

### 组网及说明

将LINUX red hat 6.0 配置为E-MAIL邮件服务器

### 配置步骤

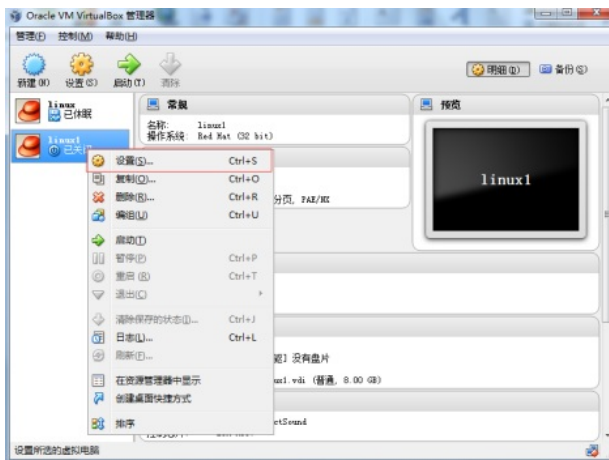
- 1、挂载光驱。
- 2、安装E-MAIL邮件服务器所需要的组件。
- 3、配置E-MAIL邮件服务器的主配置文件等其他组件的文件。
- 4、创建邮件服务器的用户。
- 5、启动E-MAIL邮件服务器。
- 6、通过发邮件来测试E-MAIL邮件服务器的功能特性。

### 配置关键点

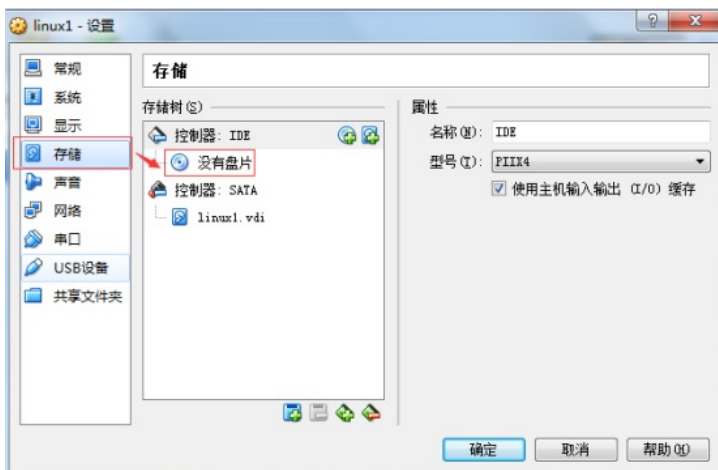
#### 1、挂载光驱

(1)、挂载光驱，将ISO镜像放入虚拟机：（提示：如果先前已经挂载过光驱后，则无需再挂在，但是如果已经执行过关机或者重启后，则需要挂载）

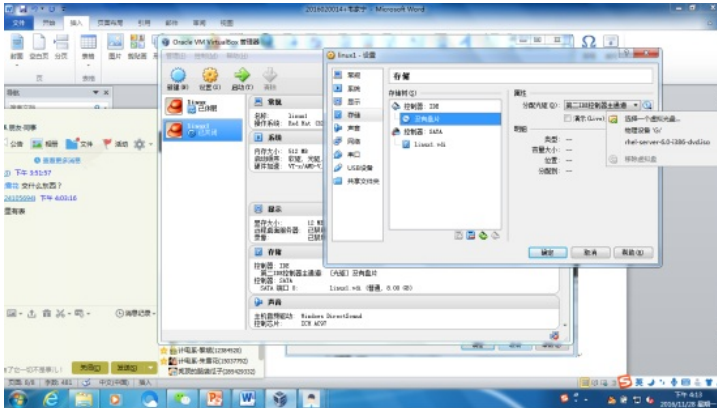
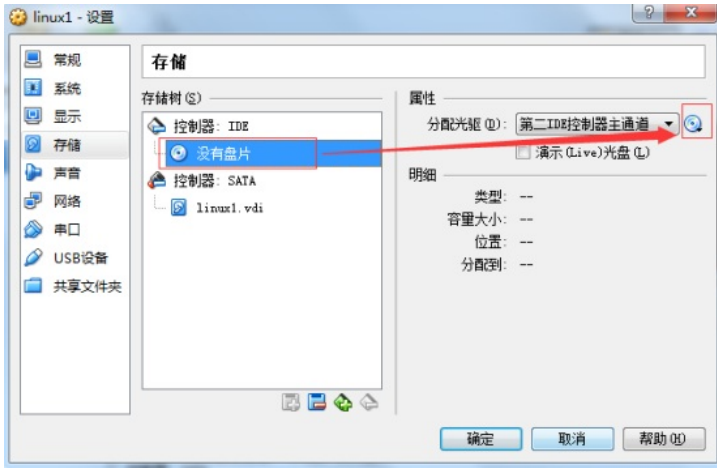
(1.1)、选中我们创建的虚拟机后，点击鼠标右键，再弹出的选项中，选择“设置”这个选项：



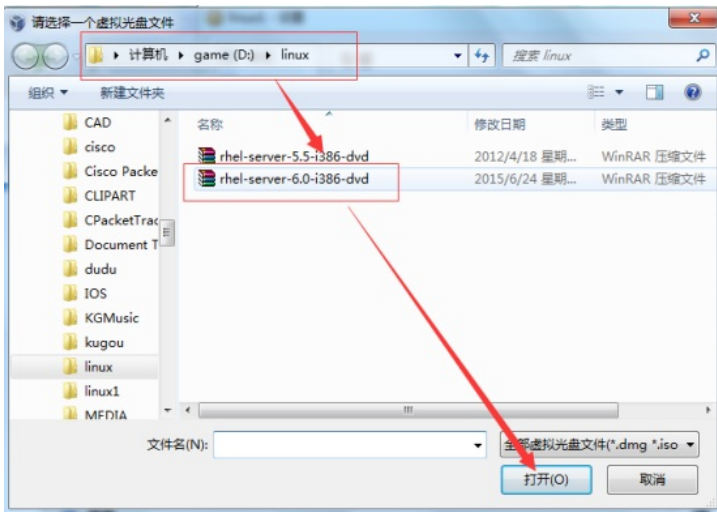
(1.2)、在弹出的设置窗口中，选择“存储”这个选项，接着点击“没有盘片”这个选项：



