

Monolithic : 1 EC2 instance and deployed wordpress and MYSQL on same instance

The screenshot displays the AWS Management Console interface for an EC2 instance named "My Server". The instance is in a "Running" state, and its details are shown, including its ID, state, type, and various addresses. Below the instance details, a terminal window shows the output of the "dpkg-query" command, listing installed packages like liblua5.3, apache2-data, mailcap, apache2-utils, mime-support, apache2-bin, and apache2.

Instance: i-0facba573e7077f9e (My Server)

Instance summary

- Instance ID: i-0facba573e7077f9e (My Server)
- IPv6 address: -
- Hostname type: -
- IP name: ip-172-31-42-185.ec2.internal

Public IPv4 address

3.87.253.208 [open address](#)

Instance state

Running

Private IP DNS name (IPv4 only)

ip-172-31-42-185.ec2.internal

Private IPv4 addresses

172.31.42.185

Public IPv4 DNS

ec2-3-87-253-208.compute-1.amazonaws.com [open address](#)

```
ubuntu@ip-172-31-42-185:~$ dpkg-query -f='${Package} ${Version} ${Architecture}\n'
```

```
Setting up liblua5.3-0:amd64 (5.3.6-1build1) ...  
Setting up apache2-data (2.4.52-lubuntu4.6) ...  
Setting up mailcap (3.70+nmu1ubuntu1) ...  
Setting up apache2-utils (2.4.52-lubuntu4.6) ...  
Setting up mime-support (3.66) ...  
Setting up apache2-bin (2.4.52-lubuntu4.6) ...  
Setting up apache2 (2.4.52-lubuntu4.6) ...  
Enabling module mpm_event.  
Enabling module authz_core.  
Enabling module authz_host.  
Enabling module authn_core.  
Enabling module auth_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 ufw (0.36.1-4build1) ...  
Processing triggers for man-db (2.10.2-1) ...  
Processing triggers for libc-bin (2.35-0ubuntu3.1) ...  
Scanning processes...  
Scanning linux images...  
  
Running kernel seems to be up-to-date.  
  
No services need to be restarted.  
  
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-172-31-42-185:~$
```

Instances | EC2 | us-east-1 x Apache2 Ubuntu Default Page +

Not secure | 3.87.253.208

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Apache2 Default Page

Ubuntu

It works!

This is the default welcome page used to test the correct operation of the Apache2 server after installation on Ubuntu systems. It is based on the equivalent page on Debian, from which the Ubuntu Apache packaging is derived. If you can read this page, it means that the Apache HTTP server installed at this site is working properly. You should **replace this file** (located at `/var/www/html/index.html`) before continuing to operate your HTTP server.

If you are a normal user of this web site and don't know what this page is about, this probably means that the site is currently unavailable due to maintenance. If the problem persists, please contact the site's administrator.

Configuration Overview

Ubuntu's Apache2 default configuration is different from the upstream default configuration, and split into several files optimized for interaction with Ubuntu tools. The configuration system is **fully documented in `/usr/share/doc/apache2/README.Debian.gz`**. Refer to this for the full documentation. Documentation for the web server itself can be found by accessing the **manual** if the `apache2-doc` package was installed on this server.

The configuration layout for an Apache2 web server installation on Ubuntu systems is as follows:

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

03:12 PM 08-10-2023

ubuntu@ip-172-31-42-185: /tmp

```
wordpress/wp-admin/js/application-passwords.js
wordpress/wp-admin/js/password-toggle.js
wordpress/wp-admin/js/user-profile.min.js
wordpress/wp-admin/js/password-toggle.min.js
wordpress/wp-admin/js/svg-painter.js
wordpress/wp-admin/js/link.js
wordpress/wp-admin/js/custom-header.js
wordpress/wp-admin/js/gallery.js
wordpress/wp-admin/js/word-count.js
wordpress/wp-admin/js/accordion.min.js
wordpress/wp-admin/js/inline-edit-post.min.js
wordpress/wp-admin/js/customize-widgets.min.js
wordpress/wp-admin/js/inline-edit-post.js
wordpress/wp-admin/js/updates.js
wordpress/wp-admin/js/media-upload.js
wordpress/wp-admin/js/media.js
wordpress/wp-admin/js/editor-expand.min.js
wordpress/wp-admin/js/media-gallery.min.js
wordpress/wp-admin/js/common.min.js
wordpress/wp-admin/js/tags-box.min.js
wordpress/wp-admin/js/svg-painter.min.js
wordpress/wp-admin/js/custom-background.js
wordpress/wp-admin/js/color-picker.min.js
wordpress/wp-admin/js/auth-app.js
wordpress/wp-admin/js/code-editor.js
wordpress/wp-admin/js/common.js
wordpress/wp-admin/js/set-post-thumbnail.min.js
wordpress/wp-admin/js/postbox.min.js
wordpress/wp-admin/js/color-picker.js
wordpress/wp-admin/js/password-strength-meter.js
wordpress/wp-admin/js/customize-nav-menus.js
wordpress/wp-admin/js/editor-expand.js
wordpress/wp-admin/js/code-editor.min.js
wordpress/wp-admin/js/set-post-thumbnail.js
wordpress/wp-admin/options-permalink.php
wordpress/wp-admin/widgets.php
wordpress/wp-admin/setup-config.php
wordpress/wp-admin/install.php
wordpress/wp-admin/admin-header.php
wordpress/wp-admin/post-new.php
wordpress/wp-admin/themes.php
wordpress/wp-admin/options-reading.php
wordpress/wp-trackback.php
wordpress/wp-comments-post.php
ubuntu@ip-172-31-42-185: /tmp$ ls
latest.tar.gz
snap-private-tmp
systemd-private-bcc602fd34c342b781ee5f09a7ec4a15-apache2.service-H2RAPk
systemd-private-bcc602fd34c342b781ee5f09a7ec4a15-chrond.service-Wag1FN
systemd-private-bcc602fd34c342b781ee5f09a7ec4a15-systemd-logind.service-ASyVRs
systemd-private-bcc602fd34c342b781ee5f09a7ec4a15-systemd-resolved.service-gJRMQ7
tmp.4hvvVixavR
ubuntu-advantage
wordpress
```

Instances | EC2 | us-east-1


WordPress - Setup Configuration: x +

← → ↻ ⚠ Not secure | 3.87.253.208/wordpress/wp-admin/setup-config.php

→ edX | Free Online C... Cloud Academy announcements - A... AWS Community B... Impartus Home | Microsoft 3... LinkedIn Learning... Watch Chichihore... LMS | Whistals

All Bookmarks

03:33 PM 06-10-2023



Welcome to WordPress. Before getting started, you will need to know the following items.

1. Database name
2. Database username
3. Database password
4. Database host
5. Table prefix (if you want to run more than one WordPress in a single database)

This information is being used to create a wp-config.php file. **If for any reason this automatic file creation does not work, do not worry. All this does is fill in the database information to a configuration file. You may also simply open wp-config-sample.php in a text editor, fill in your information, and save it as wp-config.php.** Need more help? [Read the support article on wp-config.php.](#)

In all likelihood, these items were supplied to you by your web host. If you do not have this information, then you will need to contact them before you can continue. If you are ready...

[Let's go!](#)

03:35 PM 06-10-2023



Welcome

Welcome to the famous five-minute WordPress installation process! Just fill in the information below and you'll be on your way to using the most extendable and powerful personal publishing platform in the world.

Information needed

Please provide the following information. Do not worry, you can always change these settings later.

Site Title

Username
Usernames can have only alphanumeric characters, spaces, underscores, hyphens, periods, and the @ symbol.

Password [Hide](#)

Important: You will need this password to log in. Please store it in a secure location.

Your Email
Double-check your email address before continuing.



