Nome: Syst8161-group-5-app2.
- Resumo (Informações):**
 - Número de instâncias: 1
 - Imagem do software (AMI): Canonical, Ubuntu, 22.04 LTS, ami-05d41212edf74a9f06
 - Tipo de servidor virtual (tipo de instância): t2.micro
 - Firewall (grupo de segurança): launch-wizard-10
 - Armazenamento (volumes): 1 volume(s) - 8 GiB
- Ações:** Cancelar, Executar instância (highlighted), Revisar comandos.

Create keypair

The screenshot shows the 'Criar par de chaves' (Create key pair) step in the AWS Management Console. The left sidebar lists 'Tipo de instância' (Instance type), 'Par de chaves (login)' (Key pair), and 'Configurações de rede' (Network settings). The right panel shows the following configuration:

- Nome do par de chaves:** ap2-key
- Formato de arquivo de chave privada:** RSA (selected)
- Formato:** .pem (for OpenSSH) or .ppk (for PuTTY).
- Nota:** Quando solicitado, armazene a chave privada em um local seguro e acessível no seu computador. Você precisará dele mais tarde para se conectar à sua instância. [Saiba mais](#).
- Ações:** Cancelar, Criar par de chaves (highlighted).

Screenshot of the AWS EC2 Instances page showing a single instance named "Syst8161-group-5-app2".

Instances (1/1) Information

Name	Instance ID	Instance state	Instance type	Status Check	Alarm status	Availability Zone
Syst8161-group-5-app2	i-0009b91abae2a3108	Running	t2.micro	-	View alarms +	ca-central-1b

Instância: i-0009b91abae2a3108 (Syst8161-group-5-app2)

Hostname type	Private IP DNS name (IPv4 only)
Nome do IP:	ip-172-31-13-115.ca-central-1.compute.internal
Reply private resource DNS name	ip-172-31-13-115.ca-central-1.compute.internal
IPV4 (A)	
Automatically assigned IP address	35.183.133.196 [Public IP]
ID da VPC	vpc-0fa1b41e055bbf14 [vpc]
Role of IAM	-
IMDSv2	Required
ID yes sub-rede	subnet-0b7259a4dd5b02a28 [subnet]
Elastic IP addresses	-
AWS Compute Optimizer Discovery	[Opt-in to AWS Compute Optimizer for recommendations.] know more [x]
Auto Scaling Group Name	-

Instance details

Platform	ID da AMI	Monitoring

Screenshot of the AWS Security Groups "Editar regras de entrada" (Edit incoming rules) page.

Regras de entrada

As regras de entrada controlam o tráfego de entrada que tem permissão para acessar a instância.

ID da regra do grupo de segurança	Tipo	Protocolo	Intervalo de portas	Origem	Descrição - opcional
sg-083d98924aa9b5280	HTTPS	TCP	443	Personalizado	0.0.0.0/0 [Excluir]
sg-09ed4436ee1879dd	HTTP	TCP	80	Personalizado	0.0.0.0/0 [Excluir]
sg-04ddc5115a0e42414	SSH	TCP	22	Personalizado	0.0.0.0/0 [Excluir]
-	ICMP personalizado - IPv4	Todo	Todo	Qualquer loc...	0.0.0.0/0 [Excluir]
-	TCP personalizado	TCP	3306	Qualquer loc...	0.0.0.0/0 [Excluir]

Adicionar regra

⚠️ As regras com a origem 0.0.0.0/0 ou ::/0 permitem que todos os endereços IP acessem a instância. Recomendamos configurar as regras de grupo de segurança para permitir o acesso apenas de endereços IP conhecidos.

Salvar regras

RDS

The screenshot shows the AWS RDS Resources page. On the left, a sidebar titled "Amazon RDS" contains links for Databases, Query Editor, Performance Insights, Snapshots, Exports to Amazon S3, Automated backups, Reserved Instances, Proxies, Subnet groups, Parameter groups, Option groups, Custom Engine Versions, Events, Event subscriptions, Recommendations, and Certificate update. The main content area is titled "Resources" and shows the following details:

- You are using the following Amazon RDS resources in the Canada (Central) region (used/quota):
- Database Instances (0/40)**: Allocated Storage (0TB/100TB), Increase the DB instance limit.
- Database Clusters (0/40)**: Reserved Instances (0/40).
- Snapshots (8)**: Manual (Database Cluster (0/100), Database Instance (2/100)), Automated (Database Cluster (0), Database Instance (0)).
- Parameter groups (1)**: Pattern (1), Custom (0/100).
- Option groups (1)**: Pattern (1), Custom (0/20).
- Subnet groups (1/50)**: Default network vpc-0fa1b41e0035bbf14.
- Supported platforms (2/100)**: MySQL, Oracle, PostgreSQL, Microsoft SQL Server, Amazon Aurora, MariaDB, Amazon Neptune, Amazon DocumentDB.

Below this, there's a "Create database" section with a "Create database" button. A note says "Note: Your DB instances will run in the Canada (Central) region".

On the right, there are sections for "Recommended services" (No recommendations yet) and "Additional Information" (links to RDS Basics, Overview and Features, Documentation, Articles and tutorials, Data Import Guide for MySQL, Data Import Guide for Oracle, Data Import Guide for SQL Server, New RDS Feature Announcements, Pricing, and Forums). There's also a "Database preview environment" section with a link to "RDS Preview for MySQL and PostgreSQL in US East (Ohio)".

The screenshot shows the MySQL settings configuration page. It includes the following sections:

- Database Instance Identifier**: db-app2 (Information: Enter a name for the DB instance. The name must be unique across all DB instances owned by your AWS account in the current AWS Region).
- Credential Settings**:
 - Main User Name**: admin (Information: Enter a login ID for the primary user of your DB instance).
 - Credentials management**: Self managed (Information: Create your own password or have RDS create a password that you manage).
 - Auto generate password**: Unchecked (Information: Amazon RDS can generate a password for you, or you can specify your own password).
 - Master password**: (Information: Minimum constraints: At least 8 printable ASCII characters. Can't contain any of the following symbols: / \ * @).
 - Confirm master password**: (Information: Minimum constraints: At least 8 printable ASCII characters. Can't contain any of the following symbols: / \ * @).
- Instance configuration**: DB Instance Class: db.t2.micro (Information: Hide filters, Show instance classes supported by Amazon RDS Optimized Writers).
- MySQL** (Information: MySQL is the most popular open source database in the world. MySQL offers many of the advanced features of the MySQL community edition, with the flexibility to easily expand the computing resources or storage capacity of your database):
 - Compatible with databases up to 64 TiB.
 - Supports general-purpose, memory-optimized, and performance-optimized burstable instance classes.
 - Supports automated backup and point-in-time recovery.
 - Supports up to 15 read replicas per instance within a region or 5 read replicas across regions.

The screenshot shows the AWS RDS MySQL configuration wizard. It includes sections for VPC security group (with 'Select existing' chosen), Availability Zone (No preference), RDS Proxy (disabled), and Certificate Authority (a self-signed certificate named 'rds-ca-rsa2048-q1' is selected). A sidebar on the right provides information about MySQL.

The screenshot shows the Amazon RDS console for a database named 'database-app2'. A modal window displays the connection details: Main username 'admin' and Main password 'Secret55'. Below the modal, the database identifier is listed as 'db-app2.ck8aq9ipyyc.ca-central-1.rds.amazonaws.com'.