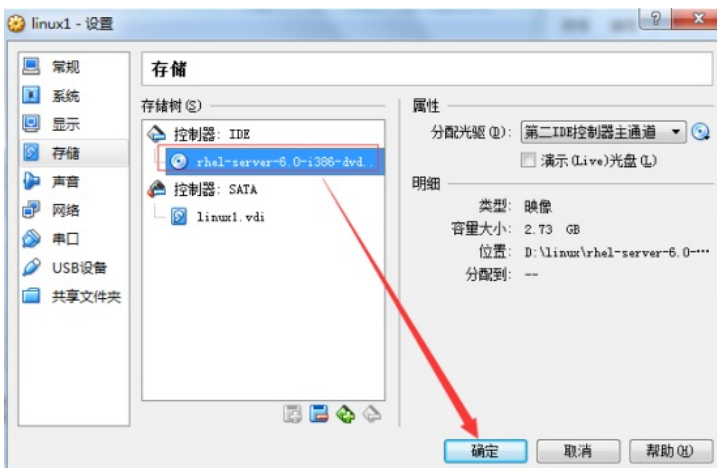
(1.3)、选择“没有盘片”之后，在对话框的右边，点击这个小光盘：



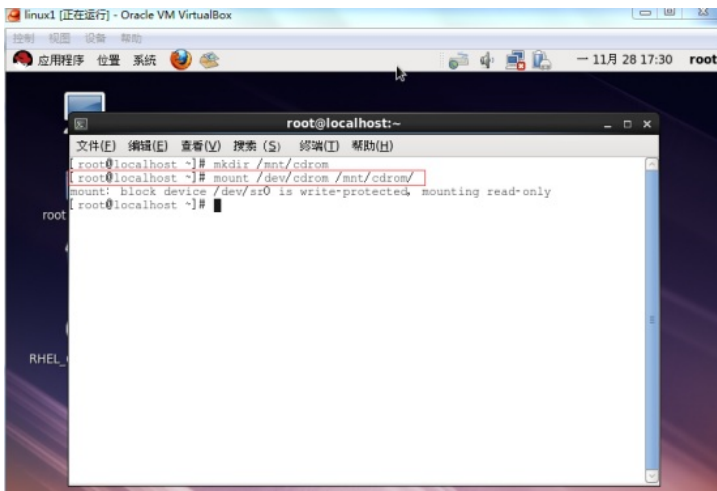
(1.4)、选择我们需要安装的ISO镜像, 如果没有, 则需要选择“选择一个虚拟光盘”, 虚拟光盘的路径就是我们ISO的存放路径: (如有必要)



(1.5)、选择完ISO镜像后, 我们点击确定, 即可将ISO镜像放入虚拟机:

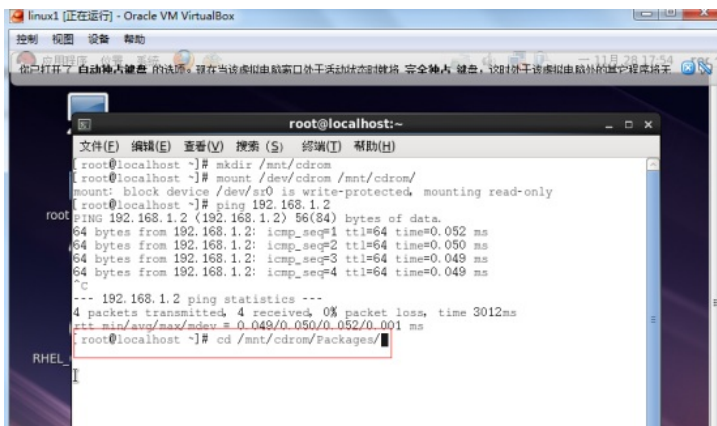


(1.6)、使用“mount /dev/cdrom /mnt/cdrom”命令将光驱挂在到临时挂载点:



## 2、安装DHCP服务器相关软件包

(2.1)、使用“cd /mnt/cdrom/Packages”命令进入光驱：



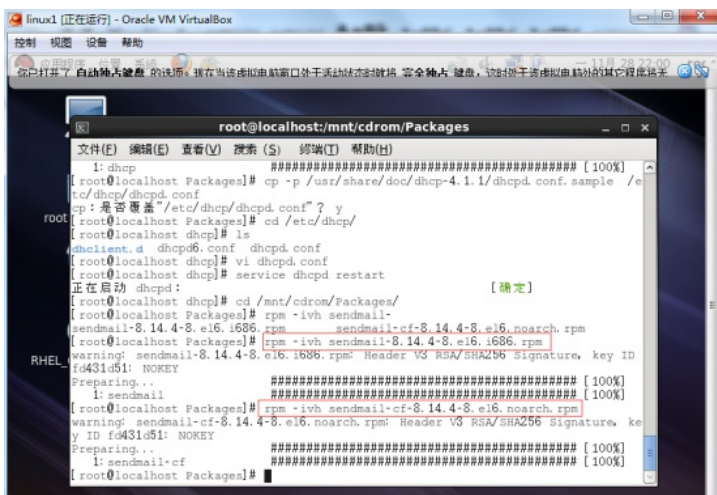
## 2、MAIL服务器相关软件包安装

(2.1)、MAIL服务器需要安装sendmail软件包，因此需要通过“rpm -ivh”命令去进行安装，命令如下：

“rpm -ivh sendmail-8.14”

“rpm -ivh sendmail-cf”

