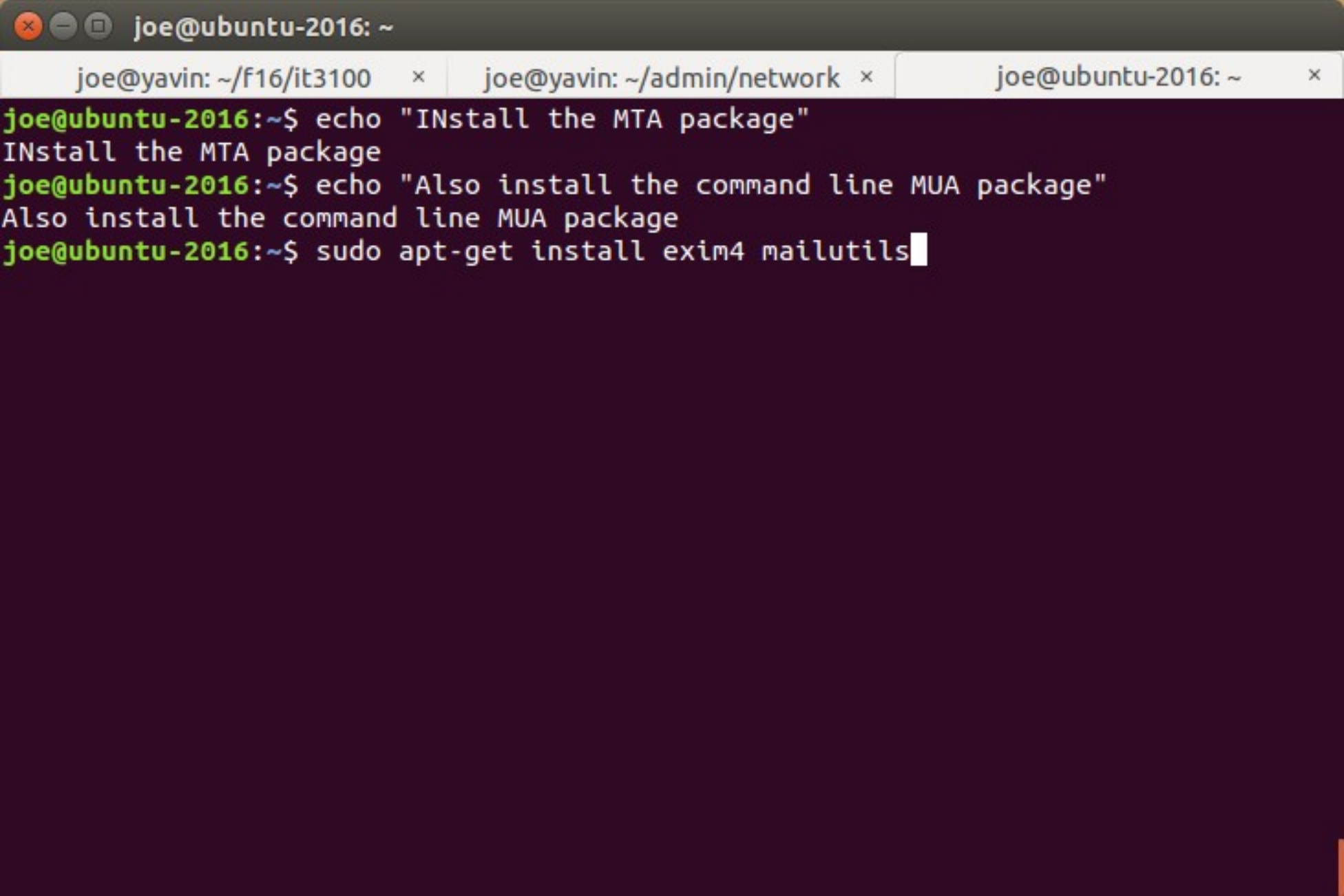
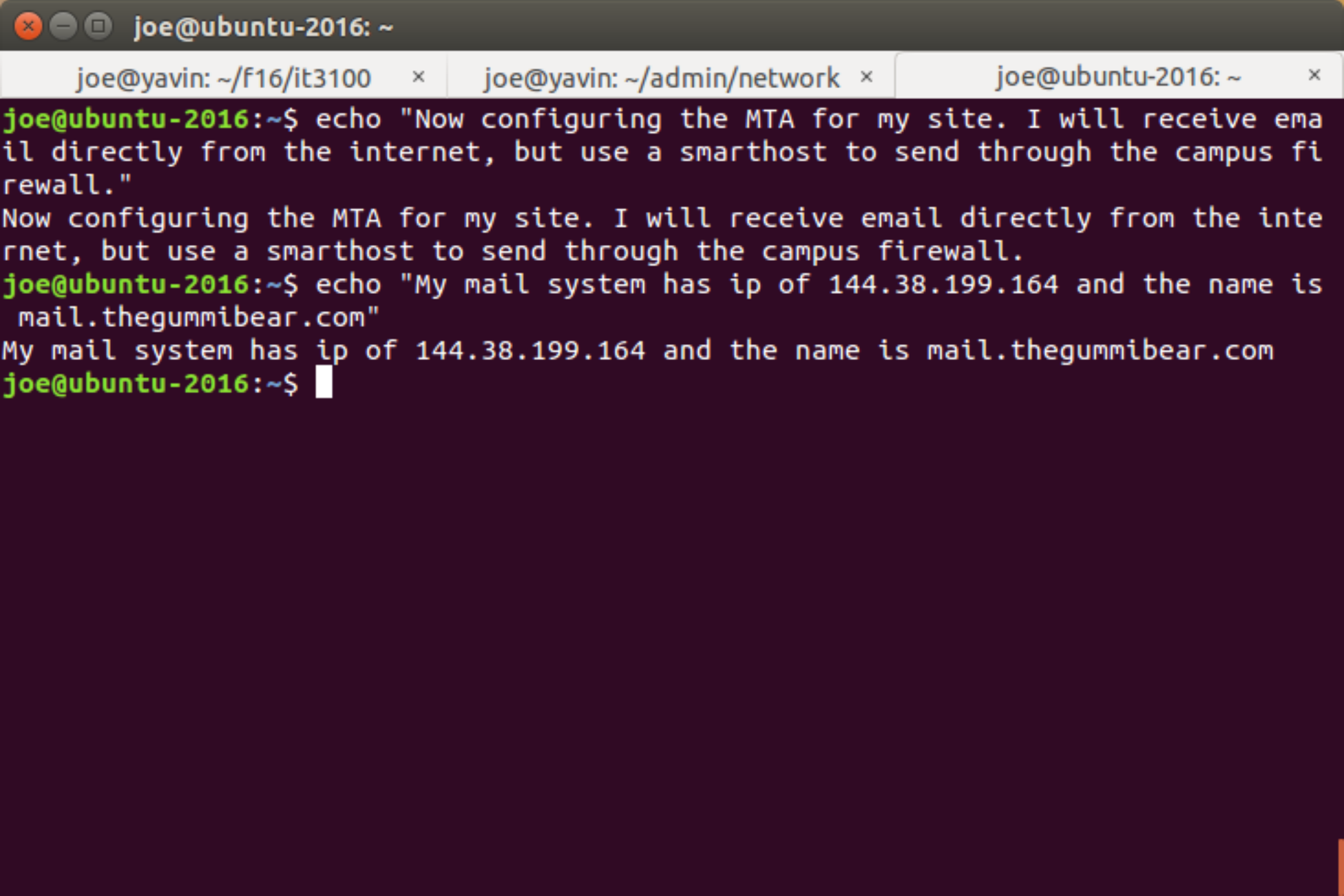
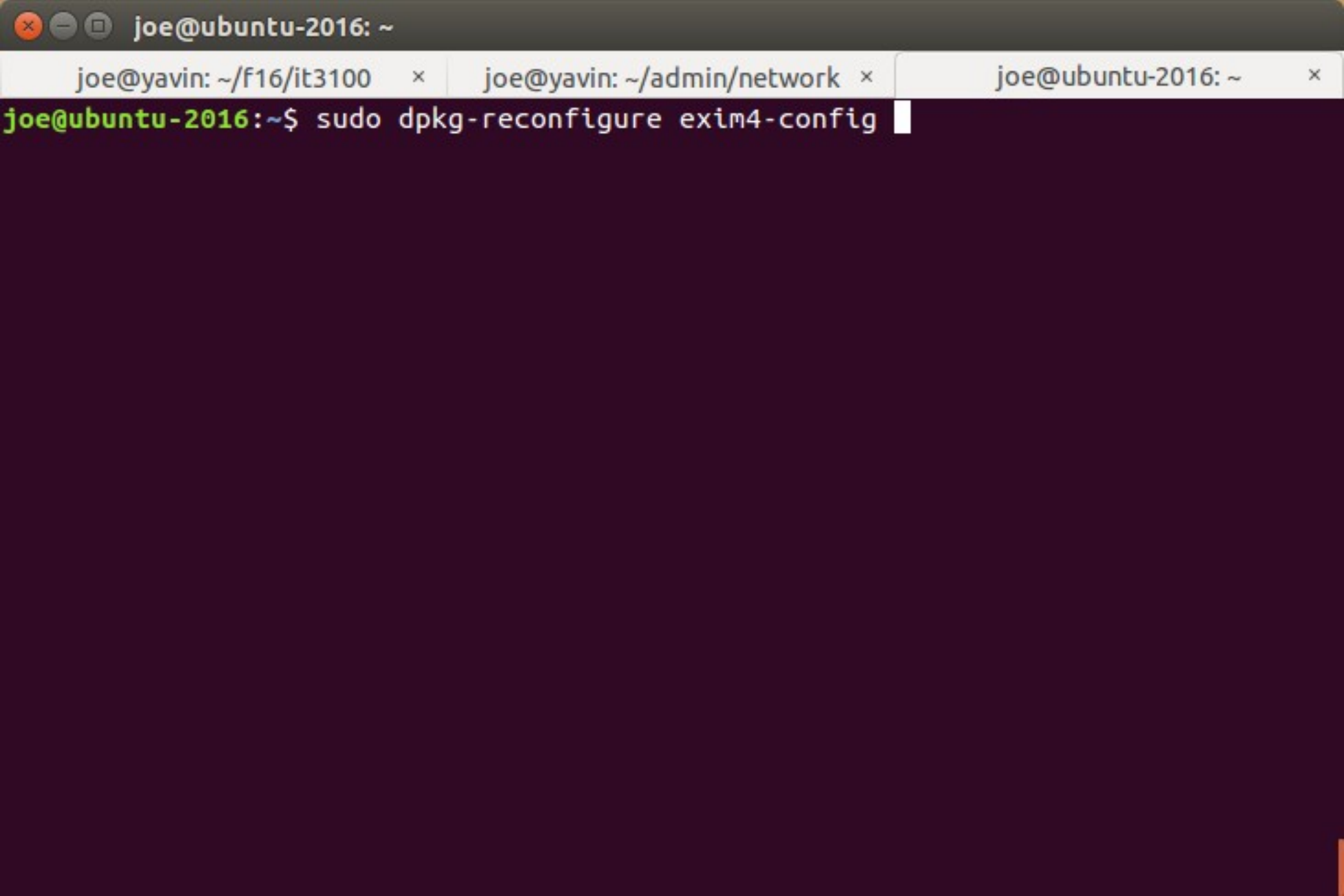
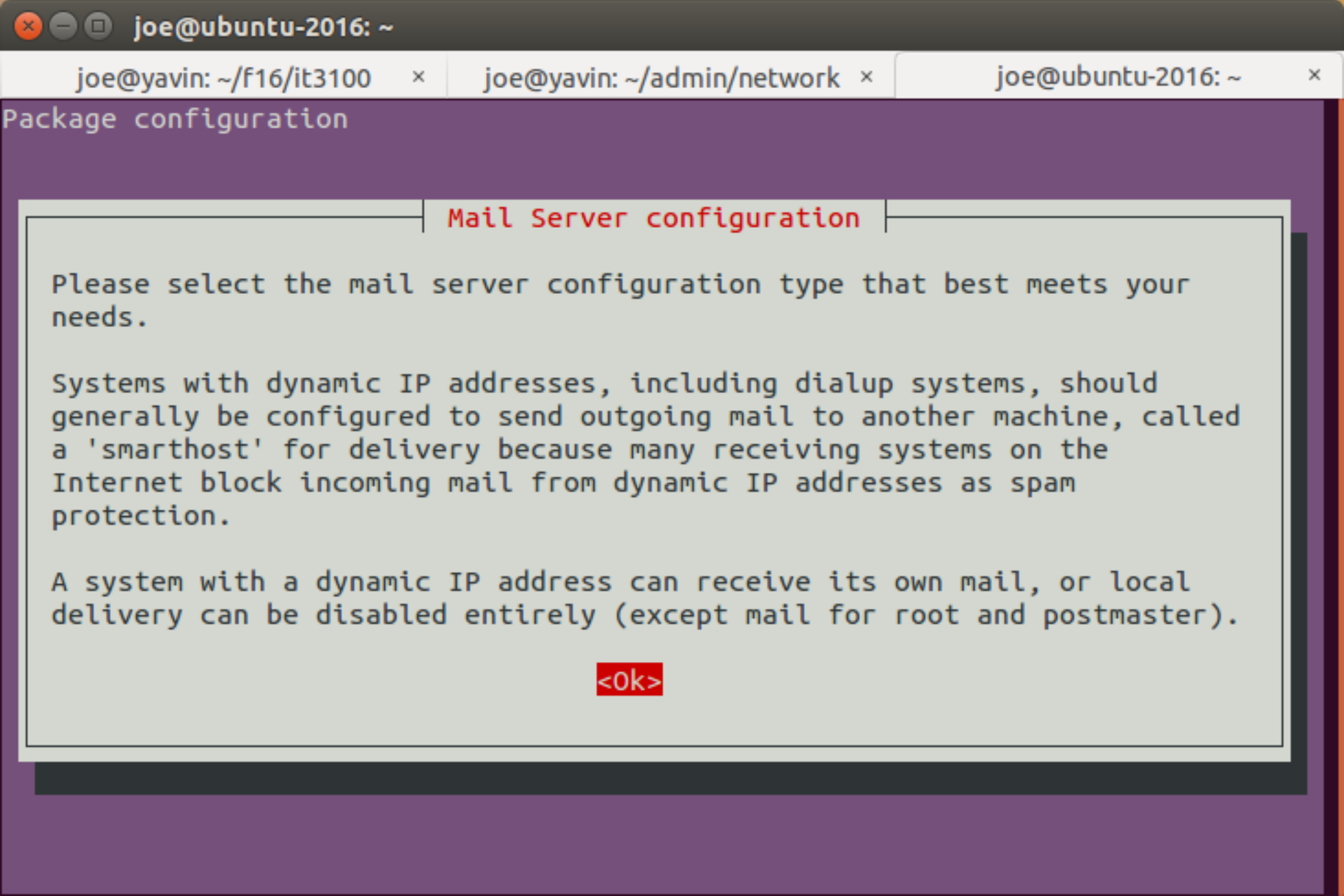
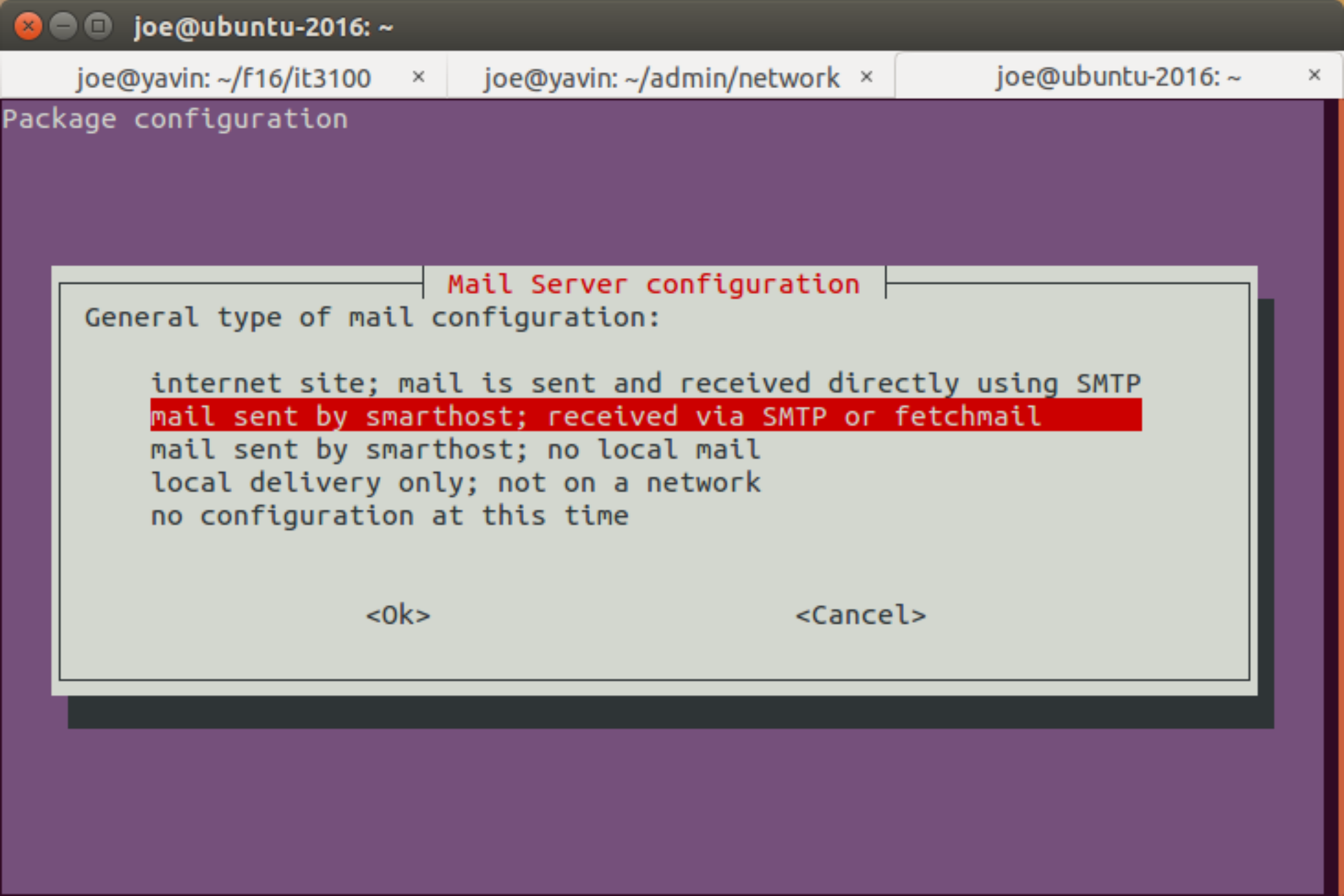
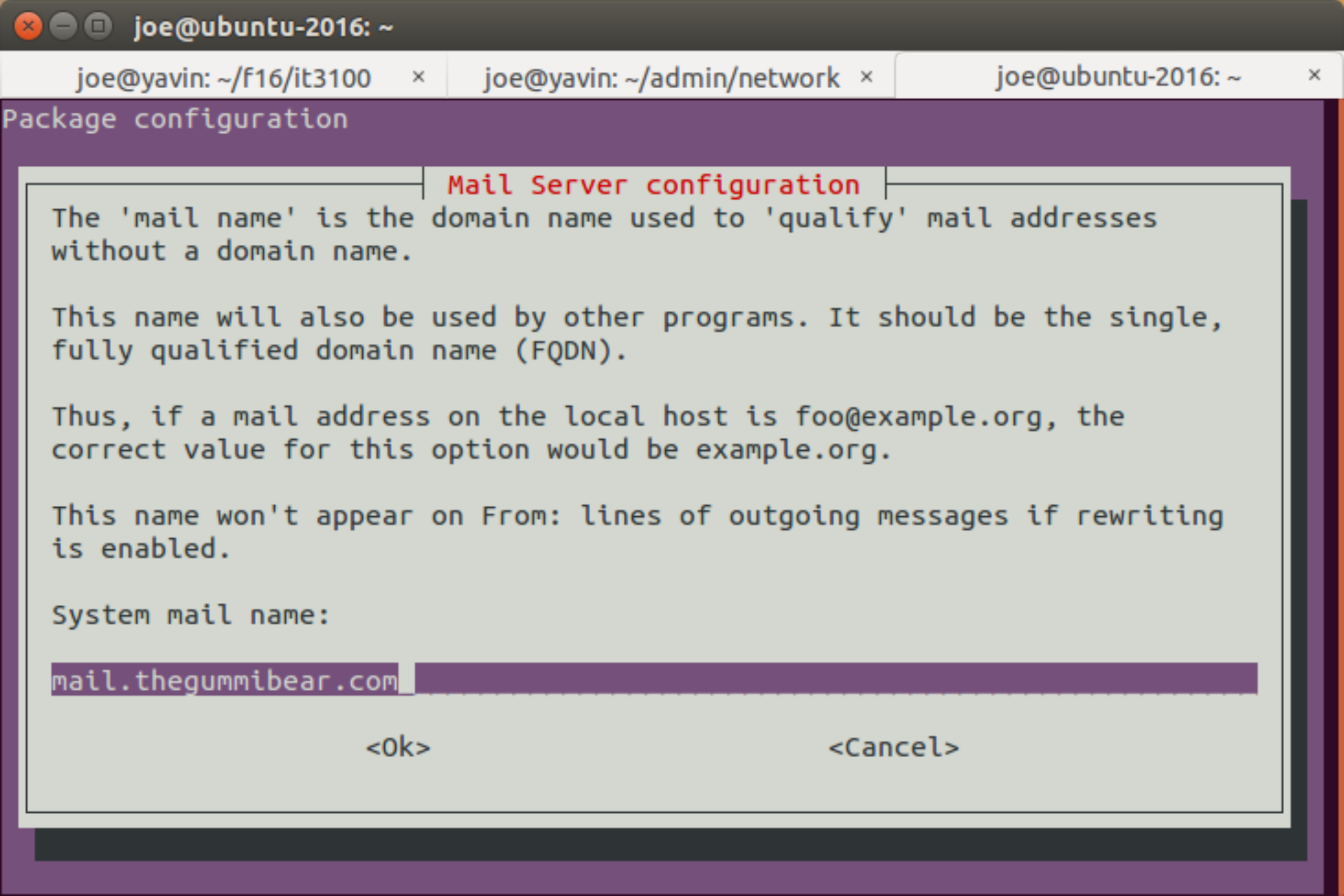

