Copper version 0.5 Installation manual

PREPARED FOR

LK domain Registry

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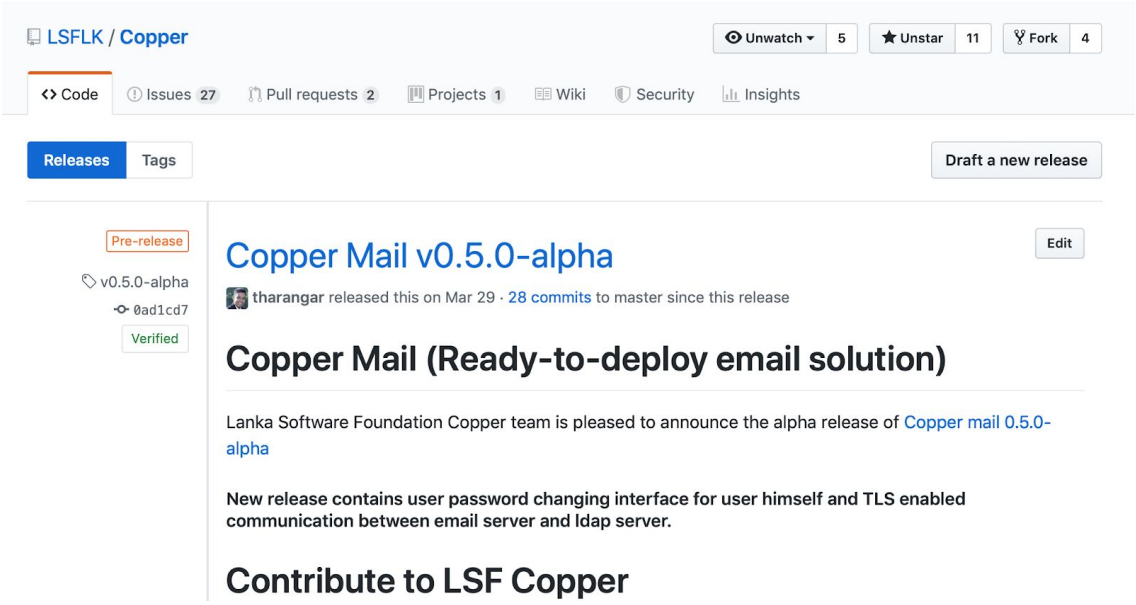
1. Download the project version 0.5

Copper Email solution version 0.5 deployment manual is prepared to make it easy for anyone to follow the steps required for successful completion.

Version 0.5 can be download from the following url.

https://github.com/LSFLK/Copper/releases



2. Deployment

Change to /copper/copper-server/kubernetes/deployment

Folder which has all shell script for deployment and un deployment.

If you have already deploy the system and if you want to undeploy it.

$ sh undeploy.sh

Change to deployment directory and run the deploy.sh shell script and provide necessary information. Your domain name should have 3 parts EX : copper.opensource.lk.

$ sh deploy.sh

```
wso2s-MacBook-Pro:kubernetes wso2$ ls
Apps                    deployment              groupware               persistent
README.md               emailserver             openldap                phpldapadmin
wso2s-MacBook-Pro:kubernetes wso2$ code .
wso2s-MacBook-Pro:kubernetes wso2$ cd deployment/
wso2s-MacBook-Pro:deployment wso2$
wso2s-MacBook-Pro:deployment wso2$
wso2s-MacBook-Pro:deployment wso2$ sh deploy.sh
********************************************************************************
**                                                                            **
**          POWERED BY LANKA SOFTWARE FOUNDATION  (LSF)                       **
**                                                                            **
********************************************************************************
* -Deploying Copper Email Server...
namespace/copper created
* -Copper namespace created...
* -Please Submit your Input data carefully...
Enter mysql database name:
copper
Enter mysql database password:
copper
Your domain must contain 3 parts. (Eg: part1.part2.part3)
Enter the first part of domain:
copper
Enter the second part of domain:
opensource
Enter the third part of domain:
lk
Enter LDAP admin password:
admin
Enter LDAP readonly user name:
raa
Enter LDAP readonly user password:
raa
Enter organization name
lsf
Enter password for spam filter (RspamD)
spam
* -Configuration going to be created...
secret/email-secret created
* -Secret configuration files Created...
* -ldap.ldif file was Created...
* -deploy.sh: cert.pem file '../tls/cert.pem' not found in tls directory. !
* -deploy.sh: privkey.pem file '../tls/privkey.pem' not found in tls directory. !
```

3. Primary Deployment Testings

Once you done the deployment then you have to check whether all pods are created and services are up and running with necessary ip allocation using following commands.

Show all pods (like vm) for the copper email solution.

$ kubectl get pods -n copper

Show all services which allow us to access each service.

$ kubectl get services -n copper

```
wso2s-MacBook-Pro:deployment wso2$ kubectl get pods -n copper
NAME                                        READY   STATUS    RESTARTS   AGE
alertmanager-65dcbc787c-5cjnv               1/1     Running   0          45m
email-79995b5b4b-htlc8                      1/1     Running   0          45m
groupoffice-79787bc875-dhchb                1/1     Running   0          45m
ldap-669556c756-vm9mw                       1/1     Running   0          45m
ldap-pw-645487d4d8-9x444                    1/1     Running   0          45m
mysql-64d8bfbc65-gwcrn                      1/1     Running   0          45m
phpldapadmin-controller-th7cz               1/1     Running   0          45m
prometheus-deployment-5965686675-dq7bd      1/1     Running   0          45m
wso2s-MacBook-Pro:deployment wso2$ kubectl get services -n copper
NAME                 TYPE           CLUSTER-IP       EXTERNAL-IP   PORT(S)                                                                AGE
alertmanager         NodePort       10.107.142.186   <none>        9093:31000/TCP                                                         45m
email                LoadBalancer   10.108.35.13     localhost     25:30609/TCP,143:31056/TCP,587:30771/TCP,4190:31239/TCP,11334:31218/TCP 45m
groupoffice          LoadBalancer   10.110.34.131    localhost     8004:31192/TCP                                                         45m
ldap                 LoadBalancer   10.111.55.147    localhost     389:30169/TCP                                                          45m
ldap-pw              LoadBalancer   10.102.75.88     localhost     4343:31516/TCP,433:32747/TCP                                           45m
mysql                ClusterIP      None             <none>        3306/TCP                                                               45m
phpldapadmin-service LoadBalancer   10.107.248.246   localhost     4433:31780/TCP                                                         45m
prometheus-service   NodePort       10.106.45.225    <none>        8080:30000/TCP                                                         45m
```

In services External-IP and the port should be used to access each service.