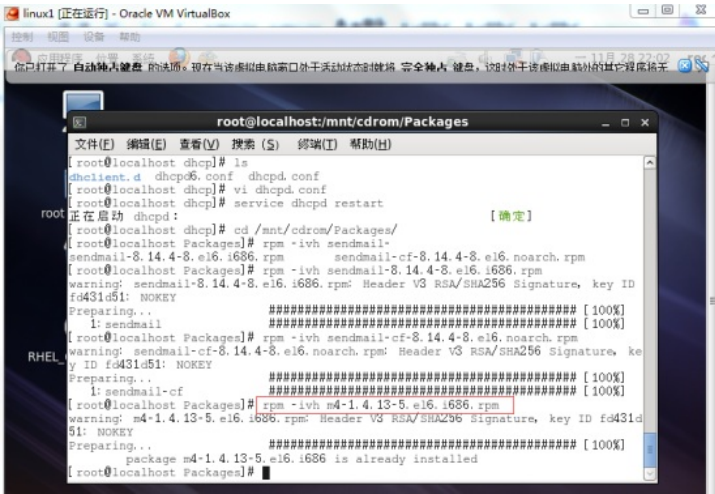
效果图如下：



安装完sendmail软件包后，我们需要安装m4转换工具，命令如下：

“rpm -ivh m4-1.4”

效果图如下：

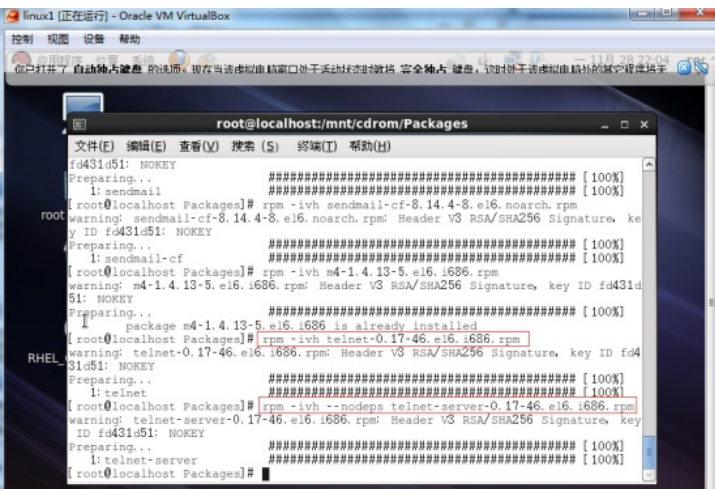


安装完m4转换工具后，我们还需要安装telnet软件包，命令如下：

“rpm -ivh telnet-0”

“rpm -ivh --nodeps telnet-server”

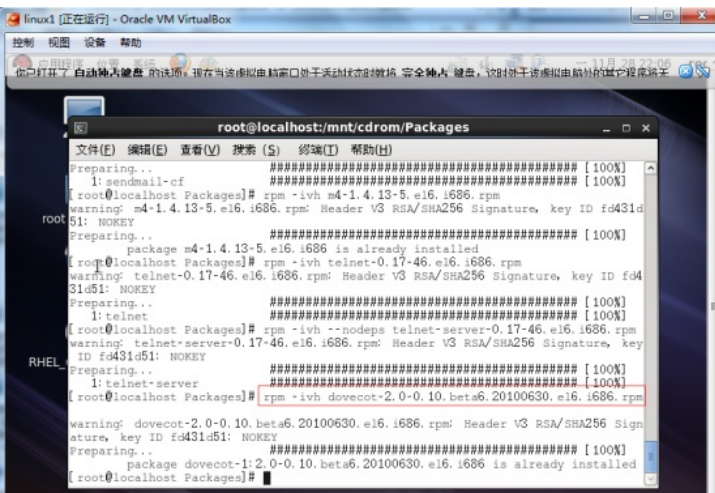
效果图如下：



安装完telnet软件包之后，我们还需要安装dovecot软件包，命令如下：

“rpm -ivh dovecot”

效果图如下：



### 3. MAIL服务器配置

(3.1)、MAIL服务器的主配置文件位于/etc/mail路径下，文件名为sendmail.mc，我们先进入/etc/mail这个路径下：

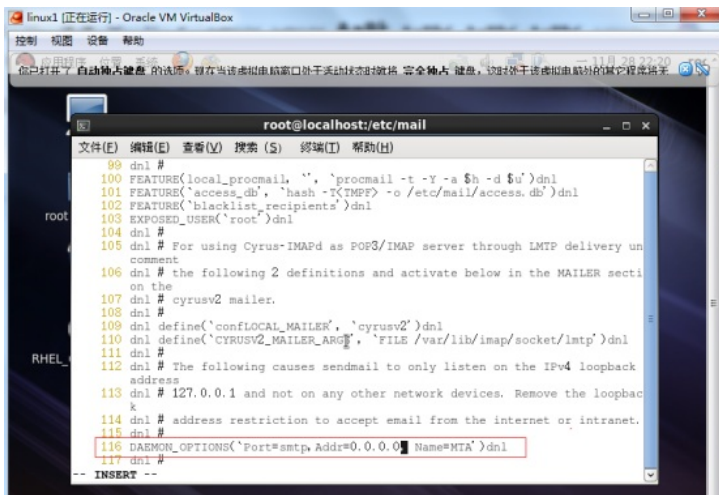
```
root@localhost/etc/mail
[root@localhost Packages]# rpm -ivh telnet-0.17-46.e16.i686.rpm
warning: telnet-0.17-46.e16.i686.rpm: Header V3 RSA/SHA256 Signature, key ID fd431d51: NOKEY
Preparing...
1:telnet
[root@localhost Packages]# rpm -ivh --nodeps telnet-server-0.17-46.e16.i686.rpm
warning: telnet-server-0.17-46.e16.i686.rpm: Header V3 RSA/SHA256 Signature, key ID fd431d51: NOKEY
Preparing...
1:telnet-server
[root@localhost Packages]# rpm -ivh dovecot-2.0-0.10.beta6.20100630.e16.i686.rpm
warning: dovecot-2.0-0.10.beta6.20100630.e16.i686.rpm: Header V3 RSA/SHA256 Signature, key ID fd431d51: NOKEY
Preparing...
package dovecot-1:2.0-0.10.beta6.20100630.e16.i686 is already installed
[root@localhost Packages]# cd /etc/mail/
[root@localhost mail]# ls
access.db          helpfile          Makefile          submit.mc
aliasesdb-stamp  local-host-names  sendmail.cf       trusted-users
mailertable       mailertable.db   spamassassin     virtuserstable.db
domaintable.db   make             submit.cf
```