joe@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@yavin: ~/admin/network
joe@ubuntu-2016: ~
joe@ubuntu-2016:~$ echo "INstall the MTA package"
INstall the MTA package
joe@ubuntu-2016:~$ echo "Also install the command line MUA package"
Also install the command line MUA package
joe@ubuntu-2016:~$ sudo apt-get install exim4 mailutils

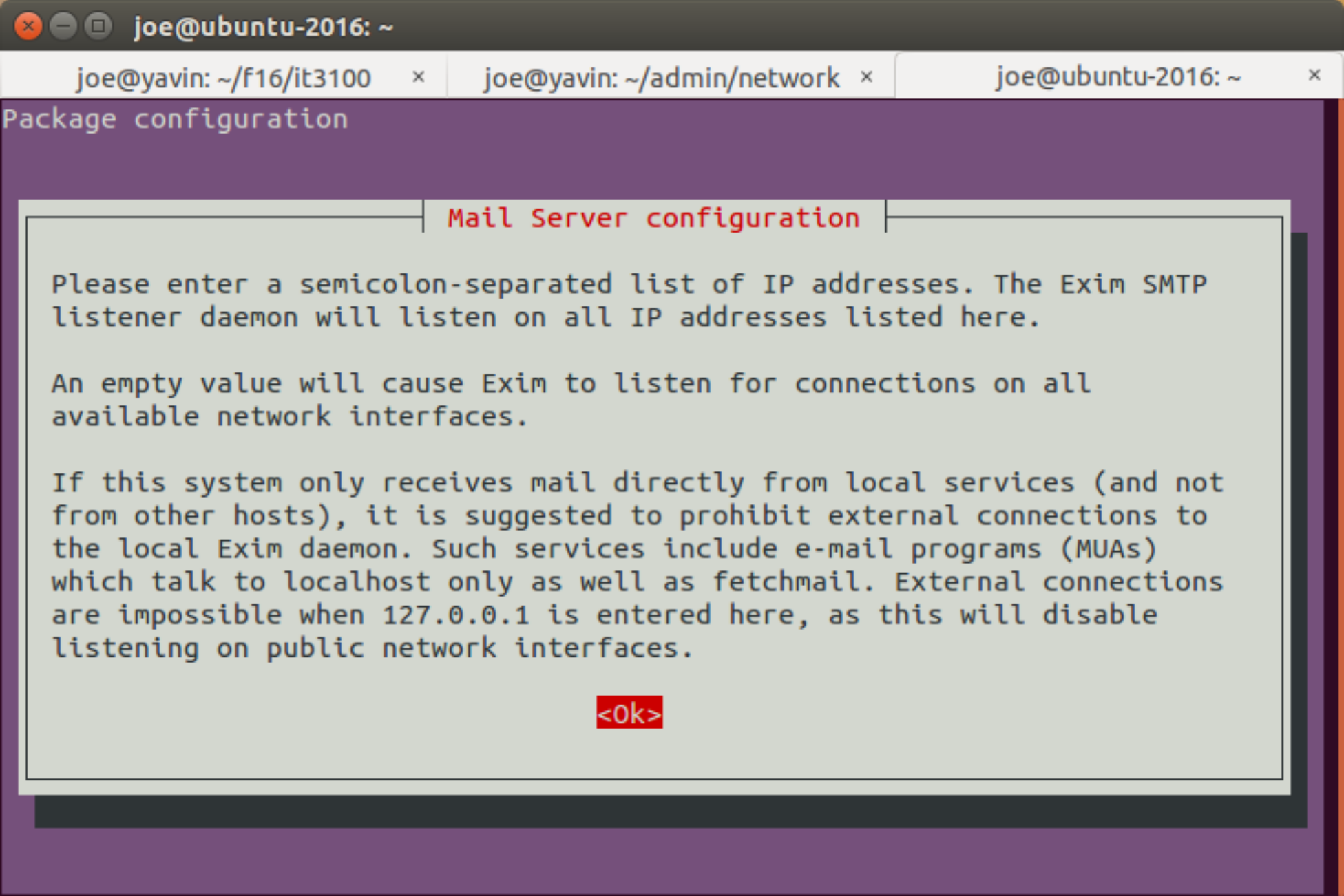

joe@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@yavin: ~/admin/network
joe@ubuntu-2016: ~
joe@ubuntu-2016:~$ echo "Now configuring the MTA for my site. I will receive email directly from the internet, but use a smarthost to send through the campus firewall."
Now configuring the MTA for my site. I will receive email directly from the internet, but use a smarthost to send through the campus firewall.
joe@ubuntu-2016:~$ echo "My mail system has ip of 144.38.199.164 and the name is mail.thegummibear.com"
My mail system has ip of 144.38.199.164 and the name is mail.thegummibear.com
joe@ubuntu-2016:~$

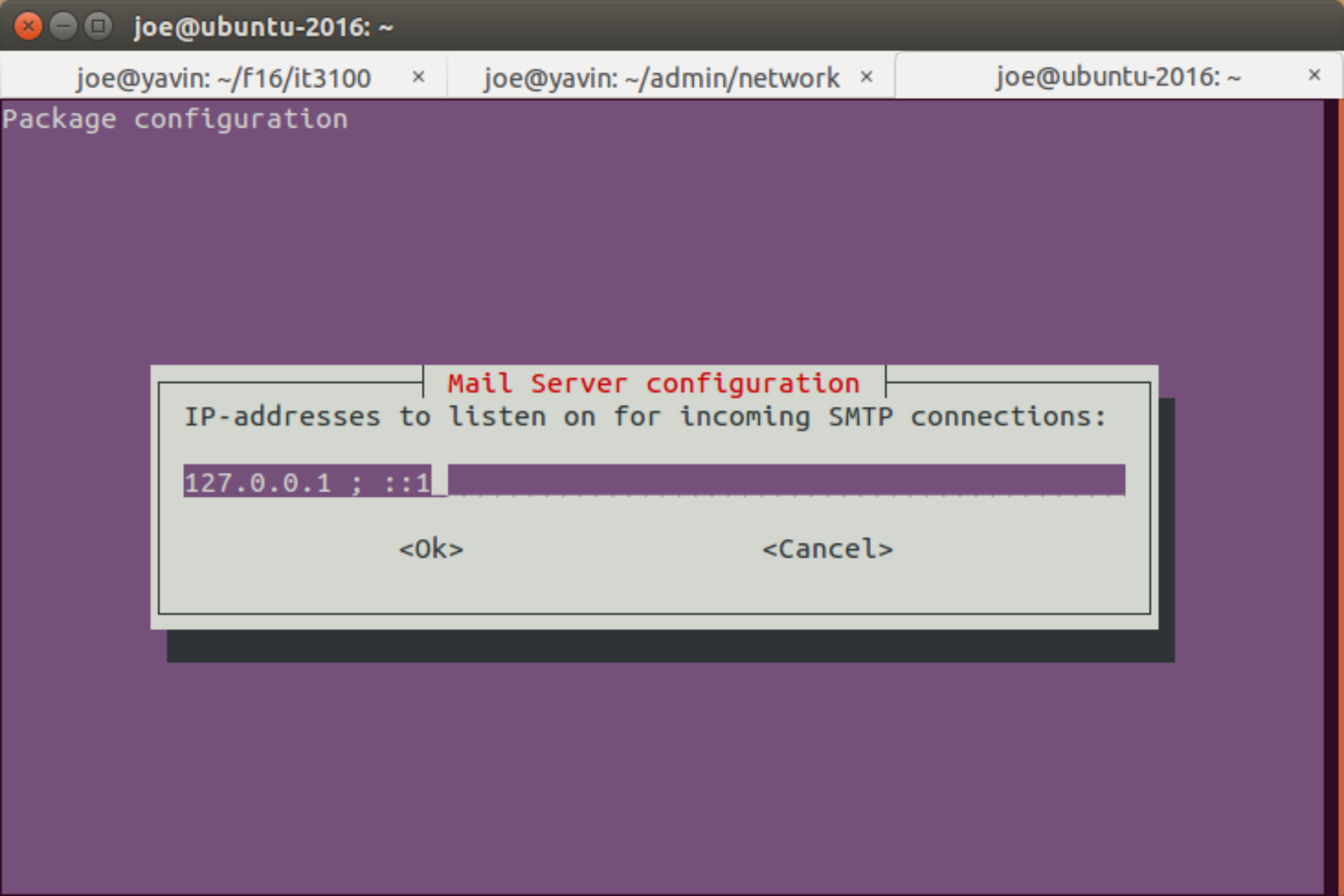

joe@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@yavin: ~/admin/network
joe@ubuntu-2016: ~
joe@ubuntu-2016:~$ sudo dpkg-reconfigure exim4-config

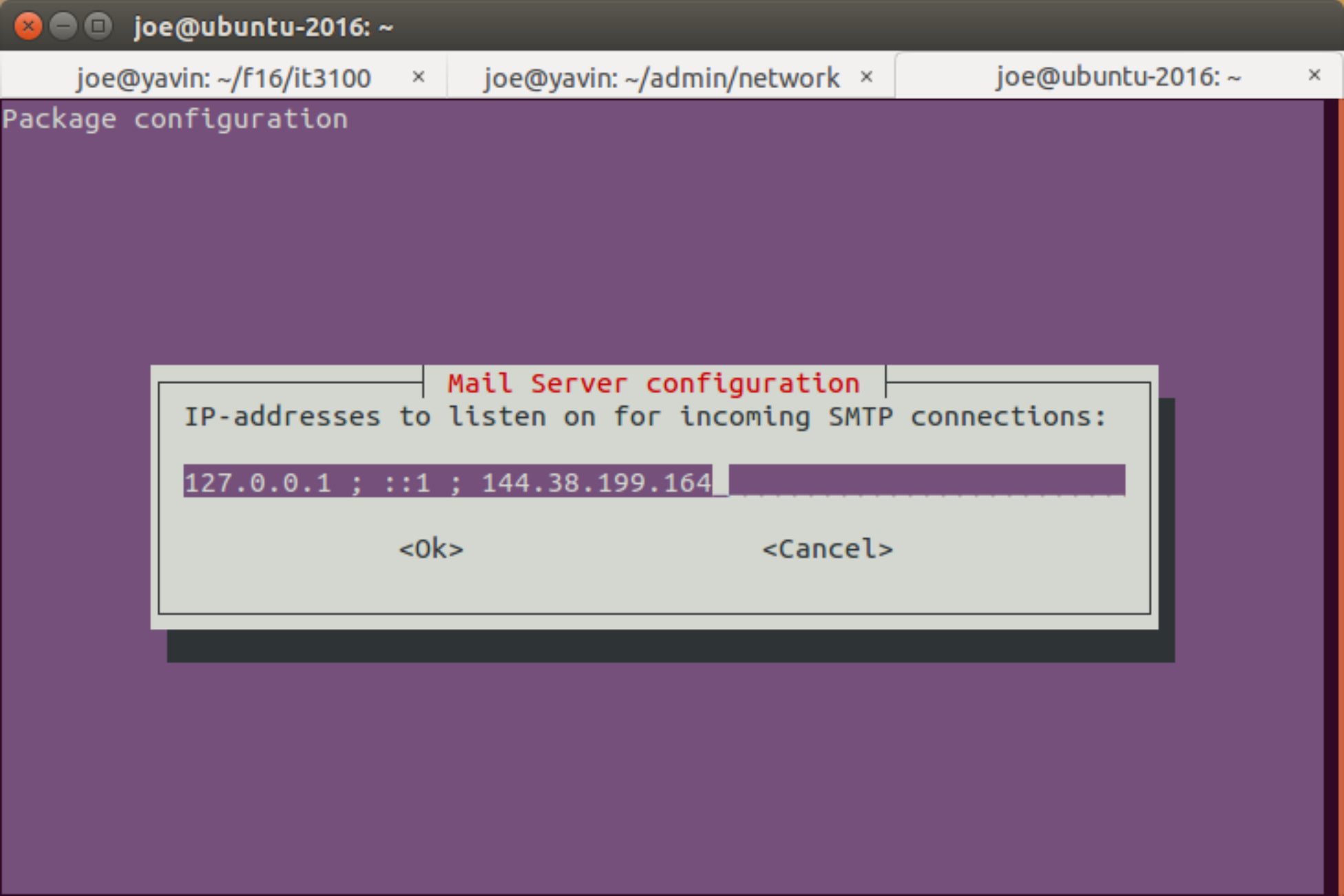

joe@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@yavin: ~/admin/network
joe@ubuntu-2016: ~
Package configuration
Mail Server configuration
Please select the mail server configuration type that best meets your needs.
Systems with dynamic IP addresses, including dialup systems, should generally be configured to send outgoing mail to another machine, called a 'smarthost' for delivery because many receiving systems on the Internet block incoming mail from dynamic IP addresses as spam protection.
A system with a dynamic IP address can receive its own mail, or local delivery can be disabled entirely (except mail for root and postmaster).
<Ok>


joe@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@yavin: ~/admin/network
joe@ubuntu-2016: ~
Package configuration
Mail Server configuration
General type of mail configuration:
internet site; mail is sent and received directly using SMTP
mail sent by smarthost; received via SMTP or fetchmail
mail sent by smarthost; no local mail
local delivery only; not on a network
no configuration at this time
<Ok>
<Cancel>


joe@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@yavin: ~/admin/network
joe@ubuntu-2016: ~
Package configuration
Mail Server configuration
The 'mail name' is the domain name used to 'qualify' mail addresses without a domain name.
This name will also be used by other programs. It should be the single, fully qualified domain name (FQDN).
Thus, if a mail address on the local host is foo@example.org, the correct value for this option would be example.org.
This name won't appear on From: lines of outgoing messages if rewriting is enabled.
System mail name:
mail.thegummibear.com
<Ok>
<Cancel>


joe@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@yavin: ~/admin/network
joe@ubuntu-2016: ~
Package configuration
Mail Server configuration
Please enter a semicolon-separated list of IP addresses. The Exim SMTP listener daemon will listen on all IP addresses listed here.
An empty value will cause Exim to listen for connections on all available network interfaces.
If this system only receives mail directly from local services (and not from other hosts), it is suggested to prohibit external connections to the local Exim daemon. Such services include e-mail programs (MUAs) which talk to localhost only as well as fetchmail. External connections are impossible when 127.0.0.1 is entered here, as this will disable listening on public network interfaces.
<Ok>


joe@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@yavin: ~/admin/network
joe@ubuntu-2016: ~
Package configuration
Mail Server configuration
IP-addresses to listen on for incoming SMTP connections:
127.0.0.1 ; ::1
<Ok>
<Cancel>


joe@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@yavin: ~/admin/network
joe@ubuntu-2016: ~
Package configuration
Mail Server configuration
IP-addresses to listen on for incoming SMTP connections:
127.0.0.1 ; ::1 ; 144.38.199.164
<Ok>
<Cancel>

joe@ubuntu-2016: ~

joe@yavin: ~/f16/it3100 × | joe@yavin: ~/admin/network × | joe@ubuntu-2016: ~ ×

Package configuration

Mail Server configuration

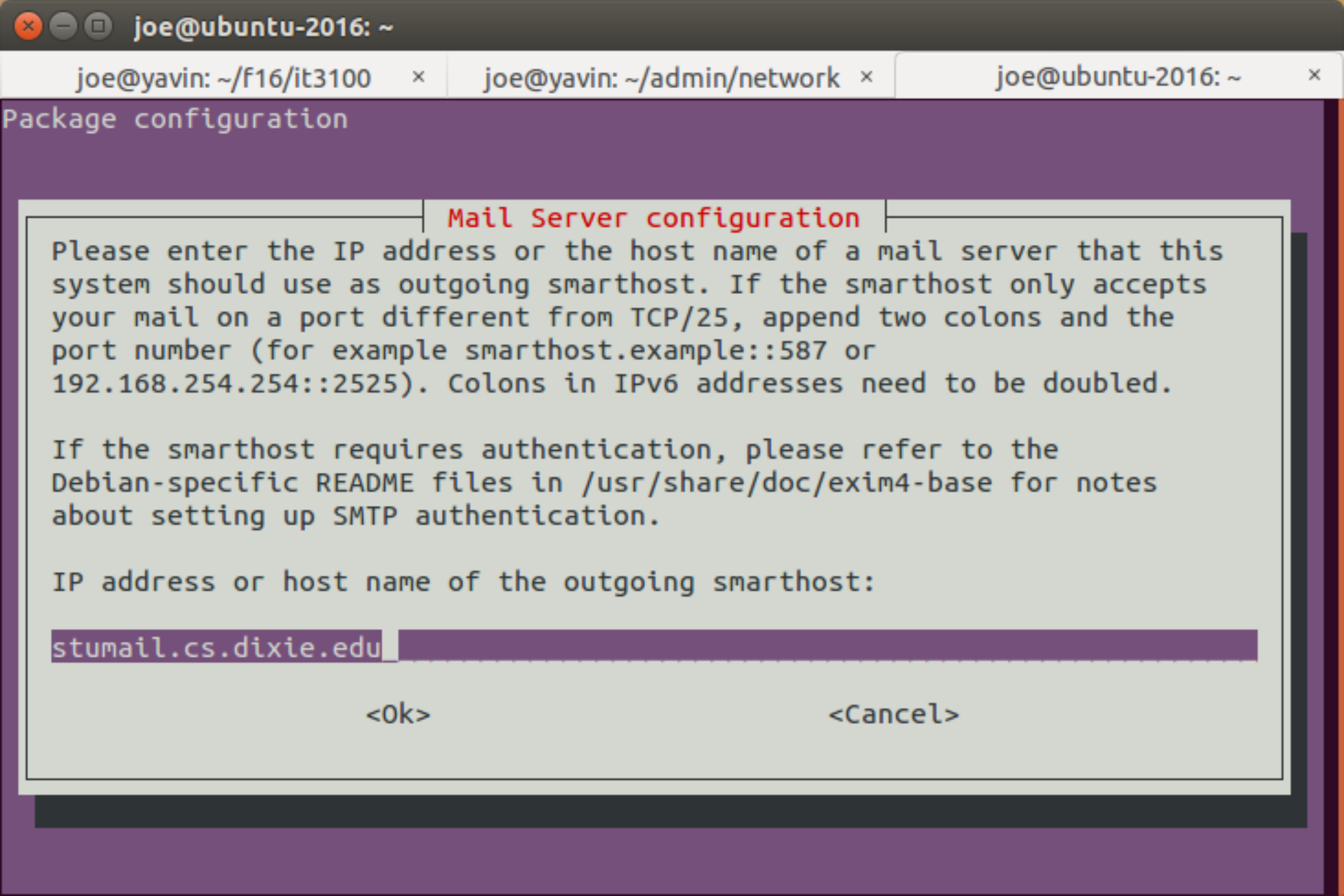
Please enter a semicolon-separated list of recipient domains for which this machine should consider itself the final destination. These domains are commonly called 'local domains'. The local hostname (ubuntu-2016) and 'localhost' are always added to the list given here.