Endpoint

db-app2.ck8aq9ipyyc.ca-central-1.rds.amazonaws.com
3306 - admin / Secret55

Amazon RDS

db-app2

Summary

Database identifier	Status	Function	Mechanism	Recommendations
db-app2	Backing up	Instance	MySQL, Community	
CPU	Class	Current activity	Region and AZ	
20.9%	db.t3.micro	0 Connections	ca-central-1a	

Security and connection

Endpoint and port	Networks	Security
Endpoint db-app2.ck8aq9ipyec.ca-central-1.rds.amazonaws.com	Availability Zone ca-central-1a	VPC security groups launch-wizard-10 (sg-0ae7e7bfbe587287a) Active
Door 3306	VPC vpc-0f1b41e0e035bbf14	Publicly accessible Yes
	Subnet group default-vpc-0f1b41e0e035bbf14	Certification Authority Information rds-ca-rsa2048-g1
	Subnets subnet-0b7259a4dd5b02a28 subnet-0c30c8b02c01d2229 subnet-0936a005d653004b	Certificate authority date May 21, 2061, 19:02 (UTC-04:00)
	Network type IPv4	DB instance certificate expiration date March 29, 2025, 14:55 (UTC-04:00)

IAM

RDS-ec2-app2

Summary

Creation date	RNA	Instance profile ARN
March 10, 2024, 11:41 (UTC-04:00)	arn:aws:iam::881241281835:role/RDS-ec2-app2	arn:aws:iam::881241281835:instance-profile/RDS-ec2-app2
Last activity 59 minutes ago	Maximum session duration 1 hour	

Permissions

Permissions policies (1) [Information](#)

You can attach up to 10 managed policies.

Policy name	Type	Associate entities
AmazonRDSFullAccess	Managed by AWS	1

Permissions limit (not defined)

Generate policy based on CloudTrail events

Amazon RDS

db-app2

Summary

Database identifier	Status	Function	Mechanism	Recommendations
db-app2	Available	Instance	MySQL Community	2 Information
CPU	Class	Current activity	Region and AZ	
-	db.t3.micro	0 Connections	ca-central-1a	

Security and connection

Endpoint and port	Networks	Security
Endpoint db-app2.ck8aq9ipyec.ca-central-1.rds.amazonaws.com	Availability Zone ca-central-1a	VPC security groups launch-wizard-10 (sg-0ae7e7bfbe587287a) Active
Door 3306	VPC vpc-0f1b41e0e035bbf14	rds-ec2-2 (sg-0a3d1c19fa222b7fc) Active
	Subnet group default-vpc-0f1b41e0e035bbf14	Publicly accessible Yes
	Subnets subnet-0b7259a4dd5b02a28 subnet-0c30c8b02c01d2229	Certification Authority Information rds-ca-rsa2048-g1

```
ubuntu@ip-172-31-13-115: ~

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-172-31-13-115:~$ sudo apt update
```

```
ubuntu@ip-172-31-13-115: ~
update-notifier-mold.service is a disabled or a static unit not running, not starting it.
Setting up linux-modules-4.5.0-1016-aws (4.5.0-1016.16-22.04.1) ...
Processing triggers for man-db (2.10.2-1) ...
I: /boot/vmlinuz is now a symlink to vmlinuz-4.5.0-1016-aws
I: /boot/initrd.img is now a symlink to initrd.img-4.5.0-1016-aws
Setting up linux-image-aws (4.5.0-1016.16-22.04.1) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for dbus (1.12.20-0ubuntu6.1) ...
Processing triggers for install-info (4.8-4build1) ...
Processing triggers for libapt-pkg-perl (4.12.1-0ubuntu1.6) ...
Processing triggers for linux-image-4.5.0-1016-aws (4.5.0-1016.16-22.04.1) ...
/etc/kernel/postinst.d/intelrmus-tools:
update-initramfs: Generating /boot/initrd.img-4.5.0-1016-aws
Sourcing file '/etc/default/grub'
Sourcing file '/etc/default/grub.d/40-force-partUUID.cfg'
Sourcing file '/etc/default/grub.d/50-cloudimg-settings.cfg'
Sourcing file '/etc/default/grub.d/50-efi-boot-select.cfg'
Generating grub configuration file...
GRUB_FORCE_PARTUUID is set, will attempt initrdless boot
Found linux image: /boot/vmlinuz-4.5.0-1016-aws
Found initrd image: /boot/initrd.img-4.5.0-1016-aws
Found linux image: /boot/vmlinuz-4.5.0-1014-aws
Found initrd image: /boot/initrd.img-4.5.0-1014-aws
Warning: os-prober will not be executed to detect other bootable partitions.
os-prober will be added to the GRUB boot configuration.
Check GRUB_DISABLE_OS_PROBER documentation entry.
done
Scanning processes...
Scanning candidates...
Scanning kernel images...
Scanning live media...
Restarting services...
systemctl restart d/systemd-manager
systemctl restart packagekit.service polkit.service rsyslog.service serial-getty@ttyS0.service systemd-journald.service systemd-networkd.service systemd-resolved.service systemd-udevd.service
Service restarts being deferred:
/etc/needrestart/restart.d/dbus.service
systemctl restart network-dispatcher.service
systemctl restart systemd-logind.service
systemctl restart unattended-upgrades.service
systemctl restart user@1000.service
No containers need to be restarted.
No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-13-115:~$ sudo apt install apache2
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
apache2-data apache2-utils bztpd libaprutil libaprutil libaprutil-dbd-sqlite3 libaprutil-ldap libblua5.3-0 mailcap mime-support ssl-cert
Suggested packages:
apache2-doc apache2-suexec-pristine | apache2-suexec-custom www-browser bztpd-dbg
The following NEW packages will be installed:
apache2 apache2-data apache2-utils bztpd libaprutil libaprutil libaprutil-dbd-sqlite3 libaprutil-ldap libblua5.3-0 mailcap mime-support ssl-cert
