Wordpress and CiviCRM Installation
on Ubuntu 22.04

Objectives:
Wordpress and the plugin CiviCRM are installed on your PC rather than a public website.

To be able to utilise the demonstration CRM data in order to learn Wordpress / CiviCRM.

Note: Text in dark blue colour should be cut and pasted to perform this installation.

Ian Stewart - 2023-05-21

Wordpress Installation and CiviCRM Plugin

- Based on `https://ubuntu.com/tutorials/install-and-configure-wordpress`
- Install on 22.04 Ubuntu Mate Desktop PC.
- Download Wordpress
- Pre-requisites include Apache2 mysql, php.
- Website build off /srv/www/wordpress/ directory
- Configuring apache2
- Configuring mysql database
- Configuring wp-config.php
- Configuring Wordpress

- Download CiviCRM and International Language support
- Configuring mysql
- Install CiviCRM plugin for Wordpress.

Install Dependencies. Apache2, Mysql, Php.

```
$ sudo apt update
$ sudo apt upgrade

$ sudo apt install apache2 \
                ghostscript \
                libapache2-mod-php \
                mysql-server \
                php \
                php-bcmath \
                php-curl \
                php-imagick \
                php-intl \
                php-json \
                php-mbstring \
                php-mysql \
                php-xml \
                php-zip
```

Includes php 8.1 as part of this apt install

Install Wordpress. Make directory /srv/www/

```
$ sudo snap install curl

$ sudo mkdir -p /srv/www

$ sudo chown www-data: /srv/www

$ sudo apt install curl

$ curl https://wordpress.org/latest.tar.gz | sudo -u www-data tar zx -C /srv/www
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100 21.9M  100 21.9M    0     0   973k      0  0:00:23  0:00:23 --:--:-- 1705k
```

Copying Wordpress took 23 Seconds

Create Apache2 website for Wordpress. Create wordpress.conf

```
$ sudo pluma /etc/apache2/sites-available/wordpress.conf

<VirtualHost *:80>
    DocumentRoot /srv/www/wordpress
    <Directory /srv/www/wordpress>
        Options FollowSymLinks
        AllowOverride Limit Options FileInfo
        DirectoryIndex index.php
        Require all granted
    </Directory>
    <Directory /srv/www/wordpress/wp-content>
        Options FollowSymLinks
        Require all granted
    </Directory>
</VirtualHost>

Enable the site with:
$ sudo a2ensite wordpress

Enable URL rewriting with:
$ sudo a2enmod rewrite

Disable the default "It Works" site with:
$ sudo a2dissite 000-default

Finally, reload apache2 to apply all these changes:
$ systemctl reload apache2
```

Copy and paste these 13 lines into wordpress.conf. Then save and close pluma editor.

Configure mysql database

```
$ sudo mysql -u root
...snip...
mysql> CREATE DATABASE wordpress;
Query OK, 1 row affected (0.00 sec)

mysql> CREATE USER 'wordpress'@'localhost' IDENTIFIED BY 'mypassword';
Query OK, 0 rows affected (0.00 sec)

mysql> GRANT ALL PRIVILEGES ON wordpress.* TO 'wordpress'@'localhost';
Query OK, 0 rows affected (0.00 sec)

mysql> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.01 sec)

Mysql> exit;
```

Change mypassword for the password you want to use.

ALL PRIVILEGES maybe considered excessive. See alternative mysql GRANT command on the next page

Before

```
mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| performance_schema |
| sys                |
+--------------------+
4 rows in set (0.00 sec)
```

After

```
mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| performance_schema |
| sys                |
| wordpress          |
+--------------------+
5 rows in set (0.00 sec)
```

After

```
mysql> select user, host from mysql.user;
+------------------+-----------+
| user             | host      |
+------------------+-----------+
| debian-sys-maint | localhost |
| mysql.infoschema | localhost |
| mysql.session    | localhost |
| mysql.sys        | localhost |
| phpmyadmin       | localhost |
| root             | localhost |
| wordpress        | localhost |
+------------------+-----------+
7 rows in set (0.00 sec)
```

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Review of mysql wordpress database tables….

```
$ sudo mysql -u root
...snip...
mysql> use wordpress;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> show tables;
+-----------------------------------------+
| Tables_in_wordpress                     |
+-----------------------------------------+
| wp_commentmeta                          |
| wp_comments                             |
| wp_links                                |
| wp_options                              |
| wp_postmeta                             |
| wp_posts                                |
| wp_term_relationships                   |
| wp_term_taxonomy                        |
| wp_termmeta                             |
| wp_terms                                |
| wp_usermeta                             |
| wp_users                                |
+-----------------------------------------+
12 rows in set (0.01 sec)
```

Probably better than GRANT ALL PRIVILEGES. Can do later.

```
mysql> GRANT
    SELECT,
    INSERT,
    UPDATE,
    DELETE,
    CREATE,
    DROP,
    INDEX,
    ALTER,
    CREATE TEMPORARY TABLES,
    LOCK TABLES,
    TRIGGER,
    CREATE ROUTINE,
    ALTER ROUTINE,
    REFERENCES,
    CREATE VIEW,
    SHOW VIEW
ON wordpress.*
TO 'wordpress'@'localhost';
```

Configure PHP for Apache2

```
$ cd /etc/php/8.1/apache2/

$ ls -l
total 76
drwxr-xr-x 2 root root  4096 May 19 19:33 conf.d
-rw-r--r-- 1 root root 73377 May 19 22:29 php.ini

$ sudo pluma php.ini


; Added for install of CiviCRM plugin
memory_limit = 256M
max_execution_time = 240
max_input_time = 120
post_max_size = 50M
upload_max_filesize = 50M

Save php.ini file and exit pluma

$ systemctl reload apache2
```

php.ini file is almost 2000 lines of text.