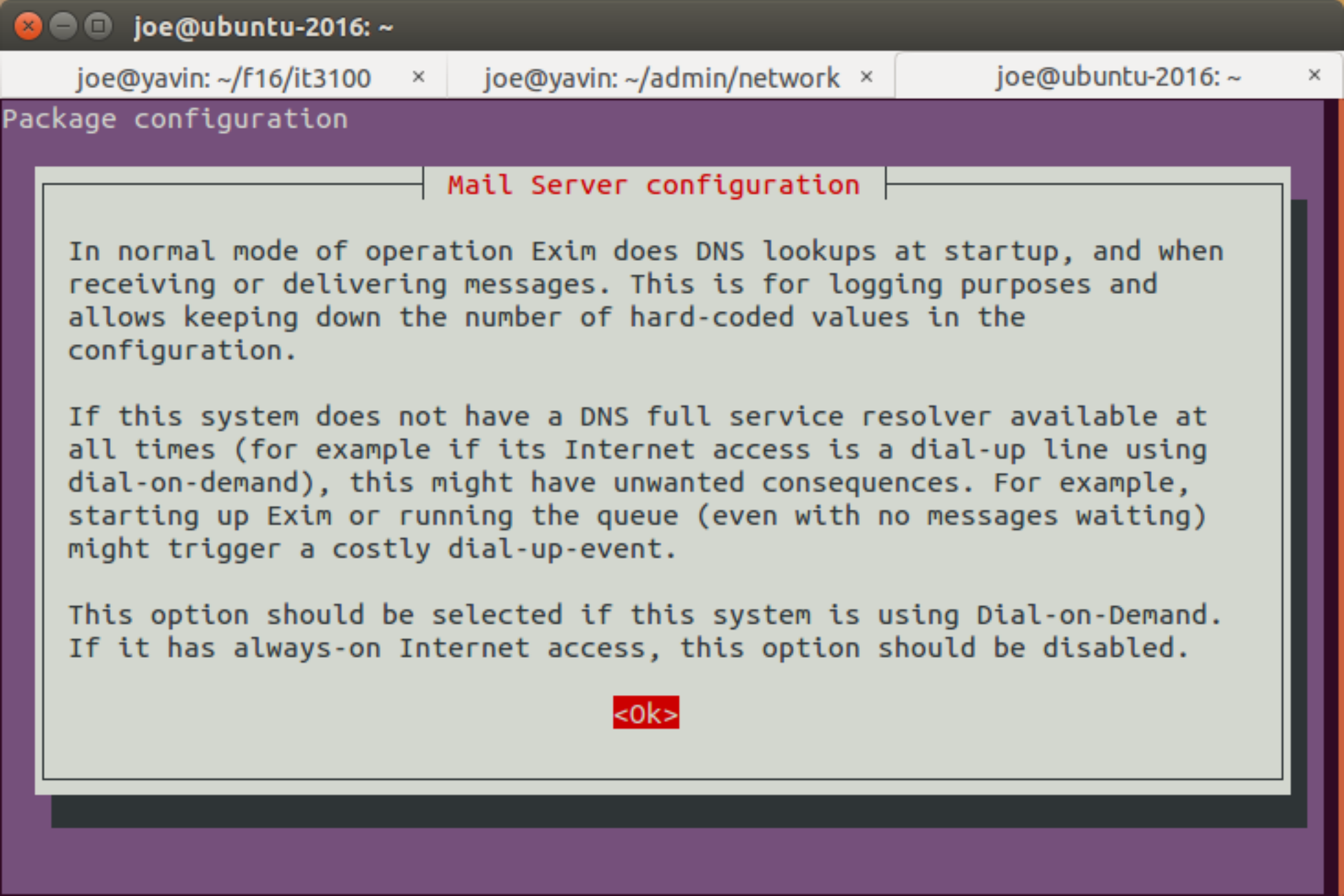
By default all local domains will be treated identically. If both a.example and b.example are local domains, acc@a.example and acc@b.example will be delivered to the same final destination. If different domain names should be treated differently, it is necessary to edit the config files afterwards.

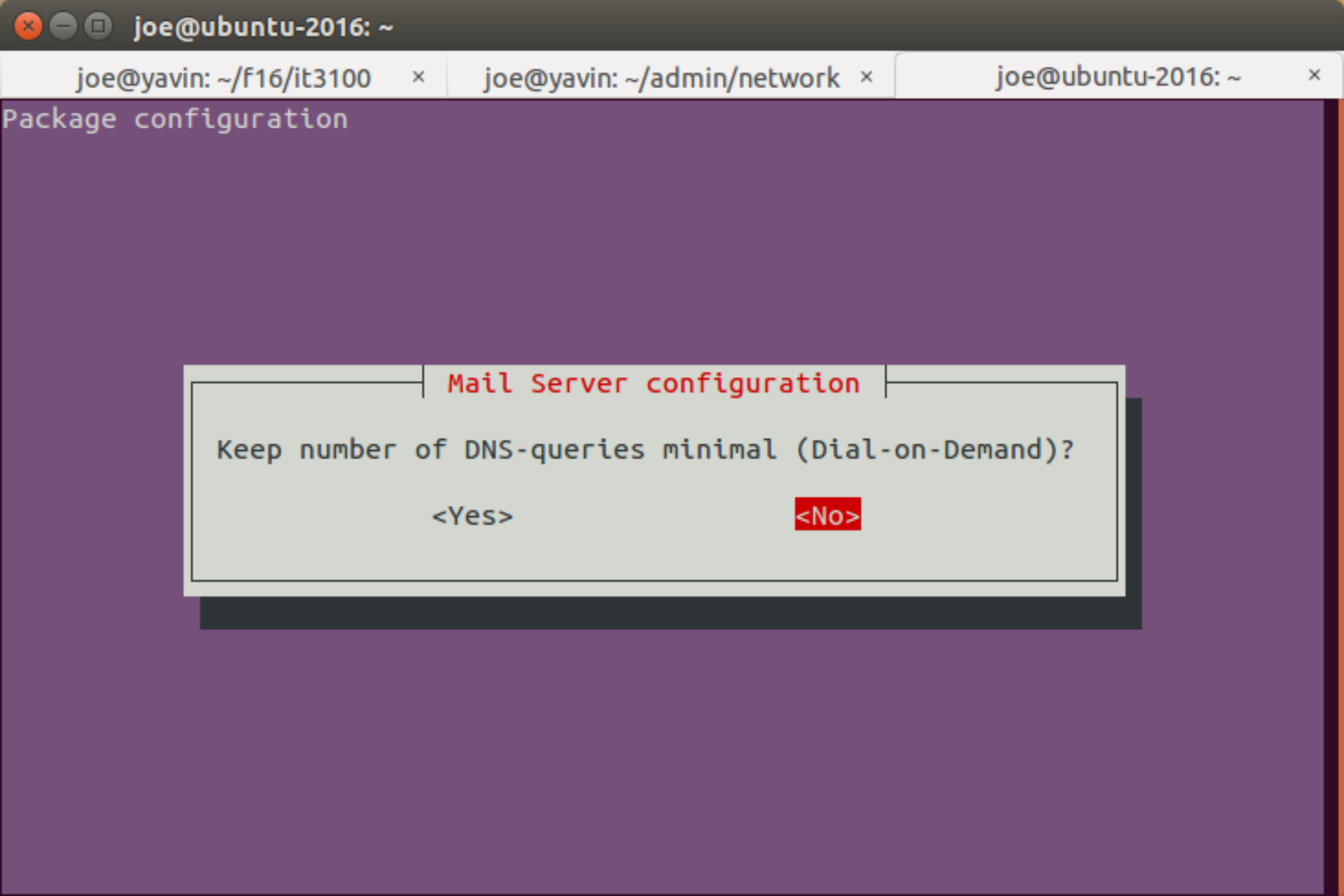
Other destinations for which mail is accepted:

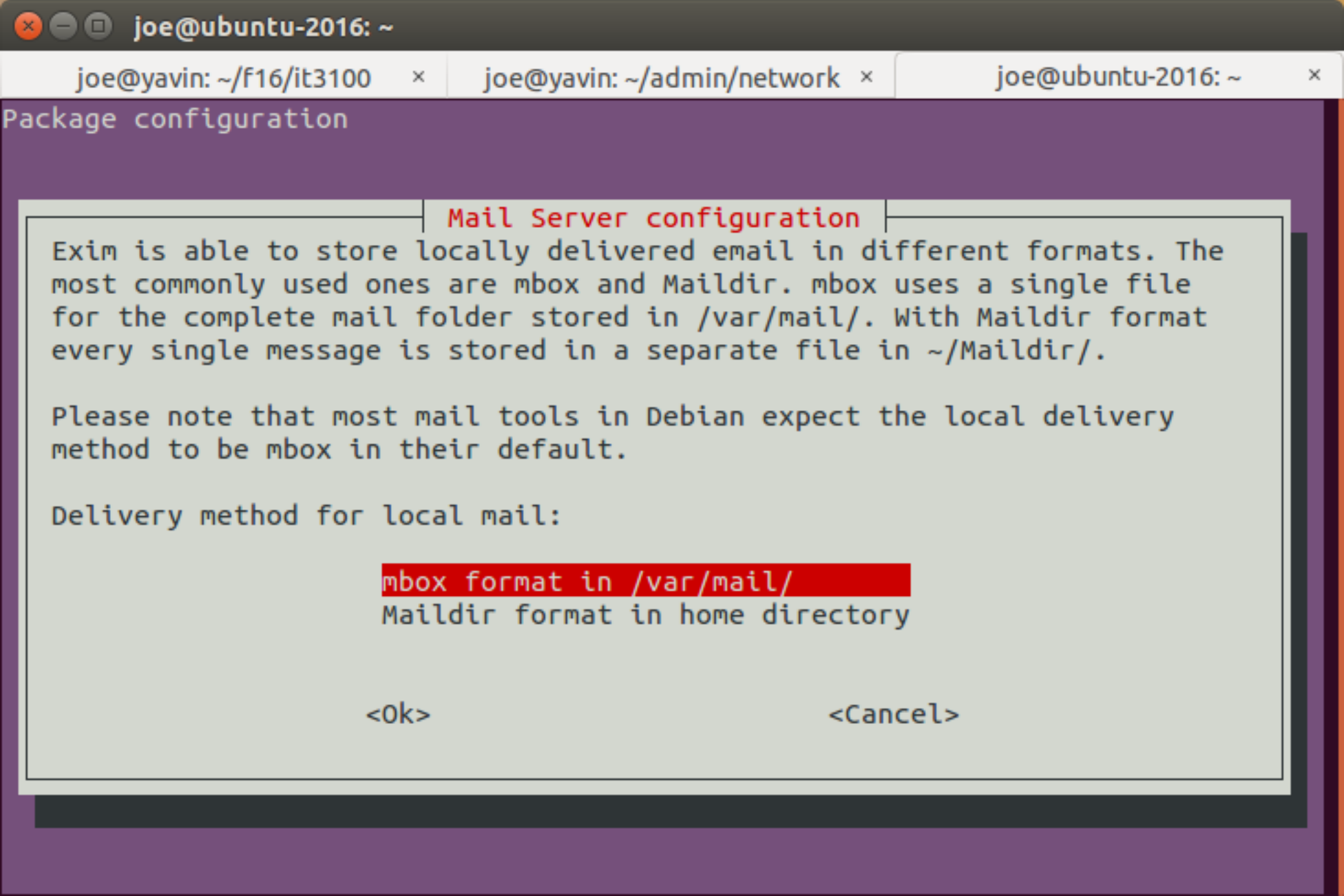
mail.thegummibear.com; thegummibear.com

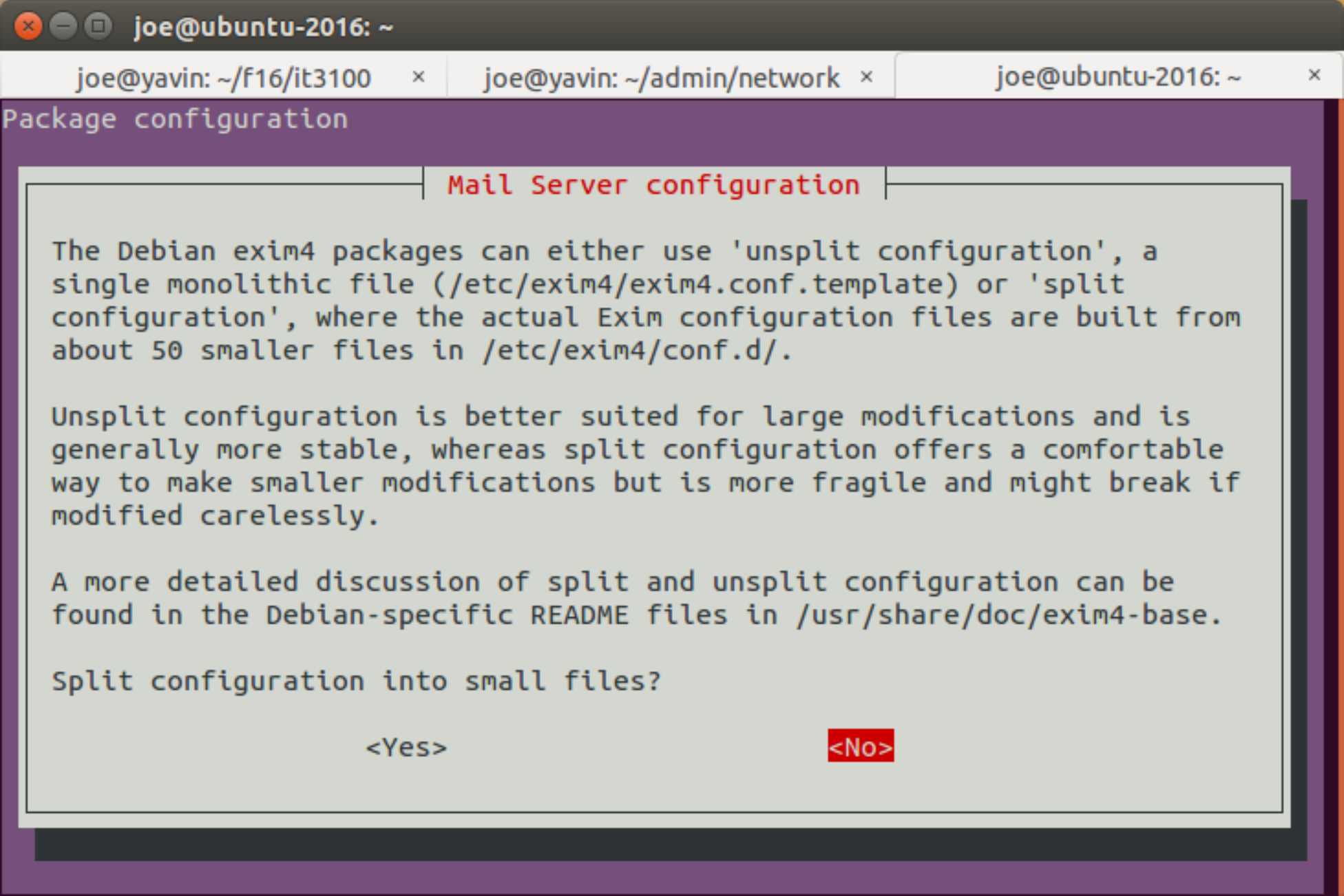
<Ok> <Cancel>

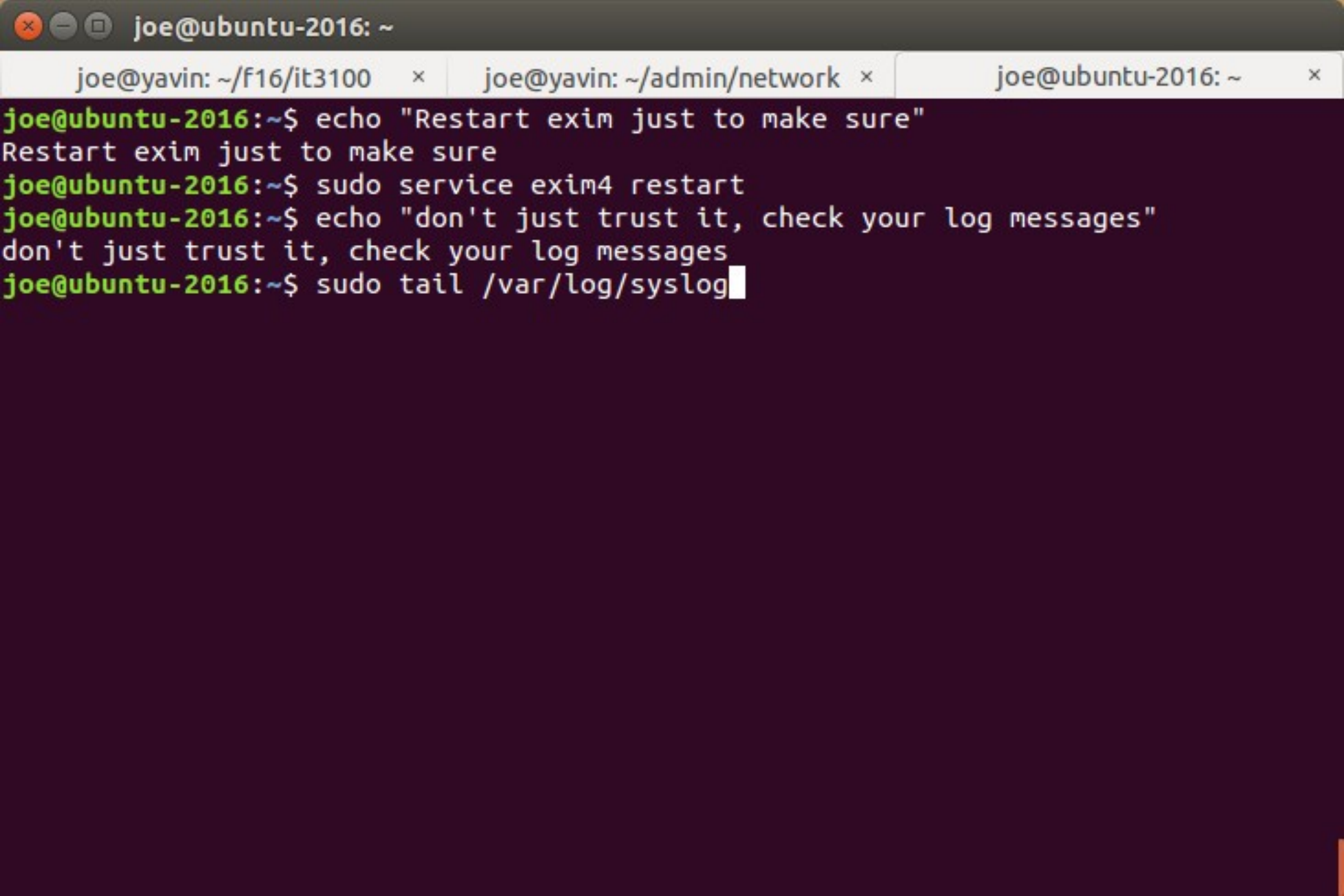

joe@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@yavin: ~/admin/network
joe@ubuntu-2016: ~
Package configuration
Mail Server configuration
Please enter the IP address or the host name of a mail server that this system should use as outgoing smarthost. If the smarthost only accepts your mail on a port different from TCP/25, append two colons and the port number (for example smarthost.example::587 or 192.168.254.254::2525). Colons in IPv6 addresses need to be doubled.
If the smarthost requires authentication, please refer to the Debian-specific README files in /usr/share/doc/exim4-base for notes about setting up SMTP authentication.
IP address or host name of the outgoing smarthost:
stumail.cs.dixie.edu
<Ok>
<Cancel>

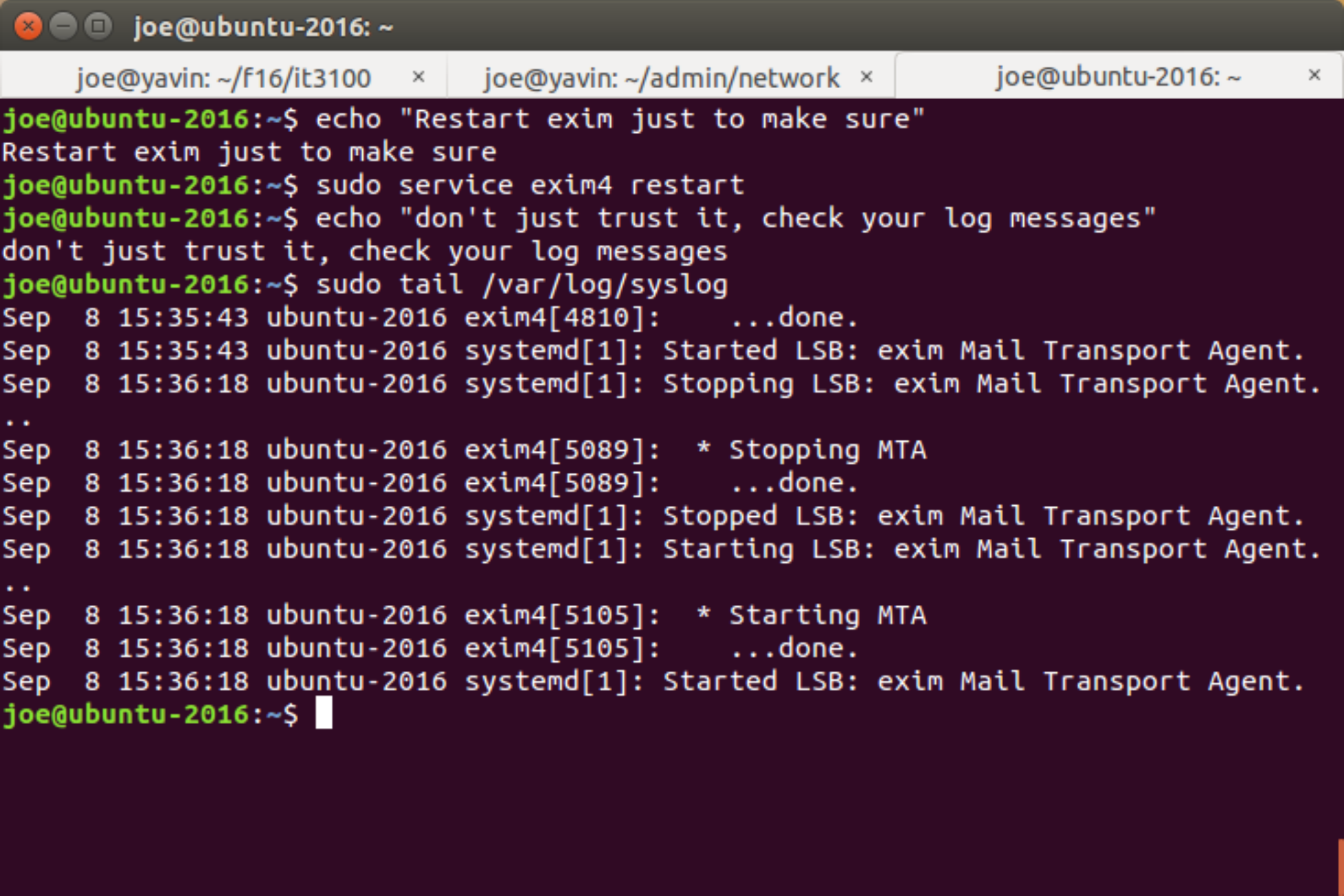

joe@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@yavin: ~/admin/network
joe@ubuntu-2016: ~
Package configuration
Mail Server configuration
In normal mode of operation Exim does DNS lookups at startup, and when receiving or delivering messages. This is for logging purposes and allows keeping down the number of hard-coded values in the configuration.
If this system does not have a DNS full service resolver available at all times (for example if its Internet access is a dial-up line using dial-on-demand), this might have unwanted consequences. For example, starting up Exim or running the queue (even with no messages waiting) might trigger a costly dial-up-event.
This option should be selected if this system is using Dial-on-Demand. If it has always-on Internet access, this option should be disabled.
<Ok>

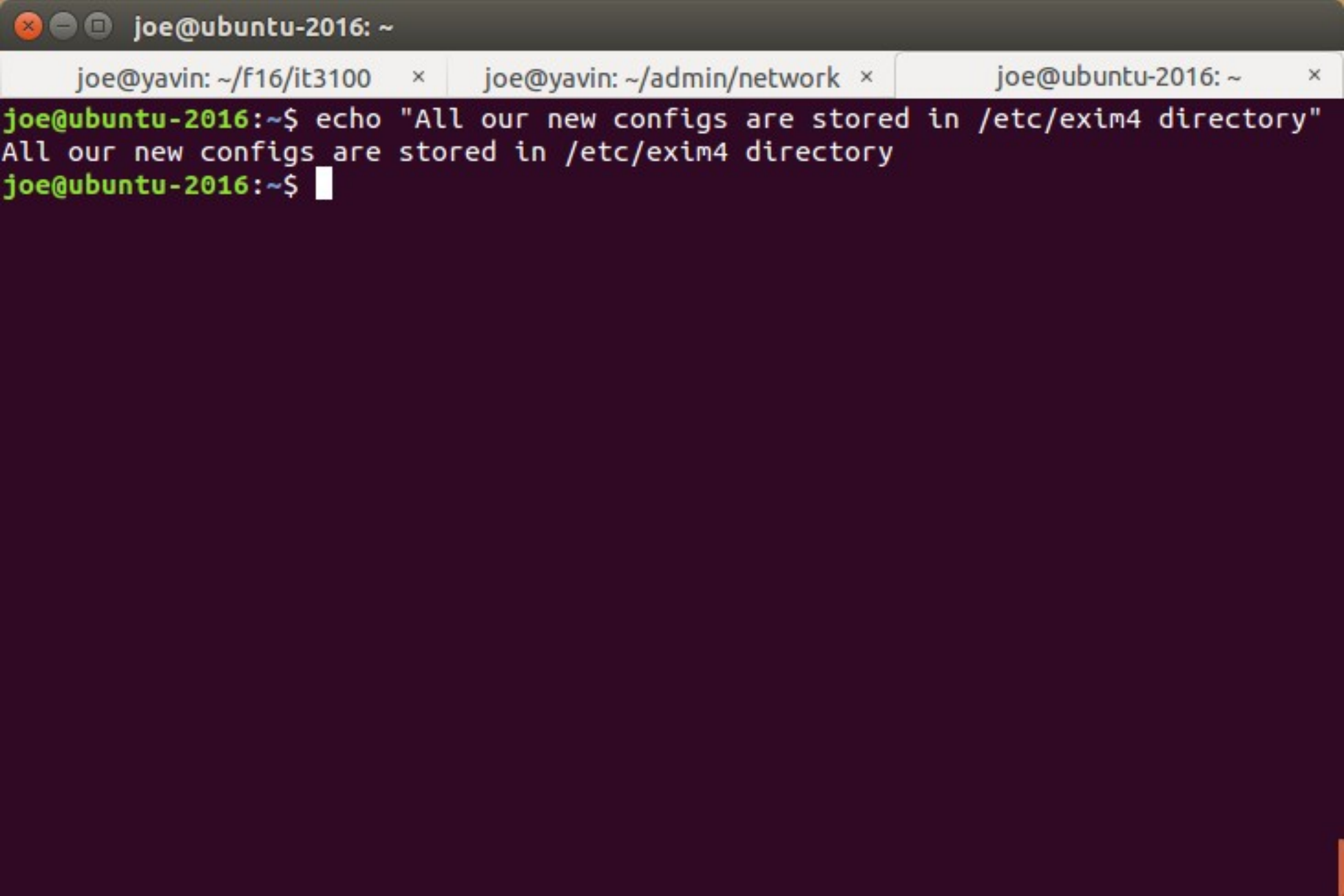

joe@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@yavin: ~/admin/network
joe@ubuntu-2016: ~
Package configuration
Mail Server configuration
Keep number of DNS-queries minimal (Dial-on-Demand)?
<Yes>
<No>

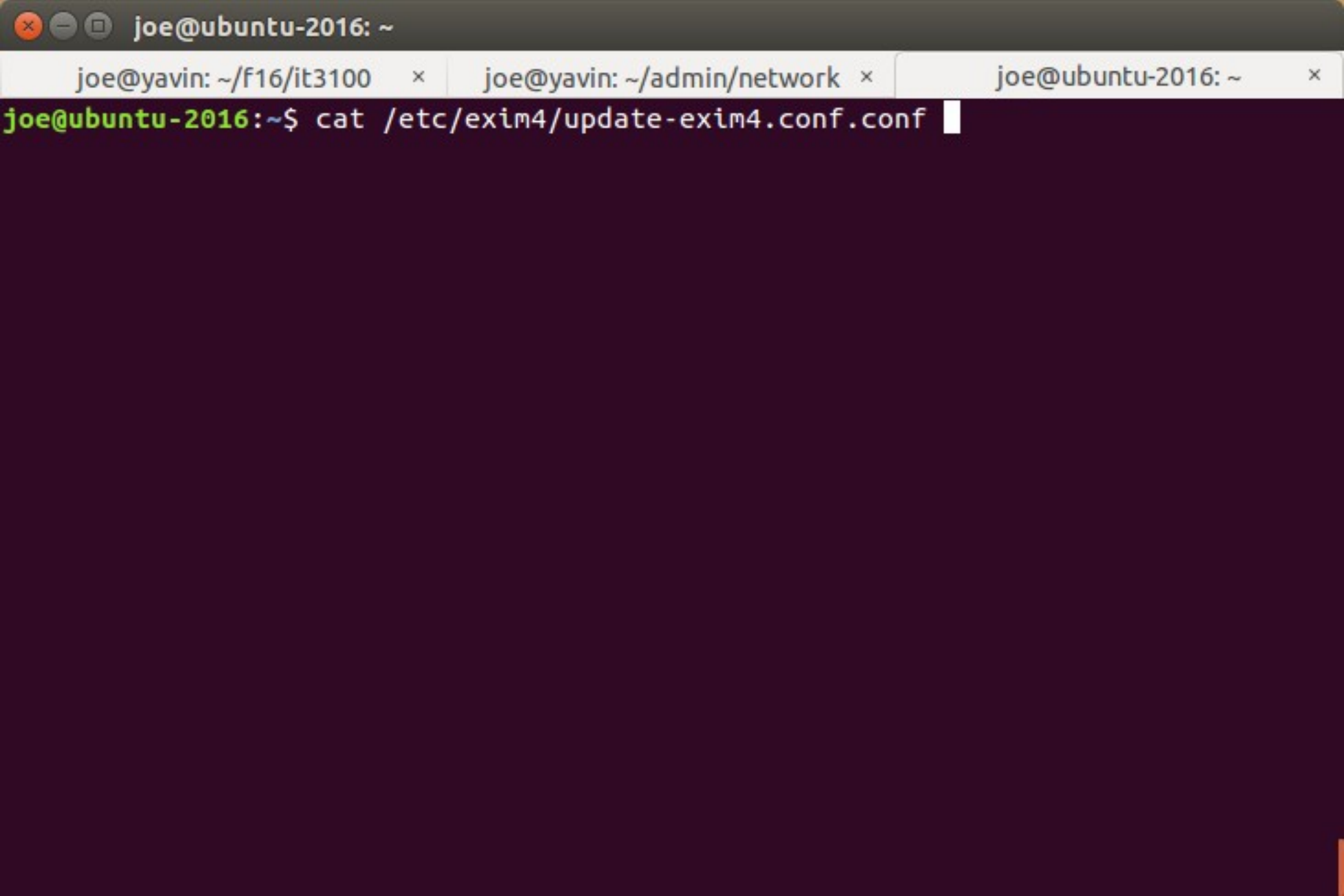

joe@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@yavin: ~/admin/network
joe@ubuntu-2016: ~
Package configuration
Mail Server configuration
Exim is able to store locally delivered email in different formats. The most commonly used ones are mbox and Maildir. mbox uses a single file for the complete mail folder stored in /var/mail/. With Maildir format every single message is stored in a separate file in ~/Maildir/.
Please note that most mail tools in Debian expect the local delivery method to be mbox in their default.
Delivery method for local mail:
mbox format in /var/mail/
Maildir format in home directory
<Ok>
<Cancel>


joe@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@yavin: ~/admin/network
joe@ubuntu-2016: ~
Package configuration
Mail Server configuration
The Debian exim4 packages can either use 'unsplit configuration', a single monolithic file (/etc/exim4/exim4.conf.template) or 'split configuration', where the actual Exim configuration files are built from about 50 smaller files in /etc/exim4/conf.d/.
Unsplit configuration is better suited for large modifications and is generally more stable, whereas split configuration offers a comfortable way to make smaller modifications but is more fragile and might break if modified carelessly.
A more detailed discussion of split and unsplit configuration can be found in the Debian-specific README files in /usr/share/doc/exim4-base.
Split configuration into small files?
<Yes>
<No>


joe@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@yavin: ~/admin/network
joe@ubuntu-2016: ~
joe@ubuntu-2016:~$ echo "Restart exim just to make sure"
Restart exim just to make sure
joe@ubuntu-2016:~$ sudo service exim4 restart
joe@ubuntu-2016:~$ echo "don't just trust it, check your log messages"
don't just trust it, check your log messages
joe@ubuntu-2016:~$ sudo tail /var/log/syslog


joe@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@yavin: ~/admin/network
joe@ubuntu-2016: ~
joe@ubuntu-2016:~$ echo "Restart exim just to make sure"
Restart exim just to make sure
joe@ubuntu-2016:~$ sudo service exim4 restart
joe@ubuntu-2016:~$ echo "don't just trust it, check your log messages"
don't just trust it, check your log messages
joe@ubuntu-2016:~$ sudo tail /var/log/syslog
Sep 8 15:35:43 ubuntu-2016 exim4[4810]: ...done.
Sep 8 15:35:43 ubuntu-2016 systemd[1]: Started LSB: exim Mail Transport Agent.
Sep 8 15:36:18 ubuntu-2016 systemd[1]: Stopping LSB: exim Mail Transport Agent.
..
Sep 8 15:36:18 ubuntu-2016 exim4[5089]: * Stopping MTA
Sep 8 15:36:18 ubuntu-2016 exim4[5089]: ...done.
Sep 8 15:36:18 ubuntu-2016 systemd[1]: Stopped LSB: exim Mail Transport Agent.
Sep 8 15:36:18 ubuntu-2016 systemd[1]: Starting LSB: exim Mail Transport Agent.
..
Sep 8 15:36:18 ubuntu-2016 exim4[5105]: * Starting MTA
Sep 8 15:36:18 ubuntu-2016 exim4[5105]: ...done.
Sep 8 15:36:18 ubuntu-2016 systemd[1]: Started LSB: exim Mail Transport Agent.
joe@ubuntu-2016:~$

