perl -MMIME::Base64 -e 'print encode\_base64(test1)' base64位转换后

apt-get install openssl telnet libsasl2-2 libsasl2-modules libsasl2-modules-sql sasl2-bin libpam-mysql

apt-get install MySQL-client mysql-server

apt-get install postfix postfix-mysql postfix-doc mailutils

mysql -u root -p

mysql> CREATE DATABASE mail;

mysql> USE mail;

mysql> GRANT SELECT, INSERT, UPDATE, DELETE ON mail.\* TO 'mail\_admin'@'localhost' IDENTIFIED BY 'password-for-mail\_admin';

mysql> GRANT SELECT, INSERT, UPDATE, DELETE ON mail.\* TO 'mail\_admin'@'127.0.0.1' IDENTIFIED BY 'password-for-mail\_admin';

mysql> FLUSH PRIVILEGES;

mysql> CREATE TABLE domains (domain varchar(50) NOT NULL, PRIMARY KEY (domain) );

mysql> CREATE TABLE forwardings (source varchar(80) NOT NULL, destination TEXT NOT NULL, PRIMARY KEY (source) );

mysql> CREATE TABLE users (email varchar(80) NOT NULL, password varchar(20) NOT NULL, PRIMARY KEY (email) );

mysql> CREATE TABLE transport ( domain varchar(128) NOT NULL default '', transport varchar(128) NOT NULL default '', UNIQUE KEY domain (domain) );

mysql> quit

vim /etc/postfix/mysql-virtual\_domains.cf

user = mail\_admin

password = password-for-mail\_admin

dbname = mail

query = SELECT domain AS virtual FROM domains WHERE domain='%s'

hosts = 127.0.0.1

vim /etc/postfix/mysql-virtual\_forwardings.cf

user = mail\_admin

password = password-for-mail\_admin

dbname = mail

query = SELECT destination FROM forwardings WHERE source='%s'

hosts = 127.0.0.1

vim /etc/postfix/mysql-virtual\_mailboxes.cf

user = mail\_admin

password = password-for-mail\_admin

dbname = mail

query = SELECT CONCAT(SUBSTRING\_INDEX(email,'@',-1),'/',SUBSTRING\_INDEX(email,'@',1),'/') FROM users WHERE email='%s'

hosts = 127.0.0.1

vim /etc/postfix/mysql-virtual\_email2email.cf

user = mail\_admin

password = password-for-mail\_admin

dbname = mail

query = SELECT email FROM users WHERE email='%s'

hosts = 127.0.0.1

chmod o= /etc/postfix/mysql-virtual\_\*.cf

chgrp postfix /etc/postfix/mysql-virtual\_\*.cf

groupadd -g 5000 vmail

useradd -c 'VMail' -g vmail -u 5000 vmail -d /home/vmail -m

vi main.cf

myhostname = mail.devstore.cn

mydomain = devstore.cn

myorigin = $mydomain

inet\_interfaces = all

mydestination = localhost

mynetworks = 127.0.0.0/8 192.168.12.0/24

relay\_domains = $mydestination

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

virtual\_mailbox\_maps =mysql:/etc/postfix/mysql-virtual-mailbox-maps.cf

virtual\_alias\_maps =mysql:/etc/postfix/mysql-virtual-alias-maps.cf

virtual\_mailbox\_domains =mysql:/etc/postfix/mysql-virtual-mailbox-domains.cf

smtpd\_sasl\_type = dovecot

smtpd\_sasl\_path = private/auth

smtpd\_sasl\_auth\_enable = yes

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

broken\_sasl\_auth\_clients = yes

/etc/dovecot/dovecot.conf                        Dovecot的主配置文件

/etc/dovecot/conf.d/10-auth.conf                  用户验证相关配置信息

/etc/dovecot/conf.d/10-mail.conf                   Dovecot将要操作的磁盘路径相关配置信息

/etc/dovecot/conf.d/10-master.conf                 Dovecot本地socket相关配置信息

/etc/dovecot/conf.d/10-ssl.conf                     关于SSL的相关配置信息

/etc/dovecot/conf.d/20-pop3.conf                   关于POP3的相关配置信息

/etc/dovecot/conf.d/auth-sql.conf.ext                 SQL-Type验证相关配置信息

/etc/dovecot/dovecot-sql.conf.ext            Dovecot与数据库连接相关配置信息。example文件位置：/usr/share/doc/dovecot-2.0.9/example-config/

1 [root@root dovecot] vi/etc/dovecot/dovecot.conf   
[root@root dovecot] vi /etc/dovecot/dovecot.conf

protocols = imap pop3 lmtp

2 [root@root dovecot] vi /etc/dovecot/conf.d/10-auth.conf

disable\_plaintext\_auth = no

auth\_mechanisms = plain login

#禁止系统用户登录 ( 在 !include auth-system.conf.ext 前面加个 # 号 )

#!include auth-system.conf.ext

#启用mysql中的用户 ( 把  #!include auth-sql.conf.ext 前面的 # 号删除掉 )

!include auth-sql.conf.ext

3 [root@root dovecot] vi/etc/dovecot/conf.d/10-mail.conf

mail\_location = maildir:/var/vmail/%d/%n

mail\_privileged\_group = vmail

# namespace inbox 会因为dovecot 的版本不同而有所改变

# Error: user xxx@mail.devstore.cn: Initializationfailed: namespace configuration error: inbox=yes namespace missing

# 如果系统日志/var/log/maillog中报上面的错误，则加入以下内容

namespace inbox {

inbox = yes

}

4 [root@root dovecot] vi/etc/dovecot/conf.d/10-master.conf

# 这个配置非常重要，是用来接收psotfix 转交过来的邮件的关键配置

service lmtp {

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

mode = 0600

user = postfix

group = postfix

}

#inet\_listener lmtp {

#Avoid making LMTP visible for the entire internet

#address =

#port =

#}

service auth {

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

mode = 0666

user = postfix

group = postfix

}

unix\_listener auth-userdb {

mode = 0600

user = vmail

#group =

}

# Auth process is run as this user.

user = dovecot

}

service auth-worker {

user = vmail

}

5 [root@root dovecot] vi/etc/dovecot/conf.d/10-ssl.conf

ssl = no

6 [root@root dovecot] vi /etc/dovecot/conf.d/20-pop3.conf

pop3\_uidl\_format = %08Xu%08Xv

pop3\_client\_workarounds = outlook-no-nuls oe-ns-eoh

7 [root@root dovecot] vi/etc/dovecot/conf.d/auth-sql.conf.ext

passdb {

driver = sql

args = /etc/dovecot/dovecot-sql.conf.ext

}

#userdb {

# driver = sql

# args = /etc/dovecot/dovecot-sql.conf.ext

#}

userdb {

driver = static

args = uid=vmail gid=vmail home=/var/vmail/%d/%n

#注意这里的 home需要和 mail\_location 配置的值相同 ( mail\_location 在10-mail.conf 文件中 )