4. Secondary Deployment Testings

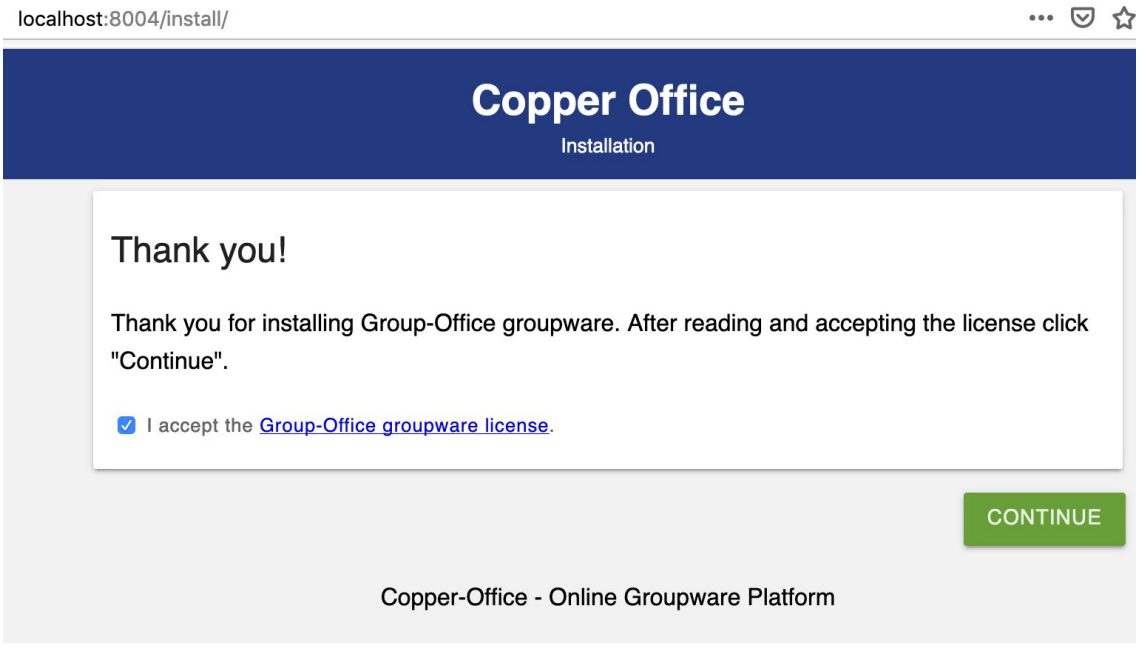
Now it is must to check your interfaces.

Basically there are 4 interfaces to be checked .

1. Web client interface
2. Phpldapadmin interface
3. Password change interface
4. Rspamd interface

1. **Web client interface**

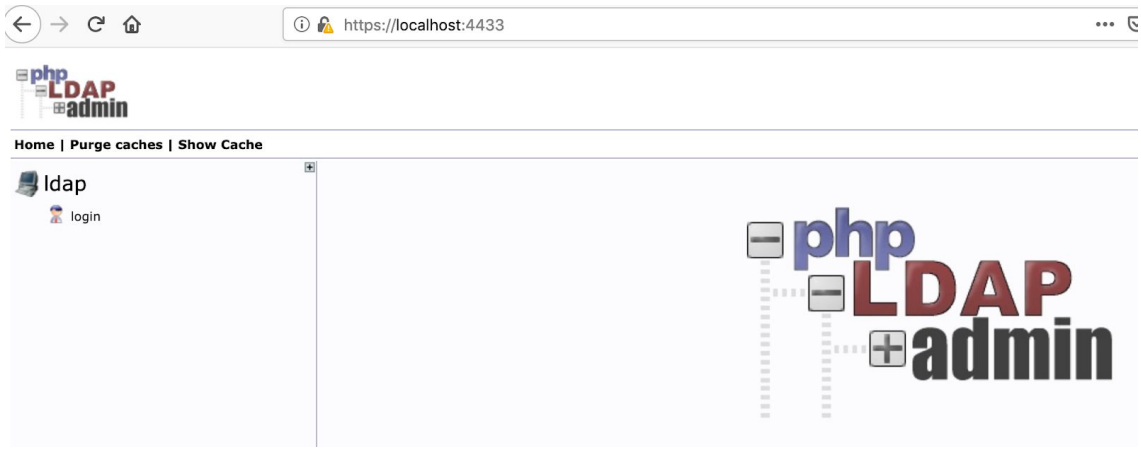
You should be able to see the installation interface of group office.