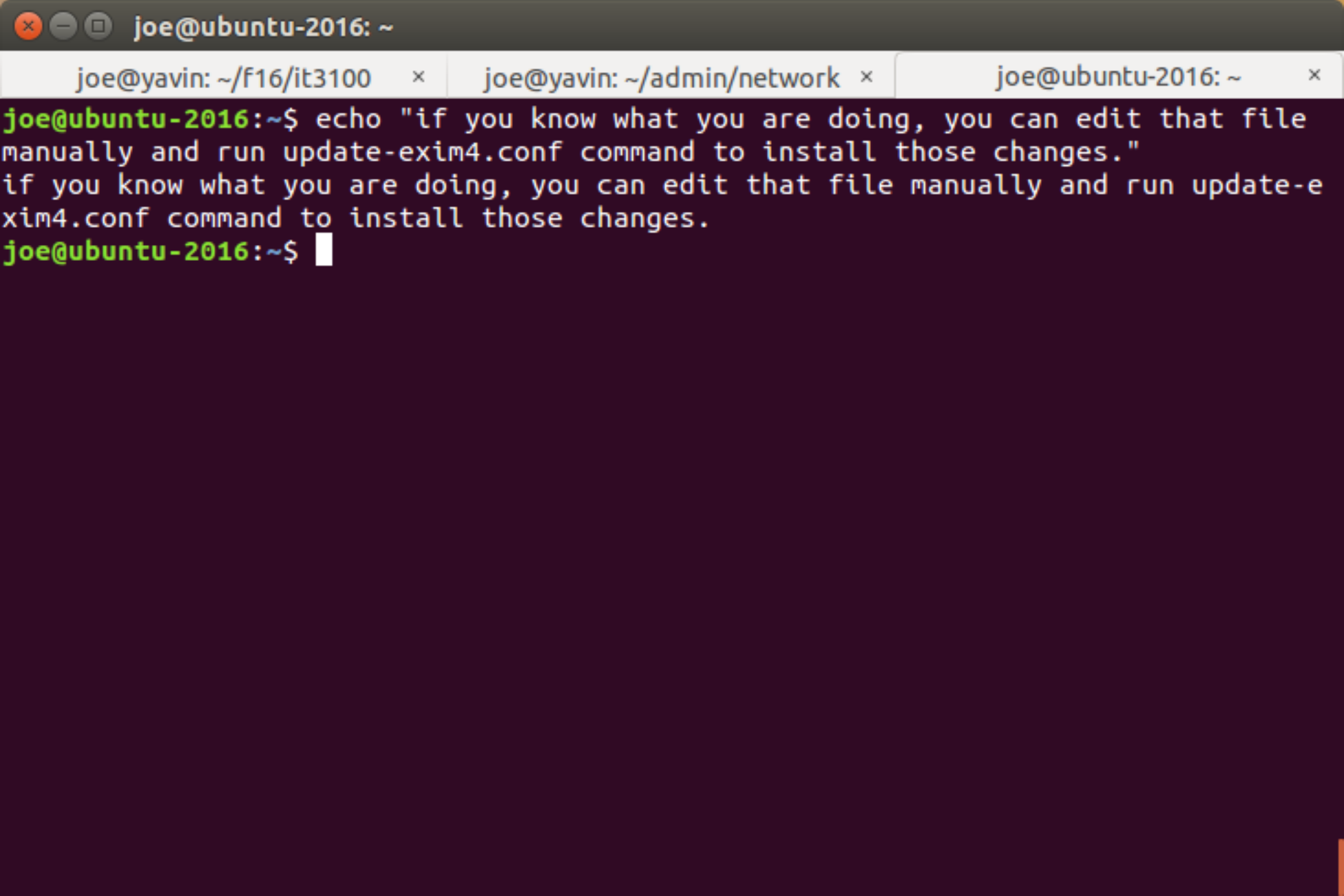

joe@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@yavin: ~/admin/network
joe@ubuntu-2016: ~
joe@ubuntu-2016:~$ echo "All our new configs are stored in /etc/exim4 directory"
All our new configs are stored in /etc/exim4 directory
joe@ubuntu-2016:~$

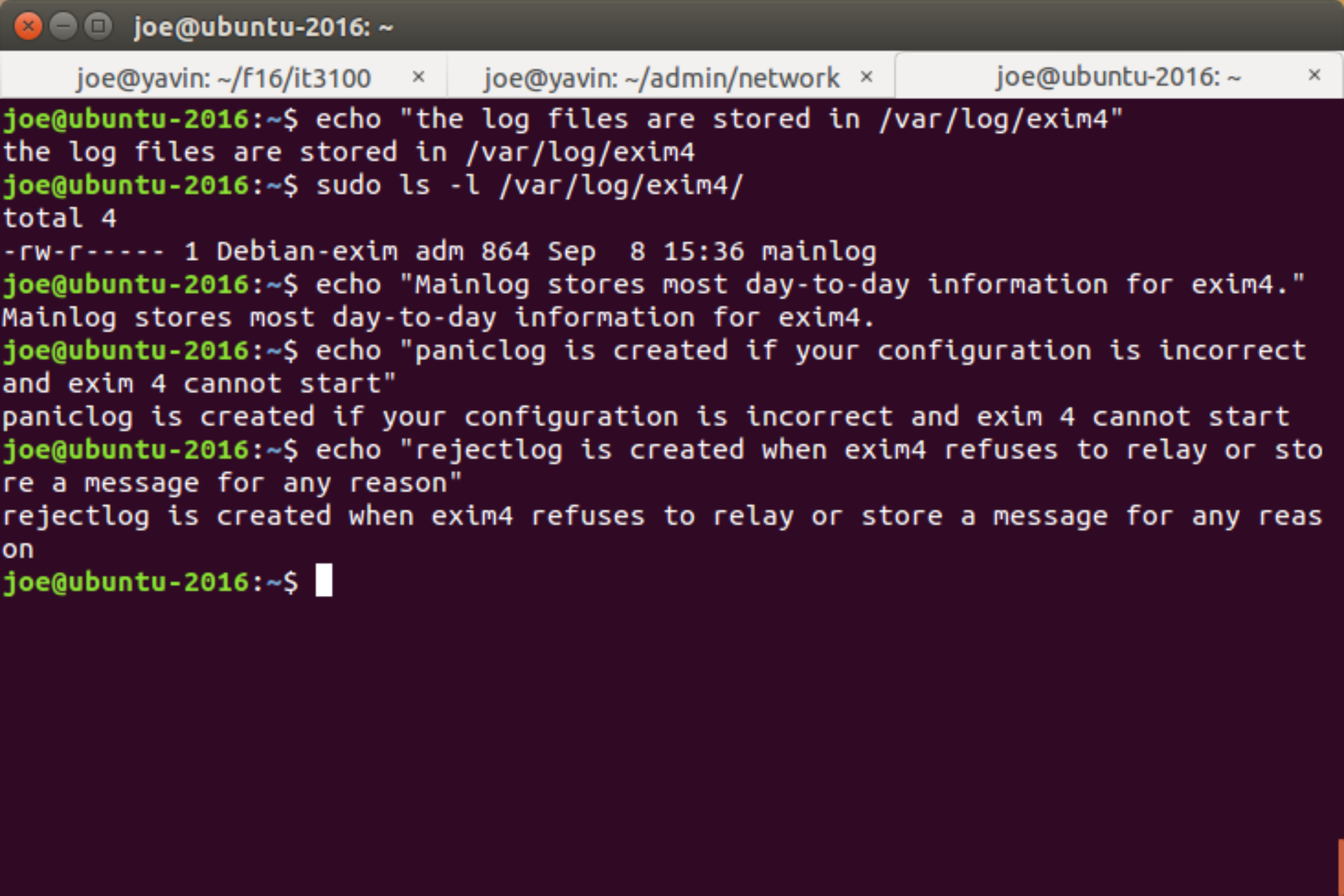

joe@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@yavin: ~/admin/network
joe@ubuntu-2016: ~
joe@ubuntu-2016:~$ cat /etc/exim4/update-exim4.conf.conf

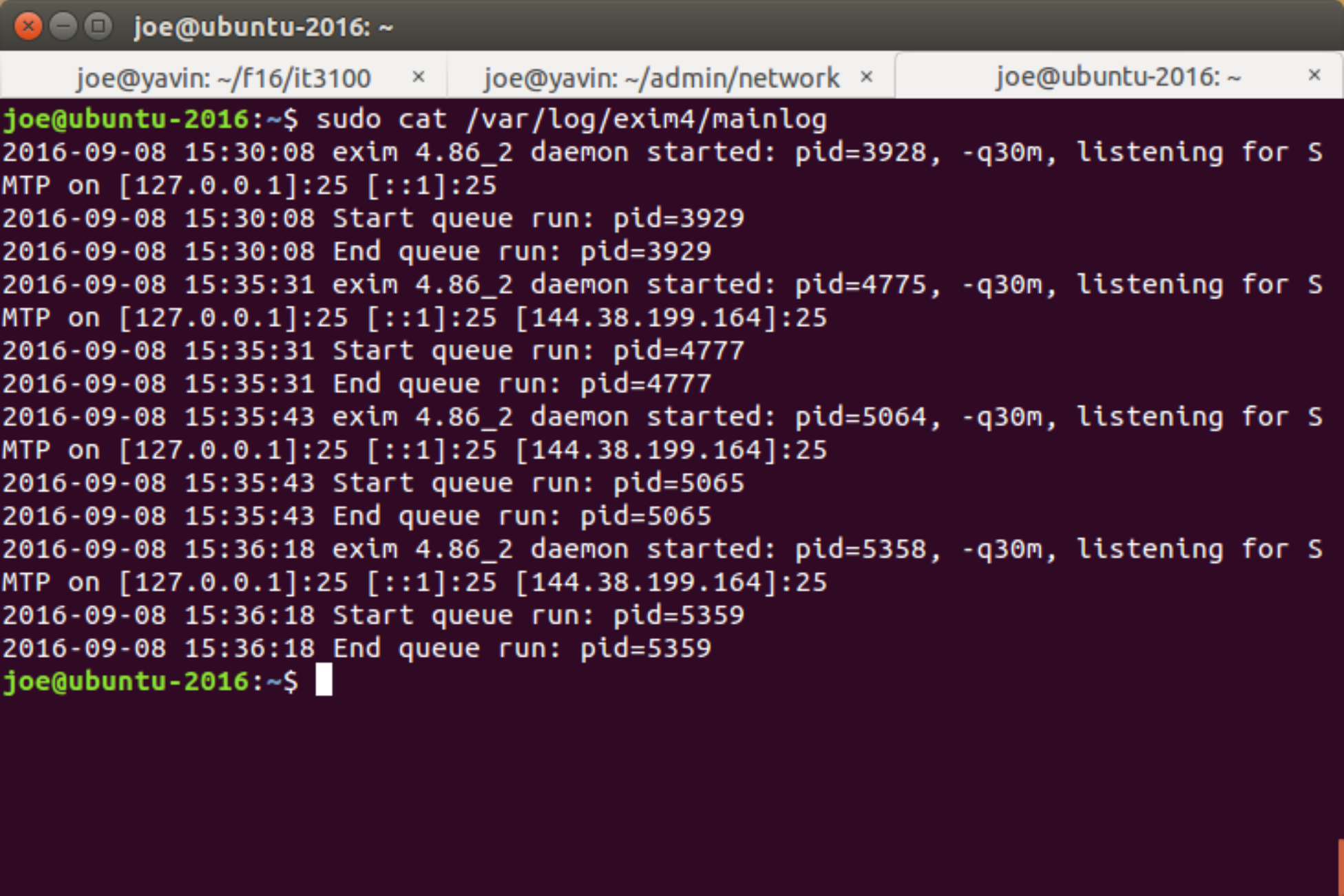
joe@ubuntu-2016: ~

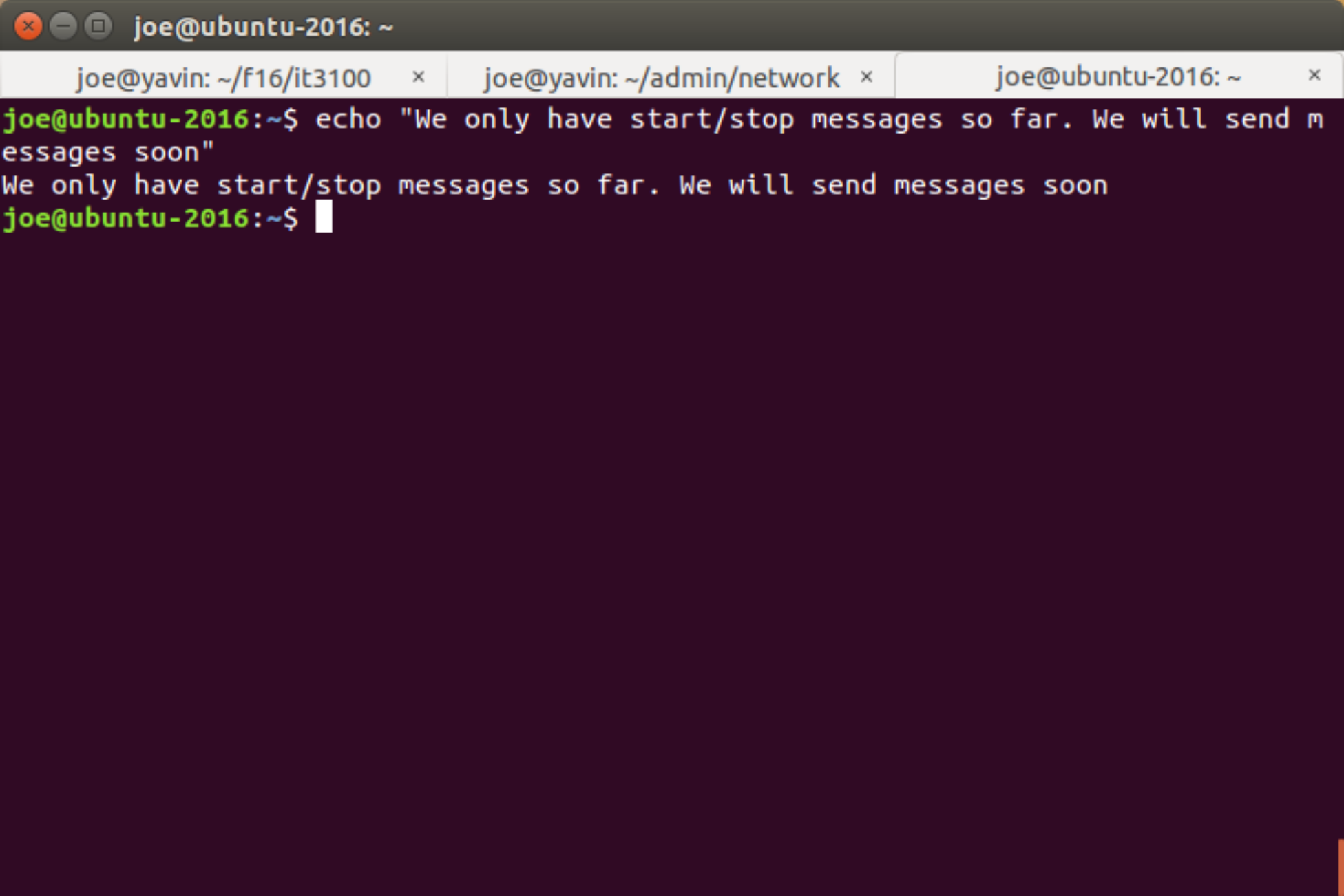
joe@yavin: ~/f16/it3100 × | joe@yavin: ~/admin/network × | joe@ubuntu-2016: ~ ×

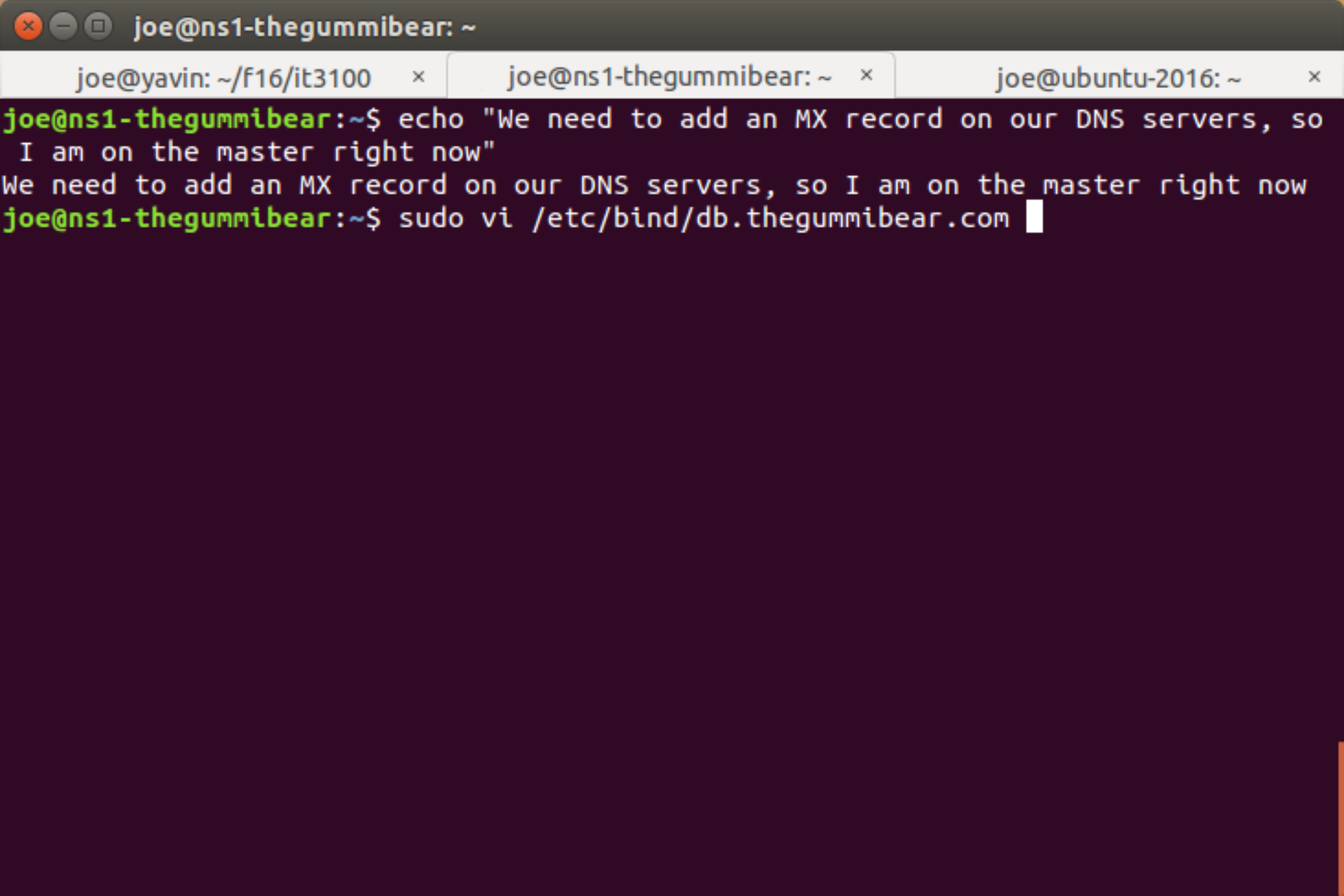
```
# around with multiple versions of the file.
#
# update-exim4.conf uses this file to determine variable values to generate
# exim configuration macros for the configuration file.
#
# Most settings found in here do have corresponding questions in the
# Debconf configuration, but not all of them.
#
# This is a Debian specific file

dc_eximconfig_configtype='smarthost'
dc_other_hostnames='mail.thegummibear.com; thegummibear.com'
dc_local_interfaces='127.0.0.1 ; ::1 ; 144.38.199.164'
dc_readhost=''
dc_relay_domains=''
dc_minimaldns='false'
dc_relay_nets=''
dc_smarthost='stumail.cs.dixie.edu'
CFILEMODE='644'
dc_use_split_config='false'
dc_hide_mailname='false'
dc_mailname_in_oh='true'
dc_localdelivery='mail_spool'
joe@ubuntu-2016:~$
```