}

8 [root@root dovecot] vi /etc/dovecot/dovecot-sql.conf.ext

(dovecot-sql.conf.ext文件所在位置：/usr/share/doc/dovecot-2.0.9/example-config/dovecot-sql.conf.ext，请先下载此文件后，再执行编辑vi命令)

driver = mysql

connect = host=172.10.2.162 dbname=mailserver user=root password=123456

default\_pass\_scheme = MD5    #  (default\_pass\_scheme是指用户的密码的加密方式：对应users表中password列的值 )

* 1. **安装Postfix、openssl、courier、sasl、pam-mysql等程序**

apt-get -y install postfix postfix-mysql postfix-doc courier-authdaemon courier-authlib-mysql courier-pop courier-pop-ssl libsasl2 libsasl2-modules libsasl2-modules-sql sasl2-bin libpam-mysql openssl

提示和输入：

Create directories for web-based administration? <---- NO

General type of mail configuration: <---- Internet Site

System mail name: <---- 邮件服务器名

SSL certificate required <---- OK

* 1. **创建postfix使用的数据库结构**
     1. **创建库及赋予权限**

**在HA环境下，如果在之前安装postfix时已经创建了，则此时不用再创建。**

下面***加粗斜体字体***为数据库地址、用户名、密码和库名可根据实际情况进行替换。

mysql -u***root*** -p***111111*** -h***192.168.11.250*** -e 'create database ***mail***'

mysql -u***root*** -p***111111*** -h***192.168.11.250*** -e "GRANT SELECT, INSERT, UPDATE, DELETE ON ***mail***.\* TO '***mail\_admin***'@'***192.168.%***' IDENTIFIED BY '***111111***';"

mysql -u***root*** -p***111111*** -h***192.168.11.250*** -e "FLUSH PRIVILEGES;"

* + 1. **创建表结构**

**在HA环境下，如果在之前安装postfix时已经创建了，则此时不用再创建。**

首先需要登录到mysql 命令行下执行下面的sql语句，***加粗斜体字***符需要根据情况实际替换。

mysql -uroot -p111111 -h***192.168.11.250***

USE mail;

CREATE TABLE domains (

domain varchar(50) NOT NULL,

PRIMARY KEY (domain) )

;

CREATE TABLE forwardings (

source varchar(80) NOT NULL,

destination TEXT NOT NULL,

PRIMARY KEY (source) )

;

CREATE TABLE users (

email varchar(80) NOT NULL,

password varchar(20) NOT NULL,

quota INT(10) DEFAULT '10485760',

PRIMARY KEY (email)

);

CREATE TABLE transport (

domain varchar(128) NOT NULL,

transport varchar(128) NOT NULL,

UNIQUE KEY domain (domain)

) ;

* 1. **配置postfix**
     1. **创建postfix连接数据库的查询文件**

下面***加粗斜体字体***为数据库的用户名、密码、库名、表名，需要根据实际情况进行替换

cat >/etc/postfix/mysql-virtual\_domains.cf <<EOOF

user = ***mail\_admin***

password = ***111111***

dbname = ***mail***

table = domains

select\_field = 'virtual'

where\_field = domain

hosts = ***192.168.11.250***

EOOF

cat >/etc/postfix/mysql-virtual\_email2email.cf <<EOF

user = ***mail\_admin***

password = ***111111***

dbname = ***mail***

table = users

select\_field = email

where\_field = email

hosts = ***192.168.11.250***

EOF

cat >/etc/postfix/mysql-virtual\_forwardings.cf <<EOF

user = ***mail\_admin***

password = ***111111***

dbname = ***mail***

table = forwardings

select\_field = destination

where\_field = source

hosts = ***192.168.11.250***

EOF

cat >/etc/postfix/mysql-virtual\_mailboxes.cf <<EOF

user = ***mail\_admin***

password = ***111111***

dbname = ***mail***

table = users

select\_field = CONCAT(SUBSTRING\_INDEX(email,'@',-1),'/',SUBSTRING\_INDEX(email,'@',1),'/')

where\_field = email

hosts = ***192.168.11.250***

EOF

cat >/etc/postfix/mysql-virtual\_mailbox\_limit\_maps.cf <<EOF

user = ***mail\_admin***

password = ***111111***

dbname = ***mail***

table = users

select\_field = quota

where\_field = email

hosts = ***192.168.11.250***

EOF

cat >/etc/postfix/mysql-virtual\_transports.cf< <EOF

user = ***mail\_admin***

password = ***111111***

dbname = ***mail***

table = transport

select\_field = transport

where\_field = domain

hosts = ***192.168.11.250***

EOF

* + 1. **修改这些文件的权限**

chmod o= /etc/postfix/mysql-virtual\_\*.cf

chgrp postfix /etc/postfix/mysql-virtual\_\*.cf

* + 1. **添加vmail用户**

Postfix用此用户权限将邮件写入磁盘

groupadd -g 5000 vmail

useradd -g vmail -u 5000 vmail -d /home/vmail -m

* + 1. **配置postfix的main.cf文件**

下面***加粗斜体字体***为主机名、信任网段、邮件目录和用户，可根据实际情景进行修改

postconf -e 'myhostname = ***mail.qstest.com***'

postconf -e 'mydestination =$myhostname, localhost, localhost.localdomain'

postconf -e 'mynetworks = 127.0.0.0/8,***192.168.0.0/16***'

postconf -e 'virtual\_alias\_domains ='

postconf -e 'virtual\_alias\_maps = proxy:mysql:/etc/postfix/mysql-virtual\_forwardings.cf, mysql:/etc/postfix/mysql-virtual\_email2email.cf'

postconf -e 'virtual\_mailbox\_domains = proxy:mysql:/etc/postfix/mysql-virtual\_domains.cf'

postconf -e 'virtual\_mailbox\_maps = proxy:mysql:/etc/postfix/mysql-virtual\_mailboxes.cf'

postconf -e 'virtual\_mailbox\_base = ***/home/vmail***'

postconf -e 'virtual\_uid\_maps = static:5000'

postconf -e 'virtual\_gid\_maps = static:5000'

postconf -e 'smtpd\_sasl\_auth\_enable = yes'

postconf -e 'broken\_sasl\_auth\_clients = yes'

postconf -e 'smtpd\_sasl\_path = smtpd'

postconf -e 'smtpd\_delay\_reject = no'

postconf -e 'smtpd\_banner = $myhostname ESMTP'

postconf -e 'smtpd\_sender\_restrictions = reject\_unknown\_sender\_domain,reject\_non\_fqdn\_sender'

postconf -e 'smtpd\_recipient\_restrictions = permit\_mynetworks,permit\_sasl\_authenticated, reject\_invalid\_hostname, reject\_non\_fqdn\_hostname, reject\_unknown\_sender\_domain, reject\_non\_fqdn\_sender, reject\_non\_fqdn\_recipient, reject\_unknown\_recipient\_domain, reject\_unauth\_pipelining,reject\_unauth\_destination, reject\_unlisted\_recipient,permit '

