

Debian Installation

Debian 12

As root update the `apt` package index and install packages to allow `apt` to use a repository over HTTPS:

```
su -  
  
apt update  
  
apt install apt-transport-https ca-certificates wget gpg
```

Import the PGP key used to sign our packages:

```
wget -qO- https://dl.packager.io/srv/opf/openproject/key | gpg --dearmor >  
/etc/apt/trusted.gpg.d/packager-io.gpg
```

Add the OpenProject package source:

```
wget -O /etc/apt/sources.list.d/openproject.list \  
  
https://dl.packager.io/srv/opf/openproject/stable/16/installer/debian/12.repo
```

Download the OpenProject package:

```
apt update  
  
apt install openproject
```

Then finish the installation by reading the [Initial configuration](#) section.

Initial Configuration

After you have successfully installed the OpenProject package, you can now perform the initial configuration of OpenProject, using the wizard that ships with the OpenProject package.

Prerequisites

- If you wish to connect to an existing database server instead of setting up a local database server, please make sure to have your database hostname, port, username and password ready. The database username used to connect to the existing database must have the CREATE DATABASE privilege.
- If you want to enable HTTPS, then you will need to provide the path (on the server) to your certificate file, private key file, and CA bundle file.

Step 0: Start the wizard

To start the configuration wizard, please run the following command with `sudo`, or as root:

```
sudo openproject reconfigure #interactive - manual choices are stored in
/etc/openproject/installer.dat

sudo openproject configure #non-interactive - using values stored in
/etc/openproject/installer.dat
```

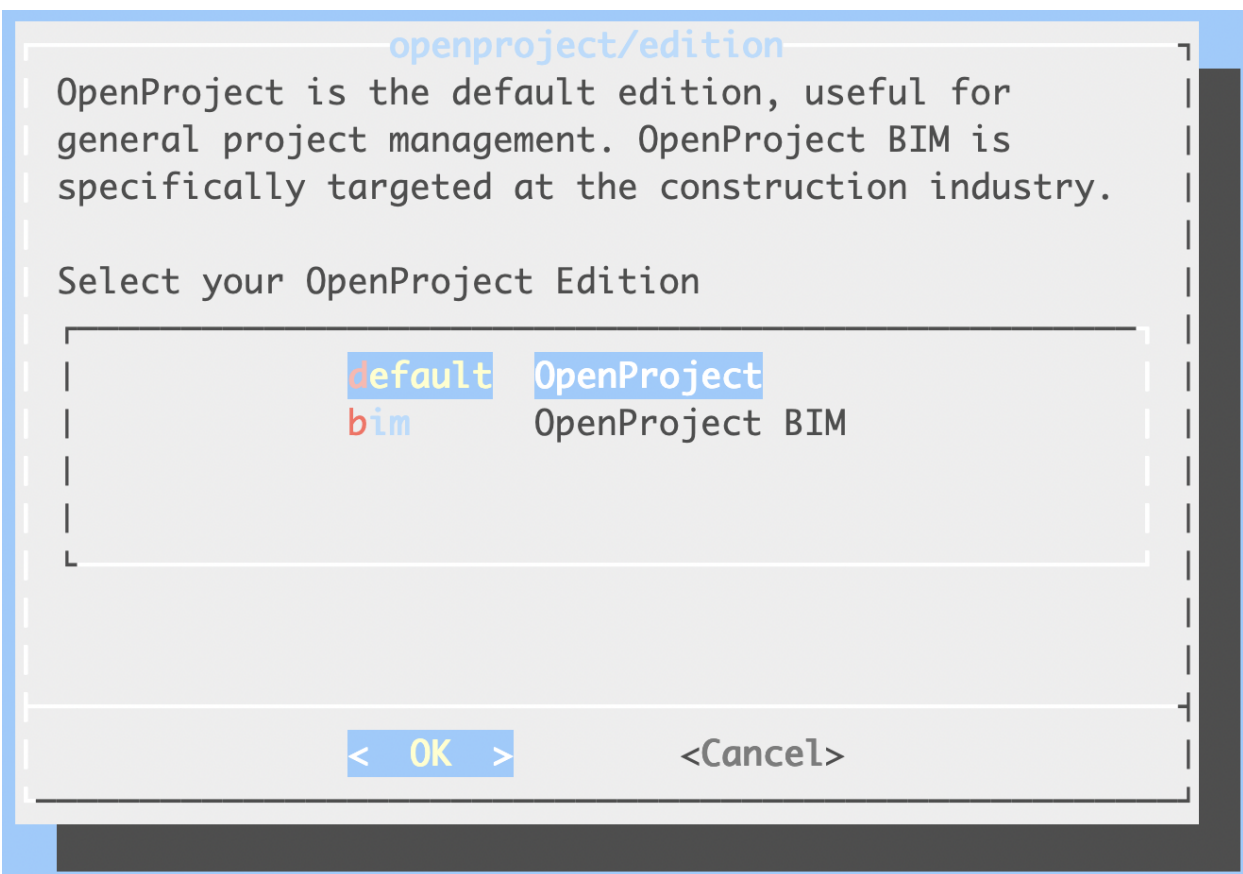
Note

Every time you will run the OpenProject wizard, by using `sudo openproject reconfigure` your choices will be persisted in a configuration file at `/etc/openproject/installer.dat` and subsequent executions of `sudo openproject configure` will re-use these values, only showing you the wizard steps for options you have not yet been asked for. In the interactive way you can skip dialogs you do not want to change simply by confirming them with `ENTER`.

Step 1: Select your OpenProject edition

OpenProject comes in two editions:

- the default edition, which is targeted at general project management.
- the BIM edition, which is specifically target at the construction industry.



You can find more about the BIM edition on [this page](#).

This wizard step is only available on the following distributions:

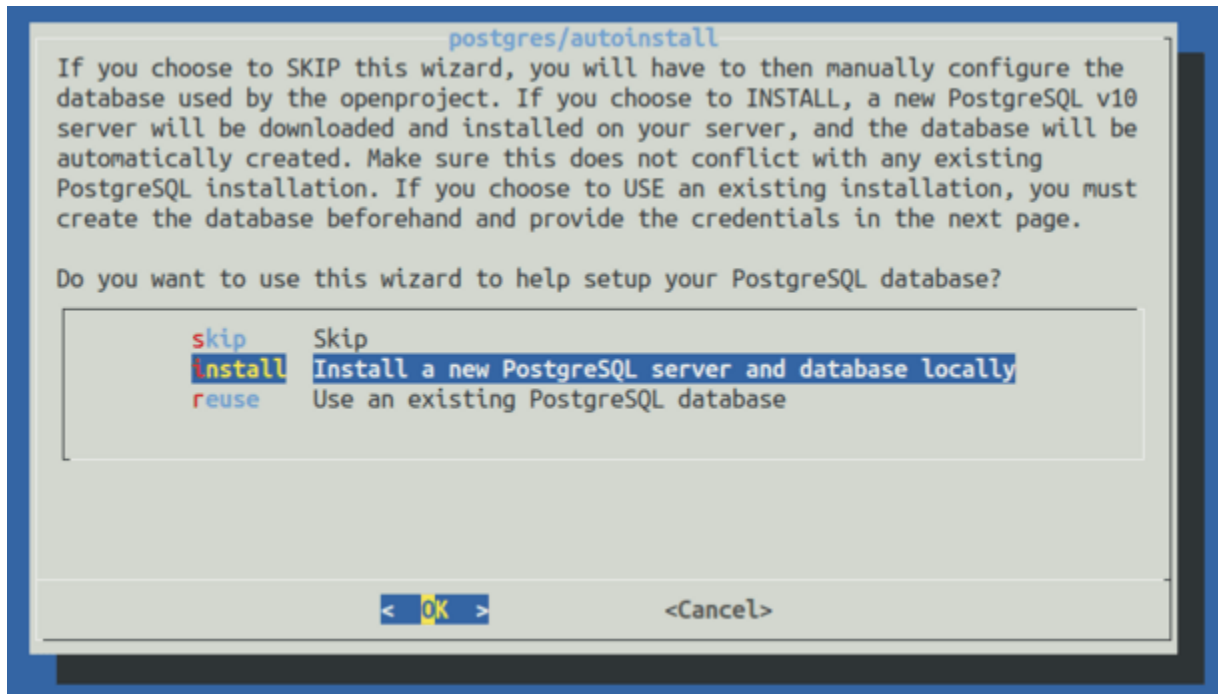
- RHEL/CentOS 9
- Ubuntu 22.04

- Ubuntu 20.04
- Debian 11

On older distributions, this wizard step won't be displayed, and the installation will default to the default edition.

Step 2: PostgreSQL database configuration

OpenProject requires a PostgreSQL database to store your data. This wizard step allows you to choose an option for the PostgreSQL database connection:



The dialog allows you to choose from three options:

Install a new PostgreSQL server and database locally (default)

Choose this option if you want OpenProject to set up and configure a local database server manually. This is the best choice if you are unfamiliar with administering databases, or do not have a separate PostgreSQL database server installed that you want to connect to.

Note

If you would like to use the database that was automatically installed by OpenProject at time of installation just choose `install` again

Use an existing PostgreSQL database

Choose this option if you have a PostgreSQL database server installed either on the same host as the OpenProject package is being installed on, or on another server you can connect to from this machine.

The wizard will show you multiple additional steps in this case to enter the hostname, username & password as well as the database name for the PostgreSQL database.

Skip (not recommended)

The wizard will not try to connect to any database. You will have to specify a database manually through the `DATABASE_URL` environment variable. If you choose skip and did not set a `DATABASE_URL`, the configuration process will fail.

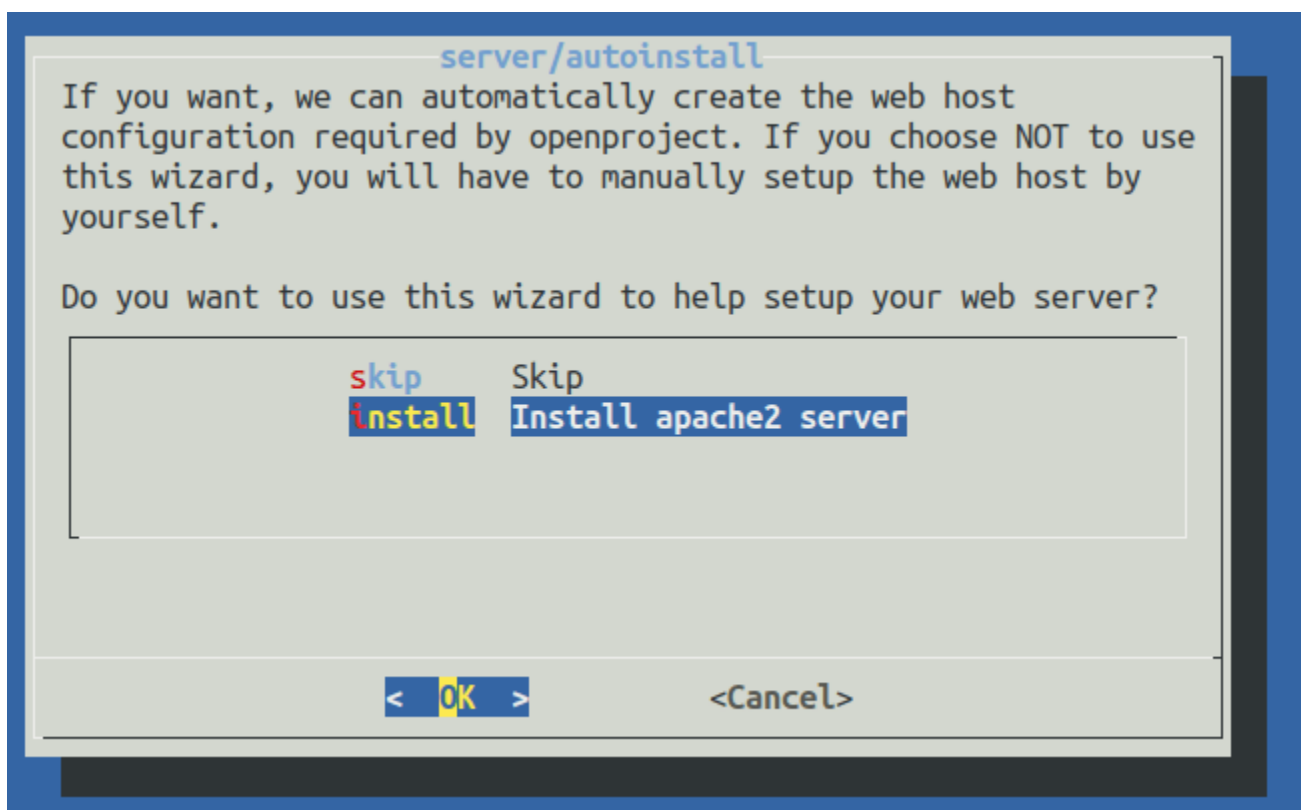
You can set this `DATABASE_URL` parameter yourself to a PostgreSQL database URL.

```
sudo openproject config:set  
DATABASE_URL="postgresql://[user[:password]@][host][:port][/dbname][?param1=value1&..  
.]
```

Step 3: Apache2 web server and SSL termination

OpenProject comes with an internal ruby application server, but this server only listens on a local interface, usually on port 6000. To receive connections from the outside world, it needs a web server that will act as a proxy to forward incoming connections to the OpenProject application server.

