10. Email

Introduction

**Objective**

At the end of this guide, you will learn to configure postfix and dovecot. Please ensure that ldap server is already setup before proceeding to configure mail server.

**Login**

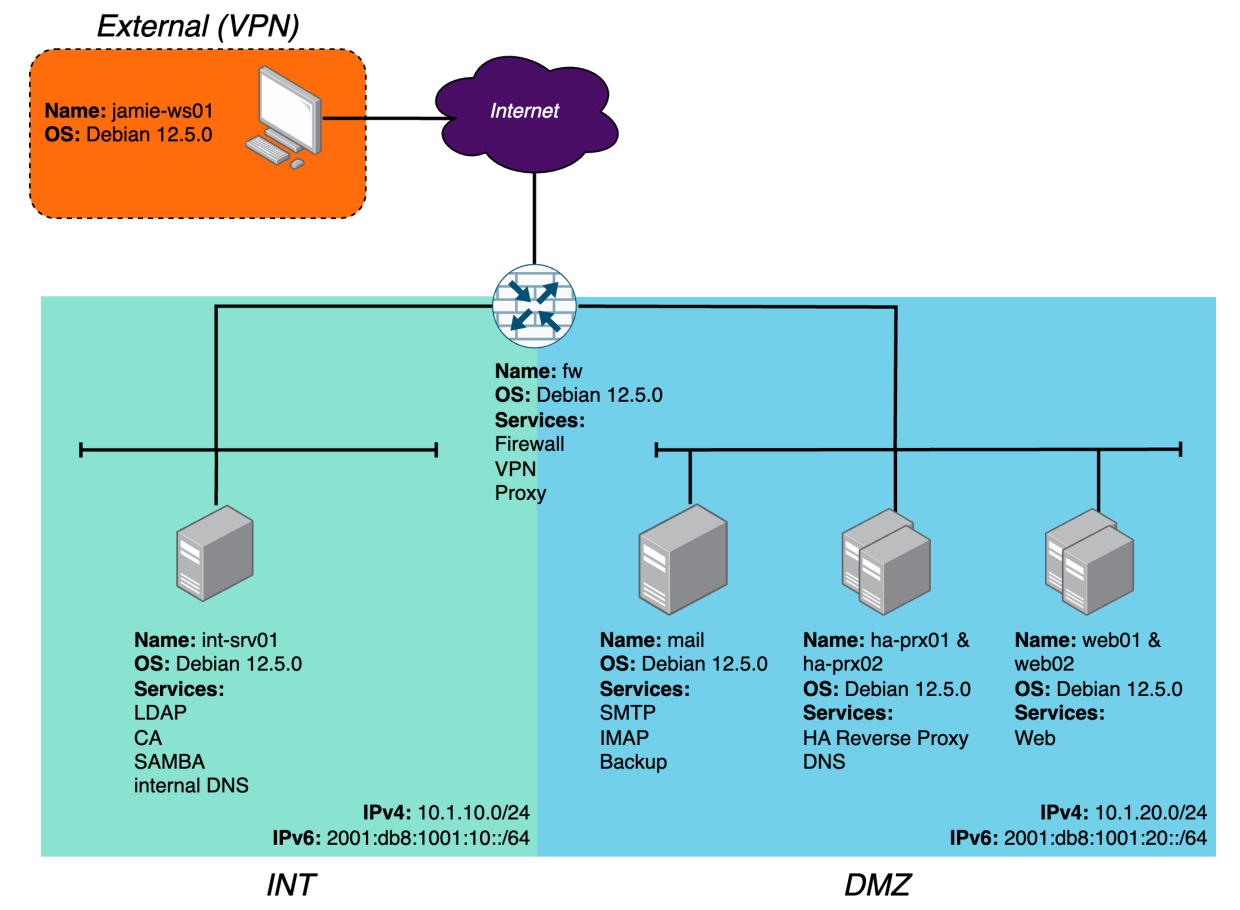
The login credential for all server and client machines:

Username: root / user

Password: Skill39@Lyon

**Network Topology**

This will be the network topology that will be referenced for setting up the infrastructure.