postconf -e 'smtpd\_use\_tls = yes'

postconf -e 'smtpd\_tls\_cert\_file = /etc/postfix/ssl/smtpd.crt'

postconf -e 'smtpd\_tls\_key\_file = /etc/postfix/ssl/smtpd.key'

postconf -e 'transport\_maps = proxy:mysql:/etc/postfix/mysql-virtual\_transports.cf'

postconf -e 'virtual\_create\_maildirsize = yes'

postconf -e 'virtual\_mailbox\_extended = yes'

postconf -e 'virtual\_mailbox\_limit\_maps = proxy:mysql:/etc/postfix/mysql-virtual\_mailbox\_limit\_maps.cf'

postconf -e 'virtual\_mailbox\_limit\_override = yes'

postconf -e 'virtual\_maildir\_limit\_message = "The user you are trying to reach is over quota."'

postconf -e 'virtual\_overquota\_bounce = yes'

postconf -e 'proxy\_read\_maps = $local\_recipient\_maps $mydestination $virtual\_alias\_maps $virtual\_alias\_domains $virtual\_mailbox\_maps $virtual\_mailbox\_domains $relay\_recipient\_maps $relay\_domains $canonical\_maps $sender\_canonical\_maps $recipient\_canonical\_maps $relocated\_maps $transport\_maps $mynetworks $virtual\_mailbox\_limit\_maps'

postconf -e 'message\_size\_limit = 10240000 '

* 1. **配置saslauthd**
     1. **创建saslauthd工作目录**

创建saslauthd工作目录

mkdir -p /var/spool/postfix/var/run/saslauthd

* + 1. **赋予saslauthd工作目录执行权限**

vi /etc/init.d/saslauthd

# Function that starts all saslauthd instances

# Parameters: none

# Return value: none

do\_startall()

{

for instance in $DEFAULT\_FILES

do

start\_instance $instance

done

}

修改成：

# Function that starts all saslauthd instances

# Parameters: none

# Return value: none

do\_startall()

{

for instance in $DEFAULT\_FILES

do

start\_instance $instance

done

**chmod -R +x /var/spool/postfix/var/**

}

* + 1. **创建saslauthd的配置文件**

此文件为saslauthd默认配置文件，定义了进程数和认证模式及工作目录等信息

cat > /etc/default/saslauthd <<EOF

START=yes

DESC="SASL Authentication Daemon"

NAME="saslauthd"

MECHANISMS="pam"

THREADS=5

OPTIONS="-c -m /var/spool/postfix/var/run/saslauthd -r"

EOF

* START=yes
* OPTIONS="-c -m /var/spool/postfix/var/run/saslauthd -r"

#-m /var/spool/postfix/var/run/saslauthd 指定saslauthd的工作目录,因为postfix工作在chroot

#下，此文件必须也要在postfix的工作目录下。否则postfix无法连接saslauthd

* MECHANISMS="pam"

认证模式 使用pam模块来认证。

* 以上3个参数为必须修改，其他参数可以使用默认值
  + 1. **创建smtp模块**

sasl使用此pam模块连接到mysql 对用户进行认证

下面***加粗斜体字体***为数据库地址、用户名、密码、库名、表名，需要根据实际情况进行替换

cat > /etc/pam.d/smtp <<EOFF

auth required pam\_mysql.so user=***mail\_admin*** passwd=***111111*** host=***192.168.11.250*** db=***mail*** table=users usercolumn=email passwdcolumn=password crypt=1

account sufficient pam\_mysql.so user=***mail\_admi***n passwd=***111111*** host=***192.168.11.250*** db=***mail*** table=users usercolumn=email passwdcolumn=password crypt=1

EOFF

* + 1. **创建smtpd.conf文件**

此文件为postfix连接sasl的配置文件。用户通过smtp连接postfix，postfix通过此文件调用sasl来认证用户

下面***加粗斜体字体***需要根据实际情况进行替换

cat >/etc/postfix/sasl/smtpd.conf <<EOF

pwcheck\_method: saslauthd

mech\_list: plain login

allow\_plaintext: true

auxprop\_plugin: mysql

sql\_hostnames: ***192.168.11.250***

sql\_user: ***mail\_admin***

sql\_passwd:***111111***

sql\_database: ***mail***

sql\_select: select password from users where email = '%u'

EOF

* pwcheck\_method: saslauthd

使用saslauthd来做认证

* mech\_list: plain login

支持哪些验证机制

* allow\_plaintext: true

是否使用哪个明文密码

* + 1. **创建saslauthd证书**

mkdir -p /etc/postfix/ssl; cd /etc/postfix/ssl;

openssl genrsa -des3 -rand /etc/hosts -out smtpd.key 1024

Enter pass phrase for smtpd.key: 🡨输入密码，要记住此密码，后面会用到

Verifying - Enter pass phrase for smtpd.key: 🡨重复输入密码

openssl req -new -key smtpd.key -out smtpd.csr

Enter pass phrase for smtpd.key: 🡨输入刚才的密码

Country Name (2 letter code) [AU]:cn 🡨输入 cn

State or Province Name (full name) [Some-State]: 🡨输入空格

Locality Name (eg, city) []:beijing 🡨输入beijing

Organization Name (eg, company) [Internet Widgits Pty Ltd]:quanshi ltd 🡨输入quanshi ltd

Organizational Unit Name (eg, section) []: 🡨输入空格

Common Name (eg, YOUR name) []:zhaixigui 🡨输入一个管理员名字

Email Address []: 🡨输入一个管理员的邮件地址

Please enter the following 'extra' attributes

to be sent with your certificate request

A challenge password []: 🡨输入空格

An optional company name []: 🡨输入空格

openssl x509 -req -days 3650 -in smtpd.csr -signkey smtpd.key -out smtpd.crt

Enter pass phrase for smtpd.key: 🡨输入刚才的密码

openssl rsa -in smtpd.key -out smtpd.key.unencrypted

Enter pass phrase for smtpd.key: 🡨输入刚才的密码

mv -f smtpd.key.unencrypted smtpd.key

openssl req -new -x509 -extensions v3\_ca -keyout cakey.pem -out cacert.pem -days 3650

Enter PEM pass phrase: 🡨输入刚才的密码

Verifying - Enter PEM pass phrase: 🡨输入刚才的密码

Enter pass phrase for smtpd.key: 🡨输入刚才的密码

Country Name (2 letter code) [AU]:cn 🡨输入 cn

State or Province Name (full name) [Some-State]: 🡨输入空格

Locality Name (eg, city) []:beijing 🡨输入beijing

Organization Name (eg, company) [Internet Widgits Pty Ltd]:quanshi ltd 🡨输入quanshi ltd