2. Phpldapadmin interface

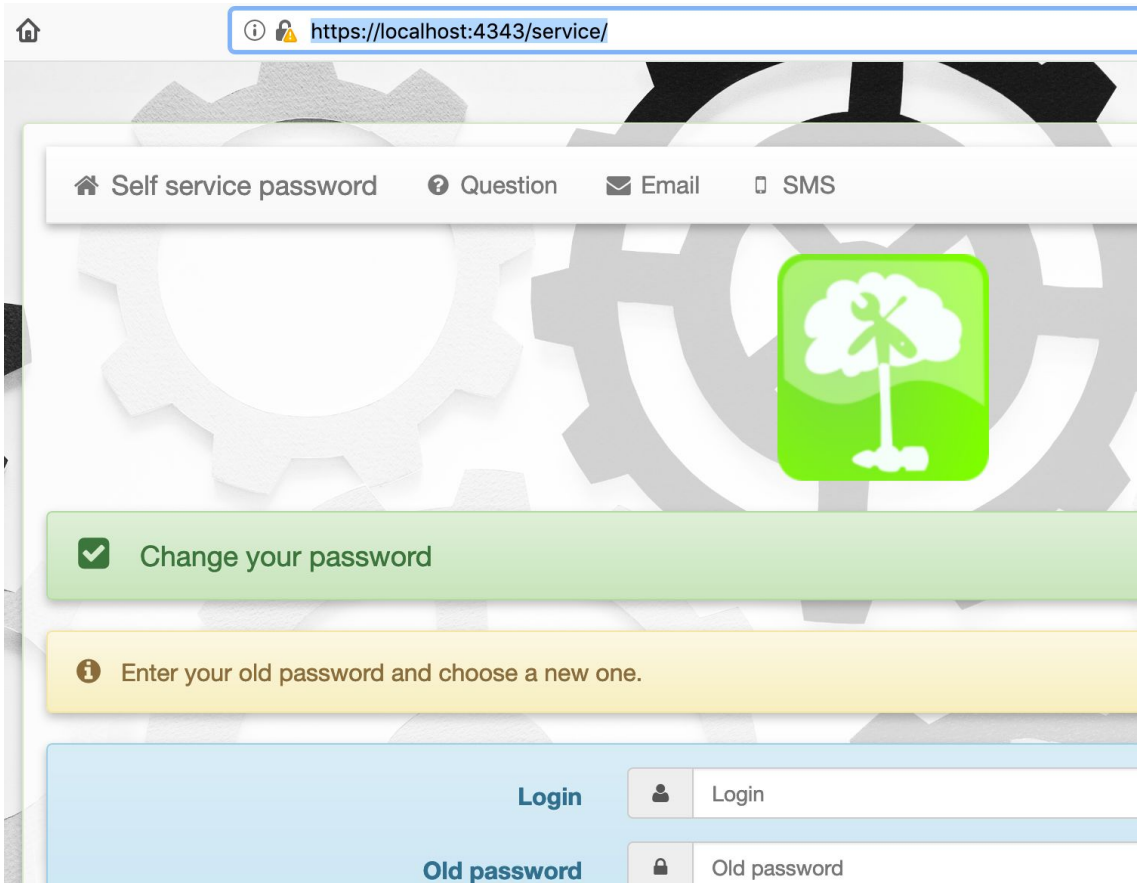
https://localhost:4433/

You may want to accept the certificate due to those certificates are self signed.



3. **Password changing interface.**

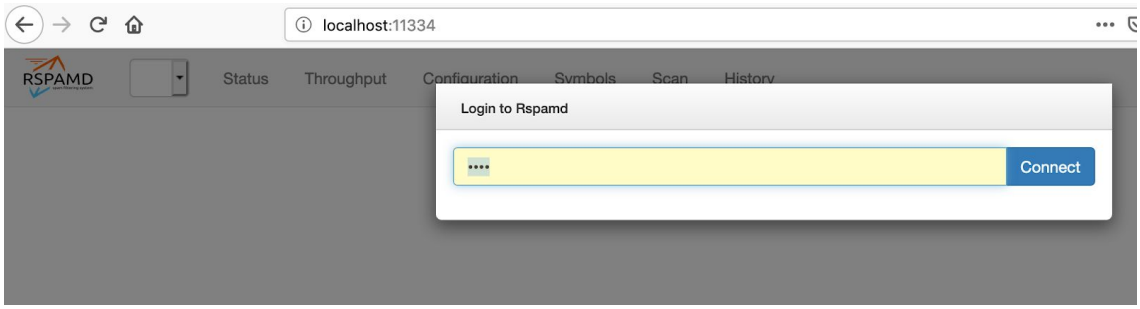
https://localhost:4343/service/



4. RspamD interface

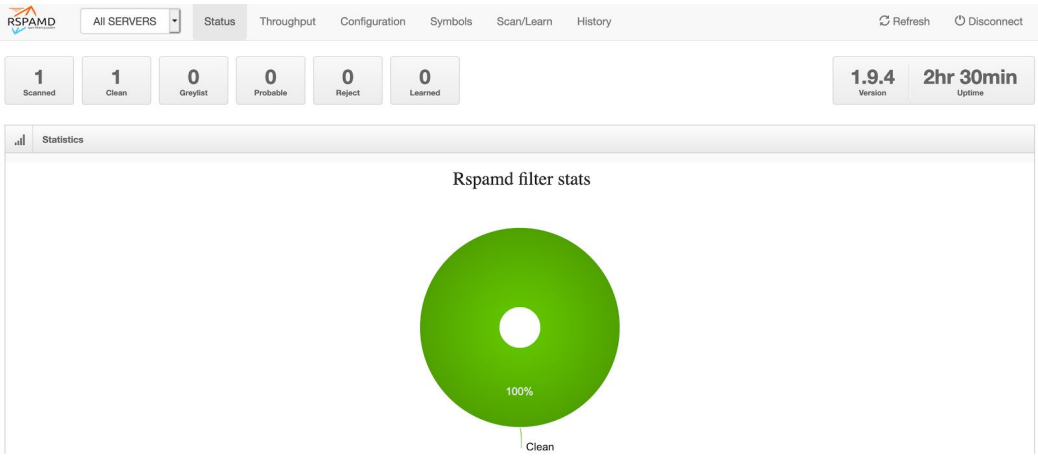
Finally you should have access to the RspamD interface too.

http://localhost:11334/



This is the password you have provided in the installation process.

Once you connect Then your spam dashboard will appear.



5. Installation

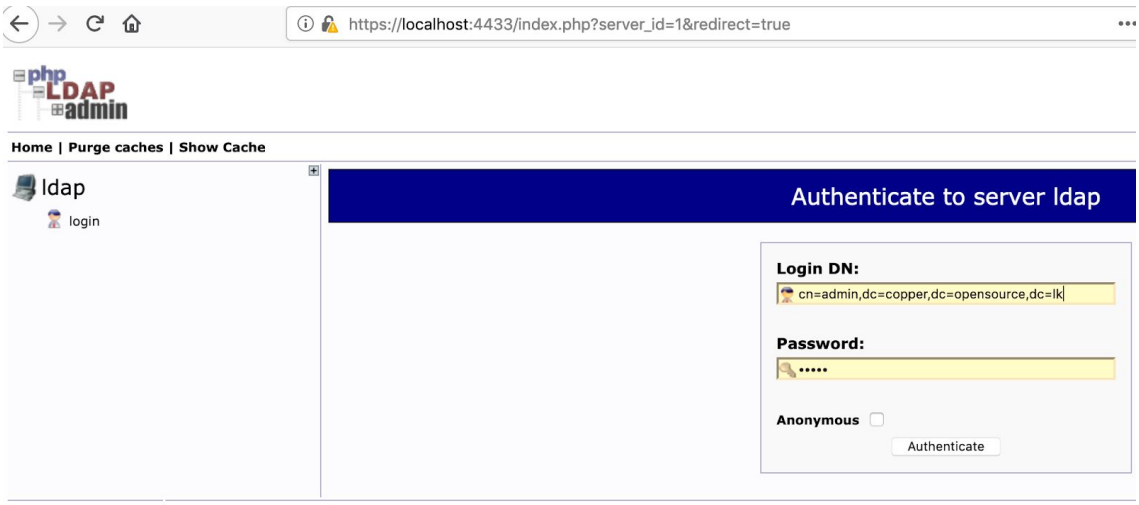
Installation Begins with ldap server configuration. In Deployment there may be two test user accounts created in the “ldap.ldif” fine in the deployment folder. First of all these configuration should be imported to ldap server.