This wizard step allows you to auto-install an Apache2 web server to function as that reverse proxy.



The available options are:

Install Apache2 web server (default)

We recommend that you let OpenProject install and configure the outer web server, in which case we will install an Apache2 web server with a VirtualHost listening to the domain name you specify, optionally providing SSL/TLS termination.

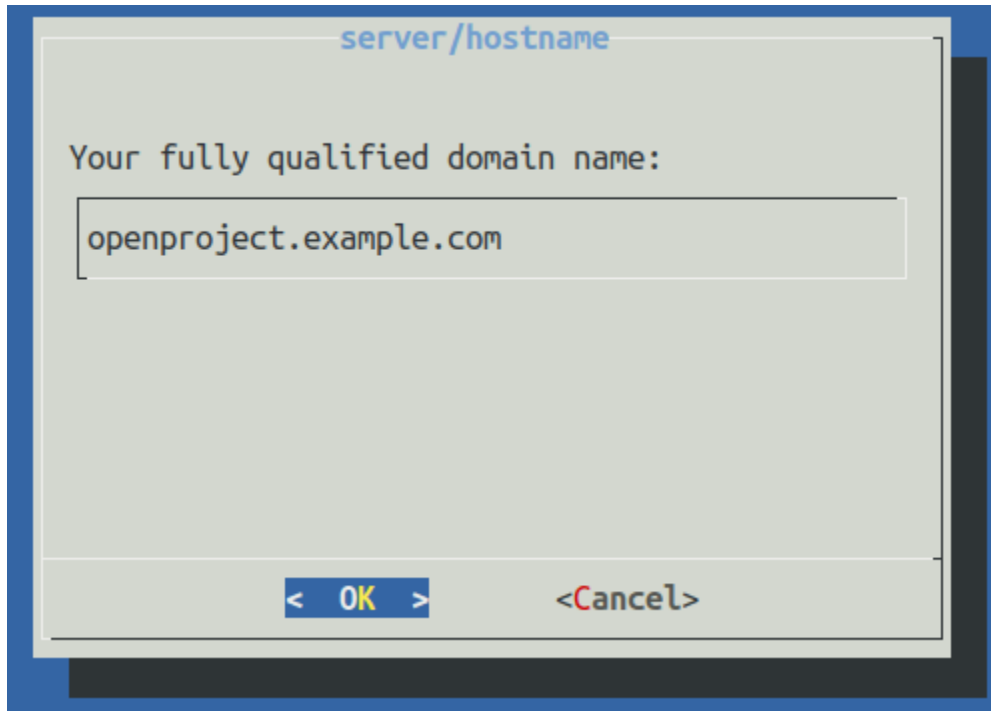
Note

In case you re-run `sudo openproject reconfigure` later it is mandatory to select `install` at the webserver again

In case you have selected to install Apache2, multiple dialogs will request the parameters for setting it up:

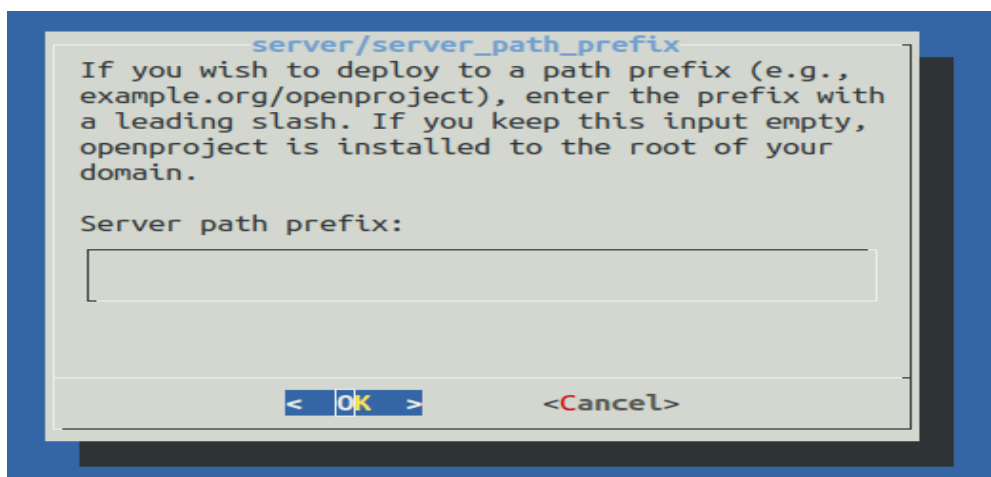
Domain name

Enter the fully qualified domain (FQDN) where your OpenProject installation will be reached at. This will become the `ServerName` of your apache VirtualHost and is also used to generate full links from OpenProject, such as in emails.



Server path prefix

If you wish to install OpenProject under a server path prefix, such as `yourdomain.example.com/openproject`, please specify that prefix here with a leading slash. For example: `/openproject`. If OpenProject should respond to `http(s)://yourdomain.example.com` as specified in the previous dialog, simply leave this dialog empty and confirm by pressing `ENTER`.