0 upgraded, 13 newly installed, 0 to remove and 3 not upgraded.
Need to get 1138 kB of archives.
After this operation, 8521 kB of additional disk space will be used.
Do you want to continue? [Y/n] Y
```

```

ubuntu@ip-172-31-13-115:~$ update-notifier-notifyd.service is a disabled or a static unit not running, not starting it.
Setting up linux-modules-6.5.0-1016-aws (6.5.0-1016.16-22.04.1) ...
Setting up linux-image-6.5.0-1016-aws (6.5.0-1016.16-22.04.1) ...
In /boot/vmlinuz-6.5.0-1016.16-22.04.1 there is no symbol to install.
Setting up linux-image-aws (6.5.0-1016.16-22.04.1) ...
Setting up linux-aws (6.5.0-1016.16-22.04.1) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for install-info (6.8-0build1) ...
Processing triggers for libc-bin (2.35-0ubuntu3.6) ...
Processing triggers for libmicrocode-6.5.0-1016-aws (6.5.0-1016.16-22.04.1) ...
(/etc/kernel/postinst.d/initramfs ...
update-initramfs: Generating /boot/initrd.img-6.5.0-1016-aws
/etc/kernel/postinst.d/zx-update-grub:
Sourcing file '/etc/default/grub'
Sourcing file '/etc/default/grub.d/40-force-partUUID.cfg'
Sourcing file '/etc/default/grub.d/50-cloudimg-settngs.cfg'
Sourcing file '/etc/default/grub.d/41-init-select.cfg'
Generating grub configuration...
Warning: /dev/sda1 will attempt to boot
Found linux image: /boot/vmlinuz-6.5.0-1016-aws
Found initrd image: /boot/microcode.cpio
Found grub image: /boot/grub/grub-efi-6.5.0-1016-aws
Warning: os-prober will not be executed to detect other bootable partitions.
Systems on them will not be added to the GRUB boot configuration.
Check GRUB_DISABLE_OS_FROBBER documentation entry.

Scanning processes...
Scanning candidates...
Scanning linux images...

Restarting services...
/etc/needrestart/restart.d/systemd-manager
systemctl restart packagekit.service polkit.service rsyslog.service serial-getty@tty0.service systemd-journald.service systemd-networkd.service systemd-resolved.service systemd-udevd.service
systemctl restart udisks2.service
/etc/needrestart/restart.d/dbus.service
systemctl restart getty@tty1.service
systemctl restart networkd-dispatcher.service
systemctl restart systemd-logind.service
systemctl restart unattended-upgrades.service
systemctl restart user@1000.service

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-13-115:~$ sudo apt install apache2
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
 apache2-bin apache2-data apache2-utils libapr1 libaprutil1 libaprutil1-dbd-sqlite3 libaprutil1-ldap liblbus5.3-0 mailcap mime-support ssl-cert
 apache2-doc apache2-suexec-pristine apache2-suexec-custom vvvv-browser h2p2-doc
The following NEW packages will be installed:
 apache2-bin apache2-data apache2-utils libapr1 libaprutil1 libaprutil1-dbd-sqlite3 libaprutil1-ldap liblbus5.3-0 mailcap mime-support ssl-cert
0 upgraded, 0 newly installed, 0 to remove and 3 not upgraded.
Need to get 0 B of additional packages.
After this operation, 8521 kB of additional disk space will be used.
Do you want to continue? [Y/n] Y

ubuntu@ip-172-31-13-115:~$ Enabling con@other-ghosts-access-log.
Enabling con@security.
Enabling con@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 ufw (0.36.1-4ubuntu0.1) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for libc-bin (2.35-0ubuntu3.6) ...
Scanning processes...
Scanning candidates...
Scanning linux images...

Restarting services...
Service restarts being deferred:
/etc/needrestart/restart.d/dbus.service
systemctl restart getty@tty1.service
systemctl restart networkd-dispatcher.service
systemctl restart systemd-logind.service
systemctl restart unattended-upgrades.service
systemctl restart user@1000.service

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-13-115:~$ sudo ufw app list
Available applications:
 Apache
 Apache Full
 Apache Secure
 OpenSSH
ubuntu@ip-172-31-13-115:~$ sudo ufw allow 'Apache'
Rules updated
Rules updated (v6)
ubuntu@ip-172-31-13-115:~$ sudo ufw status
Status: inactive
ubuntu@ip-172-31-13-115:~$ sudo ufw status
Status: inactive
ubuntu@ip-172-31-13-115:~$ sudo ufw status
Status: inactive
ubuntu@ip-172-31-13-115:~$ sudo 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 Mar 30 13:36:24 2024; 4min 40s ago
     Docs: https://httpd.apache.org/docs/2.4/
 Main PID: 9341 (apache2)
    Tasks: 55 (limit: 1121)
   Memory: 4.9M
      CPU: 48ms
     CGroup: /system.slice/apache2.service
             └─ 9341 /usr/sbin/apache2 -k start
                 ├─ 9343 /usr/sbin/apache2 -k start
                 ├─ 9344 /usr/sbin/apache2 -k start
                 └─ 9345 /usr/sbin/apache2 -k start

Mar 30 13:36:24 ip-172-31-13-115 systemd[1]: Starting The Apache HTTP Server...
Mar 30 13:36:24 ip-172-31-13-115 systemd[1]: Started The Apache HTTP Server.
ubuntu@ip-172-31-13-115:~$ hostname -I
172.31.13.115
ubuntu@ip-172-31-13-115:~$ curl -4 icanhazip.com
35.183.133.196
ubuntu@ip-172-31-13-115:~$ 
```