Copy these 6 lines and post at the very bottom of the php.ini file.
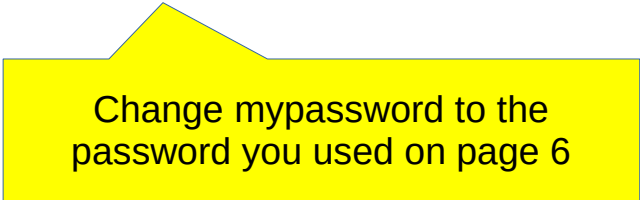
Configure WordPress to connect to the database

```
$ cd /srv/www/wordpress/

$ sudo -u www-data cp /srv/www/wordpress/wp-config-sample.php /srv/www/wordpress/wp-config.php

$ ls -l /srv/www/wordpress/wp-config.php
-rw-r--r-- 1 www-data www-data 3013 May 19 20:05 /srv/www/wordpress/wp-config.php

$ sudo -u www-data sed -i 's/database_name_here/wordpress/' /srv/www/wordpress/wp-config.php
$ sudo -u www-data sed -i 's/username_here/wordpress/' /srv/www/wordpress/wp-config.php
$ sudo -u www-data sed -i 's/password_here/mypassword/' /srv/www/wordpress/wp-config.php
```

Change mypassword to the password you used on page 6

Configure WordPress to connect to the database

```
Place this link in a browser to get keys:
https://api.wordpress.org/secret-key/1.1/salt/

The Web page will display keys and look something like this…

define('AUTH_KEY',         'zp.j90s}oKKHnj)#q3Wcj),21.|75x<+AA?%#?3Q%bEb}:nE(}]qMT|(YECl4*,S');
define('SECURE_AUTH_KEY',  ' k-6WsqbA5baz,dS]=M)AA&@^LJw+u?}Q&Rr<8+Fd4E^RMf;v@:H|kl1,Afg{OLP');
define('LOGGED_IN_KEY',    '|+-%s+H+<=Hq?GL0+e?r+nm^AV-+9W^GCI.`V),Xo:Vta`cM;:}ztDAzp7ixq7Dm');
define('NONCE_KEY',        'pmo4t8Y9wmyB1La![$RM3@NhOS^}Y|i9gM=9eDk7o0[LC?kw|V~?W3Rb<1_I(PBL');
define('AUTH_SALT',        '/DMM _{K`S%~-tTi8DTHLJT.YB*Tk^q|bvs*KoGq#$bl9}btF27~_rX89!U535rH');
define('SECURE_AUTH_SALT', '6SB`ueXKY6ZusGT_Mdj{t,e2Z&^,W9t+EllXa7&4G+S9nS{F(gN,F8~-:(QxO^;9');
define('LOGGED_IN_SALT',   '&RSJ-ERX.Cqv8b7F-;$q@1IubM+.$6A^NFU||31!x;~TE?a.nuS8K[+IaE7=cZ|K');
define('NONCE_SALT',       'Hi|d{]q3L5/*j8U&mG?;6ekaqx7P9YH>+sRgnL7b:*oR2f~Vt5o%O=f;r#iz@joa');

Copy everything from the browser page. Then use pluma editor to open the wp-config.php file...

$ sudo pluma /srv/www/wordpress/wp-config.php

Scroll down until you see the following and delete these 8 lines...
define( 'AUTH_KEY',         'put your unique phrase here' );
define( 'SECURE_AUTH_KEY',  'put your unique phrase here' );
define( 'LOGGED_IN_KEY',    'put your unique phrase here' );
define( 'NONCE_KEY',        'put your unique phrase here' );
define( 'AUTH_SALT',        'put your unique phrase here' );
define( 'SECURE_AUTH_SALT', 'put your unique phrase here' );
define( 'LOGGED_IN_SALT',   'put your unique phrase here' );
define( 'NONCE_SALT',       'put your unique phrase here' );

Now paste what you copied from your web page. Save the file and exit pluma editor.
```

Review changes to wp-config.php file.

```
$ cat /srv/www/wordpress/wp-config.php

Scroll back on the terminal and see if the file now contains sections similar to this…

// ** Database settings - You can get this info from your web host ** //
/** The name of the database for WordPress */
define( 'DB_NAME', 'wordpress' );

/** Database username */
define( 'DB_USER', 'wordpress' );

/** Database password */
define( 'DB_PASSWORD', 'mypassword' );


...and...

define('AUTH_KEY',         '?.-!4_6Pg[4laW+VbLsA:_-gm<0VUwT; K&_R5#yJHO2th)5{i7/5wzIS5]6KQ%]');
define('SECURE_AUTH_KEY',  'H)EXj{zfrzBzv20F+rAqv|XgHSo%zOIpMy]D})Hu[]l64+H X%.0B0T^^F+,vM!}');
define('LOGGED_IN_KEY',    'a`1W-M&$Yd<- %27Zl9.JTYH; c4KWpGM)P5BdBBML@Q8& `](/K~01w4p-+-@7');
define('NONCE_KEY',        'Quae[hv ;~hps>QIT)/#s>pK}EqDETSftYeso[{T.P!eE+bevg-2C*|9qlkxq=@(');
define('AUTH_SALT',        '+s *IBlcE ~pbAgr{P][QbEW0NYG++-pGWl+Cd=UF=1hp`ujvUh2 LtiIbp3TV%C');
define('SECURE_AUTH_SALT', ')-uVcE5W6*xkQ:;h{)6ldVCY.!Xwka=Qi< Xn$=j.+]odVtRzqh-YlN|B--ooH9Y');
define('LOGGED_IN_SALT',   ')P-VNS.nHmEI$IZnWr}-n3^]_!`Z|N#{Ivd=`k<e3WwNK7vZfT??yOh{,8s1+QrW');
define('NONCE_SALT',       '!Ft-;,y.xq,rzHI{Z-p7)uXY,#!VR11J<l@{]S-=7}kNOZ6?tqEhH?DyQSJQxYO-');
```

> Changed to the password that you used.

> Your key data will be different. It is unique to you.