Success!

WordPress has been installed. Thank you, and enjoy!

Username abc
Password Your chosen password.

[Log In](#)

```
ubuntu@ip-172-31-42-185: /var/www/html/wordpress
wordpress/wp-admin/js/editor-expand.min.js
wordpress/wp-admin/js/media-gallery.min.js
wordpress/wp-admin/js/common.min.js
wordpress/wp-admin/js/tags-box.min.js
wordpress/wp-admin/js/svg-painter.min.js
wordpress/wp-admin/js/custom-background.js
wordpress/wp-admin/js/color-picker.min.js
wordpress/wp-admin/js/auth-wp.js
wordpress/wp-admin/js/code-editor.js
wordpress/wp-admin/js/common.js
wordpress/wp-admin/js/set-post-thumbnail.min.js
wordpress/wp-admin/js/postbox.min.js
wordpress/wp-admin/js/color-picker.js
wordpress/wp-admin/js/password-strength-meter.js
wordpress/wp-admin/js/customize-nav-menus.js
wordpress/wp-admin/js/editor-expand.js
wordpress/wp-admin/js/code-editor.min.js
wordpress/wp-admin/js/set-post-thumbnail.js
wordpress/wp-admin/options-permalink.php
wordpress/wp-admin/widgets.php
wordpress/wp-admin/setup-config.php
wordpress/wp-admin/install.php
wordpress/wp-admin/admin-header.php
wordpress/wp-admin/post-new.php
wordpress/wp-admin/themes.php
wordpress/wp-admin/options-reading.php
wordpress/wp-trackback.php
wordpress/wp-comments-post.php
ubuntu@ip-172-31-42-185:/tmp$ ls
latest.tar.gz
system-private-bcc602fd34c342b781ee5f09a7ec4a15-chrmony.service-WaglfW tmp.4hVvVixavR
system-private-bcc602fd34c342b781ee5f09a7ec4a15-apache2.service-H2RApk ubuntu-advantage
system-private-bcc602fd34c342b781ee5f09a7ec4a15-systemd-logind.service-ASyVRs
system-private-bcc602fd34c342b781ee5f09a7ec4a15-systemd-resolved.service-qJfQM7 wordpress
ubuntu@ip-172-31-42-185:/tmp$ sudo mv wordpress/ /var/www/html
ubuntu@ip-172-31-42-185:/tmp$ cd wordpress/
-bash: cd: wordpress/: No such file or directory
ubuntu@ip-172-31-42-185:/tmp$ cd /var/www/html/wordpress
-bash: cd: /var/www/html/wordpress/: No such file or directory
ubuntu@ip-172-31-42-185:/tmp$ cd /var/www/html/
-bash: cd: /var/www/html/: No such file or directory
ubuntu@ip-172-31-42-185:/tmp$ cd /var/www/html/
ubuntu@ip-172-31-42-185:/var/www/html$ ls
index.html wordpress
ubuntu@ip-172-31-42-185:/var/www/html$ cd wordpress
ubuntu@ip-172-31-42-185:/var/www/html/wordpress$ nano wp-config.php
index.php readme.html wp-admin wp-comments-post.php wp-config.php wp-cron.php wp-links-opml.php wp-login.php wp-settings.php wp-trackback.php
license.txt wp-activate.php wp-blog-header.php wp-config-sample.php wp-content wp-includes wp-load.php wp-mail.php wp-signup.php xmlrpc.php
```

Home Page

Sample Page

Mindblown: a blog about philosophy.

Hello world!

Welcome to WordPress. This is your first post. Edit or delete it, then start writing!