Inseguro ec2-35-183-133-196.ca-central-1.compute.amazonaws.com

Barra de favoritos (6) TUDO O QUE V... conestoga College Superbid Brasil - Leilão Oficial Online... Leilão Oficial NÚ... LOTOMANIA 60 NÚ... Freitas Leilões Onlin... Consulta Processual...

The screenshot shows the Apache2 Default Page. At the top, there's a logo of a red square with a white gear icon. Below it, the word "Ubuntu" is written in a large, lowercase, sans-serif font. To the right of "Ubuntu", a red button-like box contains the text "It works!". Underneath the logo and text, there is a paragraph of small, dark gray text explaining the purpose of the page. Below this paragraph, a dark blue horizontal bar contains the text "Configuration Overview". Underneath the bar, there is more detailed configuration information.

```
/etc/apache2/
|-- apache2.conf
|   |-- ports.conf
|   |-- mods-enabled
|       |-- *.load
|       |-- *.conf
|   |-- conf-enabled
|       '-- *.conf
|-- sites-enabled
```

```
total 8
drwxr-xr-x 2 root root 4096 Mar 30 13:36 .
drwxr-xr-x 8 root root 4096 Mar 30 13:36 ..
lrwxrwxrwx 1 root root 36 Mar 30 13:36 access_compat.load -> ../mods-available/access_compat.load
lrwxrwxrwx 1 root root 28 Mar 30 13:36 alias.conf -> ../mods-available/alias.conf
lrwxrwxrwx 1 root root 28 Mar 30 13:36 alias.load -> ../mods-available/alias.load
lrwxrwxrwx 1 root root 33 Mar 30 13:36 auth_basic.load -> ../mods-available/auth_basic.load
lrwxrwxrwx 1 root root 33 Mar 30 13:36 authn_core.load -> ../mods-available/authn_core.load
lrwxrwxrwx 1 root root 33 Mar 30 13:36 authn_file.load -> ../mods-available/authn_file.load
lrwxrwxrwx 1 root root 33 Mar 30 13:36 authz_core.load -> ../mods-available/authz_core.load
lrwxrwxrwx 1 root root 33 Mar 30 13:36 authz_host.load -> ../mods-available/authz_host.load
lrwxrwxrwx 1 root root 33 Mar 30 13:36 authz_user.load -> ../mods-available/authz_user.load
lrwxrwxrwx 1 root root 32 Mar 30 13:36 autoindex.conf -> ../mods-available/autoindex.conf
lrwxrwxrwx 1 root root 32 Mar 30 13:36 autoindex.load -> ../mods-available/autoindex.load