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Configure WordPress

Open `http://localhost` in your browser. Select the language you wish to use and click on continue
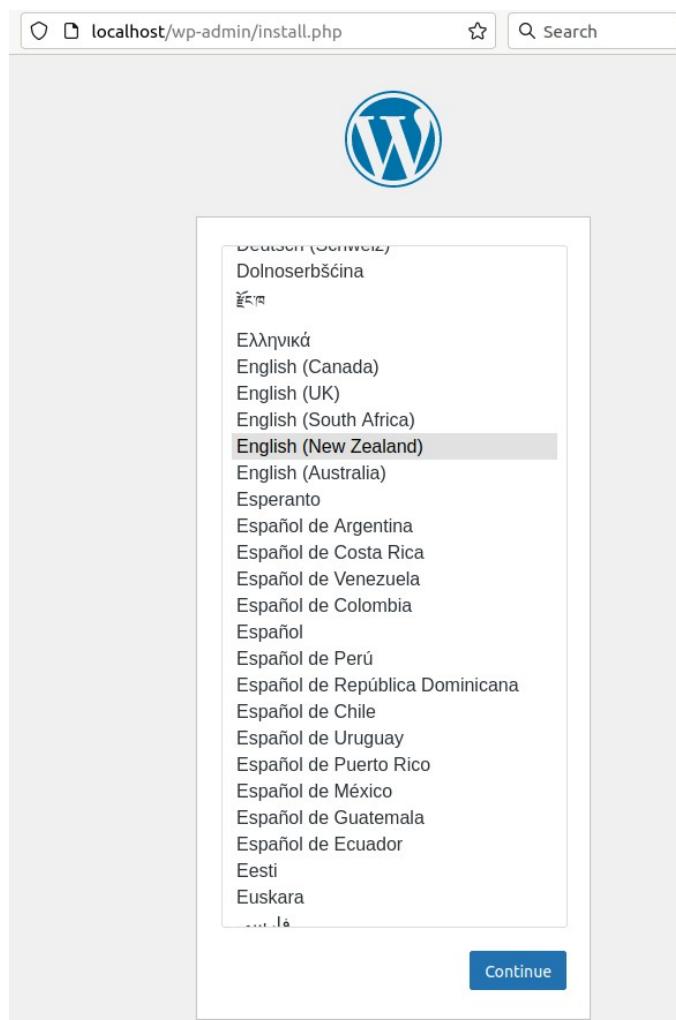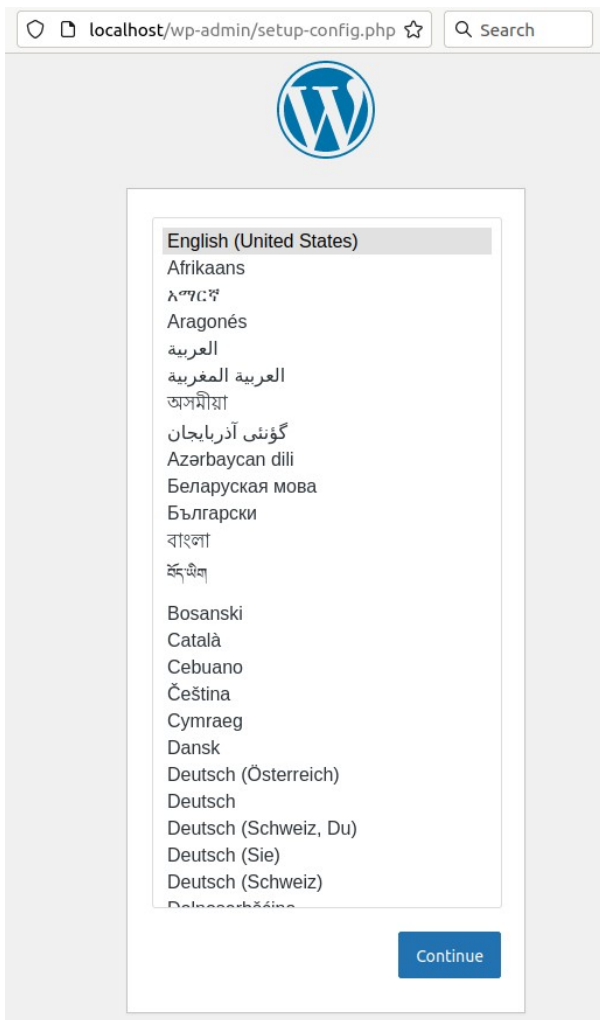
Configure WordPress
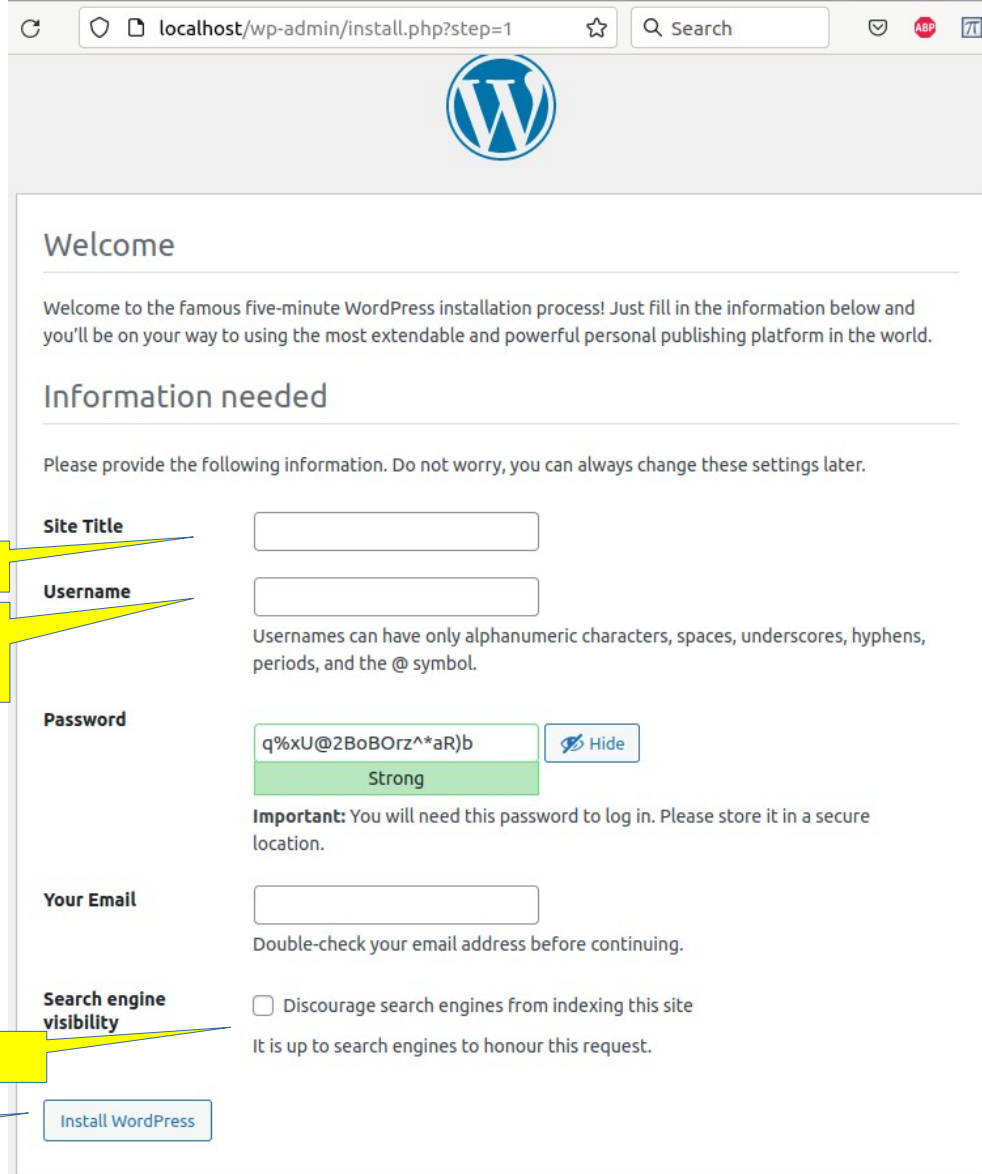
The Welcome page requires your input.
Then click on **Install Wordpress**.