First login to the phpldapadmin .

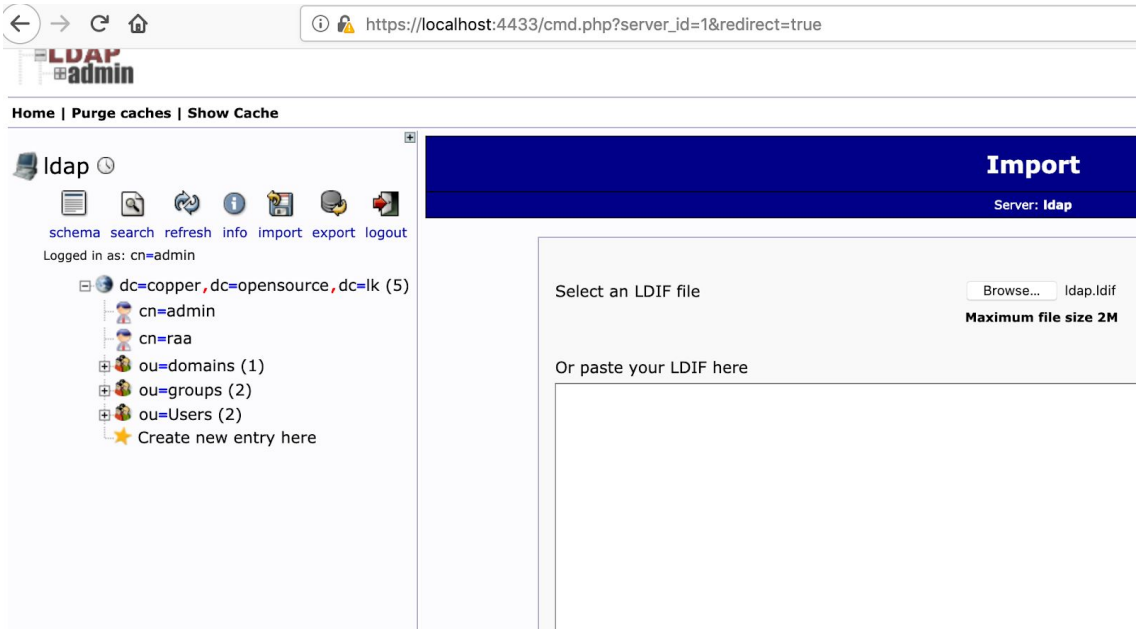
Username : your domain name with admin username :

Ex : “cn=admin,dc=copper,dc=opensource,dc=lk”

Password : <what you have provided in the deployment process “



Then import the “ldap.ldif” file in the deployment folder.



Then your user base is ok and following users may have created.