lrwxrwxrwx 1 root root 30 Mar 30 13:36 deflate.conf -> ../mods-available/deflate.conf
lrwxrwxrwx 1 root root 30 Mar 30 13:36 deflate.load -> ../mods-available/deflate.load
lrwxrwxrwx 1 root root 26 Mar 30 13:36 dir.conf -> ../mods-available/dir.conf
lrwxrwxrwx 1 root root 26 Mar 30 13:36 dir.load -> ../mods-available/dir.load
lrwxrwxrwx 1 root root 26 Mar 30 13:36 env.load -> ../mods-available/env.load
lrwxrwxrwx 1 root root 29 Mar 30 13:36 filter.load -> ../mods-available/filter.load
lrwxrwxrwx 1 root root 27 Mar 30 13:36 mime.conf -> ../mods-available/mime.conf
lrwxrwxrwx 1 root root 27 Mar 30 13:36 mime.load -> ../mods-available/mime.load
lrwxrwxrwx 1 root root 32 Mar 30 13:36 mpm_event.conf -> ../mods-available/mpm_event.conf
lrwxrwxrwx 1 root root 32 Mar 30 13:36 mpm_event.load -> ../mods-available/mpm_event.load
lrwxrwxrwx 1 root root 34 Mar 30 13:36 negotiation.conf -> ../mods-available/negotiation.conf
lrwxrwxrwx 1 root root 34 Mar 30 13:36 negotiation.load -> ../mods-available/negotiation.load
lrwxrwxrwx 1 root root 33 Mar 30 13:36 reqtimeout.conf -> ../mods-available/reqtimeout.conf
lrwxrwxrwx 1 root root 33 Mar 30 13:36 reqtimeout.load -> ../mods-available/reqtimeout.load
lrwxrwxrwx 1 root root 31 Mar 30 13:36 setenvif.conf -> ../mods-available/setenvif.conf
lrwxrwxrwx 1 root root 31 Mar 30 13:36 setenvif.load -> ../mods-available/setenvif.load
lrwxrwxrwx 1 root root 29 Mar 30 13:36 status.conf -> ../mods-available/status.conf
lrwxrwxrwx 1 root root 29 Mar 30 13:36 status.load -> ../mods-available/status.load
ubuntu@ip-172-31-13-115:/etc/apache2/mods-enabled$
```

```
ubuntu@ip-172-31-13-115:/etc/apache2/mods-enabled$ nano 6.2

    DirectoryIndex index.php index.cgi index.pl index.html index.xhtml index.htm

# vim: syntax=apache ts=4 sw=4 sts=4 sr noet
```

```
ubuntu@ip-172-31-13-115: /etc/apache2/mods-enabled
GNU nano 6.2
<VirtualHost *:80>
    # The ServerName directive sets the request scheme, hostname and port
    # the server uses to identify itself. This is used when creating
    # redirection URLs. In the context of virtual hosts, the ServerName