SSL/TLS configuration

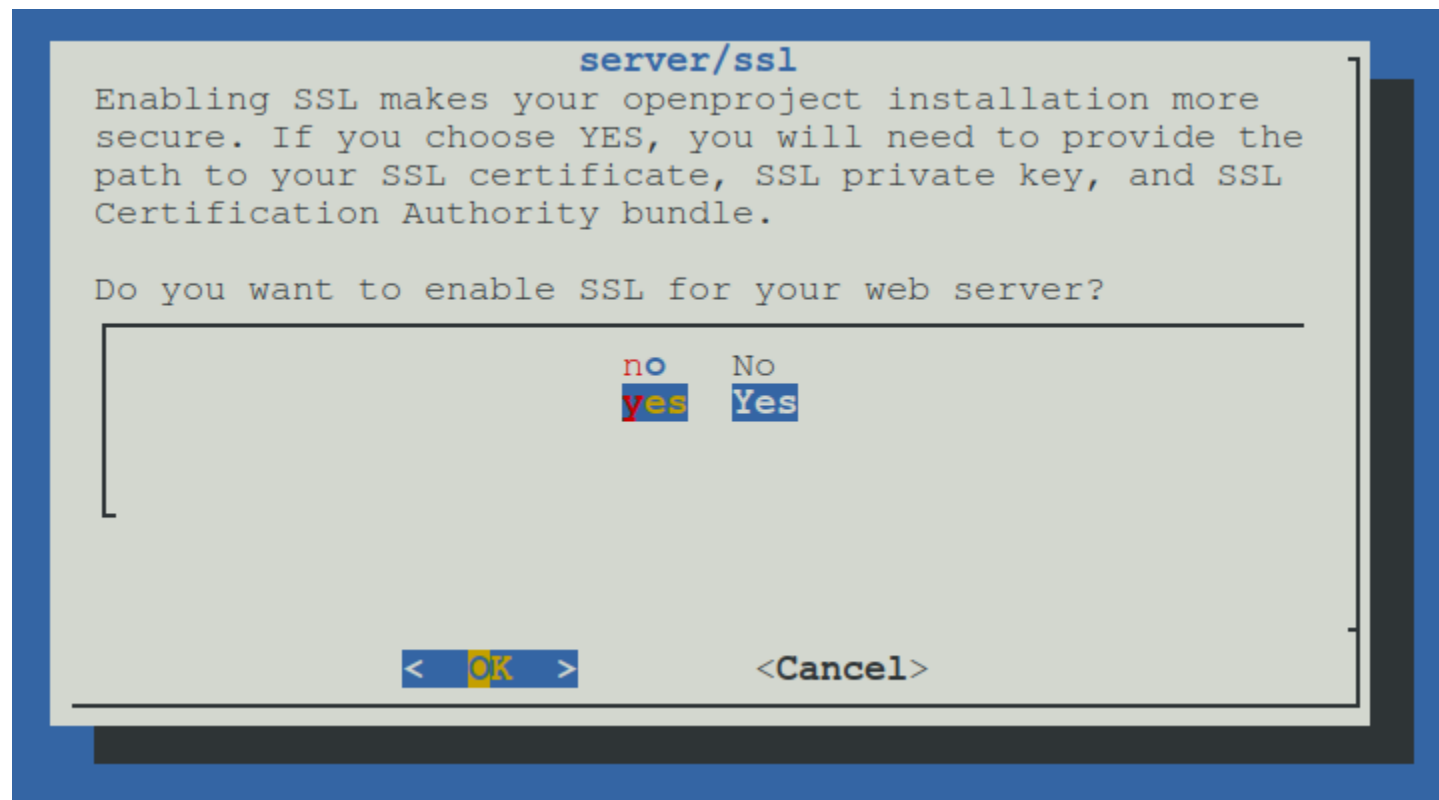
Note

With OpenProject version 12.2 **HTTPS configuration** was set to be **default** for every installation. **Now best practice is to proceed by selecting **yes** for using HTTPS (SSL/TLS)** and generating the needed certificates, otherwise you will have to manually deactivate HTTPS on the command line.

OpenProject can configure Apache to support HTTPS (SSL/TLS). If you have SSL certificates and want to use SSL/TLS (recommended), select **Yes**.

In that case, you will be shown three additional dialogs to enter the certificate details:

1. The absolute SSL certificate path
2. The absolute SSL private key path
3. The path to the Certificate Authority bundle for the certificate (optional, leave empty unless needed)



Enabling this mode will result in OpenProject only responding to HTTPS requests, and upgrade any non-secured requests to HTTPS. It will also output HTTP Strict Transport Security (HSTS) headers to the client.

External SSL/TLS termination

Note

If you terminate SSL externally before the request hits the OpenProject server, you need to follow the following instructions to avoid errors in routing. If you want to use SSL on the server running OpenProject, skip this section.

If you have a separate server that is terminating SSL and only forwarding/proxying to the OpenProject server, you must select “No” in this dialog. However, there are some parameters you need to put into your outer configuration.

- If you’re proxying to the openproject server, you need to forward the HOST header to the internal server. This ensures that the host name of the outer request gets forwarded to the internal server. Otherwise you might see redirects in your browser to the internal host that OpenProject is running on.
 - In Apache2, set the `ProxyPreserveHost On` directive
 - In NginX, use the following value: `proxy_set_header X-Forwarded-Host $host:$server_port;`
- If you’re terminating SSL on the outer server, you need to set the `X-Forwarded-Proto https` header to let OpenProject know that the request is HTTPS, even though its been terminated earlier in the request on the outer server.
 - In Apache2, use `RequestHeader set "X-Forwarded-Proto" https`
 - In Nginx, use `proxy_set_header X-Forwarded-Proto https;`
- Finally, to let OpenProject know that it should create links with ‘https’ when no request is available (for example, when sending emails), you need to set the following setting: `openproject config:set SERVER_PROTOCOL_FORCE_HTTPS="true"` followed by an `openproject configure`. This ensures that OpenProject responds correctly with secure cookies even though it was not configured for https in the server configuration.

Here an example for external SSL/TLS termination with apache (httpd):

Note

There is [another example](#) for external SSL/TLS termination for **docker-compose** installations

```
<VirtualHost *:443>

    ServerName openproject.example.com

    # Logging

    LogLevel Warn

    ErrorLog /var/log/httpd/openproject.example.com-error.log

    CustomLog /var/log/httpd/openproject.example.com-access.log combined
```

```

# Reverse Proxy

ProxyPreserveHost On

ProxyRequests Off

ProxyPass / http://[OPENPROJECT-HOST-IP]/

ProxyPassReverse / http://[OPENPROJECT-HOST-IP]/

#ProxyPass / https://[OPENPROJECT-HOST-IP]/          # if openproject's
internal apache2 server/ssl is YES

#ProxyPassReverse / https://[OPENPROJECT-HOST-IP]/    # if openproject's
internal apache2 server/ssl is YES


# Request Header

RequestHeader set "X-Forwarded-Proto" https


# SSL Certificate that was created by LetsEncrypt

Include /etc/letsencrypt/options-ssl-apache.conf

SSLEngine On

#SSLProxyEngine On          # if openproject's
internal apache2 server/ssl is YES

SSLCertificateFile /etc/letsencrypt/live/openproject.example.com/cert.pem

SSLCertificateKeyFile /etc/letsencrypt/live/openproject.example.com/privkey.pem

SSLCertificateChainFile /etc/letsencrypt/live/openproject.example.com/chain.pem
# optional

</VirtualHost>

```

Skip Apache2 web server install (not recommended)

Note

Skipping step 3 Apache2 web server install will ask later in step 7 for information about the hostname and HTTPS

The installer will not set up an external web server for accessing. You will need to either install and set up a web server such as Apache2 or Nginx to function as the web server forwarding to our internal server listening at `localhost:6000` by proxying.

Only choose this option if you have a local Apache2 installed that the OpenProject package may not control, or need to use a different web server such as Nginx. Please note that not all functionality (especially regarding Repositories) are supported on Nginx.

When installing with an existing Apache2, you can take a look at the source of our [installation templates](#) for guidance on how to set up the integration.

[Here's an exemplary configuration](#) that might work for you.

[For a minimal nginx config, please see this gist](#) as a starting point.