使用vi 编辑器对sendmail.mc文件进行编辑和配置, 进入sendmail.mc文件后, 我们依然先使用“set nu”命令显示行数, 方便配置, 效果图如下:

```
root@localhost/etc/mail
1 vert(-)dnl
2 dnl #
3 dnl # This is the sendmail macro config file for m4.  If you make changes
4 dnl # /etc/mail/sendmail.mc, you will need to regenerate the
5 dnl # /etc/mail/sendmail.cf file by confirming that the sendmail-cf pack
6 dnl # is installed and then performing a
7 dnl #
8 dnl # /etc/mail/make
9 dnl #
10 include(`/usr/share/sendmail-cf/m4/cf.m4`)dnl
11 VERSIONID(`setup for linux')dnl
12 OSTYPE(`linux')dnl
13 dnl #
14 dnl # Do not advertize sendmail version.
15 dnl #
16 dnl define(`confSMTP_LOGIN_MSG', `$j Sendmail: $b')dnl
17 dnl #
18 dnl # default logging level is 0, you might want to set it higher to
19 dnl # debug the configuration
20 dnl #
21 dnl define(`confLOG_LEVEL', `0')dnl
:set nu
```

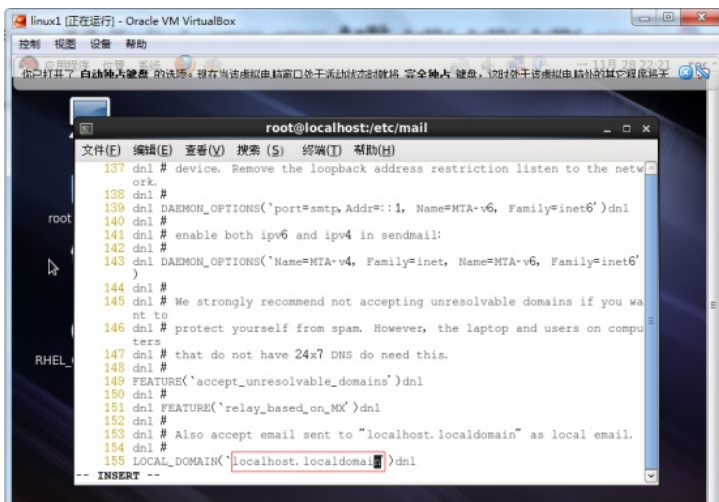
```
root@localhost/etc/mail
99 dnl #
100 FEATURE(local_procmail, `', `procmail -t -Y -a $b -d $u')dnl
101 FEATURE(`access_db', `hash -T<TMPF> -o /etc/mail/access.db')dnl
102 FEATURE(`blacklist_recipients')dnl
103 EXPOSED_USER(`root')dnl
104 dnl #
105 dnl # For using Cyrus-IMAPd as POP3/IMAP server through LMTP delivery u
106 dnl # the following 2 definitions and activate below in the MAILER secti
107 dnl # cyrusv2 mailer.
108 dnl #
109 dnl define(`confLOCAL_MAILER', `cyrusv2')dnl
110 dnl define(`CYRUSV2_MAILER_ARGS', `FILE /var/lib/imap/socket/lmtp')dnl
111 dnl #
112 dnl # The following causes sendmail to only listen on the IPv4 loopbac
113 dnl # 127.0.0.1 and not on any other network devices.  Remove the loopbac
114 dnl # address restriction to accept email from the internet or intranet.
115 dnl #
116 DAEMON_OPTIONS(`Port=smtp, Addr=127.0.0.1 Name=MTA')dnl
117 dnl #
-- INSERT --
```

我们将光标移动到第116行, 将127.0.0.1修改成0.0.0.0:



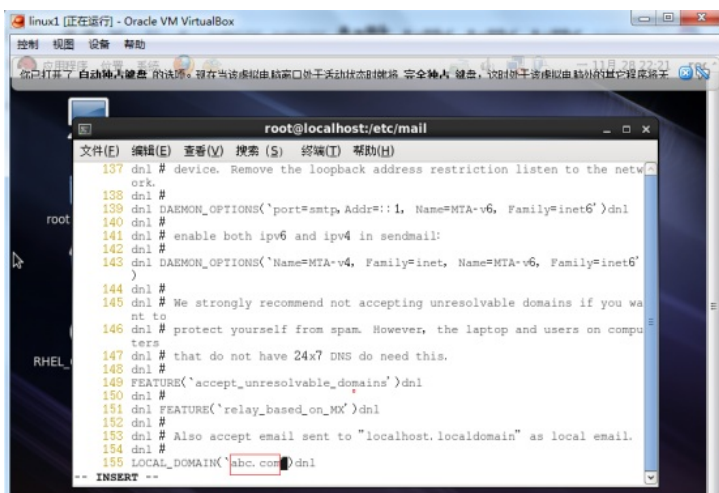
```
root@localhost:/etc/mail#
99 dnl #
100 FEATURE(local_procmail, '', `procmail -t -Y -a $h -d $u`)dnl
101 FEATURE(`access_db', `hash -I(TMPF) -o /etc/mail/access.db')dnl
102 FEATURE(`blacklist_recipients')dnl
103 EXPOSED_USER(`root')dnl
104 dnl #
105 dnl # For using Cyrus-IMAPd as POP3/IMAP server through LMTMP delivery un
comment
106 dnl # the following 2 definitions and activate below in the MAILER secti
on the
107 dnl # cyrusv2 mailer.
108 dnl #
109 dnl define(`confLOCAL_MAILER', `cyrusv2')dnl
110 dnl define(`CYRUSV2_MAILER_ARGS', `FILE /var/lib/imap/socket/lmtmp')dnl
111 dnl #
112 dnl # The following causes sendmail to only listen on the IPv4 loopback
address
113 dnl # 127.0.0.1 and not on any other network devices. Remove the loopbac
k
114 dnl # address restriction to accept email from the internet or intranet.
115 dnl #
116 DAEMON_OPTIONS(`Port=smtp, Addr=0.0.0.0, Name=MTA')dnl
117 dnl #
-- INSERT --
```