Configure WordPress

The Success page.
Then click on **Log In**.
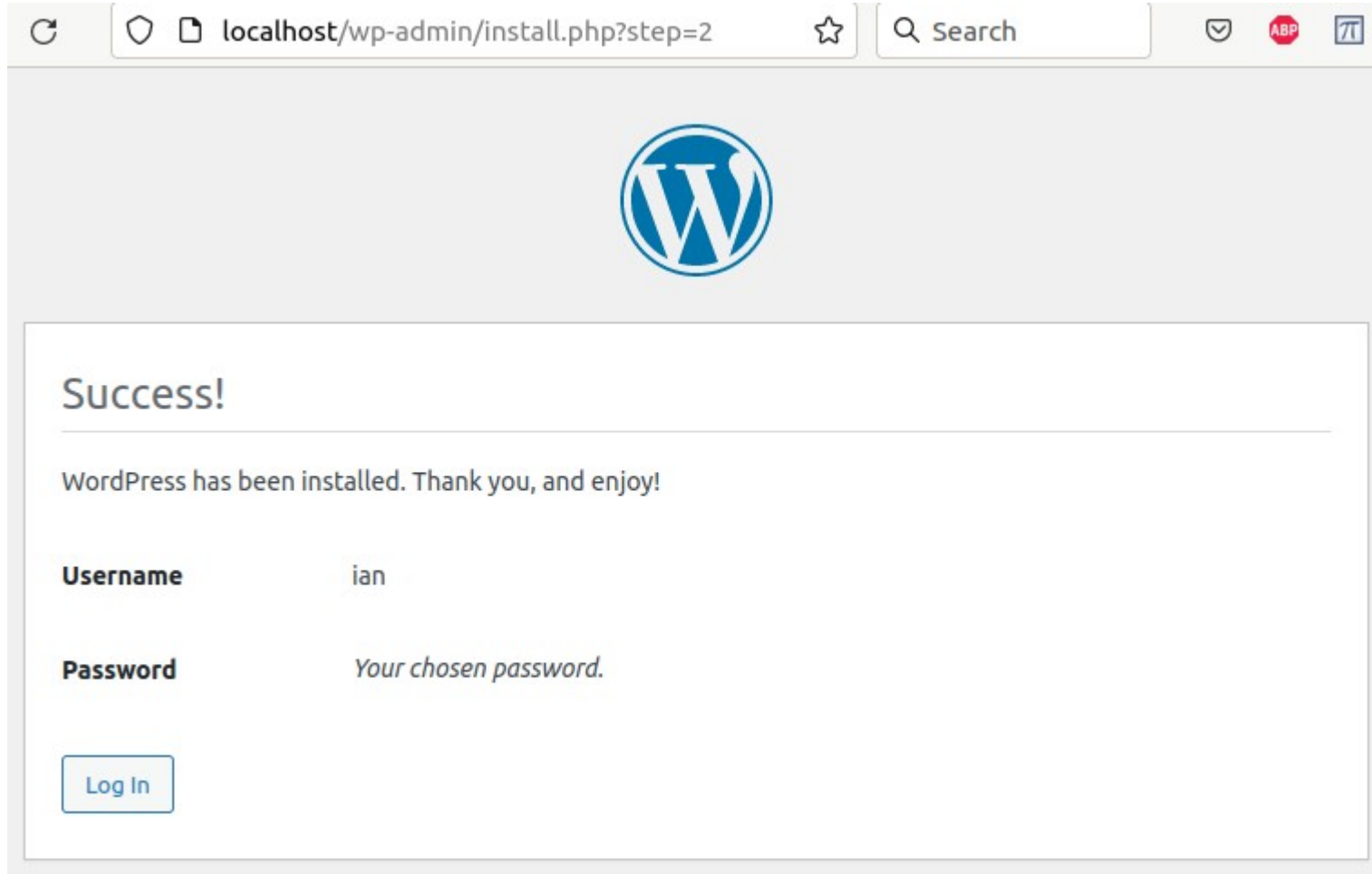
Configure WordPress