Ex

Username : copper

Password : coppermail@lsf

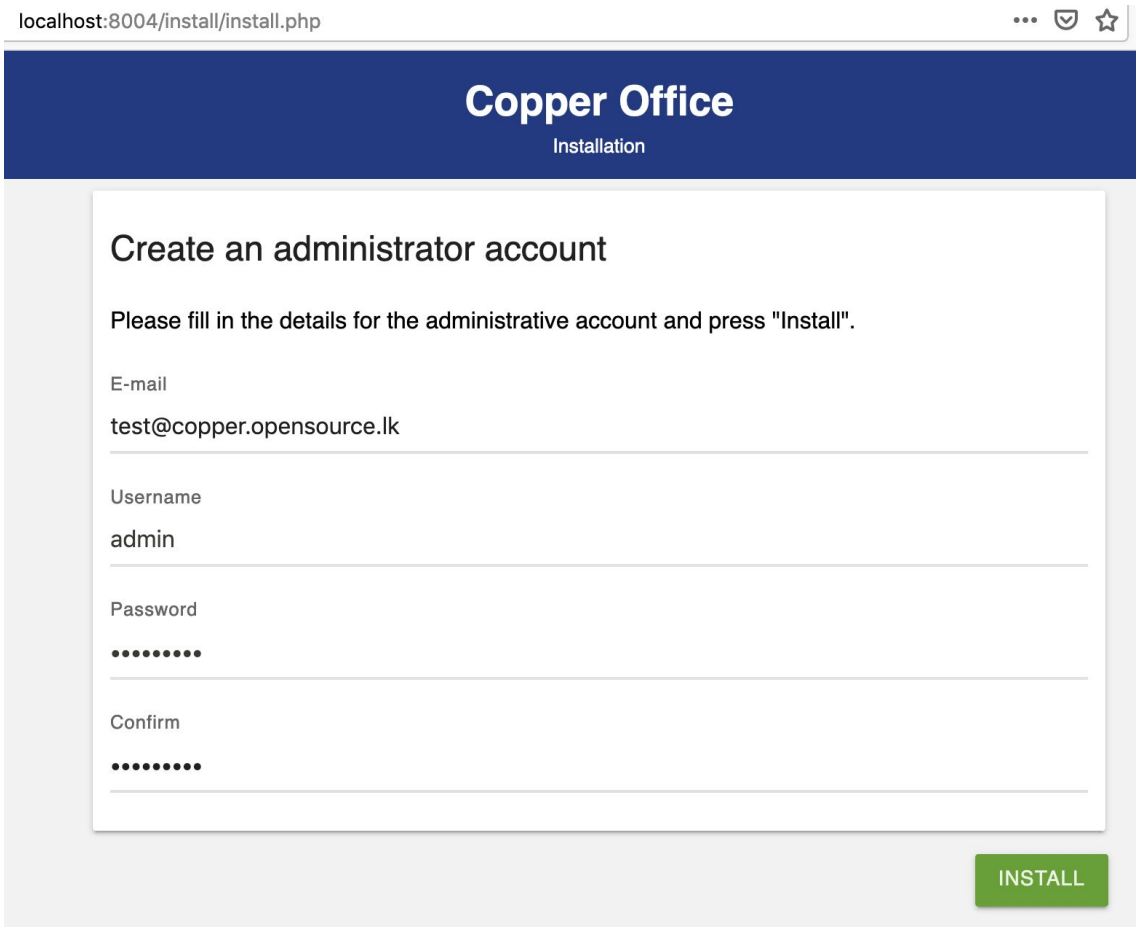
Username : test

Password : coppermail@lsf

Install Group office web client

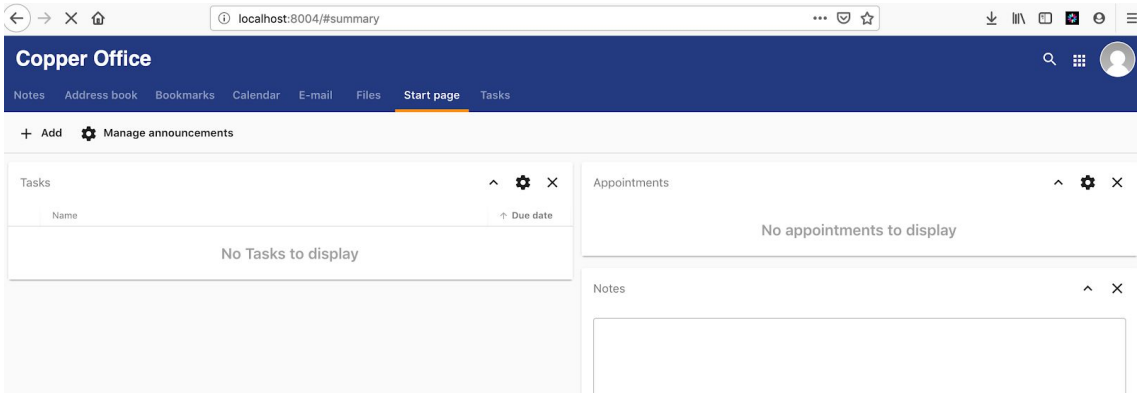
Once the user management part is done then web client installation should be started .

Proceed the group office interface installation and press ok for configuration page also and give following parameters too.



This is the admin account password and you have to remember it for further logins.

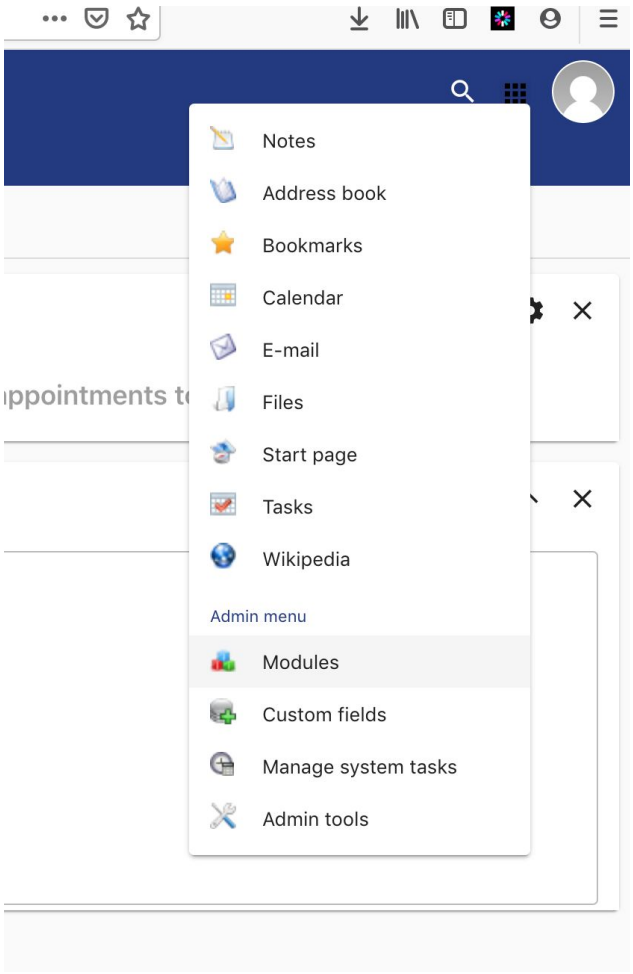
Once Installation completed then try to log in again with given username and password.



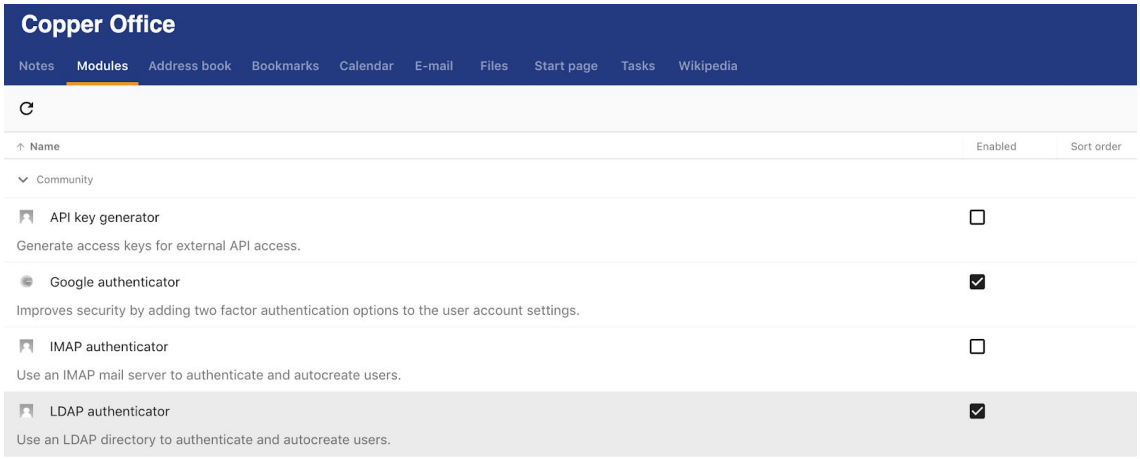
Add ldap module

Again logout and login again.

Click on “Modules”.

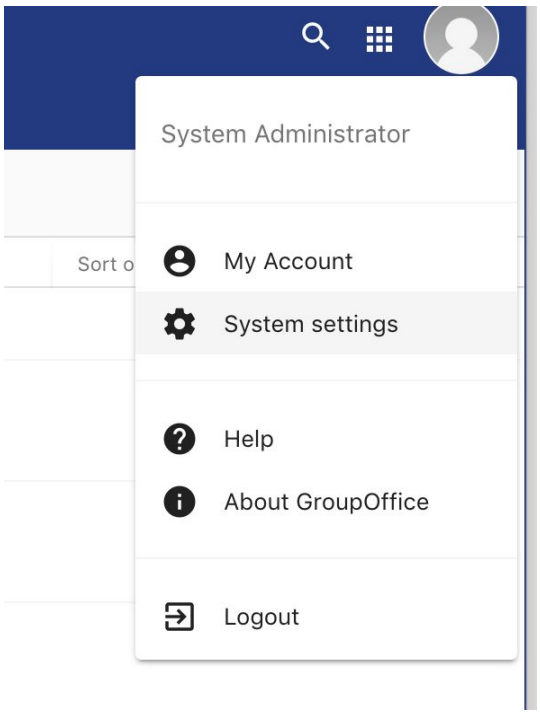


Then add the ldap plugin from the community section and then add the admin user also.



