Restrictions, mynetwork, myhostname:

1. `mynetworks=`
2. `myhostname=`
3. `smtpd_helo_required=yes`
4. `smtpd_client_restrictions=`
5. `smtpd_helo_restrictions=`
6. `smtpd_sender_restrictions=`
7. `smtpd_recipient_restrictions=`
8. `smtpd_relay_restrictions=`
9. `smtpd_data_restrictions=`
10. `smtpd_end_of_data_restrictions=`
11. `smtpd_etrn_restrictions=`

Rejections:

1. `permit_mynetworks`
2. `reject_unknown_client`
3. `reject_unknown_client_hostname`
4. `reject_unknown_reverse_client_hostname`
5. `reject_unknown_helo_hostname`
6. `reject_invalid_hostname`
7. `reject_unknown_hostname`
8. `reject_non_fqdn_hostname`
9. `reject_unknown_sender_domain`
10. `reject_non_fqdn_sender`
11. `reject_unauth_destination`
12. `reject_non_fqdn_recipient`
13. `reject_unknown_recipient_domain`
14. `reject_unauth_pipelining`
15. `check_policy_service`

1. client
2. sender
3. recipient
4. relay

1. smtpd_client_restrictions
2. smtpd_sender_restrictions
3. smtpd_recipient_restrictions
4. smtpd_relay_restrictions

unknown:

1. reject_unknown_client
2. reject_unknown_client_hostname
3. reject_unknown_reverse_client_hostname
4. reject_unknown_helo_hostname
5. reject_unknown_hostname
6. reject_unknown_sender_domain
7. reject_unknown_recipient_domain

non_fqdn:

1. reject_non_fqdn_hostname
2. reject_non_fqdn_sender
3. reject_non_fqdn_recipient

unauth:

1. reject_unauth_destination

2. `reject_unauht_pipelining`

`invalid`:

1. `reject_invalid_hostname`

`hostname`:

1. `reject_unknown_client_hostname`
2. `reject_unknown_reverse_client_hostname`
3. `reject_unknown_helo_hostname`
4. `reject_invalid_hostname`
5. `reject_unknown_hostname`
6. `reject_non_fqdn_hostname`

`client`:

1. `reject_unknown_client`
2. `reject_unknown_client_hostname`
3. `reject_unknown_reverse_client_hostname`

`sender`:

1. `reject_unknown_sender_domain`
2. `reject_non_fqdn_sender`

`recipient`:

1. `reject_non_fqdn_recipient`
2. `reject_unknown_recipient_domain`

Daneben gibt es:

1. `client`
2. `client_hostname`
3. `reverse_client_hostname`
4. `helo_hostname`
5. `sender`
6. `sender_domain`
7. `destination`
8. `recipient`
9. `recipient_domain`

```
Return-Path:
Received:
From:
To:
Subject:
Date:
Message-ID:
User-Agent:
MIME-Version:
Content-Transfer-Encoding:
Content-Type:
X-Assp-...:

Delivered-To:
X-Original-To:
Reply-To:
X-Priority:
Importance:
```

1 dovecot

- /etc/dovecot.conf
- /etc/dovecot/conf.d/10-auth.conf
- /etc/dovecot/conf.d/10-director.conf
- /etc/dovecot/conf.d/10-logging.conf
- /etc/dovecot/conf.d/10-mail.conf
- /etc/dovecot/conf.d/10-master.conf
- /etc/dovecot/conf.d/10-ssl.conf
- /etc/dovecot/conf.d/10-tcpwrapper.conf
- /etc/dovecot/conf.d/15-lda.conf
- /etc/dovecot/conf.d/15-mailboxes.conf
- /etc/dovecot/conf.d/20-imap.conf
- /etc/dovecot/conf.d/20-pop3.conf
- /etc/dovecot/conf.d/90-acl.conf
- /etc/dovecot/conf.d/90-plugin.conf