Commands :

1. Install Apache server on Ubuntu

sudo apt install apache2

2. Install php runtime and php mysql connector

sudo apt install php libapache2-mod-php php-mysql

3. Install MySQL server

`sudo apt install mysql-server`

4. Login to MySQL server

`sudo mysql -u root`

5. Change authentication plugin to `mysql_native_password` (change the password to something strong)

`ALTER USER 'root'@'localhost' IDENTIFIED WITH mysql_native_password by 'kaviya@123';`

6. Create a new database user for wordpress (change the password to something strong)

`CREATE USER 'wp_user'@localhost IDENTIFIED BY 'kaviya@123';`

7. Create a database for wordpress

`CREATE DATABASE wp;`

8. Grant all privileges on the database 'wp' to the newly created user

`GRANT ALL PRIVILEGES ON wp.* TO 'wp_user'@localhost;`

9. Download wordpress

`cd /tmp`

`wget https://wordpress.org/latest.tar.gz`

10. Unzip

`tar -xvf latest.tar.gz`

11. Move wordpress folder to apache document root

`sudo mv wordpress/ /var/www/html`

Microservice : 1 EC2 instance and MYSQL

Instances | EC2 | us-east-1

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances

Instances (1/2) Info

Find Instance by attribute or tag (case-sensitive)

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
<input type="checkbox"/>	My Server	i-0facba573e7077f9e	Running	t2.micro	2/2 checks passed	No alarms	us-east-1c	ec2-3-87-253-20
<input checked="" type="checkbox"/>	MY Sql	i-0d3e0ad19108c07f7	Running	t2.micro	Initializing	No alarms	us-east-1c	ec2-3-88-146-16

Instance: i-0d3e0ad19108c07f7 (MY Sql)

Instance summary Info

Instance ID
i-0d3e0ad19108c07f7 (MY Sql)

IPv6 address
-

Hostname type
IP name: ip-172-31-34-236.ec2.internal

Public IPv4 address copied

3.88.146.164 [open address](#)

Instance state
Running

Private IP DNS name (IPv4 only)
ip-172-31-34-236.ec2.internal

Private IPv4 addresses
172.31.34.236

Public IPv4 DNS
ec2-3-88-146-164.compute-1.amazonaws.com [open address](#)

Elastic IP addresses

```
ubuntu@ip-172-31-34-236:~$ sudo apt-get install mysql-server
Reading state data...
Reading /usr/share/mecab/dic/ipadic/Noun.csv ... 60477
Reading /usr/share/mecab/dic/ipadic/Noun-proper.csv ... 27328
Reading /usr/share/mecab/dic/ipadic/Prefix.csv ... 221
Reading /usr/share/mecab/dic/ipadic/Noun.nai.csv ... 42
emitting double-array: 100% |#####|
Reading /usr/share/mecab/dic/ipadic/matrix.def ... 1316x1316
emitting matrix : 100% |#####|
done!
update-alternatives: using /var/lib/mecab/dic/ipadic-utf8 to provide /var/lib/mecab/dic/debian (mecab-dictionary) in auto mode
Setting up libltdl-parser-perl:amd64 (3.76-1build2) ...
Setting up libhttp-message-perl (6.36-1) ...
Setting up mysql-server-8.0 (8.0.34-0ubuntu0.22.04.1) ...
update-alternatives: using /etc/mysql/mysql.cnf to provide /etc/mysql/my.cnf (my.cnf) in auto mode
Renaming removed key_buffer and myisam-recover options (if present)
mysqld will log errors to /var/log/mysql/error.log
mysqld is running as pid 2620
Created symlink /etc/systemd/system/multi-user.target.wants/mysql.service → /lib/systemd/system/mysql.service.
Setting up libio-socket-ssl-perl (4.54-1) ...
Setting up libltdl-template-perl (2.97-1.1) ...
Setting up mysql-server (8.0.34-0ubuntu0.22.04.1) ...
Setting up libio-socket-ssl-perl (4.54-1) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for libc-bin (2.35-0ubuntu3.1) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

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-172-31-34-236:~$ sudo mysql -u root
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 8
Server version: 8.0.34-0ubuntu0.22.04.1 (Ubuntu)

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owners.

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

mysql>
```