Organizational Unit Name (eg, section) []: 🡨输入空格

Common Name (eg, YOUR name) []:zhaixigui 🡨输入一个管理员名字

Email Address []: 🡨输入一个管理员的邮件地址

* 1. **配置 Courier**
     1. **配置authdaemon**

此为一个daemon，为courier-pop courier-pop-ssl提供用户认证。

cat >/etc/courier/authdaemonrc <<EOF

authmodulelist="authmysql"

authmodulelistorig="authuserdb authpam authpgsql authldap authmysql authcustom authpipe"

daemons=5

authdaemonvar=/var/run/courier/authdaemon

DEBUG\_LOGIN=2

DEFAULTOPTIONS=""

LOGGEROPTS=""

EOF

* authmodulelist="authmysql" 这个参数为必须修改，其他参数可以使用默认值
  + 1. **配置authmysqlrc**

此文件为authdaemon连接mysql的配置文件，通过此文件authdaemon完成对用户认证的过程。

下面***加粗斜体字体***需要根据实际情况进行替换

cat >/etc/courier/authmysqlrc <<EOFF

MYSQL\_SERVER ***192.168.11.184***

MYSQL\_USERNAME ***mail\_admin***

MYSQL\_PASSWORD ***111111***

MYSQL\_PORT ***3306***

MYSQL\_DATABASE ***mail***

MYSQL\_USER\_TABLE users

MYSQL\_CRYPT\_PWFIELD password

#MYSQL\_CLEAR\_PWFIELD password

MYSQL\_UID\_FIELD 5000

MYSQL\_GID\_FIELD 5000

MYSQL\_LOGIN\_FIELD email

MYSQL\_HOME\_FIELD "/home/vmail"

MYSQL\_MAILDIR\_FIELD CONCAT(SUBSTRING\_INDEX(email,'@',-1),'/',SUBSTRING\_INDEX(email,'@',1),'/')

#MYSQL\_NAME\_FIELD

MYSQL\_QUOTA\_FIELD quota

EOFF

* 1. **启动服务**

启动postfix

/etc/init.d/postfix restart

检查postfix的目录方面的权限

postfix check

启动sasl2

/etc/init.d/saslauthd restart

启动authdaemon

/etc/init.d/courier-authdaemon restart

启动pop3

/etc/init.d/courier-pop restart

/etc/init.d/courier-pop-ssl restart

* 1. **增加虚拟域和用户**

登陆mysql 命令行下执行下面的sql语句，下面***加粗斜体字符***需要根据实际情况进行替换。

mysql -u***root*** -p***111111*** -h***192.168.11.250*** ***mail***

增加一个虚拟域

INSERT INTO `domains` (`domain`) VALUES ('qstest.com');

增加一个用户

INSERT INTO `users` (`email`, `password`, `quota`) VALUES ('sales@qstest.com', ENCRYPT('secret'), 10485760);

增加一个别名

INSERT INTO `forwardings` (`source`, `destination`) VALUES ('info@qstest.com', 'sales@qstest.com');

增加一个默认转发

INSERT INTO `transport` (`domain`, `transport`) VALUES ('qstest.com', 'smtp:mail.qstest.com');

**添加用户所用的目录**

cd /home/vmail/

mkdir qstest.com

cd qstest.com

mkdir sales

cd sales

mkdir cur

**用户名需要使用“用户名”@“域名”这样的格式，本手册使用的加密模式为ENCRYPT，邮箱的quota使用的字节为单位。以上的具体规则请见运维手册8.3节详细解释**

* 1. **安装配置 heartbeat**

Heartbeat没有自带监控postfix和sasl、pop3的脚本，因此手动创建了编写了一个脚本，名叫mailserver.sh。heart通过此脚本可对postfix、sasl2和pop3进行监控、启动、关闭等功能。

**因postfix是安装在SMS服务器上，因原来已经安装了Heartbeat，所以不再需要安装heartbeat了，只需要修改heartbeat的监控，把mailserver加载进去。整个过程只需要修改cib.xml和haresources两个文件。**

* + 1. **特定修改**

**当heartbeat监控mailserver.sh时，需要在heartbeat配置过程使用以下的配置进行修改，以替代文中相对应的地方。此处特别注意**

* + - 1. **定义haresources文件**

Heartbeat需要监控的资源为ldirectord，其heartbeat的/etc/ha.d/haresources的配置为如下所示，请特别注意，因原来此机器为SMS服务器，并且为HA环境。故而只需要将mailserve.sh加入进去。不做任何其他的修改。重新生成cib.xml文件。

例如，如果原来的**haresources文件内容为**

master 192.168.11.251 tomcat\_sms.sh

将其修改

master 192.168.11.251 tomcat\_sms.sh ***mailserver.sh***

* + - 1. **重建cib.xml**

rm -rf /var/lib/heartbeat/crm/cib.\*

删除旧的cib.xml及相关文件

/usr/lib/heartbeat/haresources2cib.py

重建新的cib.xml文件

sed -i -e 's/interval="120s"/interval="30s"/g;s/timeout="60s"/timeout="15s"/g' /var/lib/heartbeat/crm/cib.xml

修改crm监控资源的间隔，本手册采用的是每个30秒查看一次资源是否正常，如果60秒没有检测出资源正常则将资源切到slave上。

sed -i -e '/default-resource-stickiness/ s:value="0":value="100":g' /var/lib/heartbeat/crm/cib.xml

sed -i -e '/default-resource-failure-stickiness/ s:value="0":value="-100":g' /var/lib/heartbeat/crm/cib.xml

当主机宕机后恢复，是否将资源切回主机上。此设置为不切回。

如果资源脚本的脚本类型为heartbeat需要修改成ocf或者lsb，这样heartbeat才能使用它。

chown -R hacluster:haclient /var/lib/heartbeat

修改/var/lib/heartbeat目录属性，使heartbeat可以修改cib.xml文件。

ssh [root@192.168.11.189](mailto:root@192.168.11.189) 'rm -rf /var/lib/heartbeat/crm/\*'

scp /var/lib/heartbeat/crm/cib.xml [root@192.168.11.189:/var/lib/heartbeat/crm/](mailto:root@192.168.11.189:/var/lib/heartbeat/crm/)