The Login page.
Then click on **Log In**.
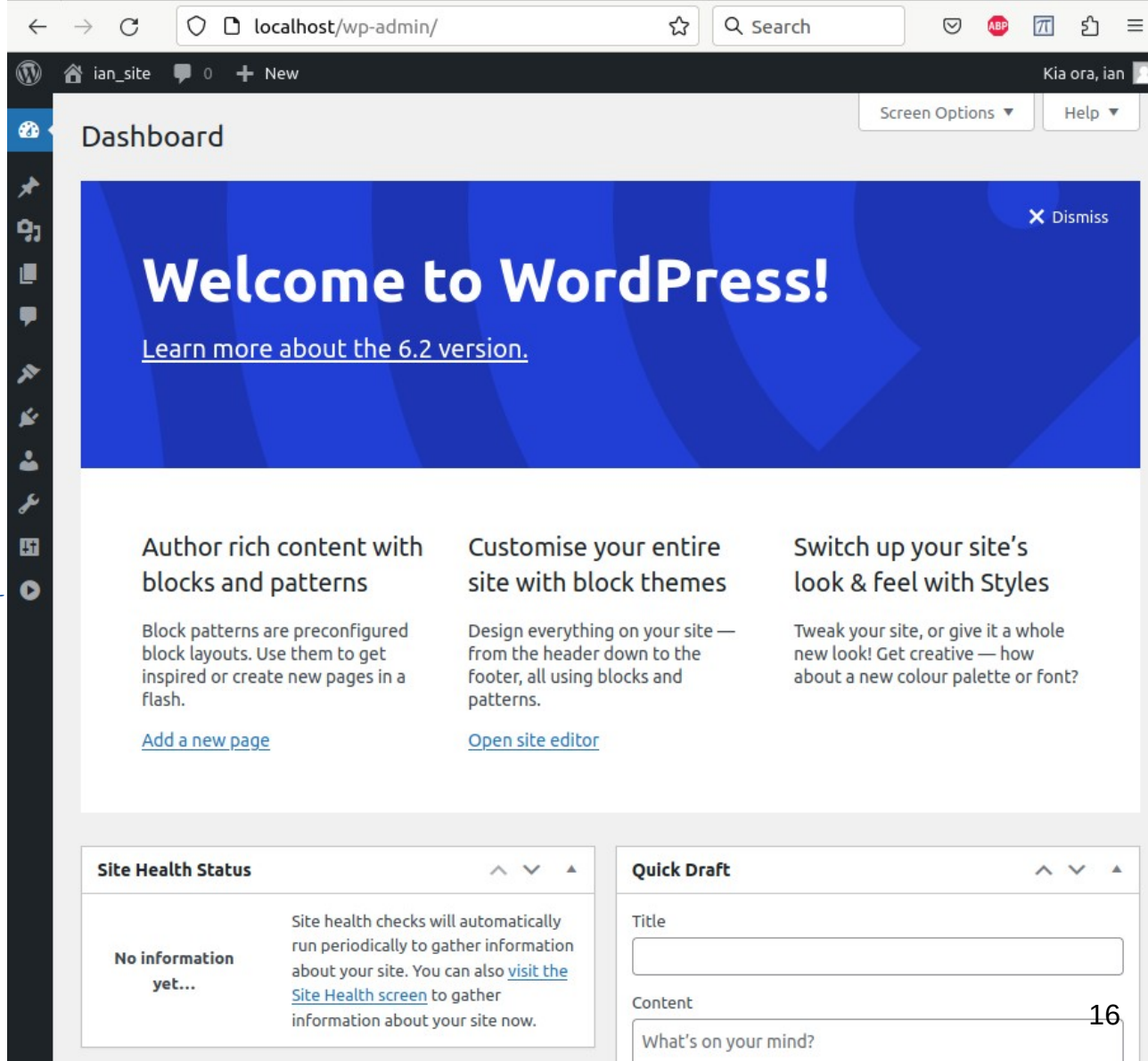
Configure WordPress

The Wordpress Dashboard.

Click to expand left margin

Check Site Health.
Tools →
SiteHealth →
Info →
Server

The changes made in the file
/etc/php/8.1/apache2/php.ini
should be displayed.

Server ⌃

The options shown below relate to your server setup. If changes are required, you may need your web host's assistance.

Server architecture	Linux 5.19.0-41-generic x86_64
Web server	Apache/2.4.52 (Ubuntu)
PHP version	8.1.2-1ubuntu2.11 (Supports 64bit values)
PHP SAPI	apache2handler
PHP max input variables	1000
PHP time limit	240
PHP memory limit	256M
Max input time	120
Upload max filesize	50M
PHP post max size	50M
cURL version	7.81.0 OpenSSL/3.0.2
Is SUHOSIN installed?	No
Is the Imagick library available?	Yes
Are pretty permalinks supported?	Yes
.htaccess rules	Your .htaccess file contains only core WordPress features.

Changes made in
/etc/php/8.1/apache2/php.ini

max_execution_time = 240

memory_limit = 256M

max_input_time = 120

max_filesize = 50M

max_post_sizwe = 50M

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Timezone.
Settings →
General

In Settings → General review the Timezone settings.

It may have defaulted to UTC+0

Use the drop-down menu to set it to your local time, based on city name.

Wordpress Installation Complete

Start learning how to use Wordpress by creating Posts, Pages and tailoring your Appearance.

CiviCRM Plugin to Wordpress Installation

This section describes how to install the CiviCRM plugin to Wordpress. It is based on information at:

https://docs.civicrm.org/installation/en/latest/wordpress/

https://docs.civicrm.org/installation/en/latest/general/requirements/

Mysql setting to change for CiviCRM installation

Most parameters were setup in the Wordpress installation such that they are suitable for CiviCRM.

There is one issue which prevents CiviCRM installation. The error message is:

The fix is described at the bottom of this posting...

https://civicrm.stackexchange.com/questions/38506/installs-fails-with-errordatabase-does-not-support-creation-of-triggers-user

Perform the following:

```
$ sudo mysql -u root
...snip...

mysql> SET GLOBAL log_bin_trust_function_creators=1;
Query OK, 0 rows affected (0.00 sec)


Mysql> exit;
```

Download the latest CiviCRM

```
Go to: https://civicrm.org/download
...and download...
```

DOWNLOAD CIVICRM 5.61.3 ▾

Download CiviCRM 5.61.3 for Drupal 9

Download CiviCRM 5.61.3 for Drupal 7

Download CiviCRM 5.61.3 for Backdrop

Download CiviCRM 5.61.3 for Joomla

Download CiviCRM 5.61.3 for WordPress ◁ **Download**

Download CiviCRM 5.61.3 localization files ◁ **Also Download. However initially we don't use it as we stay with English (USA) so we can use the demonstration data.**

```
A Review of the CiviCRM files now in the /Downloads directory...

$ ls -l ~/Downloads/civicrm*
-rw-rw-r-- 1 ian ian 28938434 May 20 19:30 /home/ian/Downloads/civicrm-5.61.3-l10n.tar.gz
-rw-rw-r-- 1 ian ian 39211624 May 20 19:30 /home/ian/Downloads/civicrm-5.61.3-wordpress.zip
```