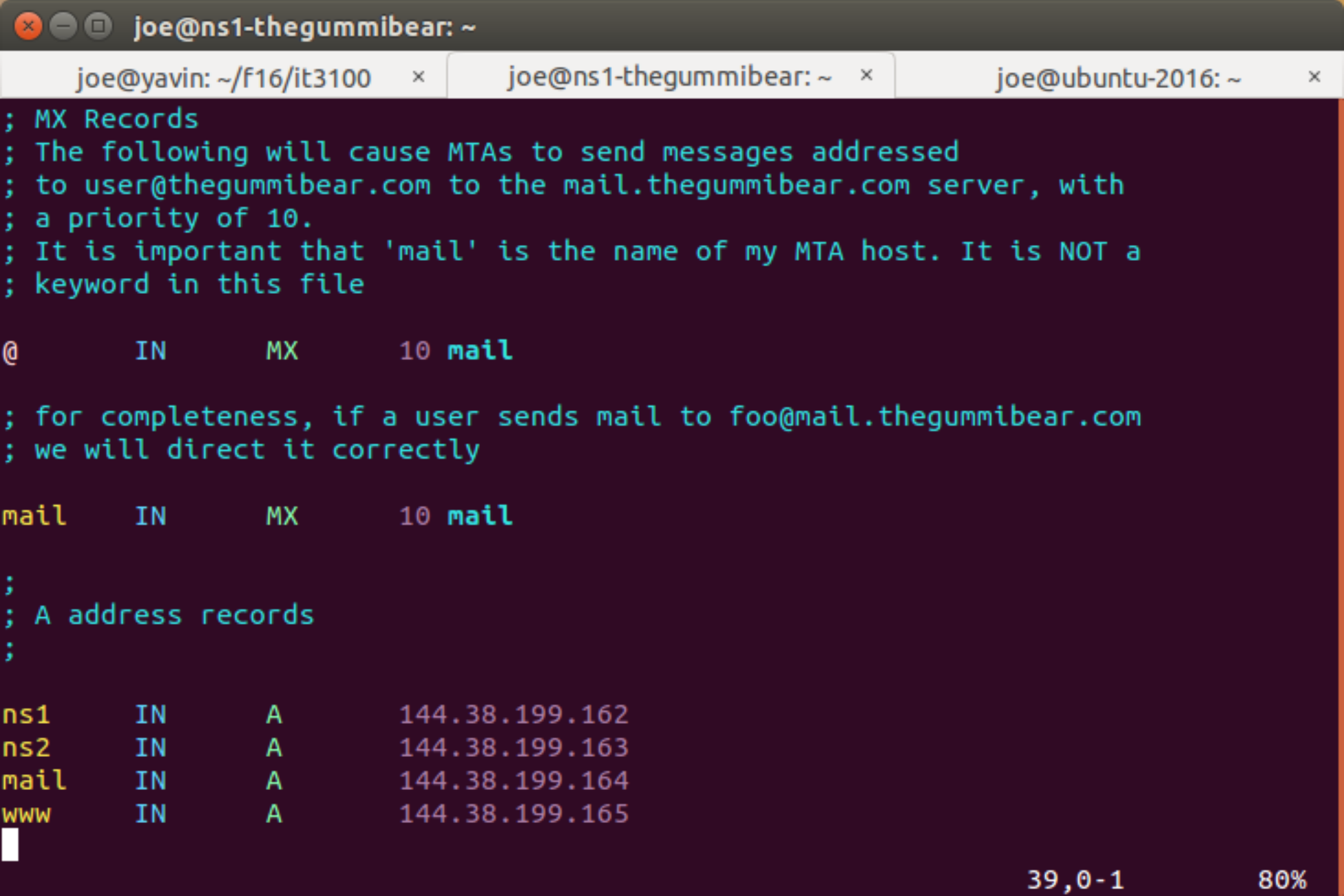

joe@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@yavin: ~/admin/network
joe@ubuntu-2016: ~
joe@ubuntu-2016:~$ echo "if you know what you are doing, you can edit that file manually and run update-exim4.conf command to install those changes."
if you know what you are doing, you can edit that file manually and run update-exim4.conf command to install those changes.
joe@ubuntu-2016:~$


joe@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@yavin: ~/admin/network
joe@ubuntu-2016: ~
joe@ubuntu-2016:~$ echo "the log files are stored in /var/log/exim4"
the log files are stored in /var/log/exim4
joe@ubuntu-2016:~$ sudo ls -l /var/log/exim4/
total 4
-rw-r----- 1 Debian-exim adm 864 Sep 8 15:36 mainlog
joe@ubuntu-2016:~$ echo "Mainlog stores most day-to-day information for exim4."
Mainlog stores most day-to-day information for exim4.
joe@ubuntu-2016:~$ echo "paniclog is created if your configuration is incorrect and exim 4 cannot start"
paniclog is created if your configuration is incorrect and exim 4 cannot start
joe@ubuntu-2016:~$ echo "rejectlog is created when exim4 refuses to relay or store a message for any reason"
rejectlog is created when exim4 refuses to relay or store a message for any reason
joe@ubuntu-2016:~$


joe@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@yavin: ~/admin/network
joe@ubuntu-2016: ~
joe@ubuntu-2016:~$ sudo cat /var/log/exim4/mainlog
2016-09-08 15:30:08 exim 4.86_2 daemon started: pid=3928, -q30m, listening for S
MTP on [127.0.0.1]:25 [::1]:25
2016-09-08 15:30:08 Start queue run: pid=3929
2016-09-08 15:30:08 End queue run: pid=3929
2016-09-08 15:35:31 exim 4.86_2 daemon started: pid=4775, -q30m, listening for S
MTP on [127.0.0.1]:25 [::1]:25 [144.38.199.164]:25
2016-09-08 15:35:31 Start queue run: pid=4777
2016-09-08 15:35:31 End queue run: pid=4777
2016-09-08 15:35:43 exim 4.86_2 daemon started: pid=5064, -q30m, listening for S
MTP on [127.0.0.1]:25 [::1]:25 [144.38.199.164]:25
2016-09-08 15:35:43 Start queue run: pid=5065
2016-09-08 15:35:43 End queue run: pid=5065
2016-09-08 15:36:18 exim 4.86_2 daemon started: pid=5358, -q30m, listening for S
MTP on [127.0.0.1]:25 [::1]:25 [144.38.199.164]:25
2016-09-08 15:36:18 Start queue run: pid=5359
2016-09-08 15:36:18 End queue run: pid=5359
joe@ubuntu-2016:~$


joe@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@yavin: ~/admin/network
joe@ubuntu-2016: ~
joe@ubuntu-2016:~$ echo "We only have start/stop messages so far. We will send m
essages soon"
We only have start/stop messages so far. We will send messages soon
joe@ubuntu-2016:~$


joe@ns1-thegummibear: ~
joe@yavin: ~/f16/it3100
joe@ns1-thegummibear: ~
joe@ubuntu-2016: ~
joe@ns1-thegummibear:~$ echo "We need to add an MX record on our DNS servers, so I am on the master right now"
We need to add an MX record on our DNS servers, so I am on the master right now
joe@ns1-thegummibear:~$ sudo vi /etc/bind/db.thegummibear.com

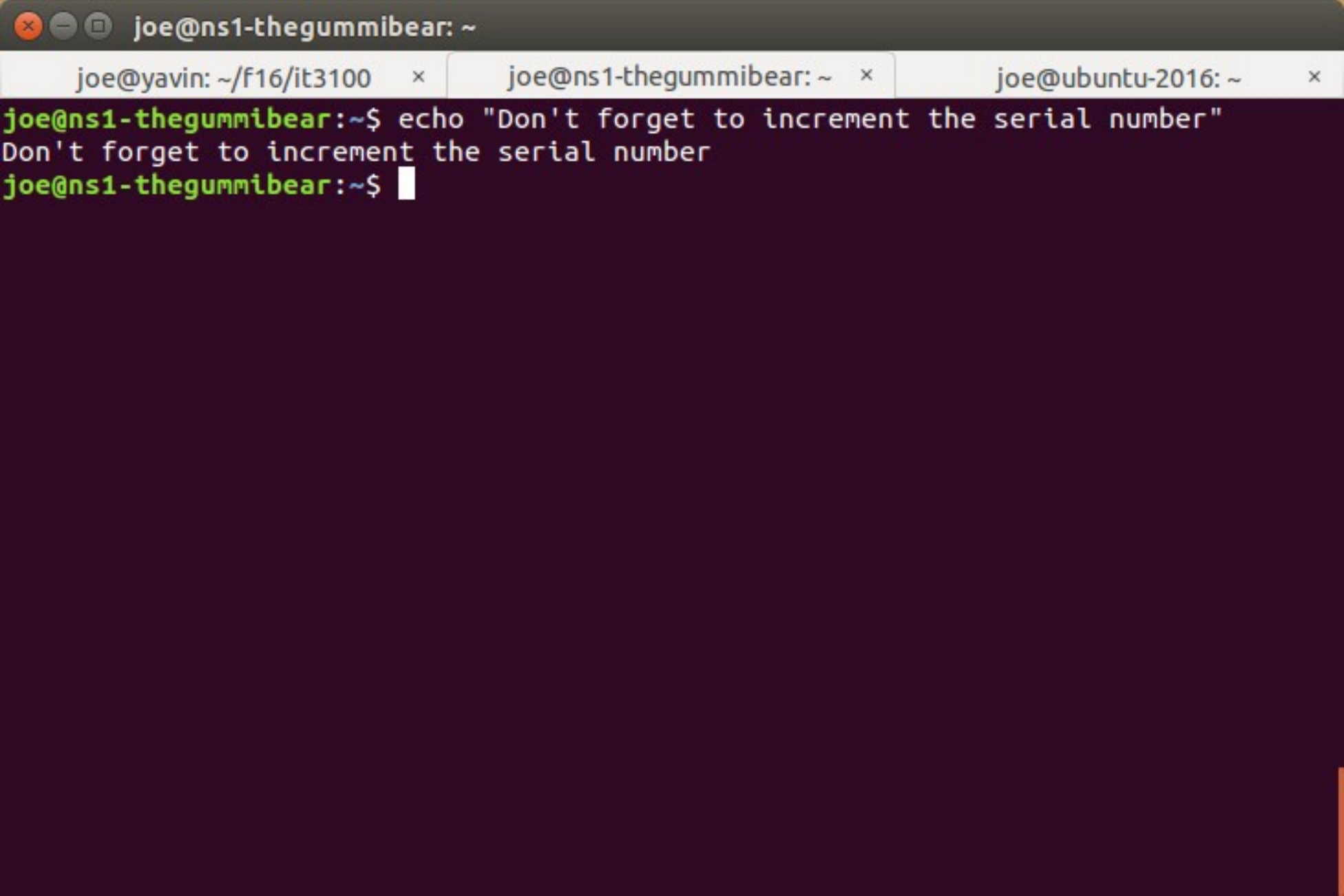


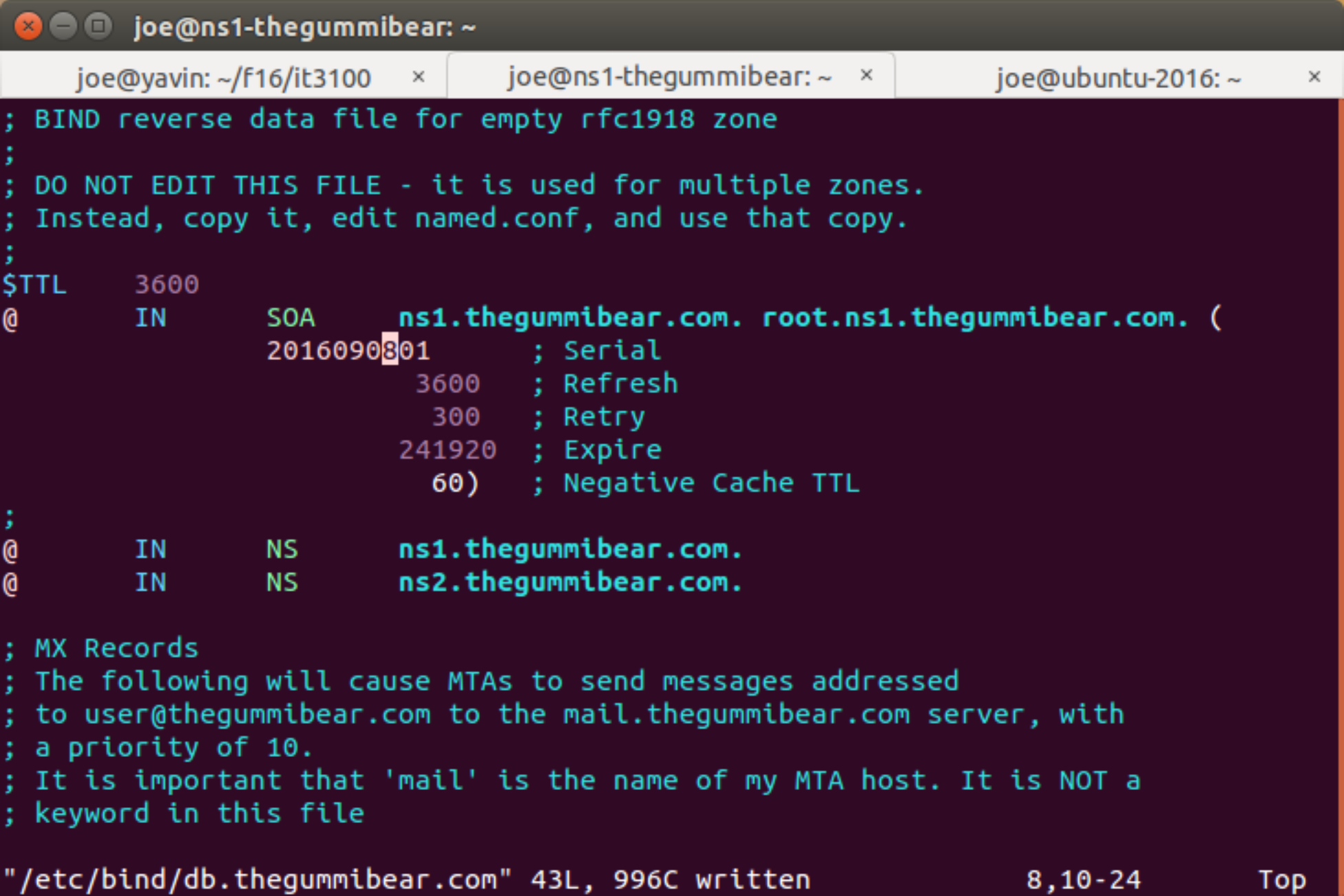
joe@ns1-thegummibear: ~

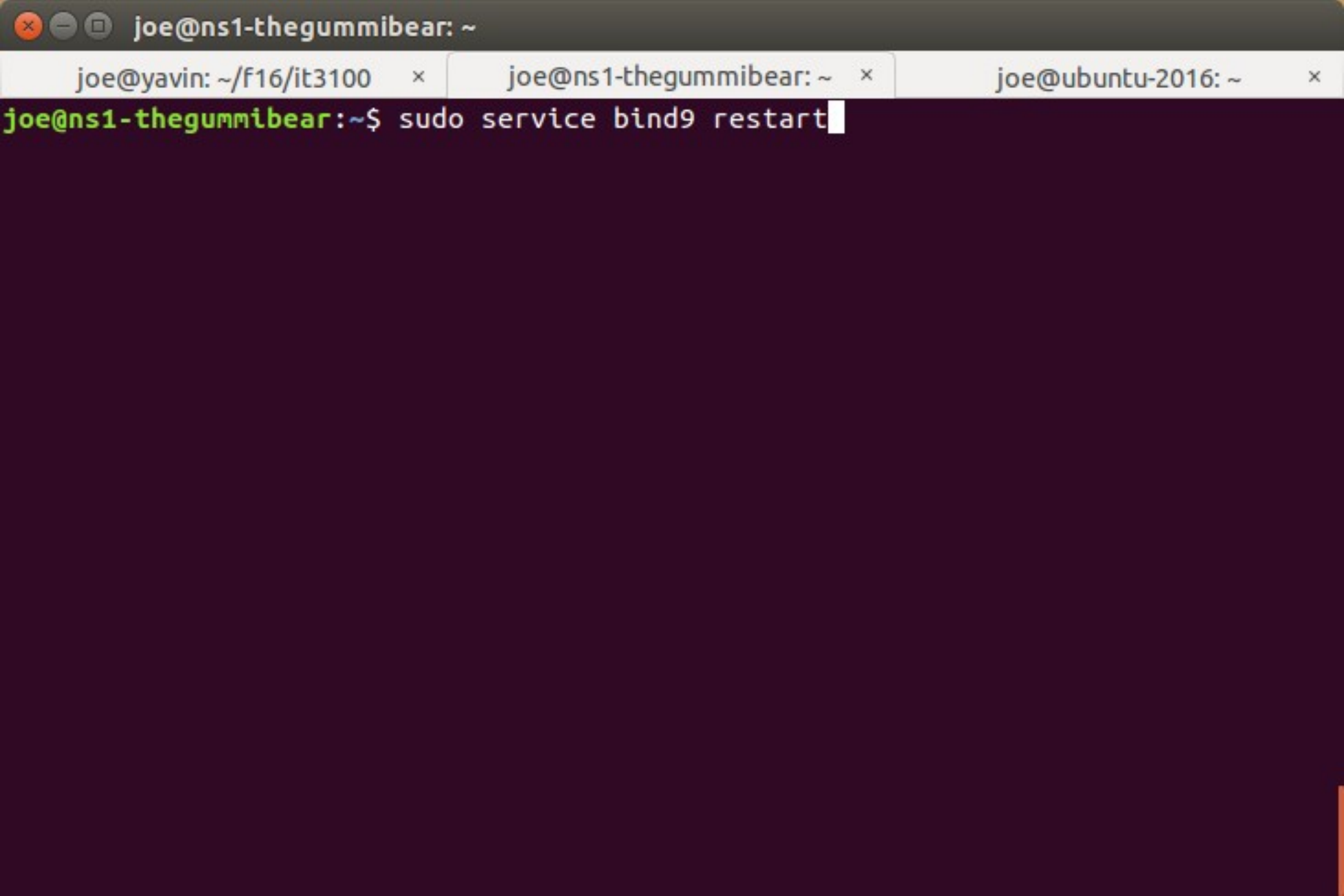
joe@yavin: ~/f16/it3100 | joe@ns1-thegummibear: ~ | joe@ubuntu-2016: ~

```
; MX Records
; The following will cause MTAs to send messages addressed
; to user@thegummibear.com to the mail.thegummibear.com server, with
; a priority of 10.
; It is important that 'mail' is the name of my MTA host. It is NOT a
; keyword in this file

@       IN      MX      10 mail

; for completeness, if a user sends mail to foo@mail.thegummibear.com
; we will direct it correctly

mail    IN      MX      10 mail

;
; A address records
;

ns1     IN      A       144.38.199.162
ns2     IN      A       144.38.199.163
mail    IN      A       144.38.199.164
www     IN      A       144.38.199.165
```

39,0-1 80%


joe@ns1-thegummibear: ~
joe@yavin: ~/f16/it3100
joe@ns1-thegummibear: ~
joe@ubuntu-2016: ~
joe@ns1-thegummibear:~$ echo "Don't forget to increment the serial number"
Don't forget to increment the serial number
joe@ns1-thegummibear:~$