Then log out and log in again.

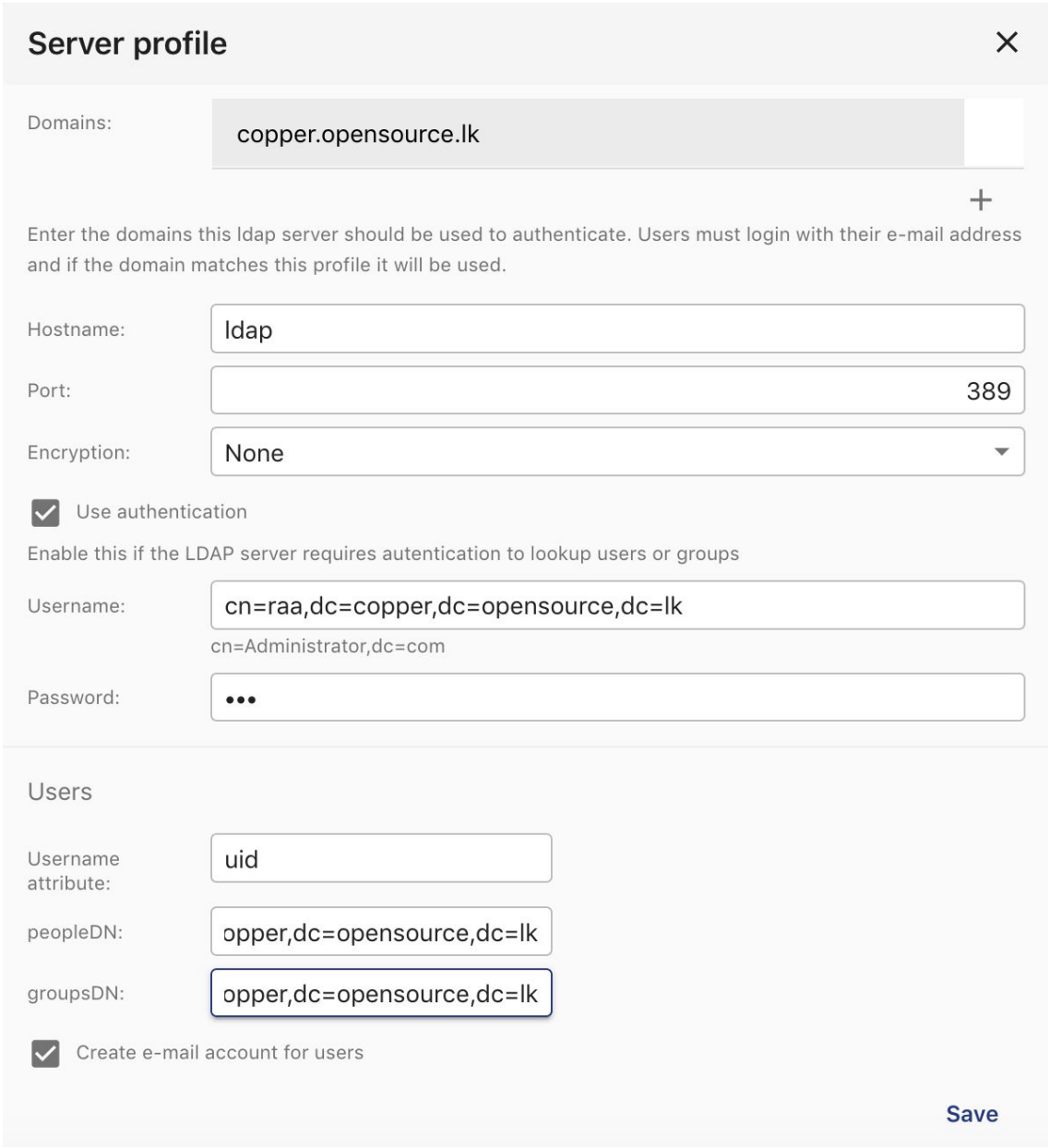
Configure your ldap server.



Go to System settings and then go to Authentication.