- /etc/dovecot/conf.d/90-quota.conf
- /etc/dovecot/conf.d/auth-checkpassword.conf.ext
- /etc/dovecot/conf.d/auth-deny.conf.ext
- /etc/dovecot/conf.d/auth-dict.conf.ext
- /etc/dovecot/conf.d/auth-master.conf.ext
- /etc/dovecot/conf.d/auth-passwdfile.conf.ext
- /etc/dovecot/conf.d/auth-sql.conf.ext
- /etc/dovecot/conf.d/auth-static.conf.ext
- /etc/dovecot/conf.d/auth-system.conf.ext
- /etc/dovecot/conf.d/auth-vpopmail.conf.ext

2 drbd

```
# cat drbd-demo.res
resource r0 {
  meta-disk internal;
  device /dev/drbd1;
  syncer {
    verify-alg sha1;
  }
  net {
    allow-two-primaries;
  }
  on ituenix {
    disk /dev/loop1;
    address 192.168.178.26:1111;
  }
  on 3.ituenix.de {
    disk /dev/loop1;
    address 192.168.178.28:1111;
  }
}


# apt-get install drbd8-utils
# apt-get install xfsprogs

# dd if=/dev/zero of=nextclouddrbd.img bs=1024k count=1024
# losetup /dev/loop1 nextclouddrbd.img
```

```
# kate /etc/drbd.d/nextclouddrbd.res

Node1:

# modprobe drbd
# drbdadm up r0
# cat /proc/drbd

Node2:

# modprobe drbd
# drbdadm up r0
# drbdadm -- --overwrite-data-of-peer primary r0
# cat /proc/drbd
```

3 heartbeat

```
/etc/ha.d/authkeys
/etc/ha.d/ha.cf
/etc/ha.d/haresources
```

```
auth 1
1 md5 geTch123 # oder md5-hash
# 1 crc # keine sicherheit
# 2 sha1 HI! # oder ein gemeinsamer sha1-hash
```

```
node ituenix ituenix2

ucast eth0 192.168.178.37 # wird auto. von client1 ignoriert
ucast eth0 192.168.178.26 # wird auto. von client2 ignoriert

auto_failback off # verhindert das auto. rckschalten auf den primary node, wenn dieser w

ping 37.24.242.146 # gemeinsame ip der nodes

debugfile /var/log/ha-debug
logfile /var/log/ha-log

deadtime 10 # sekunden bis ein node als tot erklrt wird
```

```
ituenix 192.168.178.37   apache2
```

4 packages

```
postfix
dovecot-core
dovecot-imapd
dovecot-pop3d
apache2
libapache2-mod-php
mariadb-server
php
php7.0
php-mysql
php-intl
php7.0-intl
php-gd
php-mbstring
php-curl
php-zip
php-xml
php-cli
php-cgi
```

5 LVM

```
apt-get install lvm2
```

das betrifft jetzt nur das anlegen der Partitionen

```
dd if=/dev/zero of=lvm2a.img bs=1024 count=2048k
dd if=/dev/zero of=lvm2b.img bs=1024 count=2048k
dd if=/dev/zero of=lvm2c.img bs=1024 count=2048k
dd if=/dev/zero of=lvm2d.img bs=1024 count=2048k
losetup /dev/loop1 lvm2a.img
losetup /dev/loop2 lvm2b.img
losetup /dev/loop3 lvm2c.img
losetup /dev/loop4 lvm2d.img
```

jetzt geht es weiter:

```
pvcreate /dev/loop1 /dev/loop2 /dev/loop3 /dev/loop4
vgcreate fileserver /dev/loop1 /dev/loop2 /dev/loop3 /dev/loop4
lvcreate -L 2G -n VOL fileserver
```

Jetzt ist das Ganze erreichbar unter:

```
# /dev/fileserver/VOL
```

Und ich gebe ein:

```
sudo mkfs.ext4 /dev/fileserver/VOL
```

Das ganze noch mounten

```
mkdir /media/lvm2
mount /media/lvm2 /dev/fileserver/VOL
```