    # specifies what hostname must appear in the request's Host: header to
    # match this virtual host. For the default virtual host (this file) the
    # value is not decisive as it is used as a last resort host regardless
    # However, you must set it for any further virtual host explicitly.
    #ServerName www.example.com

    ServerAdmin webmaster@localhost
    DocumentRoot /var/www/html

    <Directory /var/www/html>
        Options Indexes FollowSymLinks MultiViews
        AllowOverride All
        Require all granted
    </Directory>

    # Available loglevels: trace8, ..., trace1, debug, info, notice, warn,
    # error, crit, alert, emerg.
    # It is also possible to configure the loglevel for particular
    # modules, e.g.
    #LogLevel info ssl:warn

    ErrorLog ${APACHE_LOG_DIR}/error.log
    CustomLog ${APACHE_LOG_DIR}/access.log combined

    # For most configuration files from conf-available/, which are
    # enabled or disabled at a global level, it is possible to
    # include a line for only one particular virtual host. For example the
    # following line enables the CGI configuration for this host only
    # after it has been globally disabled with "a2disconf".
    #Include conf-available/serve-cgi-bin.conf
</VirtualHost>

# vim: syntax=apache ts=4 sw=4 sts=4 sr noet
```

```
ubuntu@ip-172-31-13-115: /etc/apache2/mods-enabled

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-13-115:/etc/apache2/mods-enabled$ php -i | grep -i mysql
ubuntu@ip-172-31-13-115:/etc/apache2/mods-enabled$ php -v
PHP 8.1.2-1lubuntu2.14 (cli) (built: Aug 18 2023 11:41:11) (NTS)
Copyright (c) The PHP Group
Zend Engine v4.1.2, Copyright (c) Zend Technologies
    with Zend OPcache v8.1.2-1lubuntu2.14, Copyright (c), by Zend Technologies
ubuntu@ip-172-31-13-115:/etc/apache2/mods-enabled$ sudo apt-get install php-mysql
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  php8.1-mysql
The following NEW packages will be installed:
  php-mysql php8.1-mysql
0 upgraded, 2 newly installed, 0 to remove and 3 not upgraded.
Need to get 132 kB of archives.