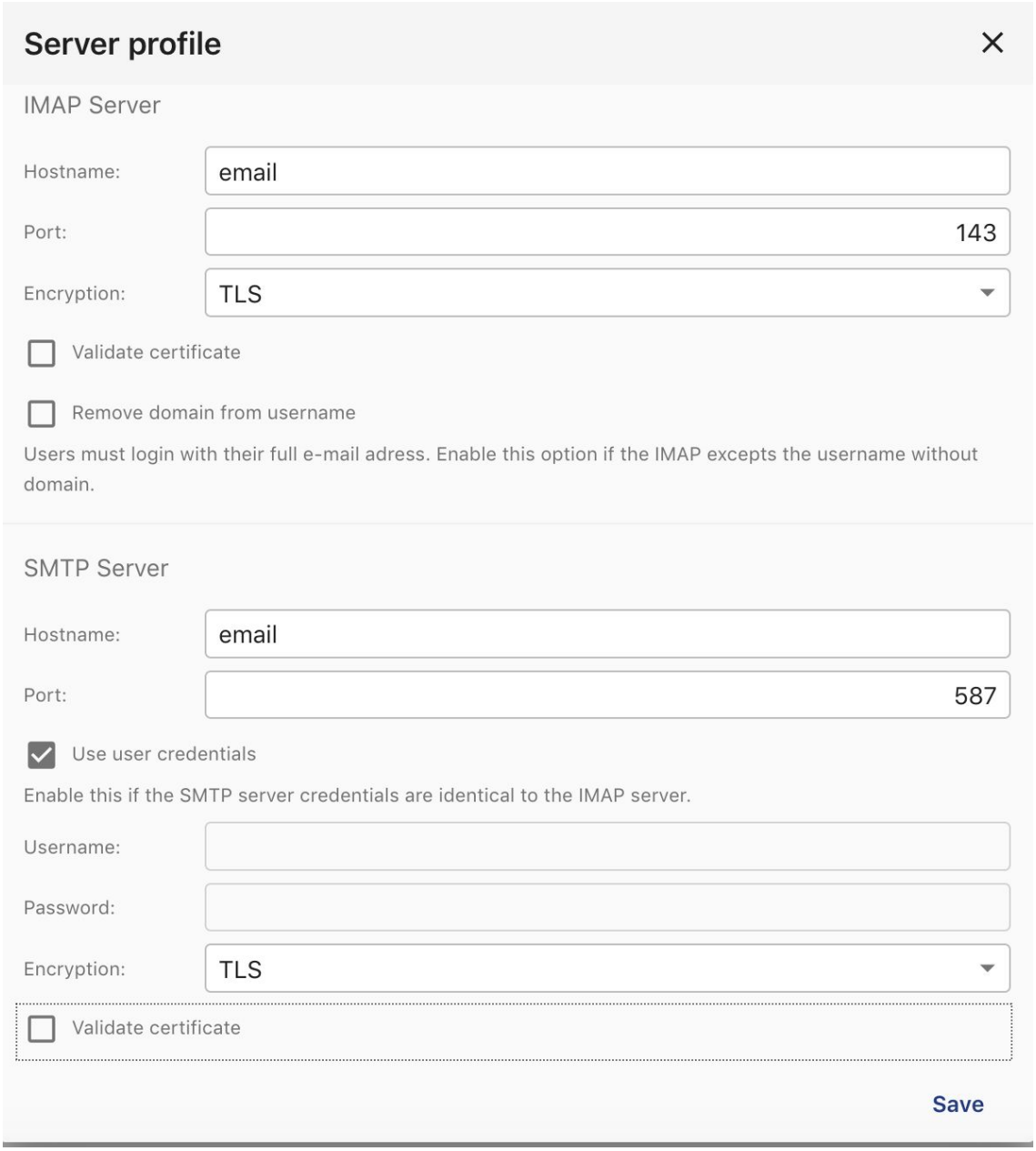
+ For ldap server

Fill following details as given in the example.

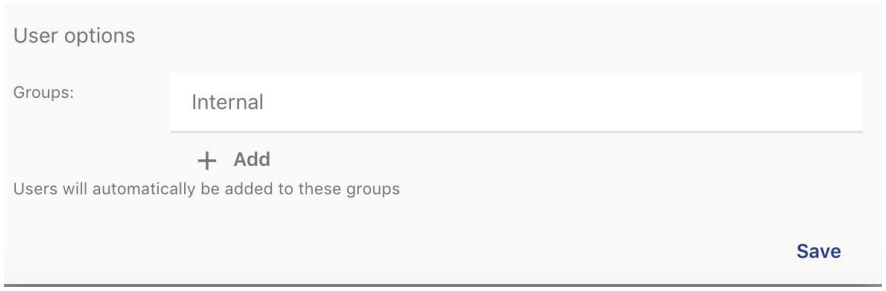


Then you have to provide your email server details as follows.

These information should be given as same given in the example because those information about your email server container.



Finally add to Internal group and then save.



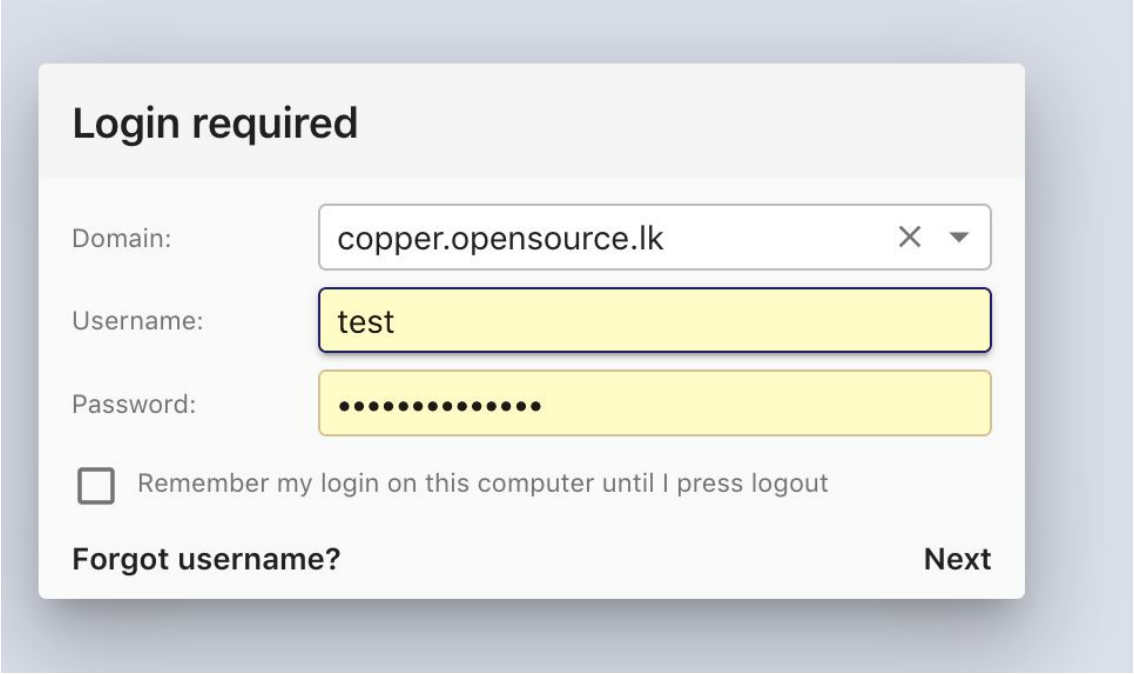
Then again logout.

6. Functional Testing

Once completed above all steps then you can start your functional testing.