Wordpress: Plugins → Add New → Upload Plugin
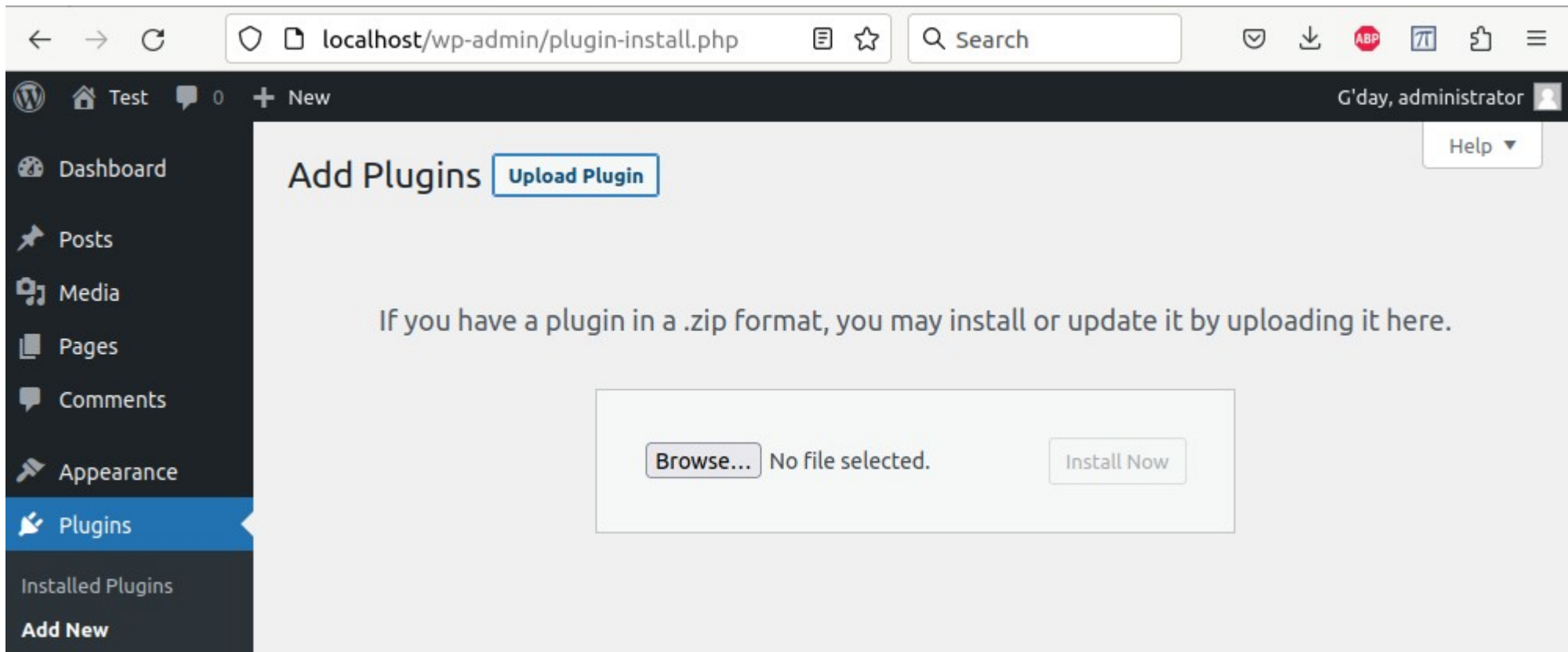
Wordpress: Plugins → Add New → Upload Plugin

Click the Browse button and select the civicrm file in the Downloads folder
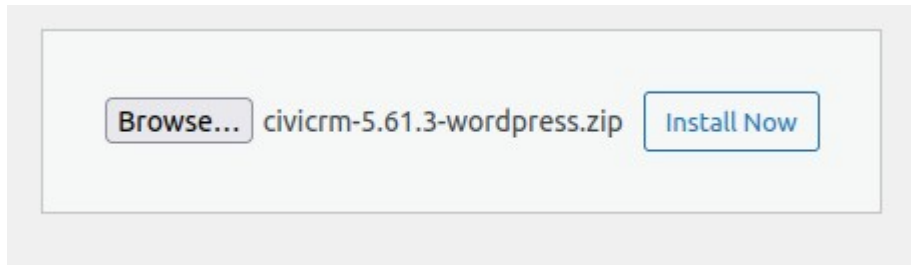
Click the Install Now button
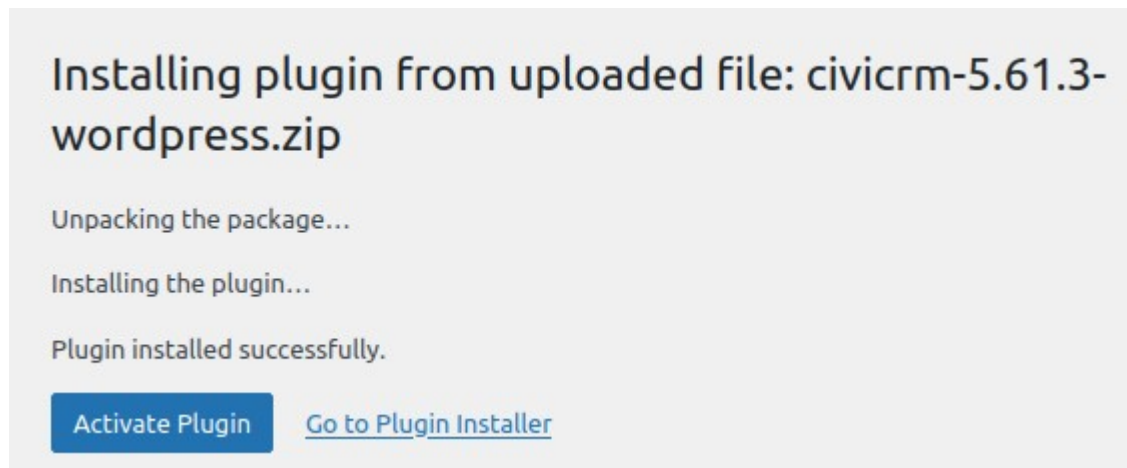
Click: Go to Plugin Installer

CiviCRM Installer 1/2

CiviCRM Installer

Thanks for choosing CiviCRM! Please follow the instructions below to install CiviCRM.