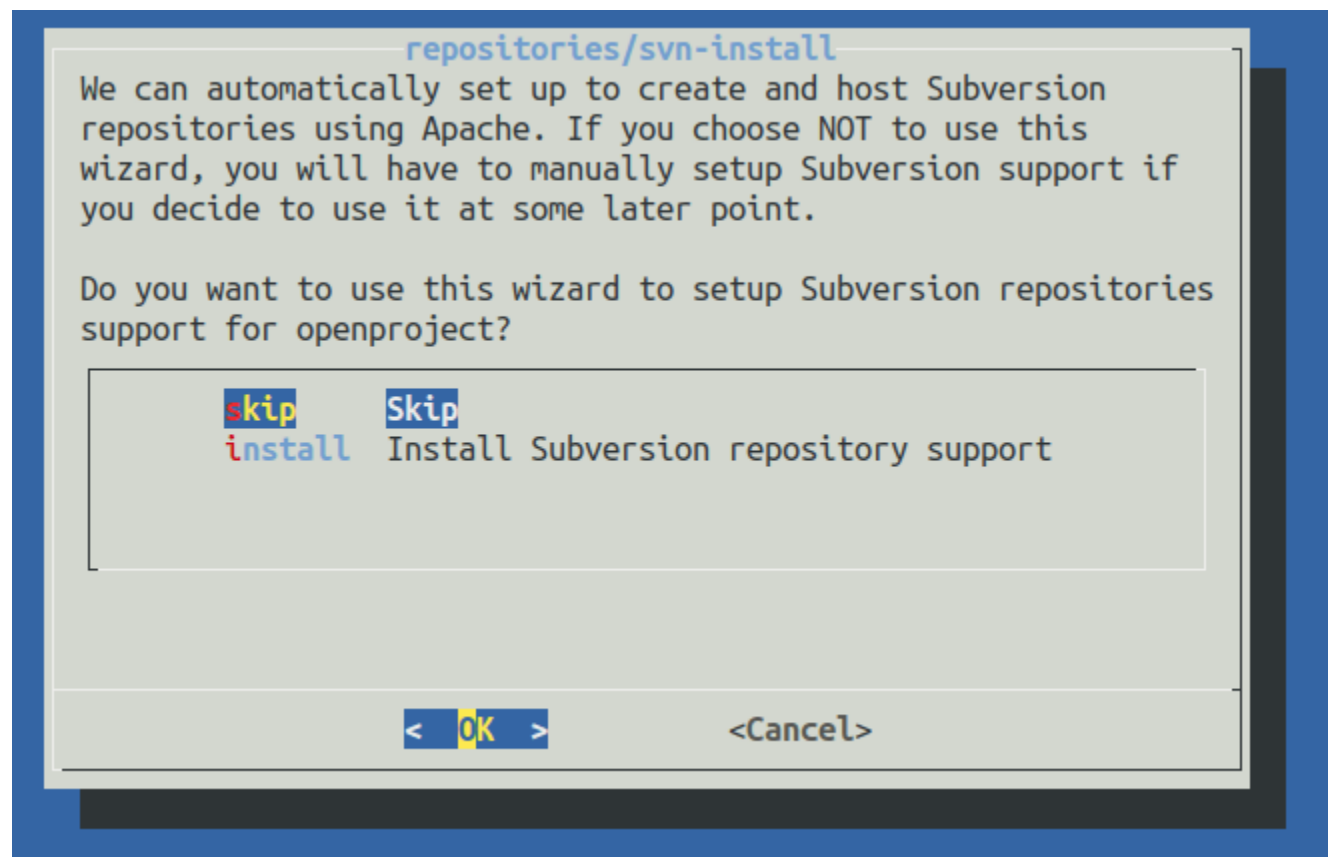
Important

If you reconfigure the OpenProject application and switch to `skip`, you might run into errors with the Apache configuration file, as that will not be automatically removed. Please double-check you removed references to the `openproject.conf` if you do reconfigure.

Step 4: SVN/Git integration server

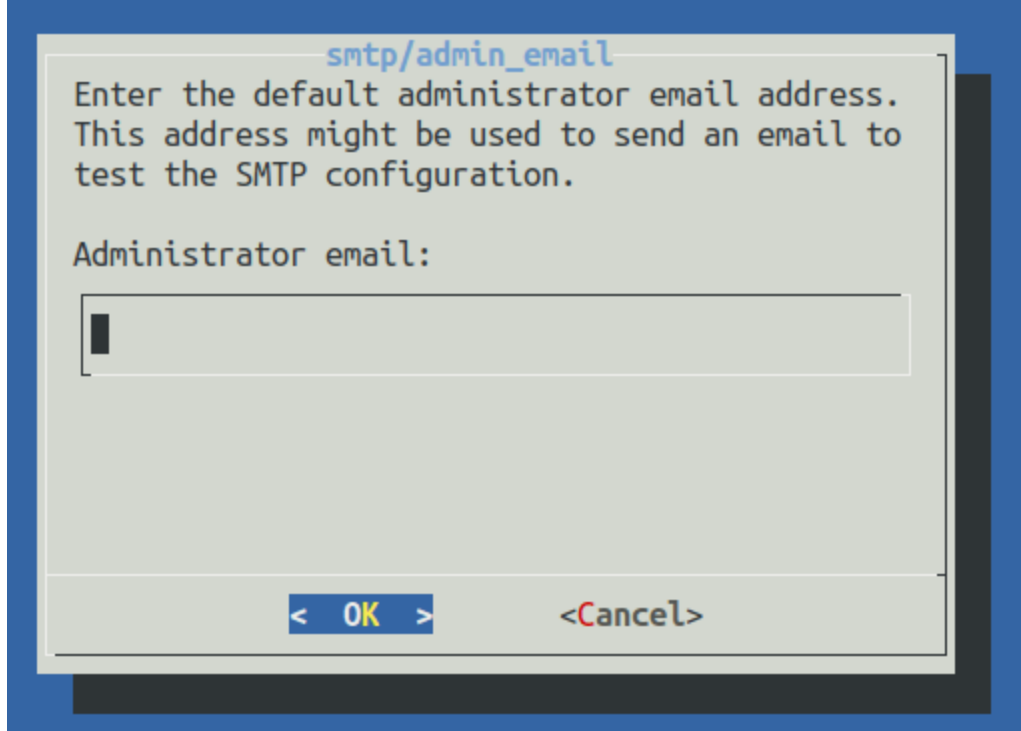
If you have selected to auto-install an Apache2 web server, you will be asked whether you want to install Git and Subversion repository support. In case you do not need it or when in doubt, choose **Skip** for both options.