1. Login to you domain.

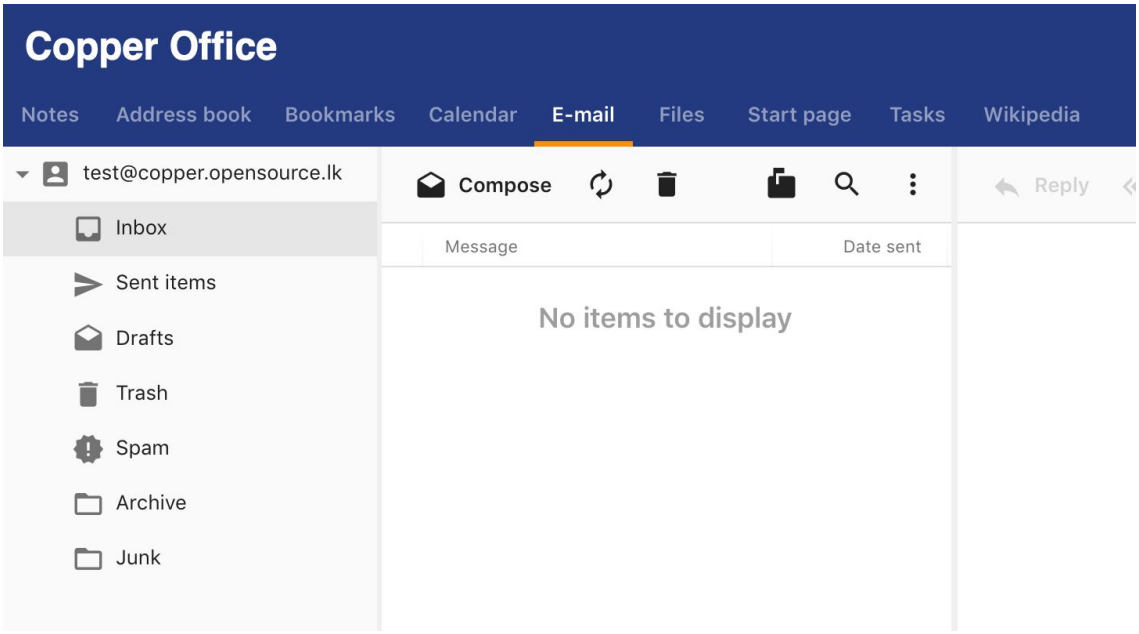
   http://localhost:8004



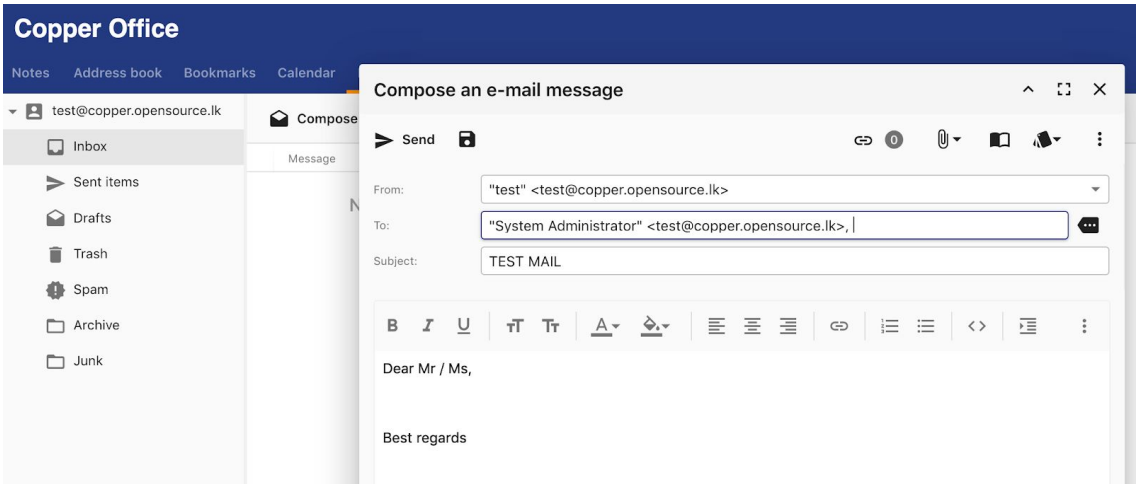
Now you can select your domain and login with test user account or copper account (both password is coppermail@lsf).

Successful login will bring you the dashboard. Then click Email tab.

If Email connectivity is success your folder structure will be shown as shown in bellow image.

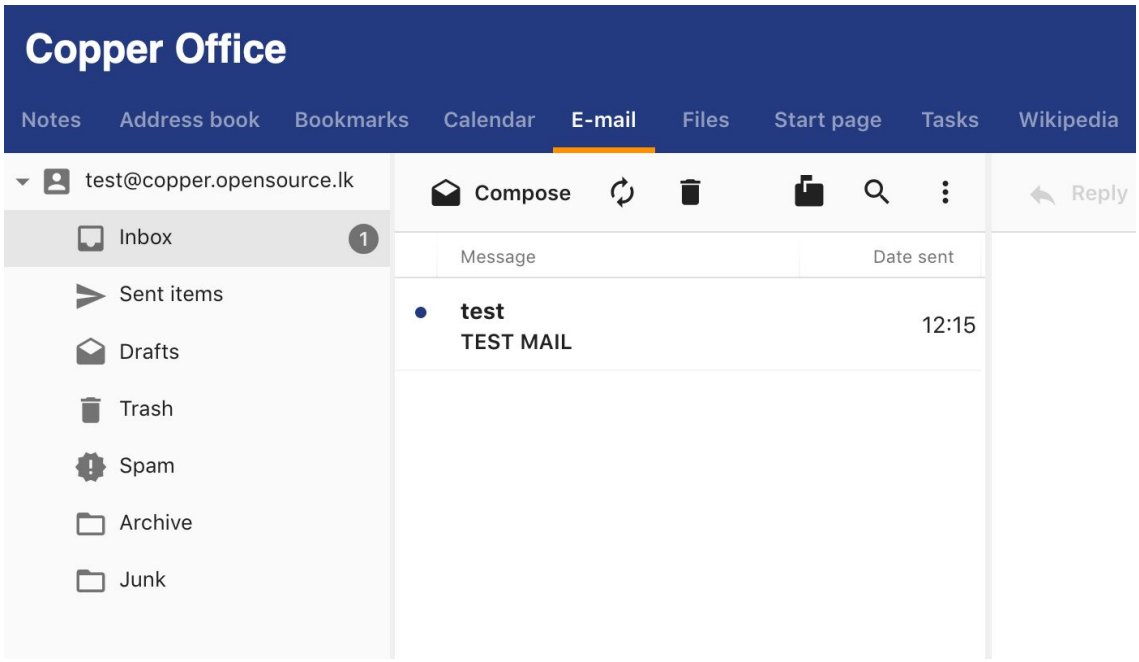


Then try to send a mail to yourself to check mail sending and receiving in same domain.



If mail sent then popup close and receive also should happen properly.

7. Result


Copper Office
Notes
Address book
Bookmarks
Calendar
E-mail
Files
Start page
Tasks
Wikipedia
test@copper.opensource.lk
Inbox
1
Sent items
Drafts
Trash
Spam
Archive
Junk
Compose
Reply
Message
Date sent
test
TEST MAIL
12:15