接着我们将光标移动到第155行:



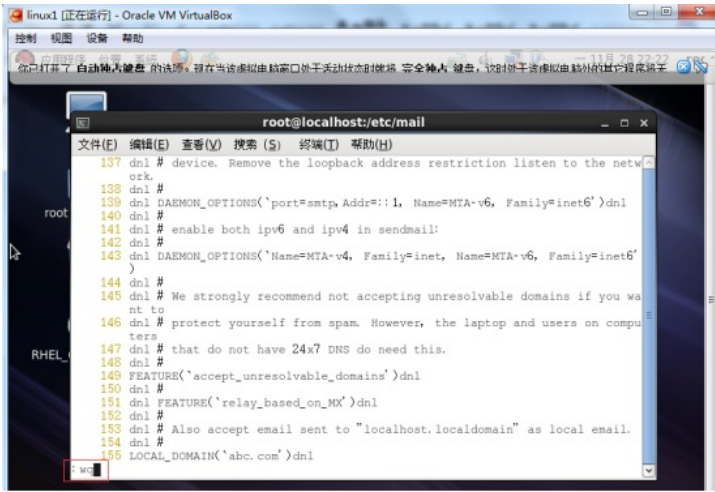
```
root@localhost:/etc/mail#
137 dnl # device. Remove the loopback address restriction listen to the netw
ork.
138 dnl #
139 dnl DAEMON_OPTIONS(`port=smtp, Addr>:::1, Name=MTA-v6, Family=inet6')dnl
140 dnl #
141 dnl # enable both ipv6 and ipv4 in sendmail:
142 dnl #
143 dnl DAEMON_OPTIONS(`Name=MTA-v4, Family=inet, Name=MTA-v6, Family=inet6'
)
144 dnl #
145 dnl # We strongly recommend not accepting unresolvable domains if you wa
nt to
146 dnl # protect yourself from spam. However, the laptop and users on compu
ters
147 dnl # that do not have 24x7 DNS do need this.
148 dnl #
149 FEATURE(`accept_unresolvable_domains')dnl
150 dnl #
151 dnl FEATURE(`relay_based_on_MX')dnl
152 dnl #
153 dnl # Also accept email sent to "localhost.localdomain" as local email.
154 dnl #
155 LOCAL_DOMAIN(`localhost.localdoma')dnl
-- INSERT --
```

将localhost.localdomain修改成abc.com :



```
root@localhost:/etc/mail#
137 dnl # device. Remove the loopback address restriction listen to the netw
ork.
138 dnl #
139 dnl DAEMON_OPTIONS(`port=smtp, Addr>:::1, Name=MTA-v6, Family=inet6')dnl
140 dnl #
141 dnl # enable both ipv6 and ipv4 in sendmail:
142 dnl #
143 dnl DAEMON_OPTIONS(`Name=MTA-v4, Family=inet, Name=MTA-v6, Family=inet6'
)
144 dnl #
145 dnl # We strongly recommend not accepting unresolvable domains if you wa
nt to
146 dnl # protect yourself from spam. However, the laptop and users on compu
ters
147 dnl # that do not have 24x7 DNS do need this.
148 dnl #
149 FEATURE(`accept_unresolvable_domains')dnl
150 dnl #
151 dnl FEATURE(`relay_based_on_MX')dnl
152 dnl #
153 dnl # Also accept email sent to "localhost.localdomain" as local email.
154 dnl #
155 LOCAL_DOMAIN(`abc.com')dnl
-- INSERT --
```

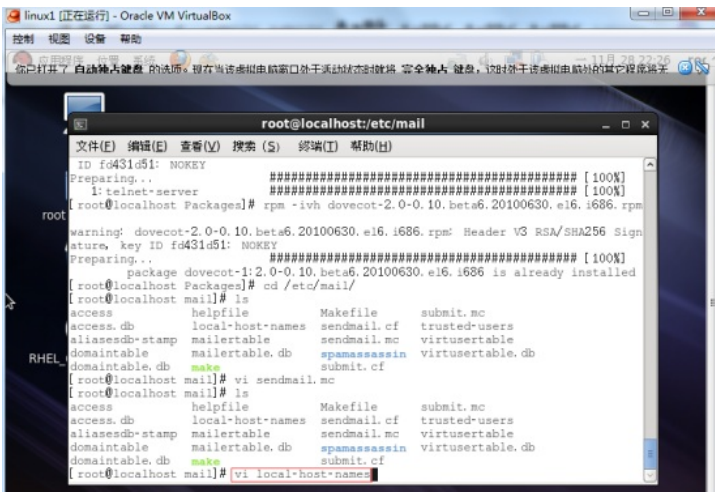
配置完成后保存退出:



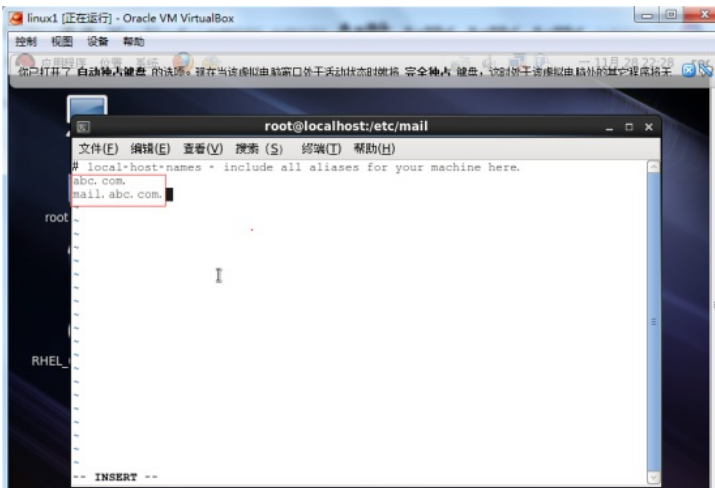
(3.2)、配置完sendmail.mc文件后，我们需要配置local-host-names这个文件，添加域名信息进入，使用vi编辑器对local-host-names这个文件进行编辑，命令如下：

"vi local-host-names"

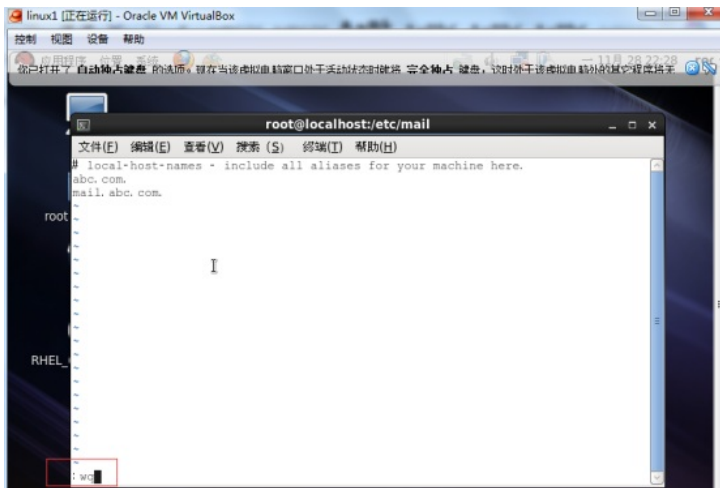
效果图如下：



进入到local-host-names这个文件后，我们需要添加两个域名信息，一个为"abc.com"，一个为"mail.abc.com"，一个域名信息分别占用一行，效果图如下：

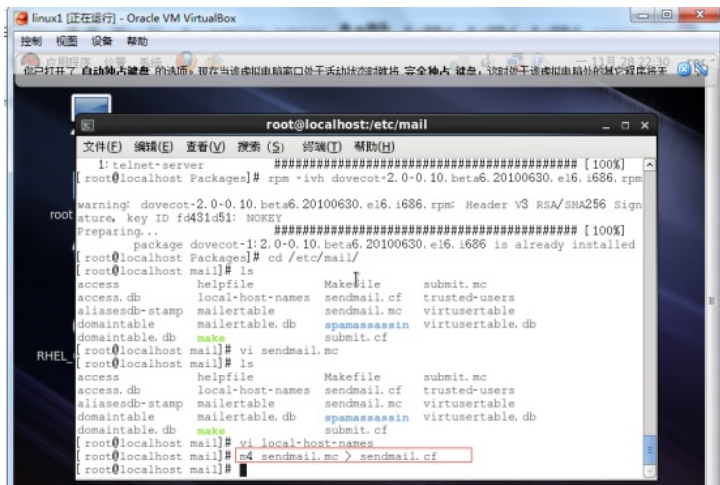


配置完成后保存退出：

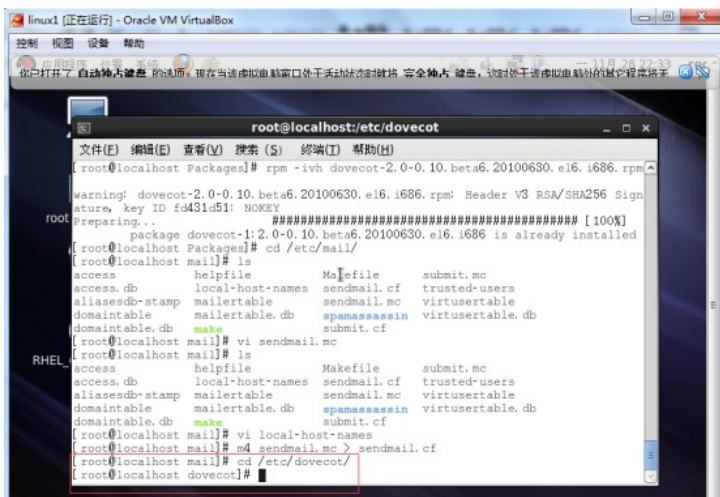


(3.3)、使用m4转换工具将sendmail.mc文件转换到sendmail.cf文件中，命令如下：  
“m4 sendmail.mc > sendmail.cf”

效果图如下：



(3.4)、用m4转换工具转换文件后，我们需要配置dovecot.conf这个文件，dovecot.conf这个文件位于/etc/dovecot/这个路径下，我们先进入到/etc/dovecot/这个路径：