For more information, [see our help on repositories](#)



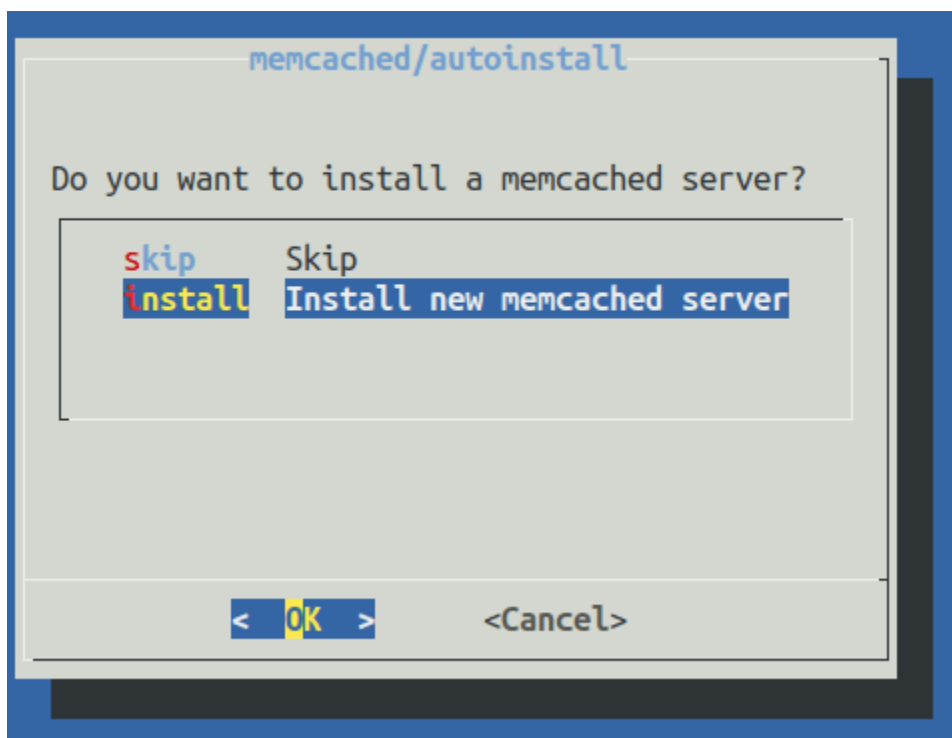
Step 5: Administrator email

The wizard will ask you for an administrative email address so that it can create the administrator account with that email for the initial login. Enter your email address to have it tied to the admin account.



Step 6: Memcached server

OpenProject heavily relies on caching, which is why the wizard suggests you to install a local memcached server the OpenProject instances can connect to. You should always set this to `install` unless you have a reason to configure another caching mechanism - for example when configuring multiple shared instances of OpenProject.

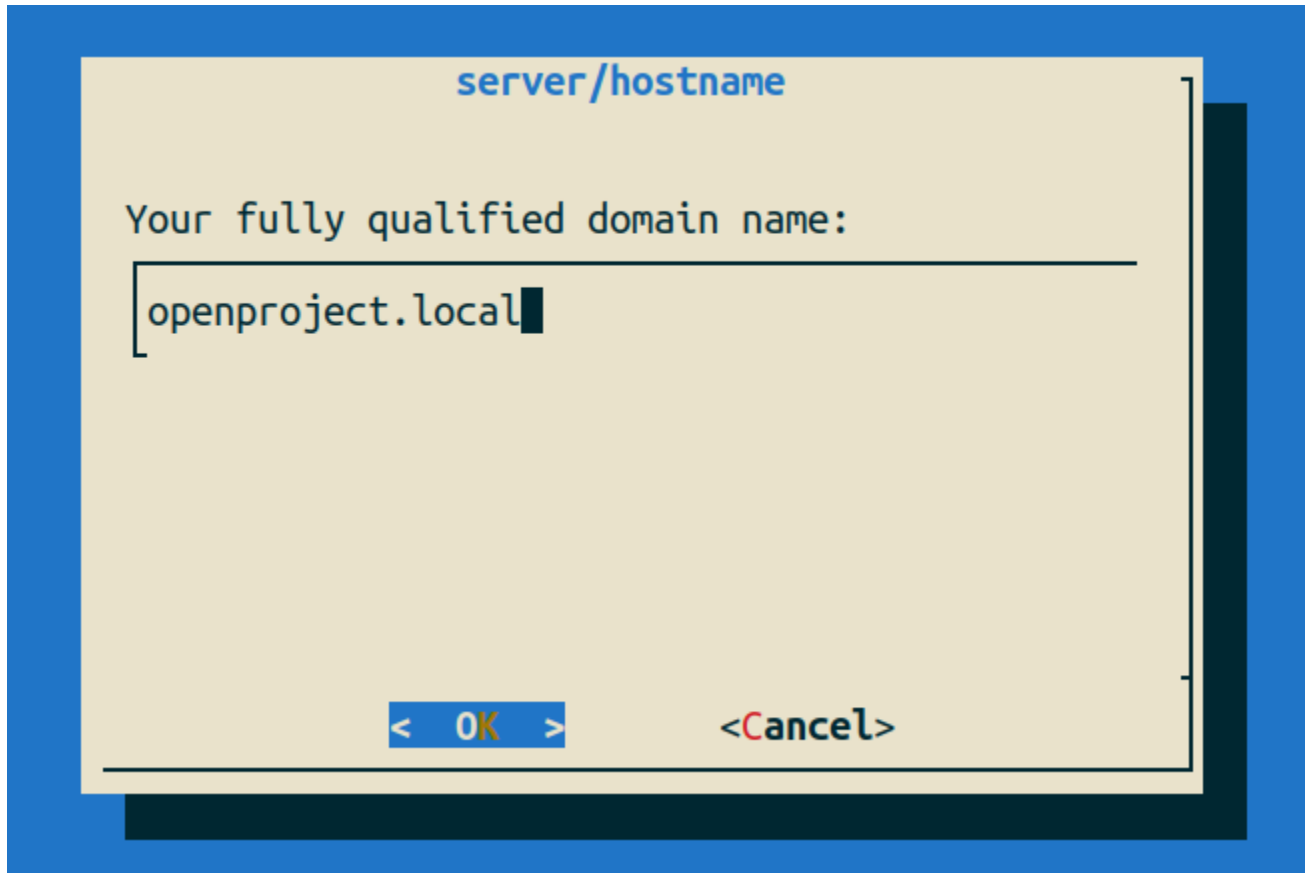


Step 7: Host name and Protocol (if step 3 was skipped)

Note

This step is only shown if you decided to skip step 3, the Apache2 installation. OpenProject still needs to know what external host name you're running on, as well as if you're using HTTPS or not.

First, enter the fully qualified domain where your OpenProject installation will be reached at. This will be used to generate full links from OpenProject, such as in emails.