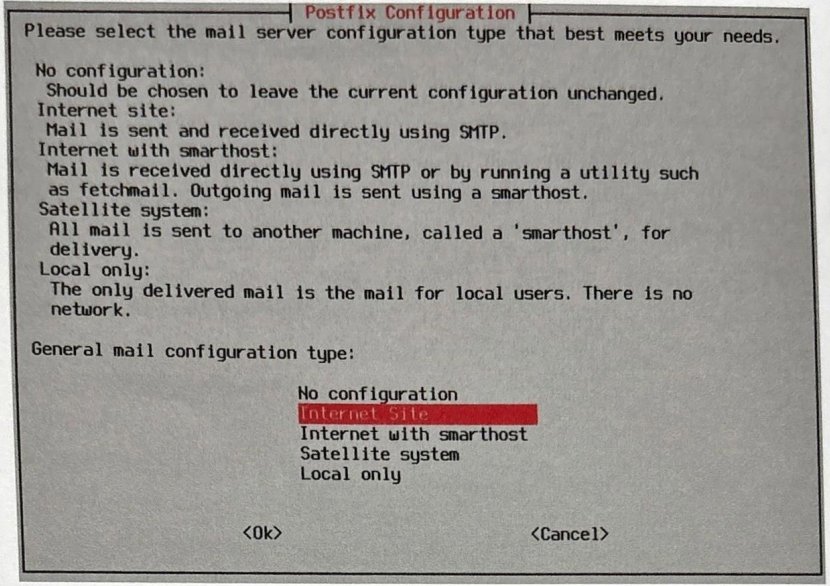
Please Check Before Doing Email Configuration

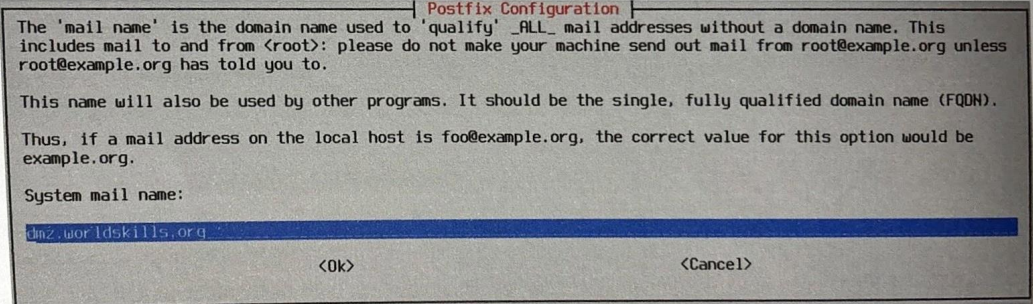
ldapsearch -x -b dc=int,dc=worldskills,dc=org -H ldap://int-srv01.int.worldskills.org

Ensure that mail.dmz.worldskills.org can query ldap. The exit code should be 0 and the user attributes should be displayed after running the ldapsearch command.

Installation

apt install postfix postfix-ldap dovecot-ldap dovecot-imapd dovecot-lmtpd -y





Post-Configuration

Create group and user to manage the mailbox.

groupadd -g 5000 vmail

adduser –uid 5000 –gid 5000 –disabled-login –gecos “” vmail

Create the mailbox directory and assign the ownership and permission.

mkdir -p /var/mail/vhosts/dmz.worldskills.org

chown -R vmail:vmail /var/mail/vhosts

chmod -R 770 /var/mail/vhosts

Create the directory to contain mail cert and key

mkdir -p /etc/tls

scp [root@10.1.10.10:/etc/ssl/CA/certs/mail.crt /etc/tls/](about:blank)