进入到这个路径下之后，我们使用vi编辑器对dovecot.conf这个文件进行编辑，进入到这个文件后，我们依然使用“set nu”这个命令显示行数，方便配置：



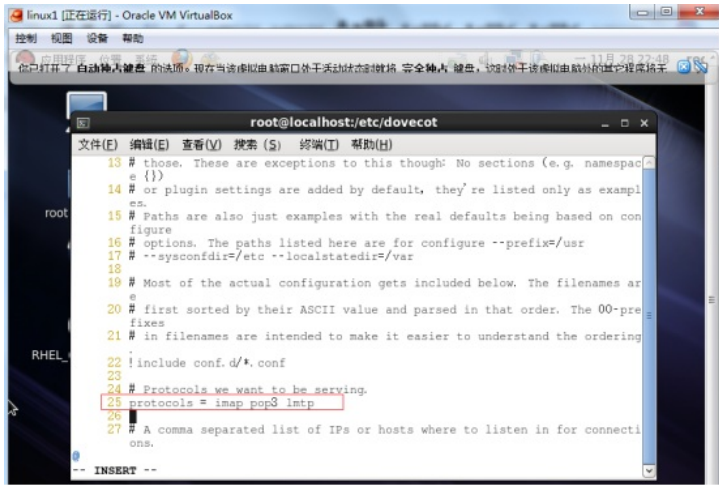
```
root@localhost:~/dovecot# rpm -ivh dovecot-2.0-0.10.beta6.20100630.e16.i686.rpm
warning: dovecot-2.0-0.10.beta6.20100630.e16.i686.rpm: Header V3 RSA/SHA256 Signature, key ID f431d51: NOKEY
Preparing... ##################################### [100%]
package dovecot-1:2.0-0.10.beta6.20100630.e16.i686 is already installed
[root@localhost Packages]# cd /etc/mail/
[root@localhost mail]# ls
access      helpfile      Makefile      submit.mc
access.db   local-host-names  sendmail.cf   trusted-users
aliasesdb-stamp  mailertable    sendmail.mc   virtusertable
domaintable mailertable.db  spamassassin  virtusertable.db
domaintable.db  mail         submit.cf
[root@localhost mail]# vi sendmail.mc
[root@localhost mail]# ls
access      helpfile      Makefile      submit.mc
access.db   local-host-names  sendmail.cf   trusted-users
aliasesdb-stamp  mailertable    sendmail.mc   virtusertable
domaintable mailertable.db  spamassassin  virtusertable.db
domaintable.db  mail         submit.cf
[root@localhost mail]# vi local-host-names
[root@localhost mail]# m4 sendmail.mc > sendmail.cf
[root@localhost mail]# cd /etc/dovecot/
[root@localhost dovecot]# vi dovecot.conf
```

```
1 # Dovecot configuration file
2
3 # If you're in a hurry, see http://wiki.dovecot.org/QuickConfiguration
4
5 # "doveconf -n" command gives a clean output of the changed settings. Use it
6 # instead of copy&pasting files when posting to the Dovecot mailing list
7
8 # '#' character and everything after it is treated as comments. Extra spaces
9 # and tabs are ignored. If you want to use either of these explicitly, put the
10 # value inside quotes, eg.: key = "# char and trailing whitespace"
11
12 # Default values are shown for each setting, it's not required to uncomment
13 # those. These are exceptions to this though: No sections (e.g. namespaces {})
14 # or plugin settings are added by default, they're listed only as examples.
15 # Paths are also just examples with the real defaults being based on configuration
16
17 # Options. The paths listed here are for configure --prefix=/usr
18 # --sysconfdir=/etc --localstatedir=/var
19
20 # Most of the actual configuration gets included below. The filenames are
21 # first sorted by their ASCII value and parsed in that order. The 00-prefixed
22 # in filenames are intended to make it easier to understand the ordering.
23
24 #include conf.d/*.conf
25
26 # Protocols we want to be serving.
27 #protocols = imap pop3 imtp
```

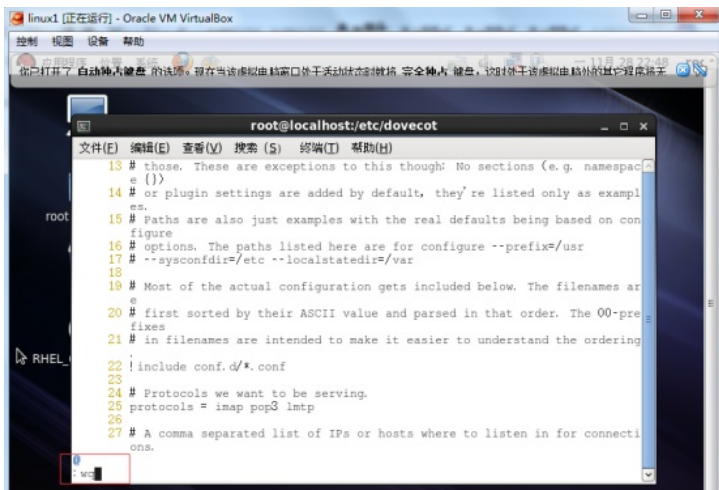
将光标移动到第25行:

```
13 # those. These are exceptions to this though: No sections (e.g. namespaces {})
14 # or plugin settings are added by default, they're listed only as examples.
15 # Paths are also just examples with the real defaults being based on configuration
16
17 # Options. The paths listed here are for configure --prefix=/usr
18 # --sysconfdir=/etc --localstatedir=/var
19
20 # Most of the actual configuration gets included below. The filenames are
21 # first sorted by their ASCII value and parsed in that order. The 00-prefixed
22 # in filenames are intended to make it easier to understand the ordering.
23
24 #include conf.d/*.conf
25 #protocols = imap pop3 imtp
26
27 # A comma separated list of IPs or hosts where to listen in for connections.
```

将第25行的#号去掉即可:

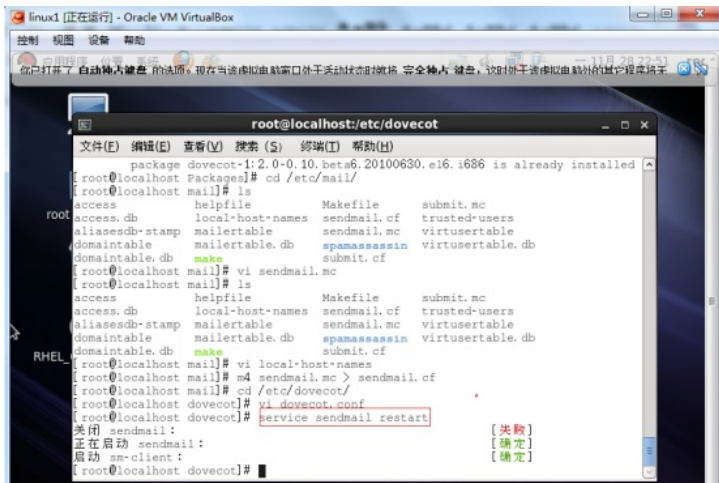


配置完成后保存退出：

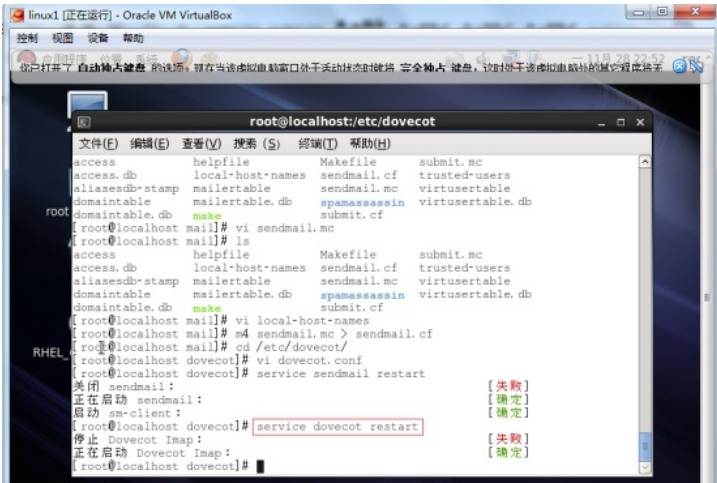


## 1、MAIL服务器启动

(4.1)、使用“service sendmail restart”命令启动MAIL服务器：

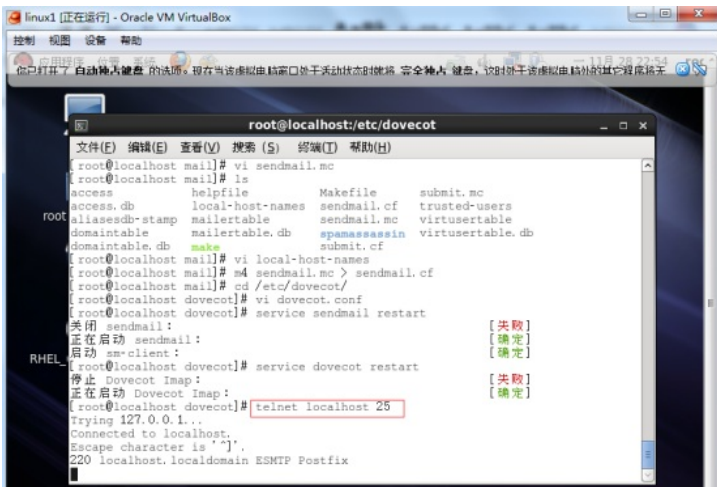


(4.2)、使用“service dovecot restart”启用POP3、IAMP服务：



#### (4.4)、测试MAIL服务:

使用“telnet localhost 25”命令启动右键编辑:



输入以下命令来编辑发件人，收件人，内容，退出邮箱编辑:

“helo 192.168.1.2” //指定邮件服务器

“mail from“abc“<abc@abc.com>” //指定发件人

“rcpt to:bcd” //指定收件人

“data” //开始编辑右键的内容

“hello world” //邮件的内容

“.” //结束邮件内容的编辑

“quit” //退出邮件的编辑

效果图如下:



```
linux1 [正在运行] - Oracle VM VirtualBox
root@localhost:/etc/dovecot
root@localhost:/etc/dovecot# service dovecot restart
停止 Dovecot Imap: [确定]
正在启动 Dovecot Imap: [失败]
root@localhost:/etc/dovecot# telnet localhost 25
Trying 127.0.0.1...
Connected to localhost.
Escape character is '^]'.
220 localhost.localdomain ESMTP Postfix
helo 192.168.1.2
250 localhost.localdomain
mail from: "abc"<abc@abc.com>
250 2.1.0 Ok
rcpt to: bcd
250 2.1.3 Ok
data
354 End data with <CR><LF>.<CR><LF>
hello world
.
250 2.0.0 Ok: queued as 5f35A7d5F
quit
221 2.0.0 Bye
Connection closed by foreign host.
[root@localhost dovecot]#
```

(4.5)、MAIL服务器的用户信息存放在/var/mail/路径下，我们先进入到该路径下：  
由于我刚刚使用用户abc给用户bcd发送了邮件，因此我们使用“cat bcd”命令来确认用户bcd是否接收到来自abc用户发送的邮件：

```
linux1 [正在运行] - Oracle VM VirtualBox
root@localhost:/var/mail
root@localhost:/var/mail# cd /var/mail/
root@localhost:/var/mail# ls
abc bcd james rpc
root@localhost:/var/mail# cat bcd
From abc@abc.com Mon Nov 28 22:59:07 2016
Return-Path: <abc@abc.com>
X-Original-To: bcd
Delivered-To: bcd@localhost.localdomain
Received: from 192.168.1.2 (localhost.localdomain [127.0.0.1])
        by localhost.localdomain (Postfix) with SMTP id 5f35A7d5F
        for <bcd>; Mon, 28 Nov 2016 22:58:53 +0800 (CST)
Message-Id: <20161128145900.5f35A7d5F@localhost.localdomain>
Date: Mon, 28 Nov 2016 22:58:53 +0800 (CST)
From: abc@abc.com
To: undisclosed-recipients:;
hello world
[root@localhost mail]#
```

通过查看bcd用户的邮箱，我们可以看到bcd用户已经确定收到来自用户abc发来的邮件。  
至此，MAIL邮件服务器已经配置完成并能正常提供服务。