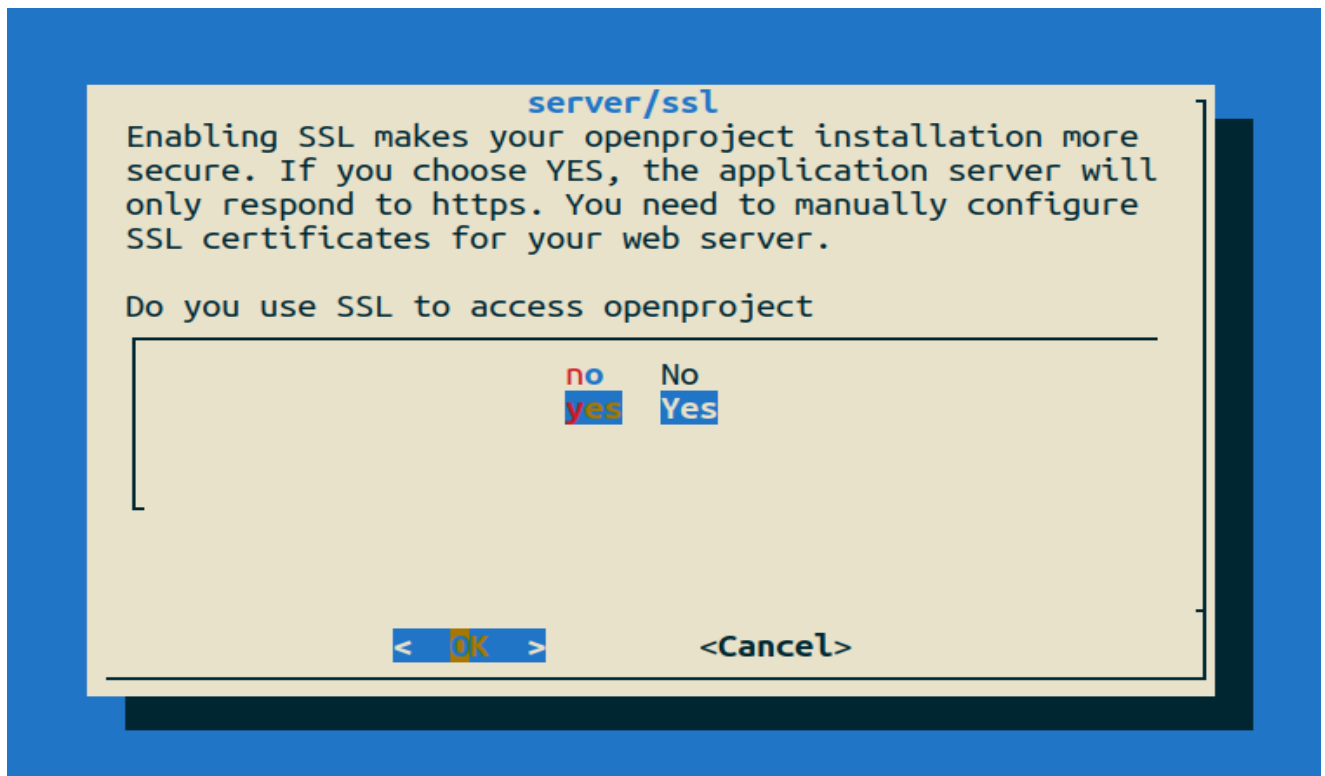
server/hostname

Your fully qualified domain name:

openproject.local

< OK > <Cancel>

Next, tell OpenProject whether you have SSL termination enabled somewhere in your stack. Please note that you need to set up protocol forwarding by the means mentioned in the [Skip Apache2 Installation](#) at step 3 above.



server/ssl

Enabling SSL makes your openproject installation more secure. If you choose YES, the application server will only respond to https. You need to manually configure SSL certificates for your web server.

Do you use SSL to access openproject

no No
yes Yes

< OK > <Cancel>

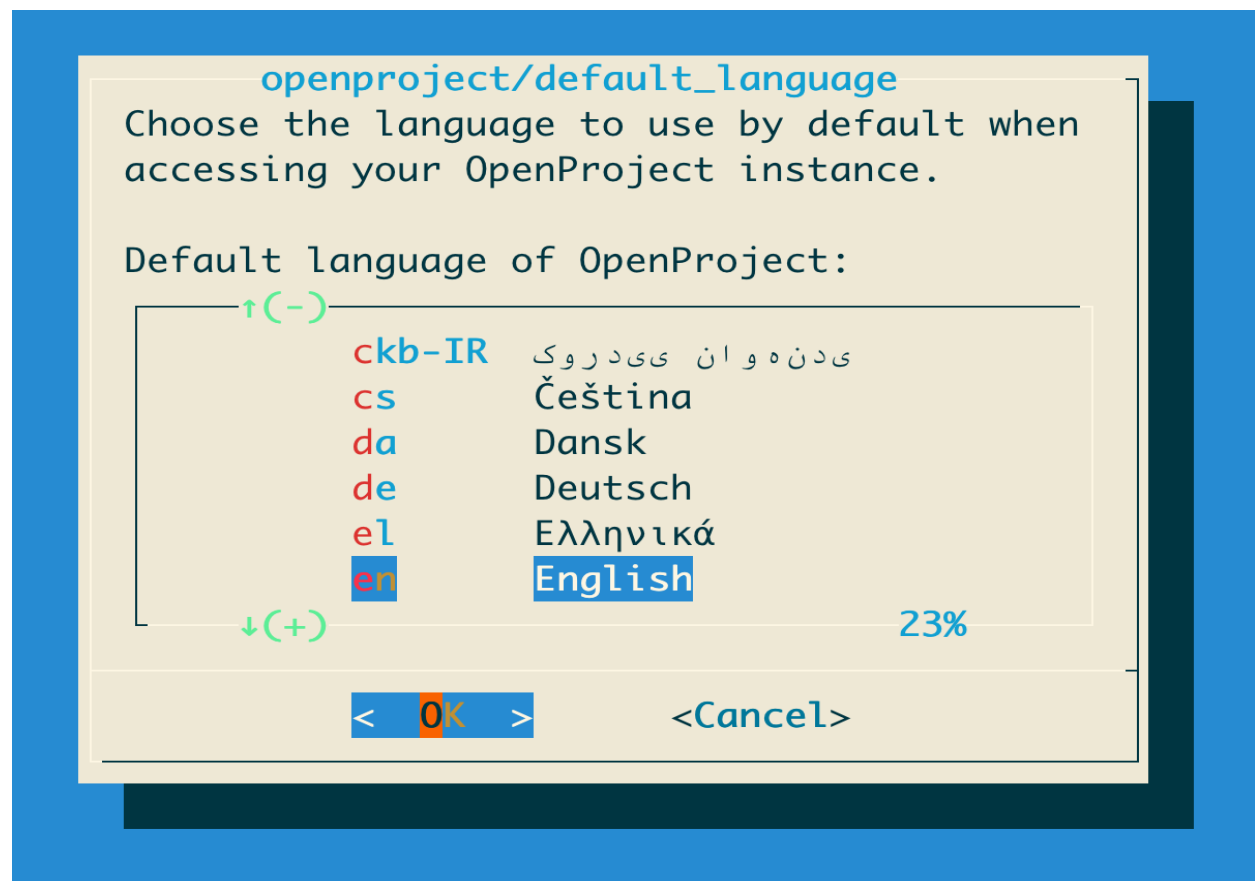
Step 8: Default language

Note

This step is only shown on the very first installation of OpenProject, as it affects only the initial seeding of the basic and demo data. Changing this value after installation will have no effect.