After this operation, 476 kB of additional disk space will be used.
Do you want to continue? [Y/n] Y
Get:1 http://ca-central-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 php8.1-mysql amd64 8.1.2-
Get:2 http://ca-central-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 php-mysql all 2:8.1+92ubuntul [18
Fetched 132 kB in 0s (1752 kB/s)
Selecting previously unselected package php8.1-mysql.
(Reading database ... 96392 files and directories currently installed.)
Preparing to unpack .../php8.1-mysql_8.1.2-1lubuntu2.14_amd64.deb ...
Unpacking php8.1-mysql (8.1.2-1lubuntu2.14) ...
Selecting previously unselected package php-mysql.
Preparing to unpack .../php-mysql_2%3a8.1+92ubuntul_all.deb ...
Unpacking php-mysql (2:8.1+92ubuntul) ...
Setting up php8.1-mysql (8.1.2-1lubuntu2.14) ...

Creating config file /etc/php/8.1/mods-available/mysqlnd.ini with new version

Creating config file /etc/php/8.1/mods-available/mysqli.ini with new version

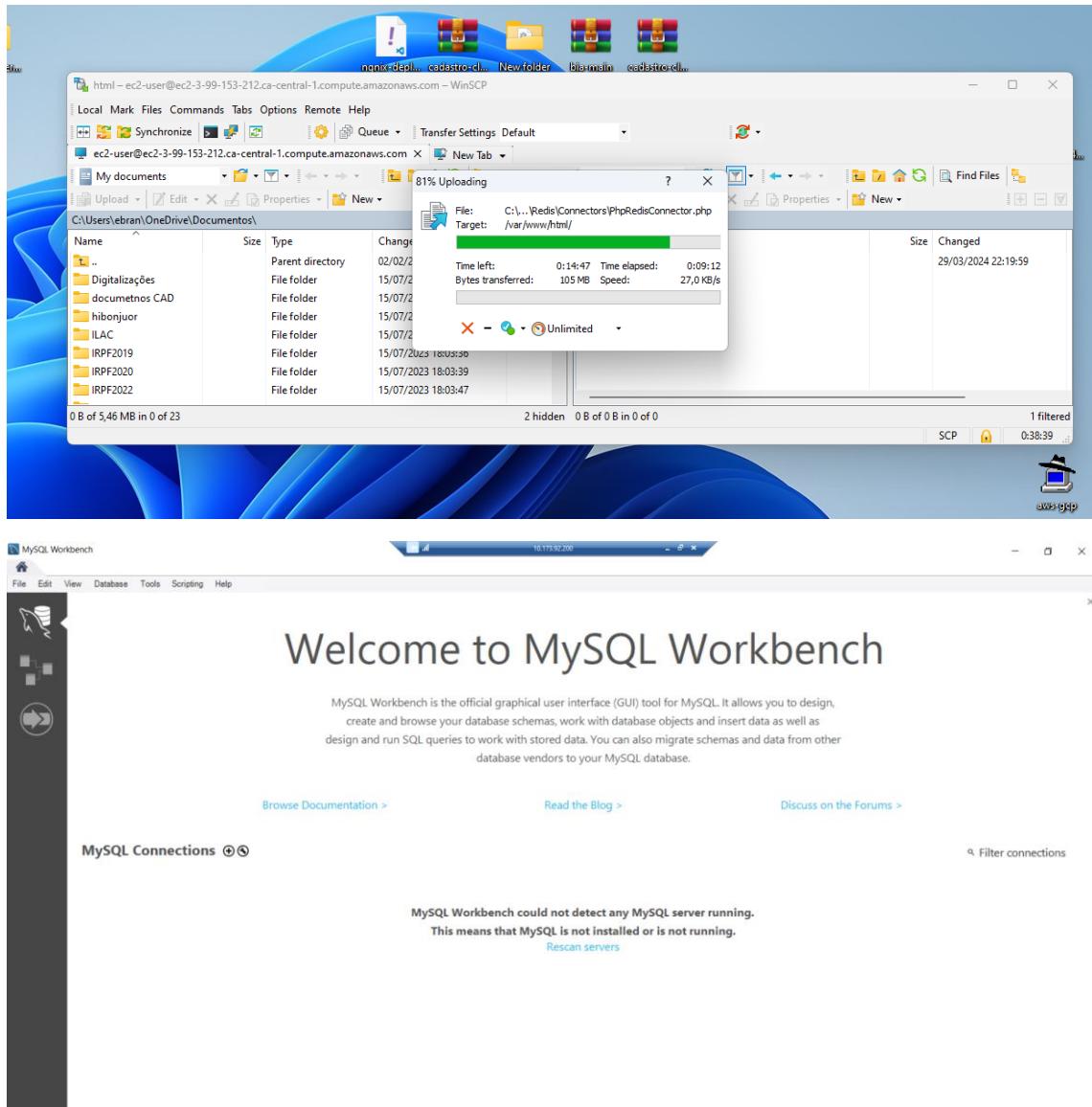
Creating config file /etc/php/8.1/mods-available/pdo_mysql.ini with new version
Setting up php-mysql (2:8.1+92ubuntul) ...
Processing triggers for php8.1-cli (8.1.2-1lubuntu2.14) ...
Scanning processes...
Scanning candidates...
Scanning linux images...

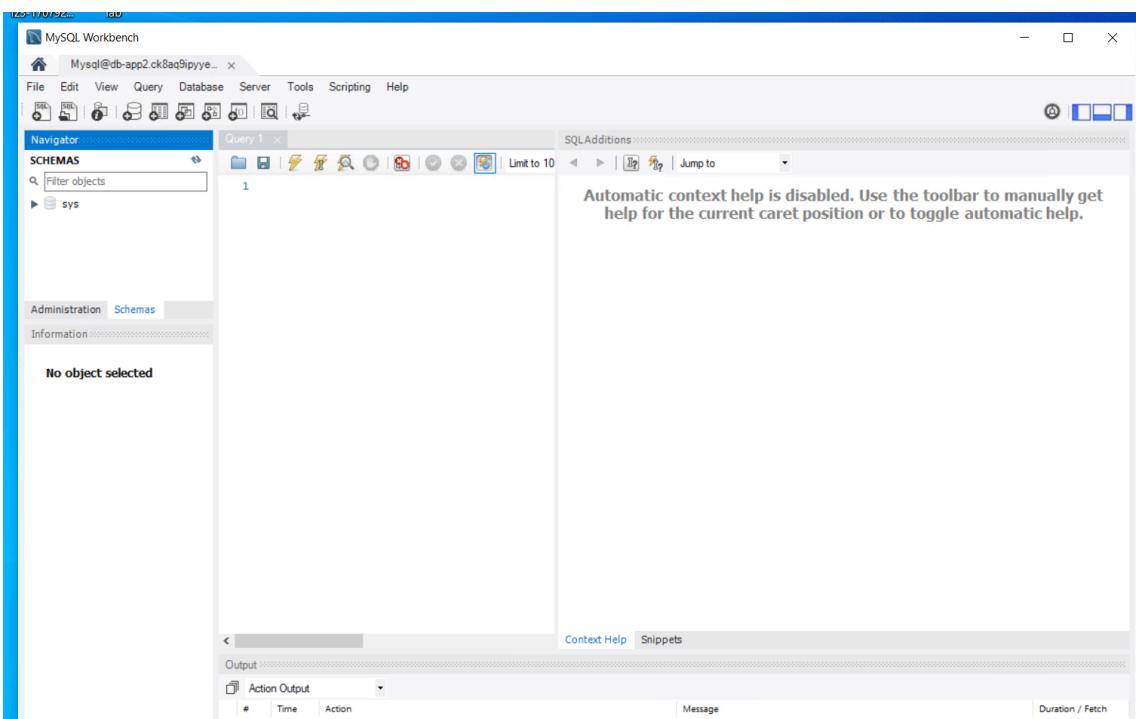
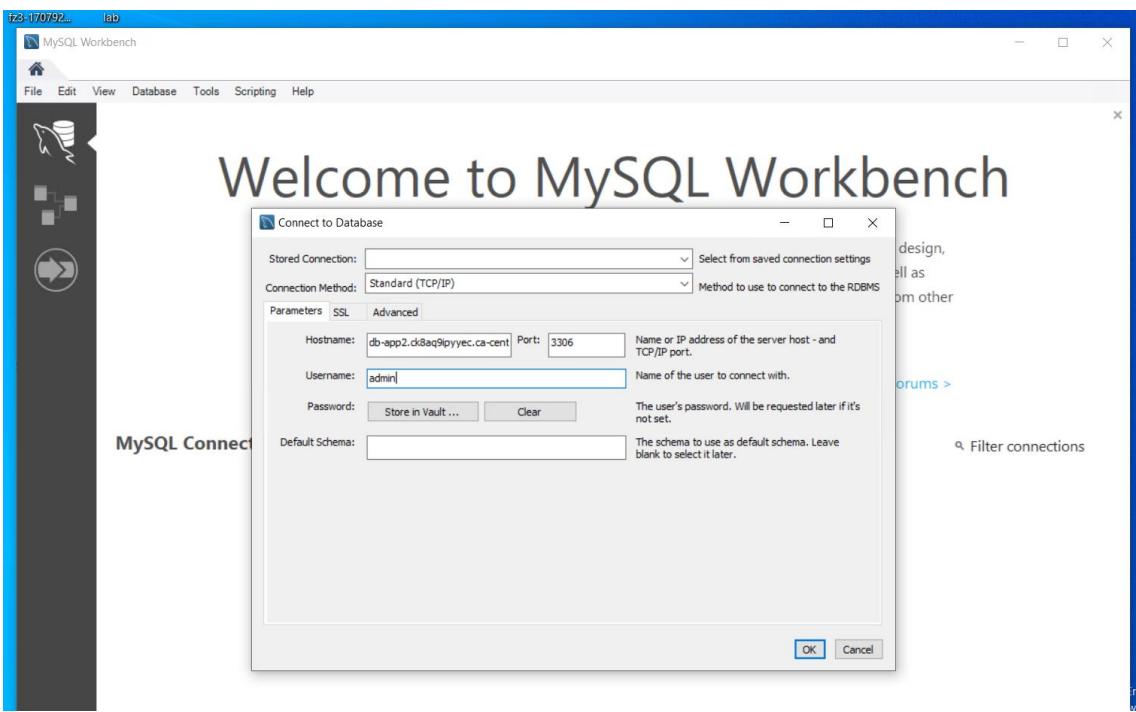
Restarting services...
Service restarts being deferred:
/etc/needrestart/restart.d/dbus.service
systemctl restart getty@tty1.service
systemctl restart networkd-dispatcher.service
systemctl restart systemd-logind.service
systemctl restart unattended-upgrades.service
systemctl restart user@1000.service

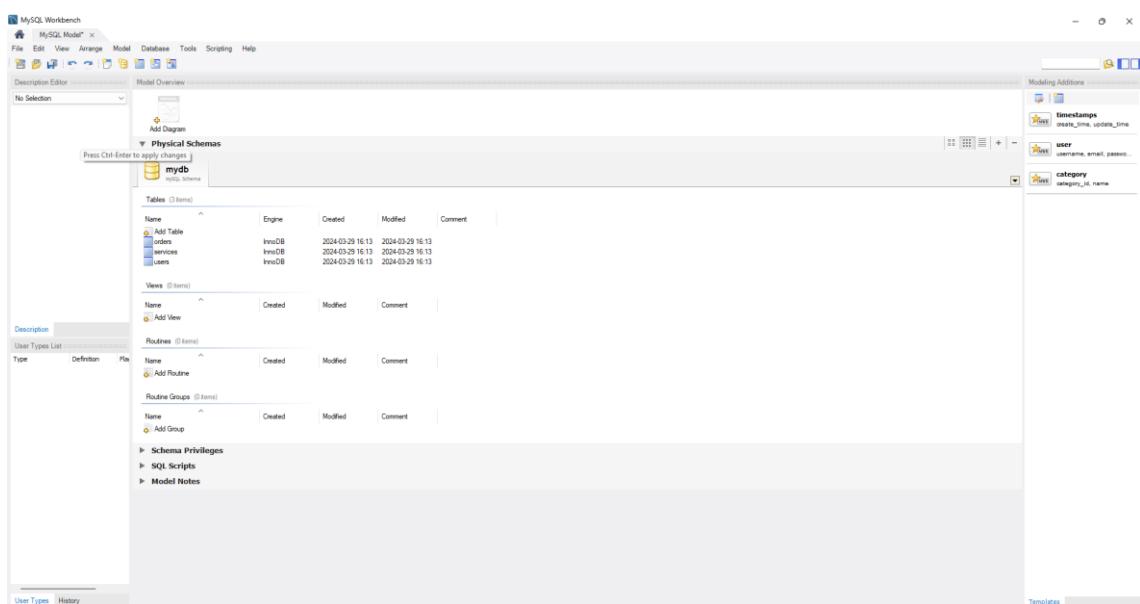
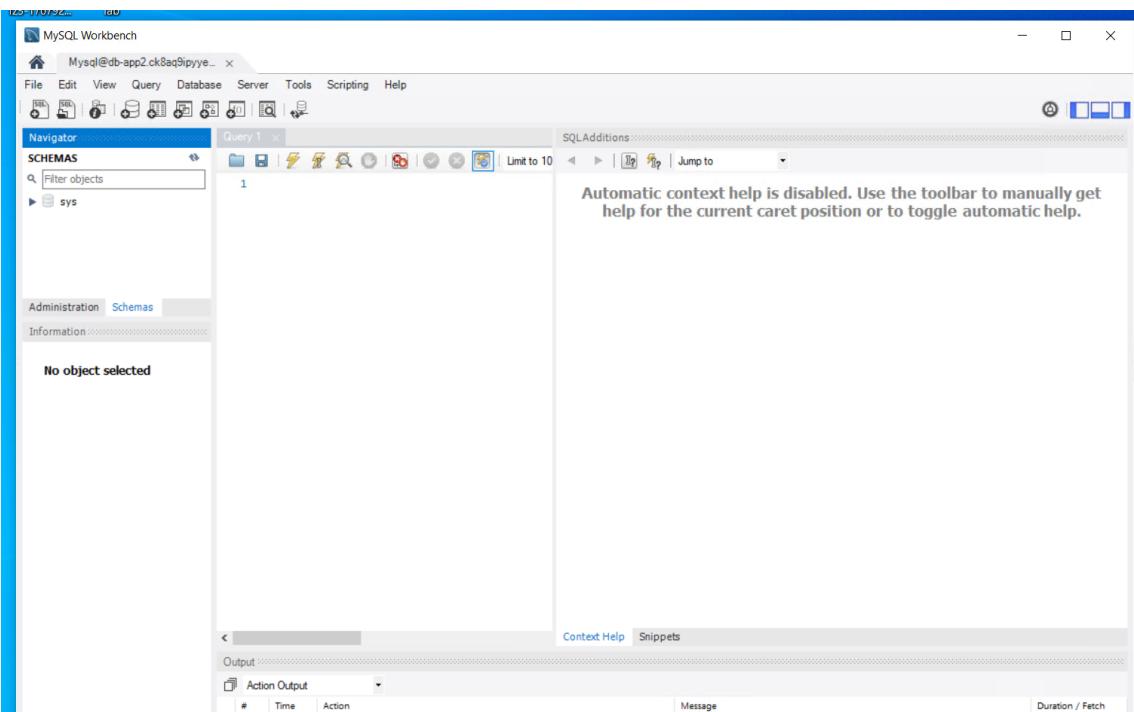
No containers need to be restarted.

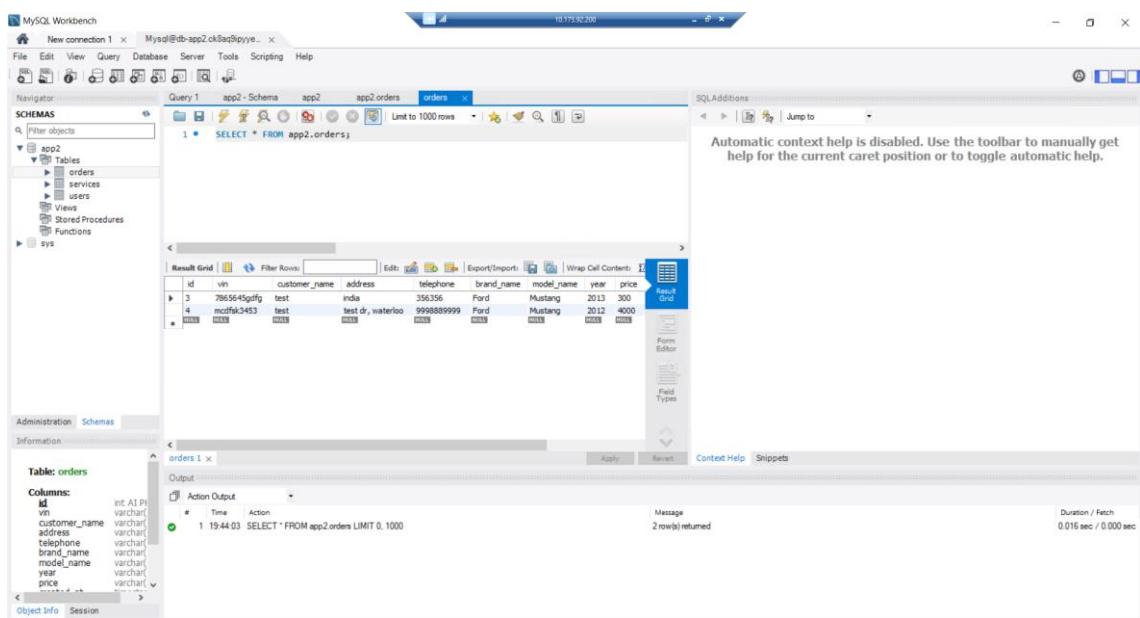
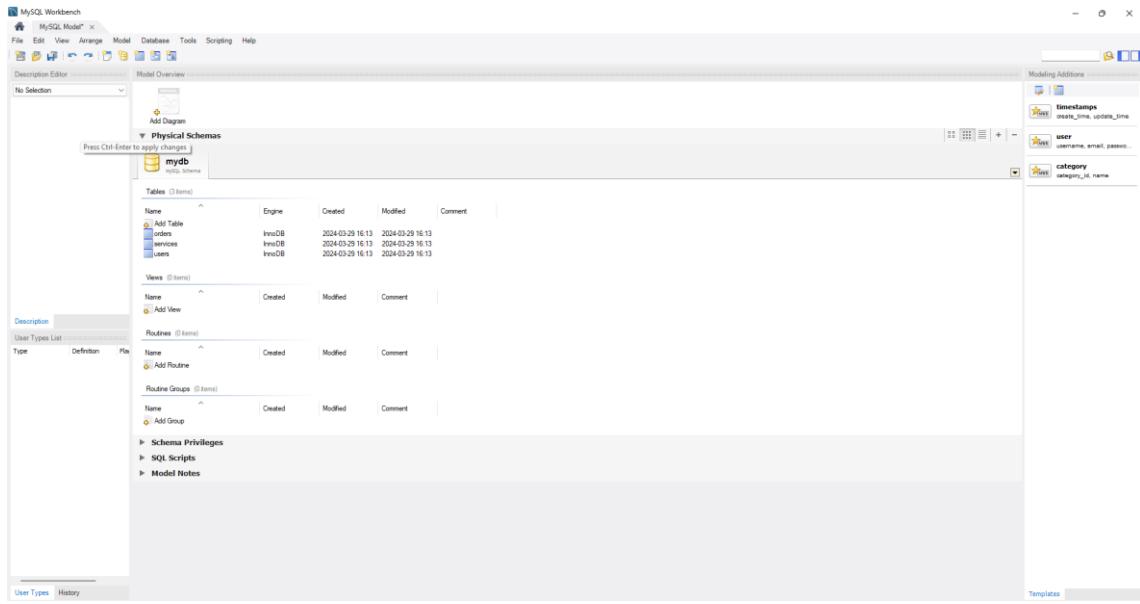
No user sessions are running outdated binaries.

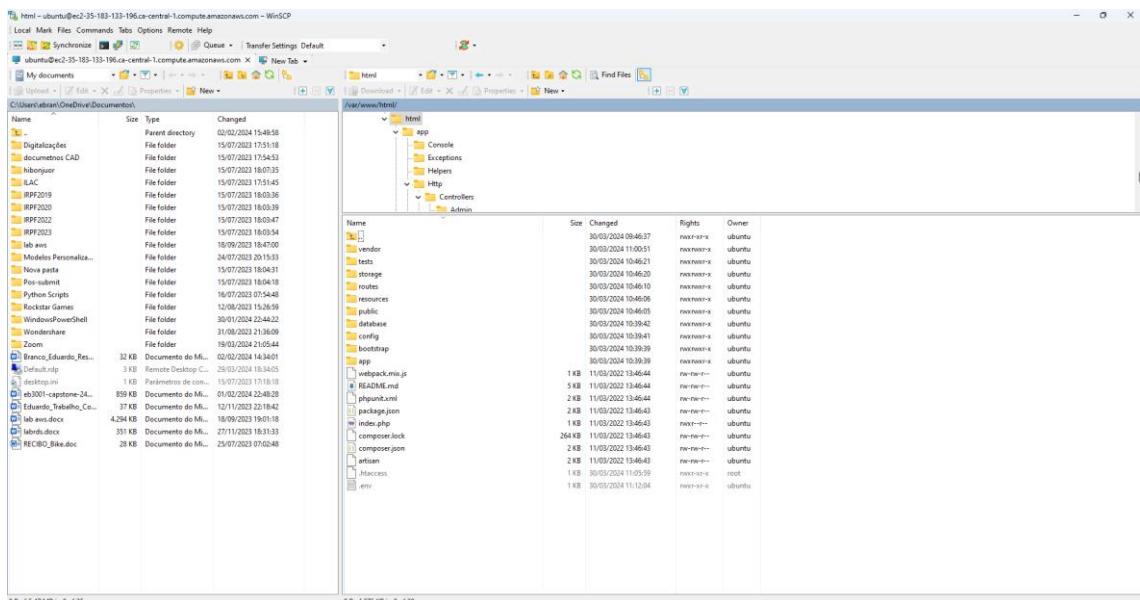
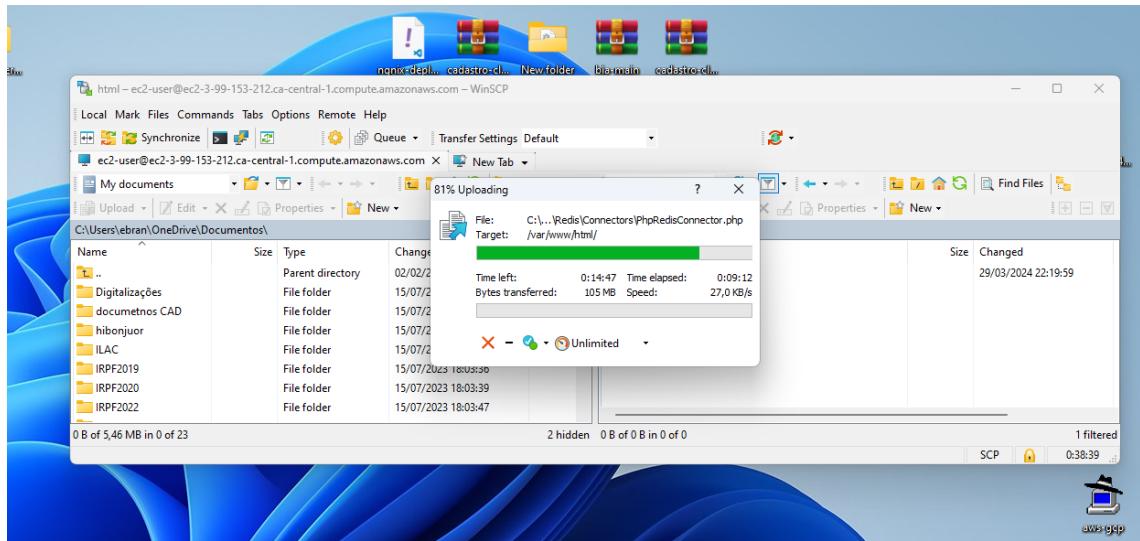
No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-13-115:/etc/apache2/mods-enabled$ sudo systemctl restart apache2
```