Localization

CiviCRM has been translated to many languages, thanks to its community of translators. By selecting another language, the installer may be available in that language. The initial configuration of the basic data will also be set to that language (ex: individual prefixes, suffixes, activity types, etc.). Learn more about using CiviCRM in other languages.

Language of basic data: [English (United States) ∨] (download the civicrm-5.61.3-l10n.tar.gz file and unzip into CiviCRM's directory to add languages here)

Keep English (United States) if wish to load the sample data

Sample Data

Load sample data:☑   **Click to load the USA sample data**

Check this box to pre-populate CiviCRM with sample English contact records, online contribution pages, profile forms, etc. These examples can help you learn about CiviCRM features.

Components

CiviContribute	CiviEvent	CiviMail
Accept donations and payments	*Accept event registrations*	*Send email blasts and newsletters*
CiviMember	**CiviCase**	**CiviPledge**
Manage recurring memberships	*Track case histories*	*Accept pledges*
CiviReport	**CiviCampaign**	
Generate reports	*Organize campaigns, surveys, and petitions*	

Click to add additional components

CiviCRM Installer 2/2

Environment

The system settings were auto-detected. CiviCRM will be installed with:

CMS Database	`mysql://wordpress:HIDDEN@localhost/wordpress`
CiviCRM Database	`mysql://wordpress:HIDDEN@localhost/wordpress` ✏
CiviCRM Settings File	`/srv/www/wordpress/wp-content/uploads/civicrm/civicrm.settings.php`
CiviCRM Source Code	`/srv/www/wordpress/wp-content/plugins/civicrm/civicrm`
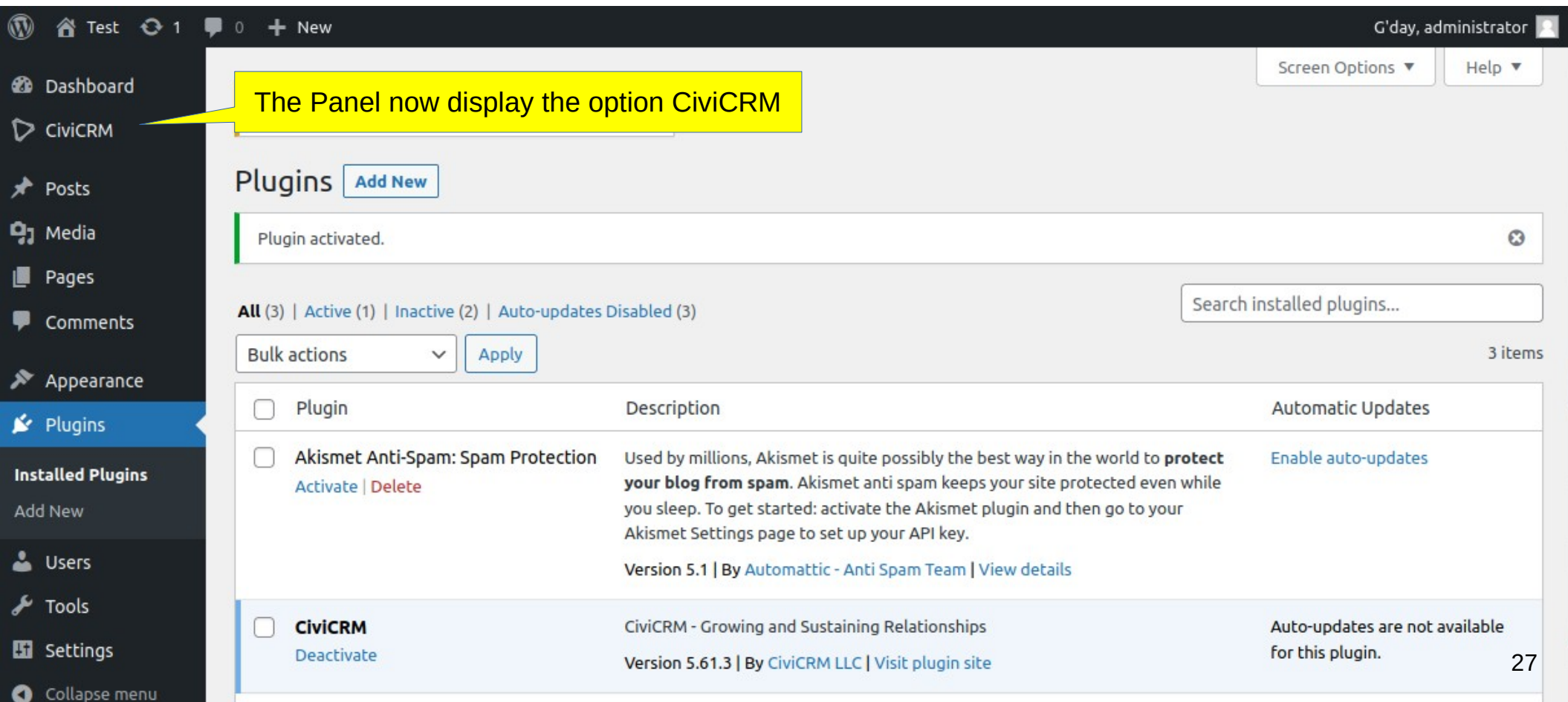
Tip: Need more advanced control? You may alternatively use the command-line installer.

Install CiviCRM

Click to install

Wordpress: Plugins

Screen now displays

CiviCRM Home

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CiviCRM Settings   `Screen now displays`

Appendix:
Example of Wordpress Update.
Changing localhost to a fixed adress.

Wordpress Update

Screen now displays

WordPress Updates

Here you can find information about updates, set auto-updates and see what plugins or themes need updating.

Current version: 6.2.1

Last checked on 20 May 2023 at 6:10 pm AEST. Check again.

Automatic update scheduled in 5 mins.

This site is automatically kept up to date with each new version of WordPress.

Switch to automatic updates for maintenance and security releases only.

An updated version of WordPress is available.

> **Important:** before updating, please back up your database and files. For help with updates, visit the Updating WordPress documentation page.