将cib.xml文件拷贝到slave上

* + - 1. **创建mailserver.sh脚本**

此脚本已创建完成，代码见附件一。将附见一的代码拷贝到/usr/lib/ocf/resource.d/heartbeat/mailserver.sh.然后赋予执行权限，并且拷贝至/etc/init.d/下

chmod +x /usr/lib/ocf/resource.d/heartbeat/mailserver.sh

cp /usr/lib/ocf/resource.d/heartbeat/mailserver.sh /etc/init.d/

* + - 1. **关闭监控的资源自启动**

被监控的资源的启动关闭都是由heartbeat控制的，因此需要关闭这些资源自身的自启动功能。**此操作需要在master和slave上同时执行。**

apt-get install rcconf

运行rcconf命令，在窗口中取消自启动资源的前[\*]内的\*，保存退出。

例如要禁止apache2资源的自启动：

[\*] courier-authdaemon

[\*] courier-pop

[\*] courier-pop-ssl

[\*] heartbeat

[\*] postfix

[\*] saslauthd

改成

[]courier-authdaemon

[] courier-pop

[] courier-pop-ssl

[\*] heartbeat

[] postfix

[] saslauthd

保存退出

* + - 1. **重启heartbeat**

/etc/init.d/heartbeat start

ssh root@***192.168.11.189*** '/etc/init.d/heartbeat start'

*启动slave的hearbeat*

* + 1. **详见《Heartbeat部署及运维手册》**



* 1. **配置邮件同步**

邮件同步使用的NFS挂载远程存储的方式实现。**在配置之前需要先在存储上划分出一部分空间，并且告知具体的NFS目录路径。**

挂载和卸载nfs目录的过程通过脚本实现，脚本见附件二

拷贝附件二的内容到/etc/init.d/mount\_vmail.sh

chmod +x /etc/init.d/mount\_vmail.sh

/etc/init.d/mount\_vmail.sh start

chown -R vmail:vmail /home/vmail/

* 1. **部署验证**
     1. **验证postfix部署**
        1. **查看进程是否存在**

ps-elf

如果没有以下信息表示postfix没有启动或者启动出现问题。

root 31792 1 0 Jul30 ? 00:00:00 /usr/lib/postfix/master

postfix 31795 31792 0 Jul30 ? 00:00:00 qmgr -l -t fifo -u

postfix 31798 31792 0 Jul30 ? 00:00:00 tlsmgr -l -t unix -u –c

如果没有以下信息表示saslauthd没有启动或者启动出现问题

root 27209 1 0 Jul29 ? 00:00:00 /usr/sbin/saslauthd -a pam -c -m /var/spool/postfix/var/run/saslauthd -r -n 5

root 27210 27209 0 Jul29 ? 00:00:00 /usr/sbin/saslauthd -a pam -c -m /var/spool/postfix/var/run/saslauthd -r -n 5

root 27212 27209 0 Jul29 ? 00:00:00 /usr/sbin/saslauthd -a pam -c -m /var/spool/postfix/var/run/saslauthd -r -n 5

root 27213 27209 0 Jul29 ? 00:00:00 /usr/sbin/saslauthd -a pam -c -m /var/spool/postfix/var/run/saslauthd -r -n 5

root 27214 27209 0 Jul29 ? 00:00:00 /usr/sbin/saslauthd -a pam -c -m /var/spool/postfix/var/run/saslauthd -r -n 5

如果没有出现以下信息表示authdaemon没有启动成功或启动出现问题

root 25423 25422 0 Jul28 ? 00:00:00 /usr/lib/courier/courier-authlib/authdaemond

root 25425 25423 0 Jul28 ? 00:00:00 /usr/lib/courier/courier-authlib/authdaemond

root 25426 25423 0 Jul28 ? 00:00:00 /usr/lib/courier/courier-authlib/authdaemond

root 25427 25423 0 Jul28 ? 00:00:00 /usr/lib/courier/courier-authlib/authdaemond

root 25428 25423 0 Jul28 ? 00:00:00 /usr/lib/courier/courier-authlib/authdaemond

root 25429 25423 0 Jul28 ? 00:00:00 /usr/lib/courier/courier-authlib/authdaemond

如果没有出现以下信息表示pop3没有启动成功或启动失败

root 25242 1 0 Jul28 ? 00:00:00 /usr/sbin/courierlogger -pid=/var/run/courier/pop3d.pid -start -name=pop3d /usr/sbin/couriertcpd -maxprocs=40

root 25243 25242 0 Jul28 ? 00:00:00 /usr/sbin/couriertcpd -maxprocs=40 -maxperip=4 -nodnslookup -noidentlookup -address=0 110 /usr/lib/courier/co

root 25265 1 0 Jul28 ? 00:00:00 /usr/sbin/courierlogger -pid=/var/run/courier/pop3d-ssl.pid -start -name=pop3d-ssl /usr/sbin/couriertcpd -add

root 25266 25265 0 Jul28 ? 00:00:00 /usr/sbin/couriertcpd -address=0 -maxprocs=40 -maxperip=4 -nodnslookup -noidentlookup 995 /usr/bin/couriertls

root 25422 1 0 Jul28 ? 00:00:00 /usr/sbin/courierlogger -pid=/var/run/courier/authdaemon/pid -start /usr/lib/courier/courier-authlib/authdaem

* + - 1. **查看端口是否存在**

netstat –ntlp

若果出现以下提示表示postfix启动成功

tcp 0 0 0.0.0.0:25 0.0.0.0:\* LISTEN 31792/master

如果出现以下提示表示pop3启动成功

tcp6 0 0 :::110 :::\* LISTEN 25266/couriertcpd

如果出现以下提示表示pop3-ssl启动成功

tcp6 0 0 :::995 :::\* LISTEN 25243/couriertcpd

* + - 1. **检查服务是否正常**

如果出现以下2条红色字段表示postfix和sasl结合成功，可以使用sasl来为smtp做认证。

telnet 192.168.11.184 25

Trying 127.0.0.1...

Connected to localhost.

Escape character is '^]'.

220 mail.qstest.com ESMTP

**🡨 输入 ehlo abc.com**

250-mail.qstest.com

250-PIPELINING

250-SIZE 10240000

250-VRFY

250-ETRN

250-STARTTLS

250-AUTH LOGIN PLAIN

250-AUTH=LOGIN PLAIN

250-ENHANCEDSTATUSCODES

250-8BITMIME

250 DSN

如果出现以下1条红色字体表示pop3服务能正常提供服务

telnet localhost 110

Trying 192.168.11.184...

Connected to 192.168.11.184.

Escape character is '^]'.

+OK Hello there.

**🡨输入user zhaixigui@qstest.com**

+OK Password required.

如果出现以下提示表示pop3-ssl能正常提供服务

telnet 192.168.11.184 995

Connected to 192.168.11.184.

Escape character is '^]'.