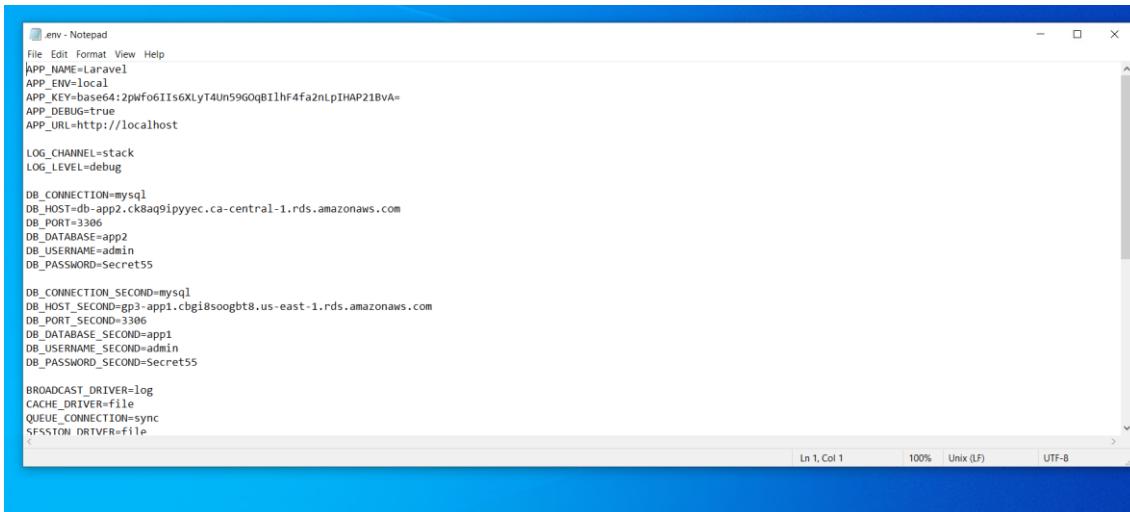












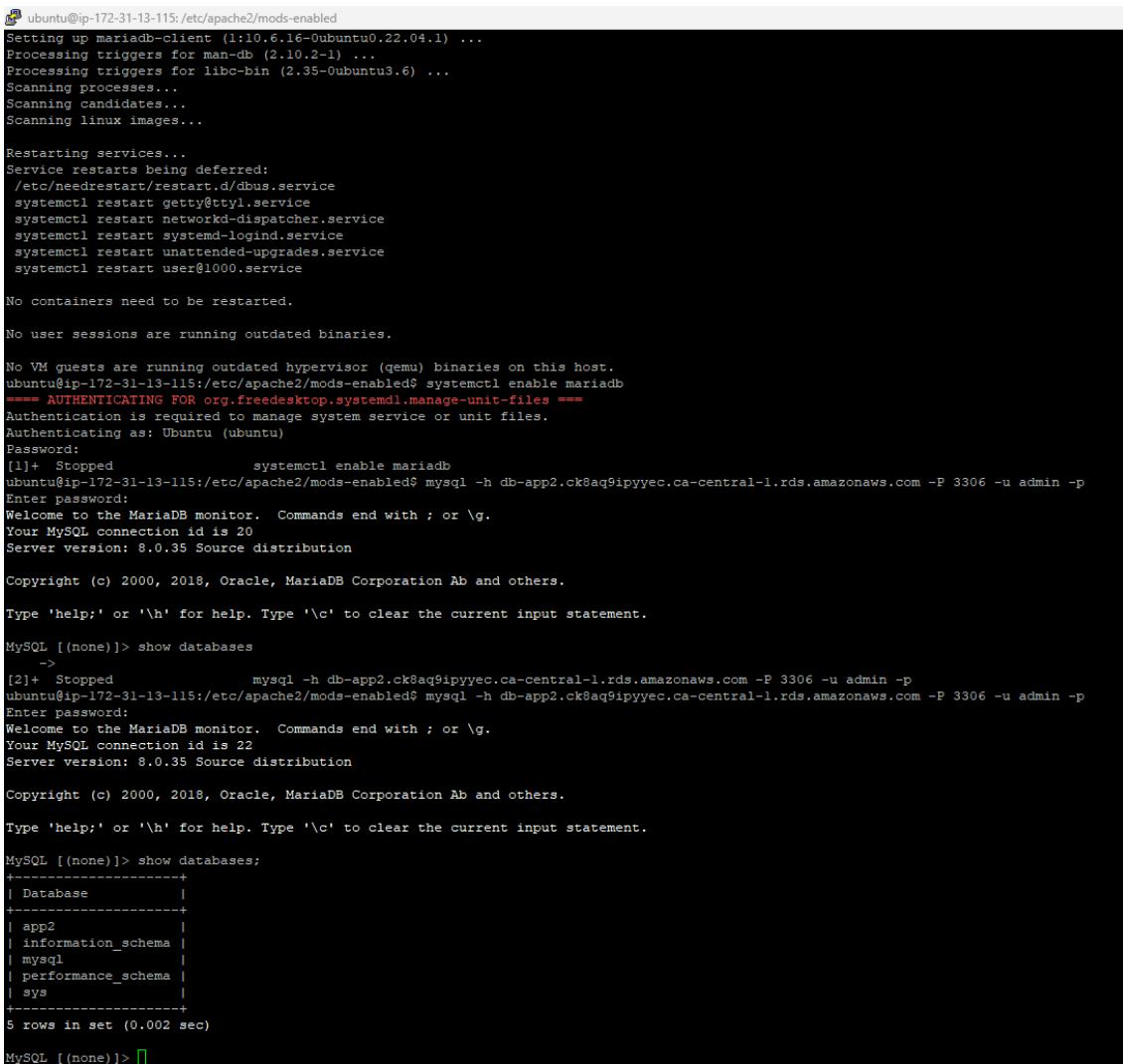
```
.\env - Notepad
File Edit Format View Help
APP_NAME=Laravel
APP_ENV=local
APP_KEY=base64:2pWfo6IIis6XLyT4Un59GOqB1lhF4fa2nlpIHAP21BVa=
APP_DEBUG=true
APP_URL=http://localhost

LOG_CHANNEL=stack
LOG_LEVEL=debug

DB_CONNECTION=mysql
DB_HOST=db-app2.ck8aq9ipyec.ca-central-1.rds.amazonaws.com
DB_PORT=3306
DB_DATABASE=app2
DB_USERNAME=admin
DB_PASSWORD=Secret55

DB_CONNECTION_SECOND=mysql
DB_HOST_SECOND=gp2-app1.cbg18soogbt8.us-east-1.rds.amazonaws.com
DB_PORT_SECOND=3306
DB_DATABASE_SECOND=app1
DB_USERNAME_SECOND=admin
DB_PASSWORD_SECOND=Secret55

BROADCAST_DRIVER=log
CACHE_DRIVER=file
QUEUE_CONNECTION=sync
SESSION_DRIVER=file
```



```
ubuntu@ip-172-31-13-115:/etc/apache2/mods-enabled
Setting up mariadb-client (1:10.6.16-0ubuntu0.22.04.1) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for libc-bin (2.35-0ubuntu3.6) ...
Scanning processes...
Scanning candidates...
Scanning linux images...

Restarting services...
Service restarts being deferred:
/etc/needrestart/restart.d/dbus.service
systemctl restart getty@tty1.service
systemctl restart networkd-dispatcher.service
systemctl restart systemd-logind.service
systemctl restart unattended-upgrades.service
systemctl restart user@1000.service

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-13-115:/etc/apache2/mods-enabled$ systemctl enable mariadb
==== AUTHENTICATING FOR org.freedesktop.systemd.manager-unit-files ===
Authentication is required to manage system service or unit files.
Authenticating as: Ubuntu (ubuntu)
Password:
[1]+  Stopped                  systemctl enable mariadb
ubuntu@ip-172-31-13-115:/etc/apache2/mods-enabled$ mysql -h db-app2.ck8aq9ipyec.ca-central-1.rds.amazonaws.com -P 3306 -u admin -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MySQL connection id is 20
Server version: 8.0.35 Source distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MySQL [(none)]> show databases
      ->
[2]+  Stopped                  mysql -h db-app2.ck8aq9ipyec.ca-central-1.rds.amazonaws.com -P 3306 -u admin -p
ubuntu@ip-172-31-13-115:/etc/apache2/mods-enabled$ mysql -h db-app2.ck8aq9ipyec.ca-central-1.rds.amazonaws.com -P 3306 -u admin -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MySQL connection id is 22
Server version: 8.0.35 Source distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MySQL [(none)]> show databases;
+-----+
| Database |
+-----+
| app2    |
| information_schema |
| mysql   |
| performance_schema |
| sys     |
+-----+
5 rows in set (0.002 sec)

MySQL [(none)]>
```

```
ubuntu@ip-172-31-13-115:/etc/apache2/mods-enabled
Setting up mariadb-client (1:10.6.16-0ubuntu0.22.04.1) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for libc-bin (2.35-0ubuntu3.6) ...
Scanning processes...
Scanning candidates...
Scanning linux images...

Restarting services...
Service restarts being deferred:
/etc/needrestart/restart.d/dbus.service
systemctl restart getty@tty1.service
systemctl restart networkd-dispatcher.service
systemctl restart systemd-logind.service
systemctl restart unattended-upgrades.service
systemctl restart user@1000.service

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-13-115:/etc/apache2/mods-enabled$ systemctl enable mariadb
==== AUTHENTICATING FOR org.freedesktop.systemd1.manage-unit-files ===
Authentication is required to manage system service or unit files.
Authenticating as: Ubuntu (ubuntu)
Password:
[1]+  Stopped                  systemctl enable mariadb
ubuntu@ip-172-31-13-115:/etc/apache2/mods-enabled$ mysql -h db-app2.ck8aq9ipyyc.ca-central-1.rds.amazonaws.com -P 3306 -u admin -p
Enter password:
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MySQL connection id is 20
Server version: 8.0.35 Source distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MySQL [(none)]> show databases
      >
[2]+  Stopped                  mysql -h db-app2.ck8aq9ipyyc.ca-central-1.rds.amazonaws.com -P 3306 -u admin -p
ubuntu@ip-172-31-13-115:/etc/apache2/mods-enabled$ mysql -h db-app2.ck8aq9ipyyc.ca-central-1.rds.amazonaws.com -P 3306 -u admin -p
Enter password:
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MySQL connection id is 22
Server version: 8.0.35 Source distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MySQL [(none)]> show databases;
+-----+
| Database |
+-----+
| app2    |
| information_schema |
| mysql   |
| performance_schema |
| sys     |
+-----+
5 rows in set (0.002 sec)

MySQL [(none)]>
```