You can update from WordPress 6.2.1 to WordPress 6.2.2–en_AU manually:

Update to version 6.2.2–en_AU   Hide this update

This localised version contains both the translation and various other localisation fixes.
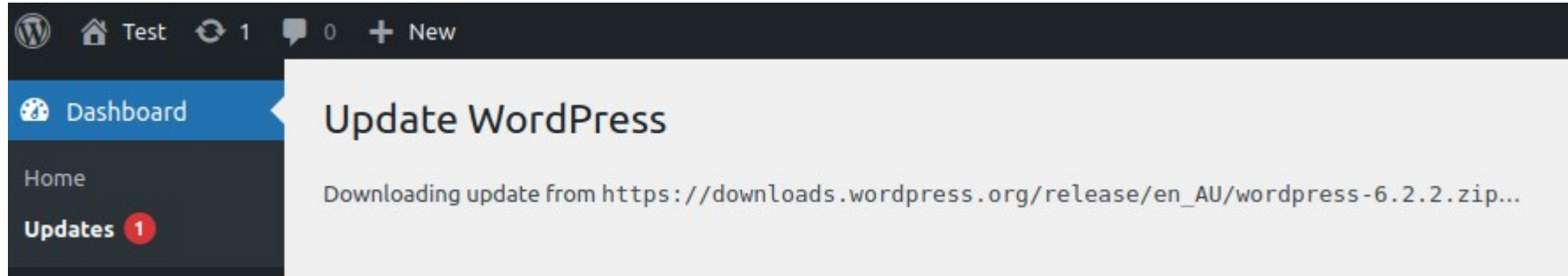
You can update from WordPress 6.2.1 to WordPress 6.2.2–en_AU manually:

Update to version 6.2.2–en_AU

While your site is being updated, it will be in maintenance mode. As soon as your updates are complete, this mode will be deactivated.

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Wordpress Upgrade

Screen now displays

Wordpress Upgraded

Screen now displays
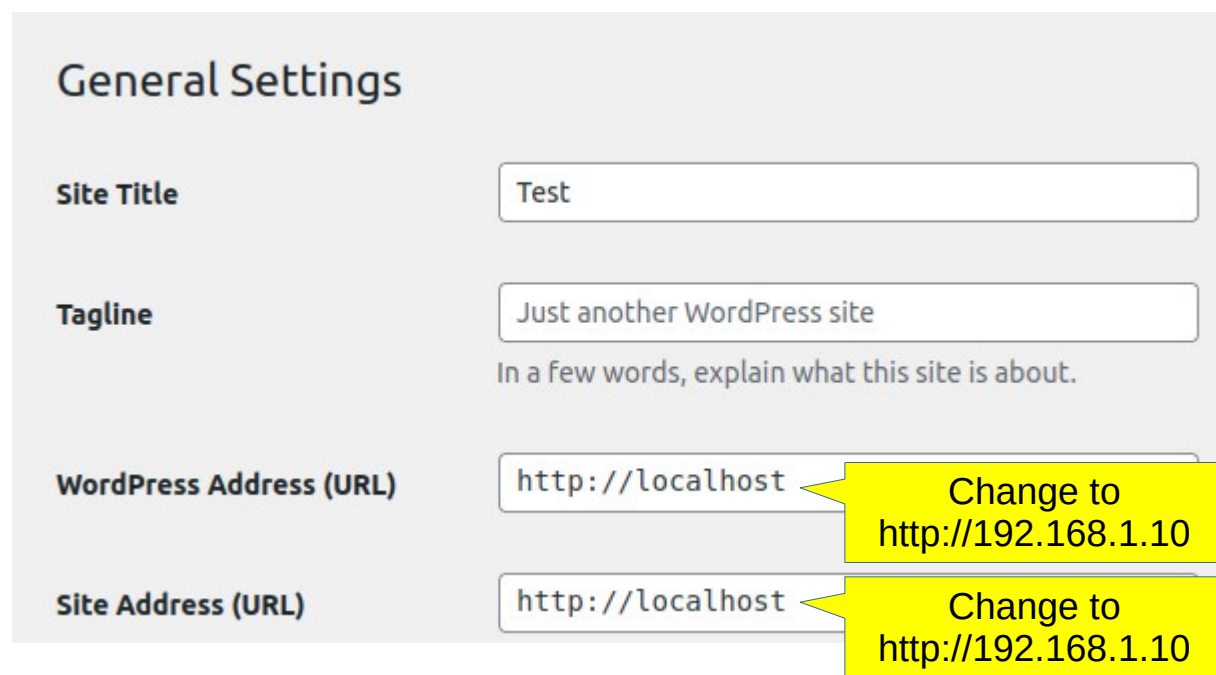
Change of IP Address.
Settings →
General.

Let's say you have two computers at home. One in the shed and one in the lounge. Both of them get DHCP server addresses from your modem on the address 192.168.1.xxx.

If you've just installed Wordpress on the computer in the shed you may want to use the browser on the computer in the lounge to access Wordpress in the shed.

First set the computer in the shed so it boots up with a fixed IP address. E.g. 192.168.1.10. See next page

Change these Wordpress Address and Site Address to http://192.168.1.10 which are in Settings → General.

General Settings

Site Title   Test

Tagline   Just another WordPress site
In a few words, explain what this site is about.

WordPress Address (URL)   http://localhost   Change to http://192.168.1.10

Site Address (URL)   http://localhost   Change to http://192.168.1.10

Setup of IP Address.

```
Setup a static ip address for the ethernet lan port.
$ cd /etc/netplan/

$ sudo pluma 99-static_address_config.yaml

Paste the following lines into the pluma editor and then save the file and exit pluma.

# For fixed ethernet lan address of 192.168.1.10
network:
  version: 2
  renderer: networkd
  ethernets:
    enp0s25:
      addresses:
        - 192.168.1.10/24
      routes:
        - to: default
          via: 192.168.1.254
      nameservers
          #search: [ns1.xtra.co.nz, ns2.xtra.co.nz]
          #addresses: [122.56.237.1, 210.55.111.1]
          # home lan
          addresses: [192.168.1.254, 8.8.8.8]

Ensure a cable has been run from the PC to the modem/router.
$ sudo netplan apply
$ systemctl restart systemd-networkd.service or reboot the computer.
On another computer on the 192.168.1.xxx network enter into the browser:
http://192.168.1.10/ or http://192.168.1.10/wp-login.php
```