* + - 1. **工具测试**

在outlook或者foxmail中配置一个账户（例如：[sales@qstest.com](mailto:sales@qstest.com)）。测试能否发送邮件和接受邮件

* + 1. **验证vmail目录挂载**

/etc/init.d/mount\_vmail.sh status

如果出现以下信息表示nfs挂载vmail目录成功

192.168.11.202:**/root/quanshi/mail** /home/vmail type nfs (rw,addr=192.168.11.202)

1. **运维手册**
   1. **配置文件说明**

**目录文件：** /etc/postfix/

**文件说明:** 此目录为postfix默认配置目录。

**目录文件：** /etc/postfix/sasl

**文件说明:** 此目录为此目录为postfix内嵌的sasl的配置目录，此目录中只有一个文件smtpd.conf

**配置文件：** /etc/courier/

**文件说明：** 此为courier-pop courier-pop-ssl程序的配置目录

**程序文件：**/usr/lib/postfix/master

**文件说明：**此为postfix的主程序文件。

**程序文件：**/usr/sbin/saslauthd

**文件说明：**此为saslauthd的主程序文件

**程序文件：**/usr/lib/courier/courier-authlib/authdaemond

**文件说明：**此为authdaemond的主程序文件

**脚本文件：**/etc/init.d/postfix

**脚本参数：** {start|stop|restart|reload|flush|check|abort|force-reload}

**文件说明：**此为postfix启动脚本

**脚本文件：**/etc/init.d/courier-authdaemon

**脚本参数：**{start|stop|restart|reload|force-reload}

**文件说明：**此为authdaemon启动脚本

**脚本文件：**/etc/init.d/ courier-pop

**脚本参数：**{start|stop|restart|reload|force-reload}

**文件说明：**此为pop3启动脚本

**脚本文件：**/etc/init.d/ courier-pop-ssl

**脚本参数：**{start|stop|restart|reload|force-reload}

**文件说明：**此为pop3-ssl启动脚本

**脚本文件：**/etc/init.d/ saslauthd

**脚本参数：**{start|stop|restart|reload|force-reload}

**文件说明：**此为saslauthd启动脚本

**配置文件：**/etc/postfix/main.cf

**文件说明：**此为postfix的主配置文件，postfix除了认证部分其他的配置均在此文件中

**配置文件：**/etc/postfix/mysql-virtual\_domains.cf

**文件说明：**此文件为postfix的虚拟域配置

**配置文件：**/etc/postfix/mysql-virtual\_email2email.cf

**文件说明：**此文件为postfix的用户别名文件

**配置文件：**/etc/postfix/mysql-virtual\_forwardings.cf

**文件说明：**同mysql-virtual\_email2email.cf一样

**配置文件：**/etc/postfix/mysql-virtual\_mailboxes.cf

**文件说明：**此文件为postfix的邮箱目录位置的配置文件

**配置文件：**/etc/postfix/mysql-virtual\_mailbox\_limit\_maps.cf

**文件说明：**此文件为postfix邮箱大小的配置文件

**配置文件：**/etc/postfix/mysql-virtual\_transports.cf

**文件说明：**此文件为postfix的邮件路由配置文件

**配置文件：**/etc/postfix/ssl/smtpd.key

**文件说明：**此文件为smtp登陆认证的的密钥

**配置文件：**/etc/postfix/ssl/smtpd.crt

**文件说明：**此文件为smtp登陆认证的的公钥

**配置文件：**/etc/postfix/mysql-virtual\_transports.cf

**文件说明：**此文件为postfix的邮件路由配置文件

**配置文件：**/etc/postfix/mysql-virtual\_transports.cf

**文件说明：**此文件为postfix的邮件路由配置文件

**配置文件：**/etc/default/saslauthd

**文件说明：**此文件为saslauthd的配置文件，此文件定义了saslauthd使用pam方式来认证用户

**配置文件：**/etc/pam.d/smtpd

**文件说明：**此文件为smtp认证模块，当smtp用户登录时将调用此文件中配进行认证，此文件为saslauthd使用

**配置文件：**/etc/courier/authdaemonrc

**文件说明：**此文件为authdaemon的配置文件，定义使用authmysql方式来认证pop3登陆的用户

**配置文件：**/etc/courier/authmysqlrc

**文件说明：**此文件为authmysql认证模块的具体配置，此文件中的不能有tab控制符，必须要用空格来代替。

**日志文件：**/var/log/auth.log

**文件说明：**此文件记录用户登陆认证过程。

**日志文件：**/var/log/ mail.err

**日志说明：**此文件记录postfix运行过程遇到的错误。

**配置文件：** /var/log/ mail.info

**日志说明：** 此文件记录了postfix邮件投递的过程。

**配置文件：** /var/log/ mail.log

**日志说明：** 此文件记录了用户登录有机投递的整个过程。

**配置文件：** /var/log/syslog

**日志说明：** 此文件记录的内容与mail.log差不多。

* 1. **参数说明**
     1. **Mail.cf文件说明**

postconf -e 'myhostname = mail.qstest.com'

#postfix的主机名

postconf -e 'mydestination =$myhostname, localhost, localhost.localdomain'

#postfix的本地域名，主机名，此处不要定义虚拟域，也不要指定备份的postfix服务器域名。

postconf -e 'mynetworks = 127.0.0.0/8,192.168.0.0/16'

#本机的网路，已经信任的网络。

postconf -e 'virtual\_alias\_domains ='

postconf -e 'virtual\_alias\_maps = proxy:mysql:/etc/postfix/mysql-virtual\_forwardings.cf, mysql:/etc/postfix/mysql-virtual\_email2email.cf'

#定义了postfix的别名，此处的别名必须要使用完整的邮件地址。如：test@qstest.com

postconf -e 'virtual\_mailbox\_domains = proxy:mysql:/etc/postfix/mysql-virtual\_domains.cf'

#定义了postfix的虚拟域

postconf -e 'virtual\_mailbox\_maps = proxy:mysql:/etc/postfix/mysql-virtual\_mailboxes.cf'

#定义了postfix的邮箱路径

postconf -e 'virtual\_mailbox\_base = /home/vmail'

#定义了postfix的邮件存放地

postconf -e 'virtual\_uid\_maps = static:5000'

#定义以那个用户权限存储放邮件

postconf -e 'virtual\_gid\_maps = static:5000'

#定义以那个用户权限存储放邮件

postconf -e 'smtpd\_sasl\_auth\_enable = yes'

#启用sasl认证

postconf -e 'broken\_sasl\_auth\_clients = yes'

#启用兼容老邮件客户端客认证，例如 MicroSoft Outlook Express version 4。

postconf -e 'smtpd\_sasl\_path = smtpd'

#postfix通过此文件将用户的smtp用户登录传递个sasl来做认证，postfix会对这个参数后加上.conf来查找此文件。

postconf -e 'smtpd\_delay\_reject = no'

#yes为多阶段过滤，当在上一个阶段匹配的规则不会理解执行，会继续过滤接下来的阶段。# 上个阶段过程动作会被下个阶段过滤的动作覆盖。

#no 为单阶段过滤，把多个阶段连成一个阶段。一旦匹配规则就立即执行。

postconf -e 'smtpd\_banner = $myhostname ESMTP'

#提示信息，当连接到本机的postfix后，返回的提示信息。

postconf -e 'smtpd\_sender\_restrictions = reject\_unknown\_sender\_domain,reject\_non\_fqdn\_sender'