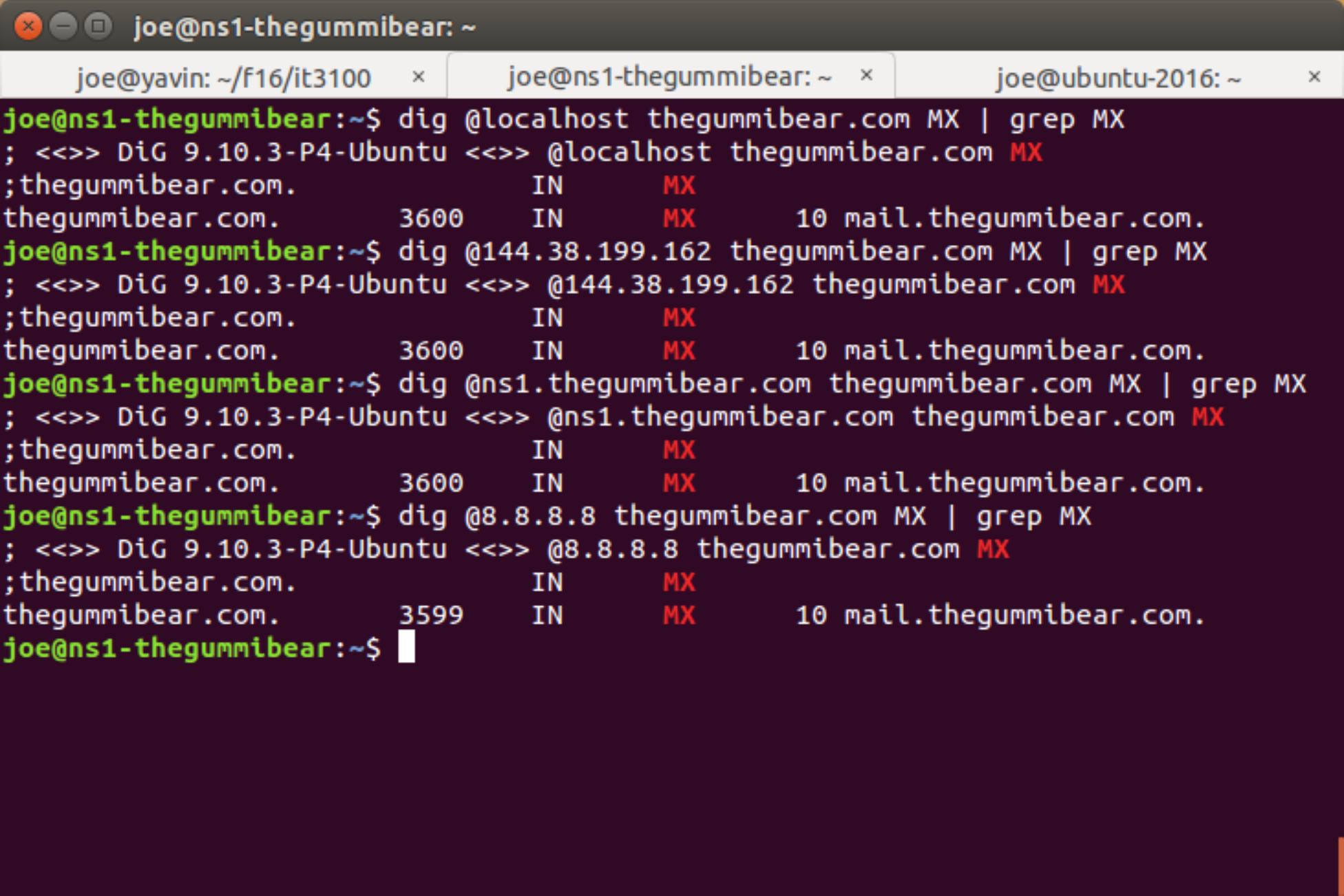

joe@ns1-thegummibear: ~
joe@yavin: ~/f16/it3100
joe@ns1-thegummibear: ~
joe@ubuntu-2016: ~
; BIND reverse data file for empty rfc1918 zone
;
; DO NOT EDIT THIS FILE - it is used for multiple zones.
; Instead, copy it, edit named.conf, and use that copy.
;
$TTL 3600
@ IN SOA ns1.thegummibear.com. root.ns1.thegummibear.com. (
2016090801 ; Serial
3600 ; Refresh
300 ; Retry
241920 ; Expire
60) ; Negative Cache TTL
;
@ IN NS ns1.thegummibear.com.
@ IN NS ns2.thegummibear.com.
; MX Records
; The following will cause MTAs to send messages addressed
; to user@thegummibear.com to the mail.thegummibear.com server, with
; a priority of 10.
; It is important that 'mail' is the name of my MTA host. It is NOT a
; keyword in this file
"/etc/bind/db.thegummibear.com" 43L, 996C written
8,10-24
Top

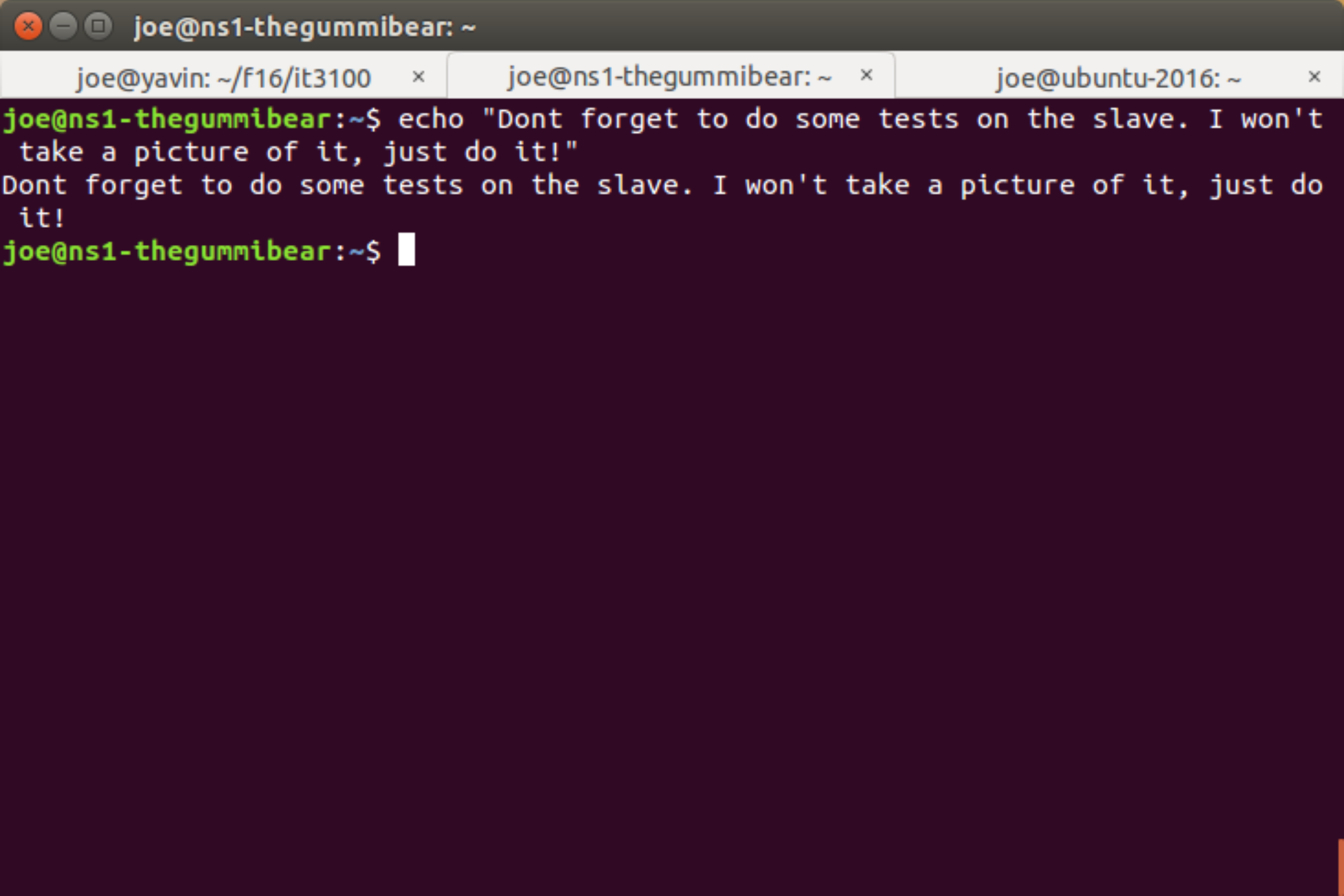

joe@ns1-thegummibear: ~
joe@yavin: ~/f16/it3100
joe@ns1-thegummibear: ~
joe@ubuntu-2016: ~
joe@ns1-thegummibear:~$ sudo service bind9 restart

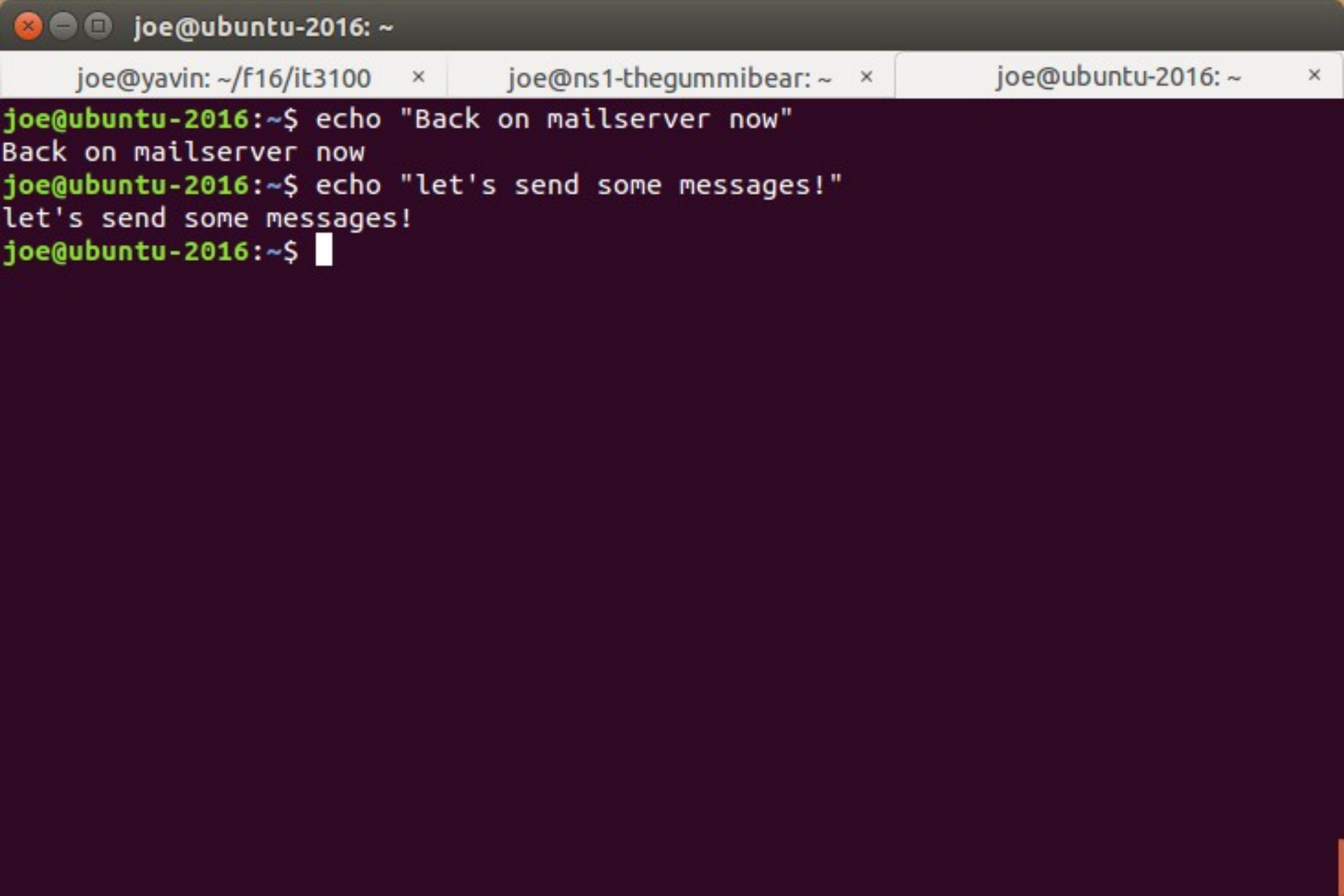
joe@ns1-thegummibear: ~

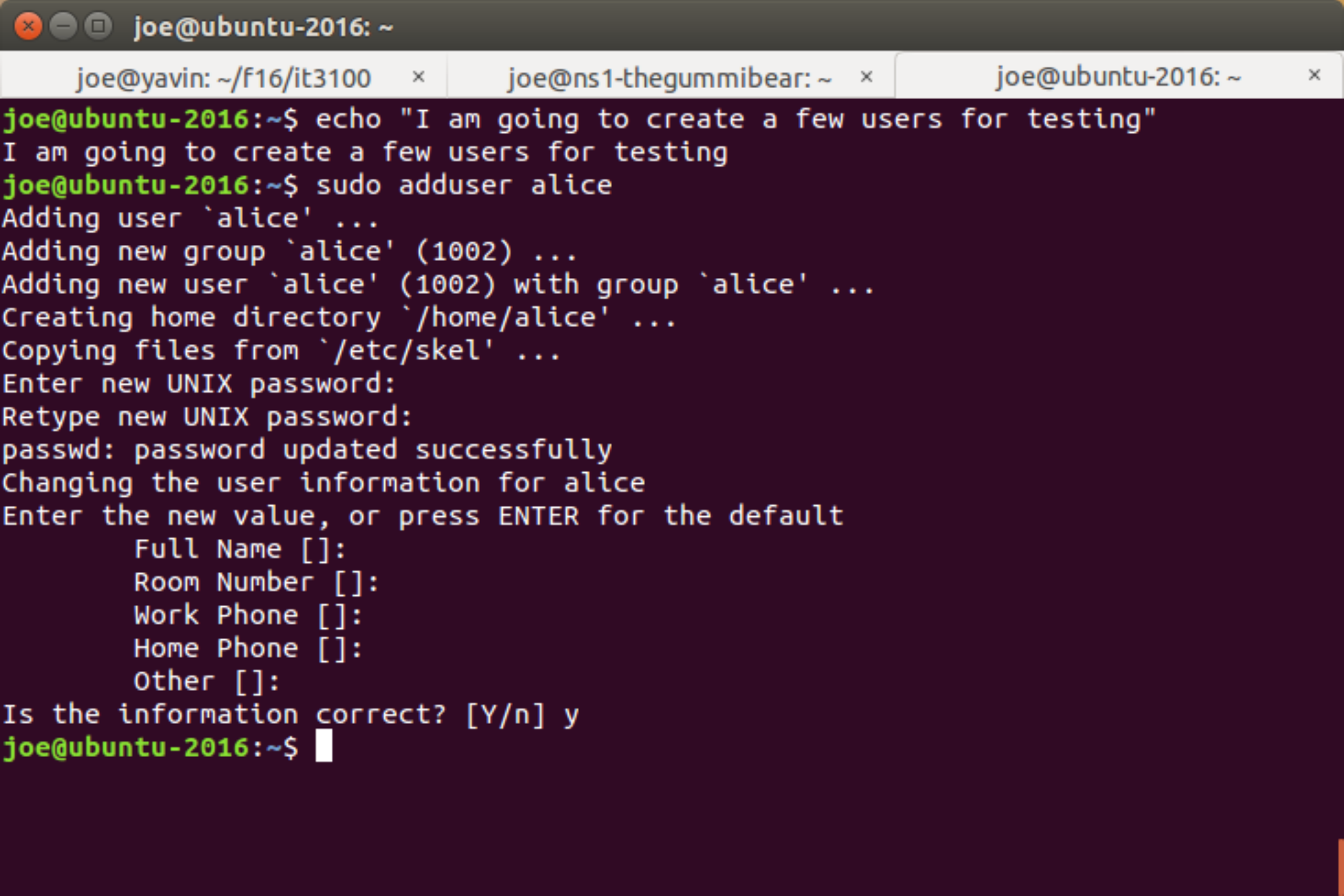
joe@yavin: ~/f16/it3100 × | joe@ns1-thegummibear: ~ × | joe@ubuntu-2016: ~ ×

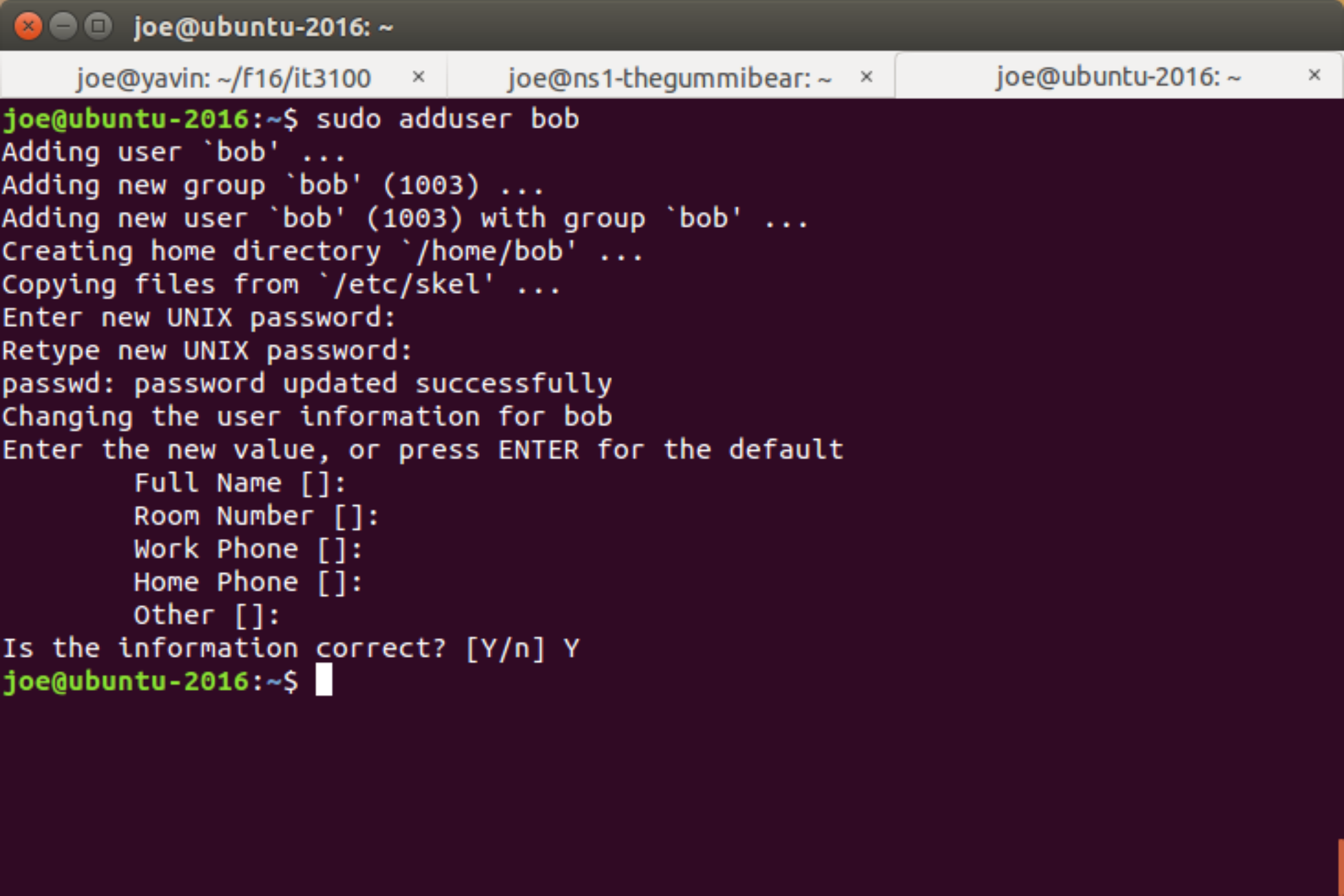
```
joe@ns1-thegummibear:~$ sudo service bind9 restart
joe@ns1-thegummibear:~$ echo "did it load correctly"
did it load correctly
joe@ns1-thegummibear:~$ grep 'zone thegummibear.com' /var/log/syslog | tail
grep: /var/log/syslog: Permission denied
joe@ns1-thegummibear:~$ sudo grep 'zone thegummibear.com' /var/log/syslog | tail

Sep  8 15:46:14 ns1 named[20316]: zone thegummibear.com/IN: loaded serial 201609
0801
Sep  8 15:46:14 ns1 named[20316]: zone thegummibear.com/IN: sending notifies (se
rial 2016090801)
joe@ns1-thegummibear:~$ date
Thu Sep  8 15:46:57 MDT 2016
joe@ns1-thegummibear:~$ echo "loaded ok"
loaded ok
joe@ns1-thegummibear:~$
```