scp [root@10.1.10.10:/etc/ssl/CA/private/mail.key](about:blank) /etc/tls

Dovecot

vim /etc/dovecot/conf.d/10-auth.conf

line 10

disable\_plaintext\_auth = yes

line 100

auth\_mechanisms = plain login

uncomment line 124

vim /etc/dovecot/conf.d/10-ssl.conf

ssl\_cert = </etc/tls/mail.crt

ssl\_key = </etc/tls/mail.key

vim /etc/dovecot/conf.d/10-mail.conf

line 30

mail\_location = maildir:/var/mail/vhosts/%d/%n/Maildir

mail\_uid = 5000

mail\_gid = 5000

maildir\_very\_dirty\_syncs = yes

maildir\_copy\_with\_hardlinks = yes

vim /etc/dovecot/conf.d/10-master.conf

line 54

service lmtp {

unix\_listener /var/spool/postfix/private/dovecot-lmtp {

mode = 0600

user = postfix

group = postfix

}

}

line 88

service auth {

unix\_listener /var/spool/postfix/private/auth {

mode = 0660

user = postfix

group = postfix

}

}

vim /etc/dovecot/dovecot-ldap.conf.ext

hosts = int-srv01.int.worldskills.org

dn = cn=admin,dc=int,dc=worldskills,dc=org

dnpass = Skill39@Lyon

auth\_bind = yes

ldap\_version = 3

base = ou=Employees, dc=int,dc=worldskills,dc=org

user\_attrs = =home=/var/mail/vhosts/%d/%n,=uid=5000,=gid=5000

user\_filter = (|(mail=%u)(mail=%n))

pass\_attrs = userPassword=password

pass\_filter = (|(mail=%u)(mail=%n))

check for config errors

dovecot -n

restart the service

systemctl restart dovecot

**Test Dovecot**

doveadm auth test [jamie.oliver@dmz.worldskills.org](mailto:jamie.oliver@dmz.worldskills.org) ‘Skill39@Lyon’

passdb: [jamie.oliver@dmz.worldskills.org](mailto:jamie.oliver@dmz.worldskills.org) auth succeeded

extra fields:

[user=jamie.oliver@dmz.worldskills.org](mailto:user=jamie.oliver@dmz.worldskills.org)

openssl s\_client -connect mail.dmz.worldskills.org:993

a1 login [jamie.oliver@dmz.worldskills.org](mailto:jamie.oliver@dmz.worldskills.org) Skill39@Lyon

a2 list “” “\*”

a3 logout

ls -l /var/mail/vhosts/dmz.worldskills.org

you should see there user’s mailbox directory

Postfix

vim /etc/postfix/main.cf

line 41

mydestination = $myhostname, localhost

line 49

smtpd\_sasl\_type = dovecot

smtpd\_sasl\_path = private/auth

smtpd\_sasl\_auth\_enable = yes

smtpd\_sasl\_security\_options = noanonymous

broken\_sasl\_auth\_clients = yes

smtpd\_recipient\_restrictions = permit\_sasl\_authenticated, permit\_mynetworks, reject\_unauth\_destination

virtual\_mailbox\_domains = dmz.worldskills.org

virtual\_mailbox\_base = /var/mail/vhosts

virtual\_mailbox\_maps = ldap:/etc/postfix/ldap-users.cf

virtual\_minimum\_uid = 5000

virtual\_uid\_maps = static:5000

virtual\_gid\_maps = static:5000

virtual\_transport = lmtp:unix:private/dovecot-lmtp

vim /etc/postfix/ldap-users.cf

server\_host = int-srv01.int.worldskills.org

search\_base = ou=Employees,dc=int,dc=worldskills,dc=org

version = 3

bind = yes

bind\_dn = cn=admin,dc=int,dc=worldskills,dc=org

bind\_pw = Skill39@Lyon

query\_filter = (|(mail=%s)(mail=%u))

result\_attribute = mail

vim /etc/postfix/master.cf



postconf -n

check for any syntax errors

postfix check

systemctl restart postfix

**Test Postfix**

apt install swaks -y

swaks --to [peter.fox@dmz.worldskills.org](mailto:peter.fox@dmz.worldskills.org) --from [jamie.oliver@dmz.worldskills.org](mailto:jamie.oliver@dmz.worldskills.org) --server mail.dmz.worldskills.org –auth-user [jamie.oliver@dmz.worldskills.org](mailto:jamie.oliver@dmz.worldskills.org) –auth-password [jamie.oliver@dmz.worldskills.org](mailto:jamie.oliver@dmz.worldskills.org) --auth PLAIN --tls