#邮件发送人过滤规则，具体查postfix手册。

postconf -e 'smtpd\_recipient\_restrictions = permit\_mynetworks,permit\_sasl\_authenticated, reject\_invalid\_hostname, reject\_non\_fqdn\_hostname, reject\_unknown\_sender\_domain, reject\_non\_fqdn\_sender, reject\_non\_fqdn\_recipient, reject\_unknown\_recipient\_domain, reject\_unauth\_pipelining,reject\_unauth\_destination, reject\_unlisted\_recipient,permit '

#邮件接收人过滤规则，具体请查postfix手册

postconf -e 'smtpd\_use\_tls = yes'

#开启tls

postconf -e 'smtpd\_tls\_cert\_file = /etc/postfix/ssl/smtpd.crt'

postconf -e 'smtpd\_tls\_key\_file = /etc/postfix/ssl/smtpd.key'

postconf -e 'transport\_maps = proxy:mysql:/etc/postfix/mysql-virtual\_transports.cf'

#postfix的邮件路由，比如将一个域的所有邮件转发到另一个域上

postconf -e 'virtual\_create\_maildirsize = yes'

postconf -e 'virtual\_mailbox\_extended = yes'

postconf -e 'virtual\_mailbox\_limit\_maps = proxy:mysql:/etc/postfix/mysql-virtual\_mailbox\_limit\_maps.cf'

#postfix通过此文件查看邮件大小

postconf -e 'virtual\_mailbox\_limit\_override = yes'

postconf -e 'virtual\_maildir\_limit\_message = "The user you are trying to reach is over quota."'

#当邮箱超过配额后提示信息

postconf -e 'virtual\_overquota\_bounce = yes'

postconf -e 'proxy\_read\_maps = $local\_recipient\_maps $mydestination $virtual\_alias\_maps $virtual\_alias\_domains $virtual\_mailbox\_maps $virtual\_mailbox\_domains $relay\_recipient\_maps $relay\_domains $canonical\_maps $sender\_canonical\_maps $recipient\_canonical\_maps $relocated\_maps $transport\_maps $mynetworks $virtual\_mailbox\_limit\_maps'

postconf -e 'message\_size\_limit'

#设定邮件的大小，默认为10M，超过此值将会被过滤掉。

* 1. **postfix数据库说明**
     1. **MySQL Database Structure**

The domains table will store each virtual domain that Postfix should receive emails for (e.g. example.com).

|  |
| --- |
| **domain** |
| example.com |

The forwardings table is for aliasing one email address to another, e.g. forward emails for info@example.com to sales@example.com.

|  |  |
| --- | --- |
| **source** | **destination** |
| info@example.com | sales@example.com |

The users table stores all virtual users (i.e. email addresses, because the email address and user name is the same) and passwords (in encrypted form!) and a quota value for each mail box (in this example the default value is 10485760 bytes which means 10MB).

|  |  |  |
| --- | --- | --- |
| **email** | **password** | **quota** |
| info@example.com | No9.E4skNvGa. | 10485760 |

The transport table is optional and is for advanced users. It allows us to forward mails for single users, whole domains or all mails to another server. For example,

|  |  |
| --- | --- |
| **domain** | **transport** |
| example.com | smtp:[1.2.3.4] |

would forward all emails for example.com via the smtp protocol to the server with the IP address 1.2.3.4 (the square brackets [] mean "do not make a lookup of the MX DNS record" (which makes sense for IP addresses...). If you use a fully qualified domain name (FQDN) instead you would not use the square brackets.).

* + 1. **Forwarding Options**

The forwardings table can have entries as follows:

|  |  |  |
| --- | --- | --- |
| **source** | **destination** | **description** |
| info@example.com | sales@example.com | Redirects emails for info@example.com to sales@example.com |
| @example.com | thomas@example.com | Creates a Catch-All account for thomas@example.com. All emails to example.com will arrive at thomas@example.com, except those that exist in the users table (i.e., if sales@example.com exists in the users table, mails to sales@example.com will still arrive at sales@example.com). |
| @example.com | @anotherdomain.com | This redirects all emails to example.com to the same user at anotherdomain.tld. E.g., emails to thomas@example.com will be forwarded to thomas@anotherdomain.tld. |
| info@example.com | sales@example.com, billing@anotherdomain.com | Forward emails for info@example.com to two or more email addresses. All listed email addresses under destination receive a copy of the email. |

* + 1. **Transport Options**

The transport table can have entries like these:

|  |  |  |
| --- | --- | --- |
| **domain** | **transport** | **description** |
| example.com | : | Delivers emails for example.com locally. This is as if this record would not exist in this table at all. |
| example.com | smtp:mail.anotherdomain.com | Delivers all emails for example.com via smtp to the server mail.anotherdomain.com. |
| example.com | smtp:mail.anotherdomain.com:2025 | Delivers all emails for example.com via smtp to the server mail.anotherdomain.com, but on port 2025, not 25 which is the default port for smtp. |
| example.com | smtp:[1.2.3.4], smtp:[1.2.3.4]:2025, smtp:[mail.anotherdomain.tld] | The square brackets prevent Postfix from doing lookups of the MX DNS record for the address in square brackets. Makes sense for IP addresses. |
| .example.com | smtp:mail.anotherdomain.com | Mail for any subdomain of example.com is delivered to mail.anotherdomain.com. |
| \* | smtp:mail.anotherdomain.com | All emails are delivered to mail.anotherdomain.com. |
| joe@example.com | smtp:mail.anotherdomain.com | Emails for joe@example.com are delivered to mail.anotherdomain.com. |

Please keep in mind that the order of entries in the transport table is important! The entries will be followed from the top to the bottom.

Important: Postfix uses a caching mechanism for the transports, therefore it might take a while until you changes in the transport table take effect. If you want them to take effect immediately, run

1. **附件一**

#!/bin/bash

#configuration

COMMAND=$1

export PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games

#Default error exit code

err\_exitid=7

#defined log file

checkmail\_log=/var/log/check\_mail.log

#mount vmail folder script

mount\_vmail=/etc/init.d/mount\_vmail.sh

usage(){

cat <<-EOF

usage: $0 action

action:

start start the mail server

stop stop the mail server

restart restart the mail server

status return the status of mail, run or down

monitor return TRUE if the mail appears to be working.

