

Installing Sympa on Ubuntu 18.04

First things first, much of this documentation comes from two articles I found on the Internet. One is from 'mrjones' [here](#). The other document comes from kelly.close@irewater.com. The document written by 'kelly_close@irewater.com' applies to installing Mailman and can be found [here](#). It came in really handy for installing some of the prerequisites for sympy, specifically Postfix and Apache2. Note that you do not need to install mysql as a prerequisite. The sympy package installer will do that for you. Any comments about this documentation can be directed to: cbate@crec.org

As an aside, I had a lot of difficulty getting MailMan installed so I moved on to Sympa. It is a full-featured list server, similar to mailman but easier to install in my opinion.

Some initial comments before you start installing software:

1. To get sympy running you'll need a domain name. You'll also need to set up an MX record to point to your Sympa list server. We will not be going over MX records or DNS in this document.
2. If you have web filtering in place you may want to put an exception in for your sympy server. Our web filtering interfered with the download of some needed packages.
3. To make your life easier, you'll want to set up the ability to login to your Ubuntu server via an ssh client such as putty. Putty is available [here](#). I generally prefer to login as root, although that is not a best practice. To allow root login from the console, you need to do the following:
 - A. From the console, type: `sudo passwd root`
 - B. You will be prompted for the administrator username and password you created when installing ubuntu. Next, you'll be prompted to set the root password. Set your root password. This will allow you to login to your server as root from the console.
4. Set up root login access via SSH. Instructions to do that can be found [here](#). Note that you may want to use the nano editor vs. VIM mentioned in the document. Also, contrary to the document I did not need to add the line 'PermitRootLogin yes'. The line was already there, I just needed to change it from '#PermitRootLogin prohibit-password' to 'PermitRootLogin yes'.
5. Last but not least, Ubuntu seems to have made setting up the server much more difficult than I have found it to be the case in the past. To set a static IP on your server, do the following:
 - A. Type: `cd /etc/netplan`
 - B. Type: `ls` (we want to list files in the directory)
 - C. There should be one file in the /etc/netplan directory with an extension of .yaml. In my case, the file name was 50-cloud-init.yaml.

D. Set up your file so it looks like the following.

```
GNU nano 2.9.3          50-cloud-init.yaml          Modified
# This file is generated from information provided by
# the datasource.  Changes to it will not persist across an instance.
# To disable cloud-init's network configuration capabilities, write a file
# /etc/cloud/cloud.cfg.d/99-disable-network-config.cfg with the following:
# network: {config: disabled}
network:
  ethernets:
    ens160:
      addresses: [10.10.176.125/21]
      gateway4: 10.10.176.1
      nameservers:
        addresses: [10.10.183.216,10.10.183.219]
      dhcp4: no
      optional: true
  version: 2
```

Note: Indentations are very important when setting up this file. Also, note that you cannot use the tab key for indentations. Use the spacebar. If you would rather copy and paste, a version of the file you can copy and paste. Simply change the IP addresses to suit your environment.

```
network:
  ethernets:
    ens160:
      addresses: [10.10.176.125/21]
      gateway4: 10.10.176.1
      nameservers:
        addresses: [10.10.183.216,10.63.183.219]
      dhcp4: no
      optional: true
  version: 2
```

5. Once you think you have everything setup as needed, you can test your configuration by typing: `sudo netplan apply`. If you don't get any errors, you should be good to go.

Before you install the sympa mail package, you'll need to install Apache2 and Postfix. To install the Apache package, do the following:

1. Type: `sudo apt update`
2. Type: `sudo apt install apache2`
3. Adjust the firewall to allow web traffic. To do this, do the following:
 - A. Type: `sudo ufw app list`. Once you do that, you should see "Apache Full" in the list
 - B. Type: `sudo ufw allow in "Apache Full"`
4. To check if Apache is installed, direct a browser window to the server's IP address (eg. `http://12.34.56.789`). The page should display the words "It works!"

To install the Postfix package, do the following:

1. Run the following commands to install (priority set to force more prompts at setup)
 - a. Type: `sudo apt update`
 - b. Type: `sudo DEBIAN_PRIORITY=low apt install postfix`
2. You *may* get all of the prompts below at once, not at all, or in a different order. If you did not get a specific prompt during the initial installation you can type: '`sudo dpkg-reconfigure postfix`' and you should get the prompts you are looking for once you run the reconfigure command after initial installation.
 - General type of mail configuration?: Internet Site
 - System mail name: _____ (yourdomain.xxx)
 - Root and postmaster mail recipient: postmaster (address will be `postmaster@yourdomain.xxx`)
 - Other destinations to accept mail for: accept defaults
 - Force synchronous updates on mail queue?: No
 - Local networks: accept defaults
 - Mailbox size limit: 0
 - Local address extension character: +
 - Internet protocols to use: all
3. To create postfix firewall exceptions, type: `sudo ufw allow Postfix`

Once the install of Apache and Postfix is complete, you are ready to install Sympa. To install Sympa do the following:

1. Start updating your package lists and upgrading packages installed on your server. To do this, type `sudo apt-get update` & `sudo apt-get upgrade`.