OpenProject can be used with a wide variety of languages. The initial data of the instance (basic data such as status names, types, etc.) as well as data for demonstrational purposes will be created in the language you select in this screen. Move through the list using the arrow keys and select the default language.

Also, this setting will control what is the default language for new users if their browser language is not available in the system.



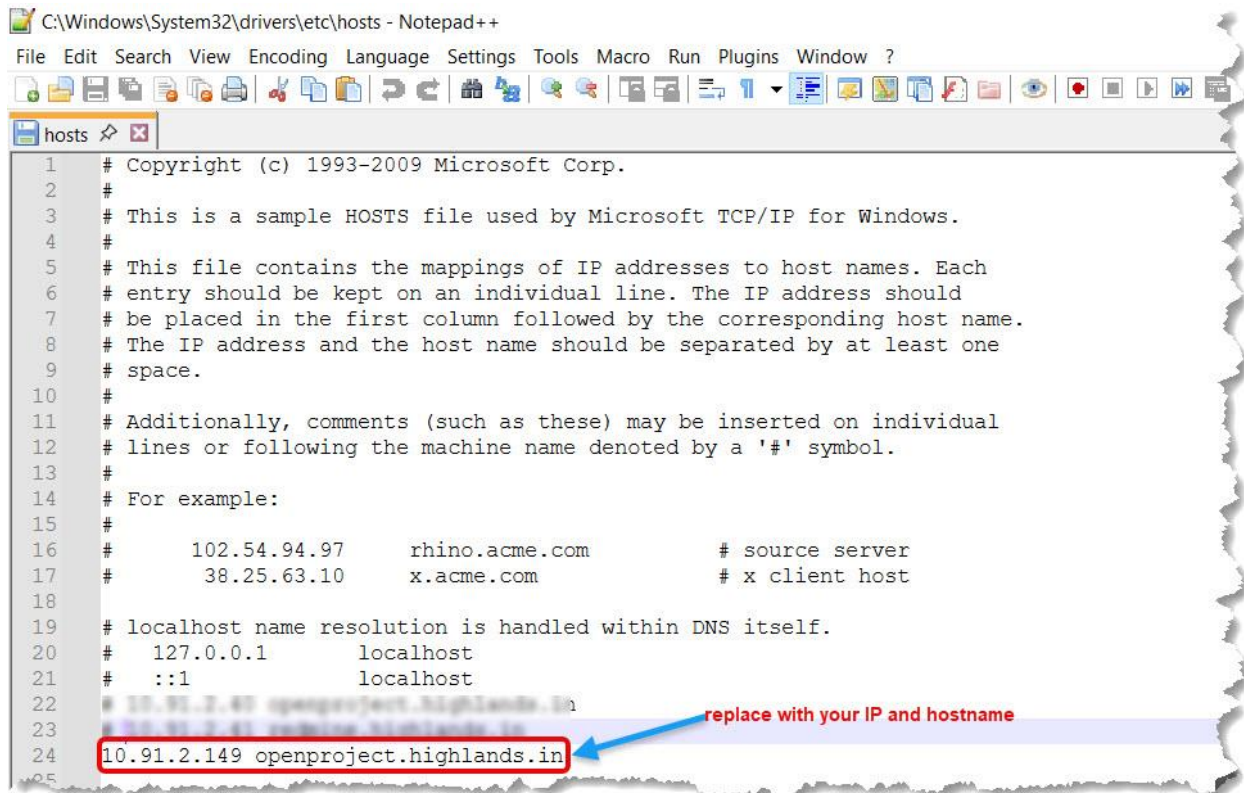
Result

With this last step confirmed, the OpenProject wizard will complete, and apply all the configuration options that you have just selected. This might take a few minutes depending on your machine and internet connection, as OpenProject might need to install additional packages (such as the web server, database) depending on your selections.

In case this process crashes or exits with an obvious error, please keep the output and send your configuration from `/etc/openproject/installer.dat` (removing any passwords from it) to us at support@openproject.com, or [reach out to the community forums](#).

When this process completes, it will have started the internal application and web servers, the background jobs to process work-intensive jobs, and set up the connection to the database.

Note: Just goto this location (C:\Windows\System32\drivers\etc) on your windows PC which is in same network and edit it using notepad++ see attached image.



```
C:\Windows\System32\drivers\etc\hosts - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?

hosts
1 # Copyright (c) 1993-2009 Microsoft Corp.
2 #
3 # This is a sample HOSTS file used by Microsoft TCP/IP for Windows.
4 #
5 # This file contains the mappings of IP addresses to host names. Each
6 # entry should be kept on an individual line. The IP address should
7 # be placed in the first column followed by the corresponding host name.
8 # The IP address and the host name should be separated by at least one
9 # space.
10 #
11 # Additionally, comments (such as these) may be inserted on individual
12 # lines or following the machine name denoted by a '#' symbol.
13 #
14 # For example:
15 #
16 #       102.54.94.97       rhino.acme.com       # source server
17 #       38.25.63.10       x.acme.com           # x client host
18
19 # localhost name resolution is handled within DNS itself.
20 #   127.0.0.1       localhost
21 #   ::1             localhost
22 # 10.91.2.45 openproject.highlands.in
23 # 10.91.2.45 openproject.highlands.in
24 10.91.2.149 openproject.highlands.in
25
```

You should be able to reach the OpenProject instance by visiting your installation at <http://<openproject.example.com>/<server prefix>>.

- username = `admin`
- password = `admin`

You will be asked to change this password immediately after the first login.

Operating OpenProject

Complete guide on OpenProject can be found on.

<https://www.openproject.org/docs/getting-started/>

I have attached a preconfigured Virtual Machine just attach on virtual machine and go through it.

Username: admin | Password: Hld@123456

One thing more if you need to see complete tutorial just see the attached video file.

Topic	Description
<u>(Re)Configuring</u>	How to (re)configure your OpenProject installation
<u>Backing up</u>	How to backup your OpenProject data
<u>Restoring</u>	How to restore from a backup
<u>Upgrading</u>	How to upgrade your OpenProject installation
<u>Monitoring & Logs</u>	How to monitor your OpenProject installation (logs, health checks)
<u>Process control</u>	How to start/stop/restart, execute processes in your OpenProject installation
<u>FAQ</u>	Frequently asked questions