EOF

exit $err\_exitid

}

stop\_mail\_error\_flag=0

stop\_mail\_error\_mesg=""

stop\_status\_mailserver(){

#check nfs vmail

$mount\_vmail status

if [ $? -eq 0 ];then

stop\_mail\_error\_flag=1

stop\_mail\_error\_mesg="$(date '+%Y%m%d %T'): stop : NFS vmail was mounted\n"

fi

#check postfix

local postfix\_ck\_code="$(pidof master)"

if [ "$postfix\_ck\_code" ];then

stop\_mail\_error\_flag=1

stop\_mail\_error\_mesg="$(date '+%Y%m%d %T') : stop : postfix process exists\n"

fi

#check saslauthd

local sasl\_ck\_code="$(pidof saslauthd)"

if [ "$sasl\_ck\_code" ];then

stop\_mail\_error\_flag=1

stop\_mail\_error\_mesg="${stop\_mail\_error\_mesg}$(date '+%Y%m%d %T') : stop : saslauthd process exists\n"

fi

#check authdaemond

local auth\_ck\_code="$(pidof authdaemond)"

if [ "$auth\_ck\_code" ];then

stop\_mail\_error\_flag=1

stop\_mail\_error\_mesg="${stop\_mail\_error\_mesg}$(date '+%Y%m%d %T') : stop : authdaemond process exists\n"

fi

#check pop3 pop3-ssl

local logger\_ck\_code="$(pidof courierlogger)"

local tcpd\_ck\_code="$(pidof couriertcpd)"

if [ "$logger\_ck\_code" -o "$tcpd\_ck\_code" ];then

stop\_mail\_error\_flag=1

stop\_mail\_error\_mesg="${stop\_mail\_error\_mesg}$(date '+%Y%m%d %T') : stop : pop3 or pop3-ssl process exists\n"

fi

#check postfix port

if (netstat -ntlp|grep -q master);then

stop\_mail\_error\_flag=1

stop\_mail\_error\_mesg="${stop\_mail\_error\_mesg}$(date '+%Y%m%d %T') : stop : postfix ports doesn't exists\n"

fi

#check pop3 and pop3-ssl port

if (netstat -ntlp|grep couriertcpd|grep -q "110\|995");then

stop\_mail\_error\_flag=1

stop\_mail\_error\_mesg="${stop\_mail\_error\_mesg}$(date '+%Y%m%d %T') : stop : pop3 or pop3-ssl ports doesn't exists\n"

fi

if [ $stop\_mail\_error\_flag -eq 1 ];then

printf "$stop\_mail\_error\_mesg"

printf "$stop\_mail\_error\_mesg" >> $checkmail\_log

exit $err\_exitid

else

echo "mailserver is stopped ..."

exit 0

fi

}

mail\_error\_flag=0

mail\_error\_mesg=""

status\_mailserver(){

#check nfs vmail

$mount\_vmail status

if [ $? -ne 0 ];then

mail\_error\_flag=1

stop\_mail\_error\_mesg="$(date '+%Y%m%d %T') : NFS vmail don't mounted\n"

fi

#check postfix

local postfix\_ck\_code="$(pidof master)"

if [ ! "$postfix\_ck\_code" ];then

mail\_error\_flag=1

mail\_error\_mesg="$(date '+%Y%m%d %T') : postfix process doesn't exists\n"

fi

#check saslauthd

local sasl\_ck\_code="$(pidof saslauthd)"

if [ ! "$sasl\_ck\_code" ];then

mail\_error\_flag=1

mail\_error\_mesg="${mail\_error\_mesg}$(date '+%Y%m%d %T') : saslauthd process doesn't exists\n"

fi

#check authdaemond

local auth\_ck\_code="$(pidof authdaemond)"

if [ ! "$auth\_ck\_code" ];then

mail\_error\_flag=1

mail\_error\_mesg="${mail\_error\_mesg}$(date '+%Y%m%d %T') : authdaemond process doesn't exists\n"

fi

#check pop3 pop3-ssl

local logger\_ck\_code="$(pidof courierlogger)"

local tcpd\_ck\_code="$(pidof couriertcpd)"

if [ ! "$logger\_ck\_code" -o ! "$tcpd\_ck\_code" ];then

mail\_error\_flag=1

mail\_error\_mesg="${mail\_error\_mesg}$(date '+%Y%m%d %T') : pop3 or pop3-ssl process doesn't exists\n"

fi

#check postfix port

if (! netstat -ntlp|grep -q master);then

mail\_error\_flag=1

mail\_error\_mesg="${mail\_error\_mesg}$(date '+%Y%m%d %T') : postfix ports doesn't exists\n"

fi

#check pop3 and pop3-ssl port

if (! netstat -ntlp|grep couriertcpd|grep -q "110\|995");then

mail\_error\_flag=1

mail\_error\_mesg="${mail\_error\_mesg}$(date '+%Y%m%d %T') : pop3 or pop3-ssl ports doesn't exists\n"

fi

if [ $mail\_error\_flag -eq 1 ];then

printf "$mail\_error\_mesg"

printf "$mail\_error\_mesg" >> $checkmail\_log

exit $err\_exitid

else

echo "mailserver is runinng ..."

exit 0

fi

}

stop\_mailserver(){

#stop mailserver

/etc/init.d/postfix stop

/etc/init.d/saslauthd stop

/etc/init.d/courier-authdaemon stop

/etc/init.d/courier-pop stop

/etc/init.d/courier-pop-ssl stop

#mount vmail folder

$mount\_vmail stop

#check mailserver

stop\_status\_mailserver

}

start\_mailserver(){

#start vmail folder

$mount\_vmail start

#starting mailserver

/etc/init.d/postfix start

/etc/init.d/saslauthd start

/etc/init.d/courier-authdaemon start

/etc/init.d/courier-pop start

/etc/init.d/courier-pop-ssl start

#check mailserver

status\_mailserver

}

restart\_mailserver(){

#restart vmail folder

$mount\_vmail restart

#restarting.. mailserver

/etc/init.d/postfix restart

/etc/init.d/saslauthd restart

/etc/init.d/courier-authdaemon restart

/etc/init.d/courier-pop restart

/etc/init.d/courier-pop-ssl restart

#check mailserver

status\_mailserver

}

case $COMMAND in

start)start\_mailserver;;

stop)stop\_mailserver;;

restart)restart\_mailserver;;

status)status\_mailserver;;

monitor)status\_mailserver;;

\*)usage;;

esac **附件二**

#!/bin/sh

#configuration

#**红色加粗字体**部分需要根据实际情况进行替换

COMMAND=$1

usage(){

cat <<-EOF

usage: $0 action

action:

start mount remote DB and WWW directory of postfix home

stop umount remote DB and WWW directory of postfix home

restart umount and mount

status check resource of mount

monitor check resource of mount

EOF

exit 7

}

start\_mount(){

mount -t nfs 192.168.67.8:**/root/quanshi/mail** /home/vmail

sleep 1

mount -t nfs 192.168.67.8:**/root/quanshi/mail** /home/vmail

}

stop\_mount(){

umount -t nfs 192.168.67.8:**/root/quanshi/mail**

exit $?

}

status\_mount(){

mount -t nfs |grep 192.168.67.8

exit $?

}

monitor\_mount(){

mount -t nfs |grep 192.168.67.8

exit $?

}

case $COMMAND in

start)start\_mount;;

stop)stop\_mount;;

restart)stop\_mount;status\_mount;;

status)status\_mount;;

monitor)monitor\_mount;;

\*)usage;;

esac