2. Type: `cd /etc`
3. Type: `nano mailname`
4. Edit the file to reflect the name of your mail server. I found that the sympa installation fails if this file is not present.
5. Install sympa and its prerequisite packages by typing the following:

```
apt-get install -y sympa javascript-common libjs-jquery-migrate-1
```

- A. You will be prompted to choose your web server. Choose 'Apache 2
- B. You will be prompted with the question 'Configure database for sympa with dbconfig-common? Choose Yes. '
- C. Choose mysql as your database
- D. Choose a root password for mysql

6. . Now it's time to fix a css bug in 6.2 with a copy:

```
Type: cp /usr/share/sympa/default/web_tt2/head_javascript.tt2 /etc/sympa/web_tt2
```

7. Type: `nano /etc/sympa/web_tt2/head_javascript.tt2`

8. Add the line shown below after 'jquery.js:' When you are finished, the file should look like the screenshot below:

```
<script src="/javascript/jquery-migrate-1.js"></script>
```

```
[%# Now retrieving the javascript files ~%]  
<script src="[% static_content_url %]/external/jquery.js"></script>  
<script src="/javascript/jquery-migrate-1.js"></script>  
<script src="[% static_content_url %]/external/jquery-migrate.js"></script>  
<script src="[% static_content_url %]/external/jquery-migrate.js"></script>
```

9. Type: `nano /etc/sympa/sympa/sympa.conf`. Edit the file to match values appropriate for your environment.

Listmaster: adminuser@list.yourdomain.com. Note: Make sure you can get to email sent to this address. You will use it for your first logon to Sympa.

domain: `list.yourdomain.com`

wwsympa_url `https://list.yourdomain.com/wws`

default_home `home`

create_list `intranet`

Note: The “intranet” value will prevent someone from signing up and requesting a list with any approval.

10. Ensure Sympa starts at boot:

Type: `update-rc.d sympa defaults`

Type: `update-rc.d sympa enable`

11 Type: `nano /etc/postfix/main.cf` and edit the following parameters to match or adjust for your environment as needed. When you are finished, the file should look similar to the screenshot below. Note that the ‘relayhost’ parameter is only needed if you intend to relay all mail to a smart host

```
myhostname = list.example.com  
alias_maps = hash:/etc/aliases,hash:/etc/mail/sympa/aliases  
alias_database = hash:/etc/aliases,hash:/etc/mail/sympa/aliases  
mydestination = $myhostname, example.com, list.example.com, localhost.example.com, localhost  
relay_domains = $mydestination, stargrouptransportation.org  
local_recipient_maps =
```

```
# See /usr/share/doc/postfix/TLS_README.gz in the postfix-doc package for
# information on enabling SSL in the smtp client.

smtpd_relay_restrictions = permit_mynetworks permit_sasl_authenticated defer_unauth_destination
myhostname = lists.example.com
alias_maps = hash:/etc/aliases,hash:/etc/mail/sympa/aliases
alias_database = hash:/etc/aliases,hash:/etc/mail/sympa/aliases
mydestination = $myhostname, mailing, localhost.localdomain, , localhost,lists.example.com
relay_domains = $mydestination, lists.example.com
local_recipient_maps =
relayhost = 10.10.1.1
mynetworks = 127.0.0.0/8 [::ffff:127.0.0.0]/104 [::1]/128
mailbox_size_limit = 0
recipient_delimiter = +
inet_interfaces = all
inet_protocols = all
home_mailbox = Maildir/
virtual_alias_maps = hash:/etc/postfix/virtual
```

12.. add default aliases for sympa at the top of /etc/mail/sympa/aliases:

```
## main sympa aliases
sympa: "| /usr/lib/sympa/bin/queue sympa@lists.example.com"
listmaster: "| /usr/lib/sympa/bin/queue sympa@lists.example.com"
bounce+*: "| /usr/lib/sympa/bin/bouncequeue sympa@lists.example.com"
sympa-request: email1@example.com
sympa-owner: email1@example.com
```

13. Rebuild aliases and reboot by doing the following:

- A. Type: newaliases
- B. Type: reboot

Once the reboot is complete, you should have yourself a functioning list server! Whoo Hoo! To create your first list, do the following:

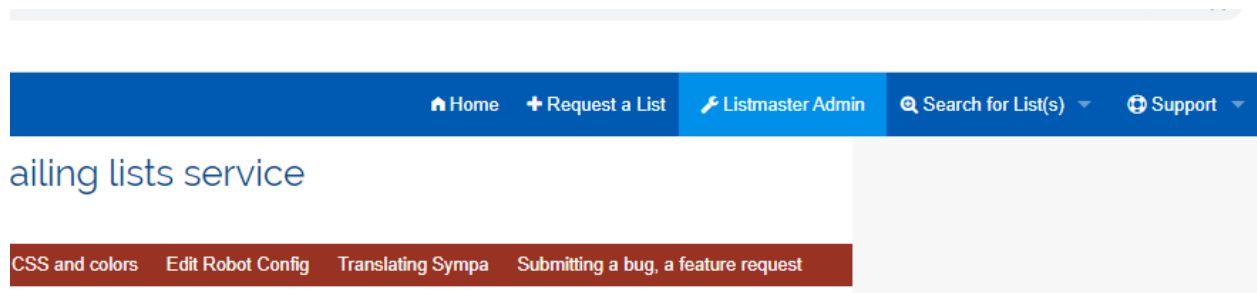
1. Go to <http://lists.example.com/www>.
2. Click on 'Login' and then select 'First Login'
3. When prompted for your email address, type in the address you defined as the listmaster in /etc/sympa/sympa/sympa.conf.
4. You should get an email similar to the one below. Click on the link to set your listmaster password.

Subject: Listserv / your environment

Someone, probably you, requested to allocate or renew your password for your list server account lists.example.com|

You may ignore this request or click on the following URL in order to choose your password.: <http://lists.example.com/wws/ticket/00928641715509>

5. Once that is complete you can log in as the listmaster. You should see the wrench icon in the menu bar as shown below. From here, you can perform global operations on the system.



You should now be on your way to creating lists! One final task to take on if you choose to do so is to secure the web traffic from and to the mail server. You can do that (for free!) by using Let's Encrypt. Instructions are provided [here](#).