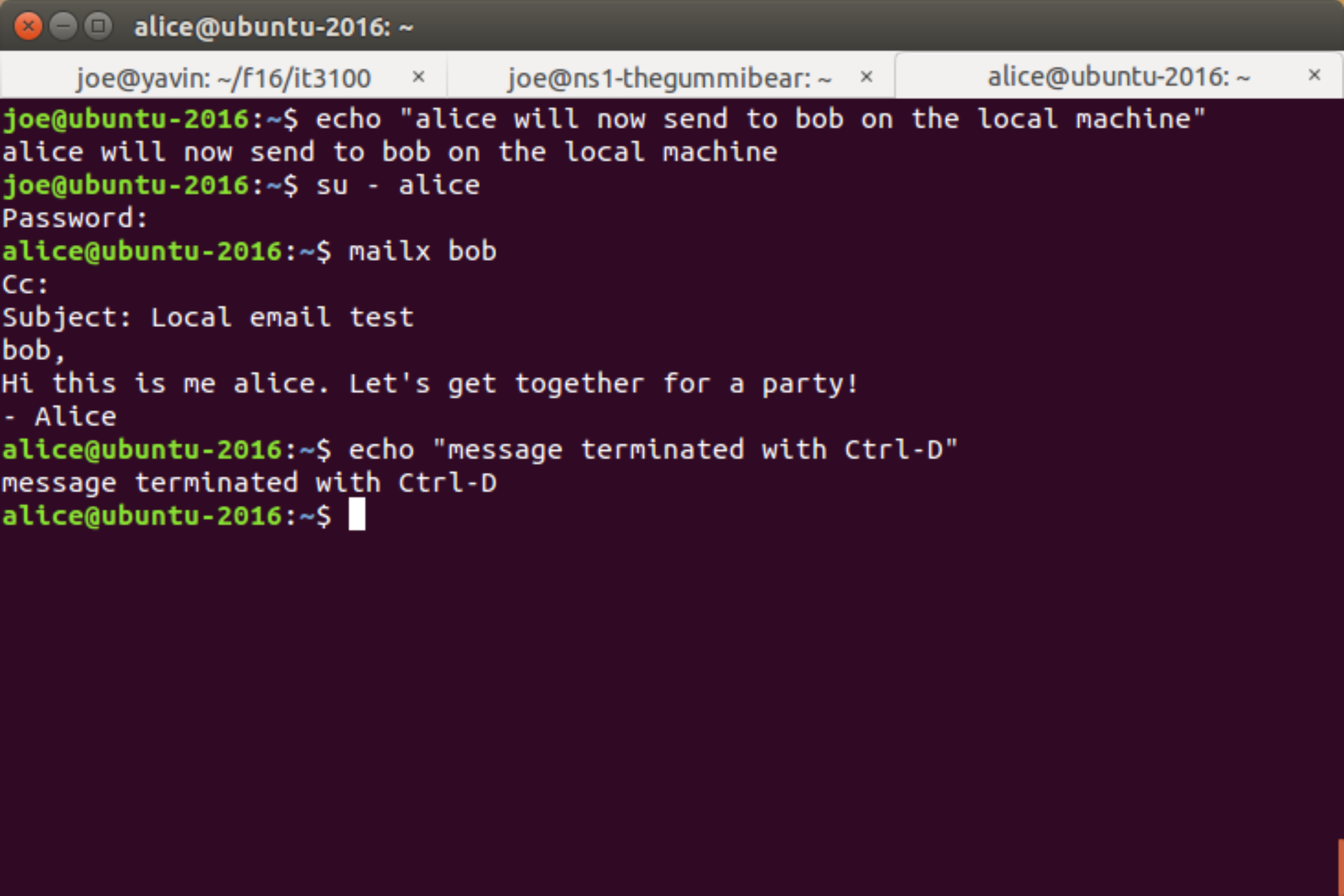

joe@ns1-thegummibear: ~
joe@yavin: ~/f16/it3100
joe@ns1-thegummibear: ~
joe@ubuntu-2016: ~
joe@ns1-thegummibear:~$ dig @localhost thegummibear.com MX | grep MX
; <<>> DiG 9.10.3-P4-Ubuntu <<>> @localhost thegummibear.com MX
;thegummibear.com. IN MX
thegummibear.com. 3600 IN MX 10 mail.thegummibear.com.
joe@ns1-thegummibear:~$ dig @144.38.199.162 thegummibear.com MX | grep MX
; <<>> DiG 9.10.3-P4-Ubuntu <<>> @144.38.199.162 thegummibear.com MX
;thegummibear.com. IN MX
thegummibear.com. 3600 IN MX 10 mail.thegummibear.com.
joe@ns1-thegummibear:~$ dig @ns1.thegummibear.com thegummibear.com MX | grep MX
; <<>> DiG 9.10.3-P4-Ubuntu <<>> @ns1.thegummibear.com thegummibear.com MX
;thegummibear.com. IN MX
thegummibear.com. 3600 IN MX 10 mail.thegummibear.com.
joe@ns1-thegummibear:~$ dig @8.8.8.8 thegummibear.com MX | grep MX
; <<>> DiG 9.10.3-P4-Ubuntu <<>> @8.8.8.8 thegummibear.com MX
;thegummibear.com. IN MX
thegummibear.com. 3599 IN MX 10 mail.thegummibear.com.
joe@ns1-thegummibear:~$

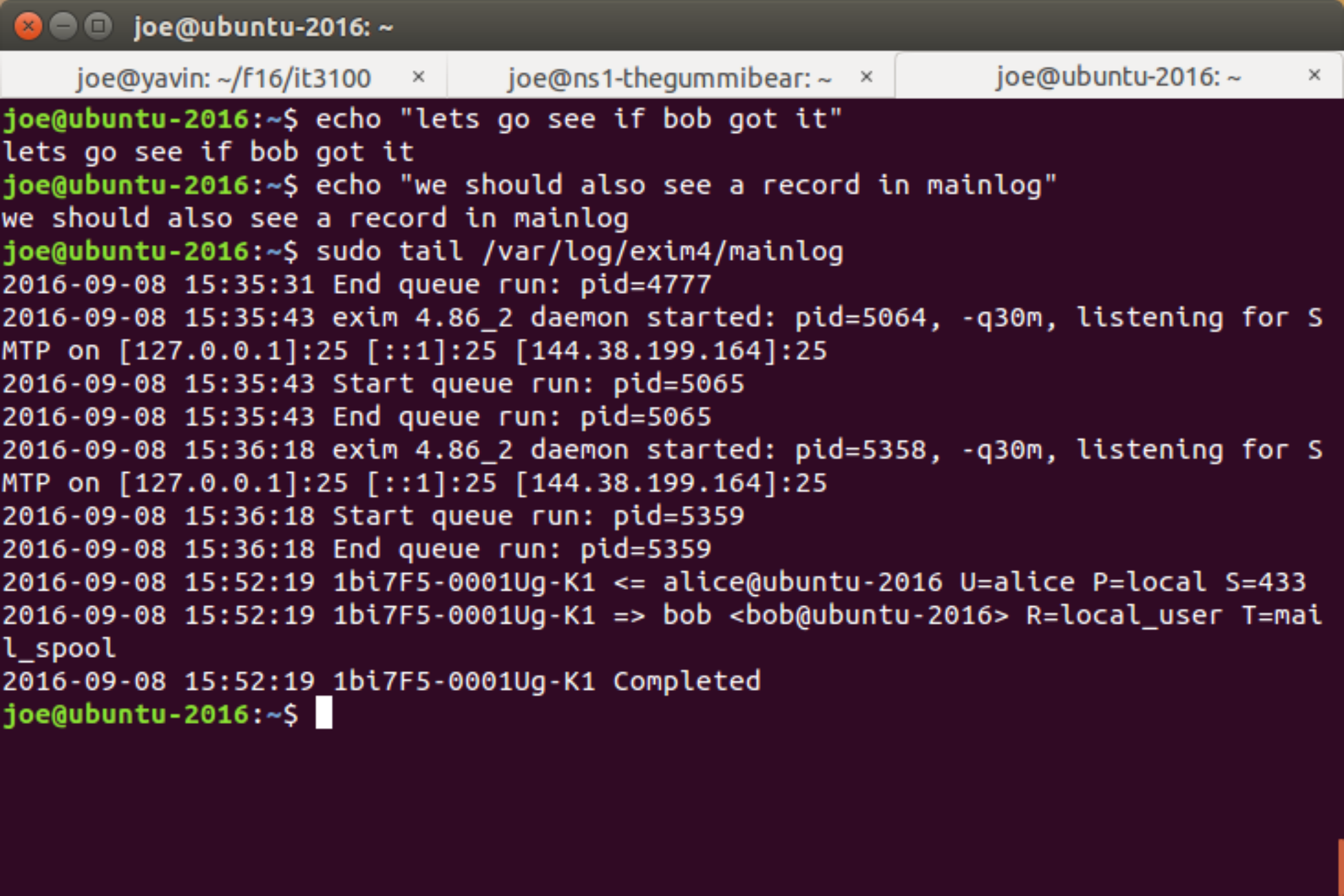

joe@ns1-thegummibear: ~
joe@yavin: ~/f16/it3100
joe@ns1-thegummibear: ~
joe@ubuntu-2016: ~
joe@ns1-thegummibear:~$ echo "Dont forget to do some tests on the slave. I won't take a picture of it, just do it!"
Dont forget to do some tests on the slave. I won't take a picture of it, just do it!
joe@ns1-thegummibear:~$

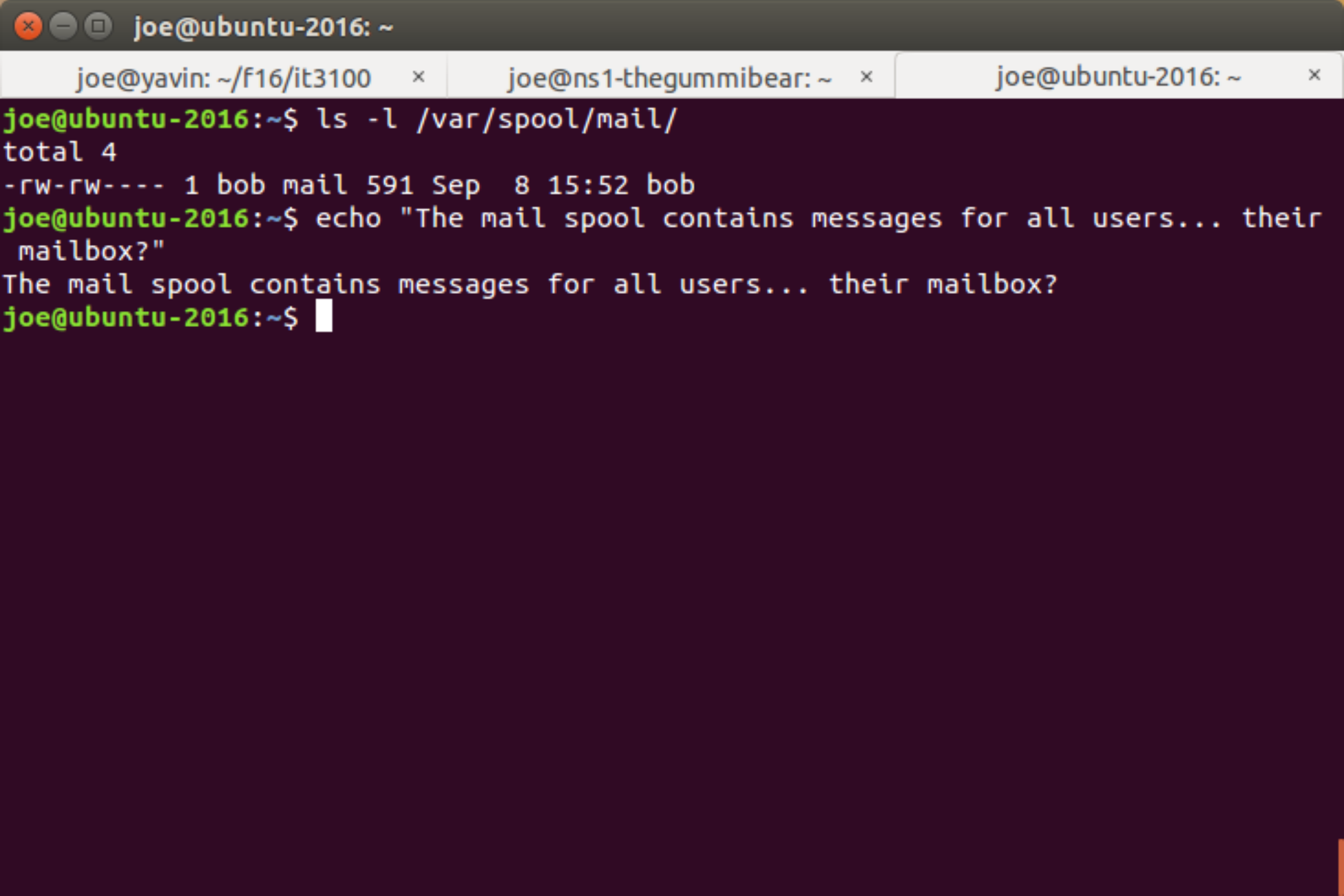

joe@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@ns1-thegummibear: ~
joe@ubuntu-2016: ~
joe@ubuntu-2016:~$ echo "Back on mailserver now"
Back on mailserver now
joe@ubuntu-2016:~$ echo "let's send some messages!"
let's send some messages!
joe@ubuntu-2016:~$

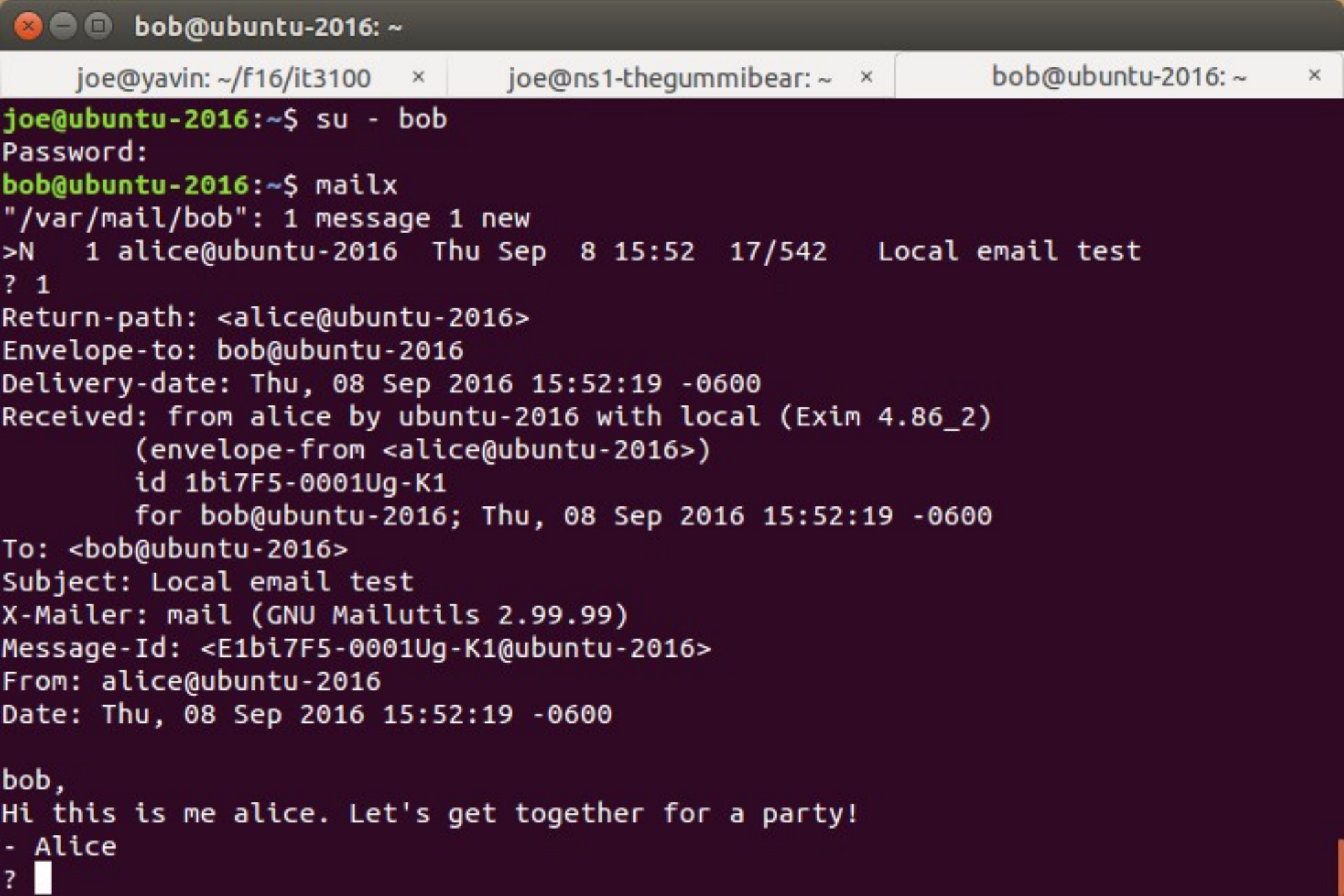

joe@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@ns1-thegummibear: ~
joe@ubuntu-2016: ~
joe@ubuntu-2016:~$ echo "I am going to create a few users for testing"
I am going to create a few users for testing
joe@ubuntu-2016:~$ sudo adduser alice
Adding user `alice' ...
Adding new group `alice' (1002) ...
Adding new user `alice' (1002) with group `alice' ...
Creating home directory `/home/alice' ...
Copying files from `/etc/skel' ...
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
Changing the user information for alice
Enter the new value, or press ENTER for the default
Full Name []:
Room Number []:
Work Phone []:
Home Phone []:
Other []:
Is the information correct? [Y/n] y
joe@ubuntu-2016:~$

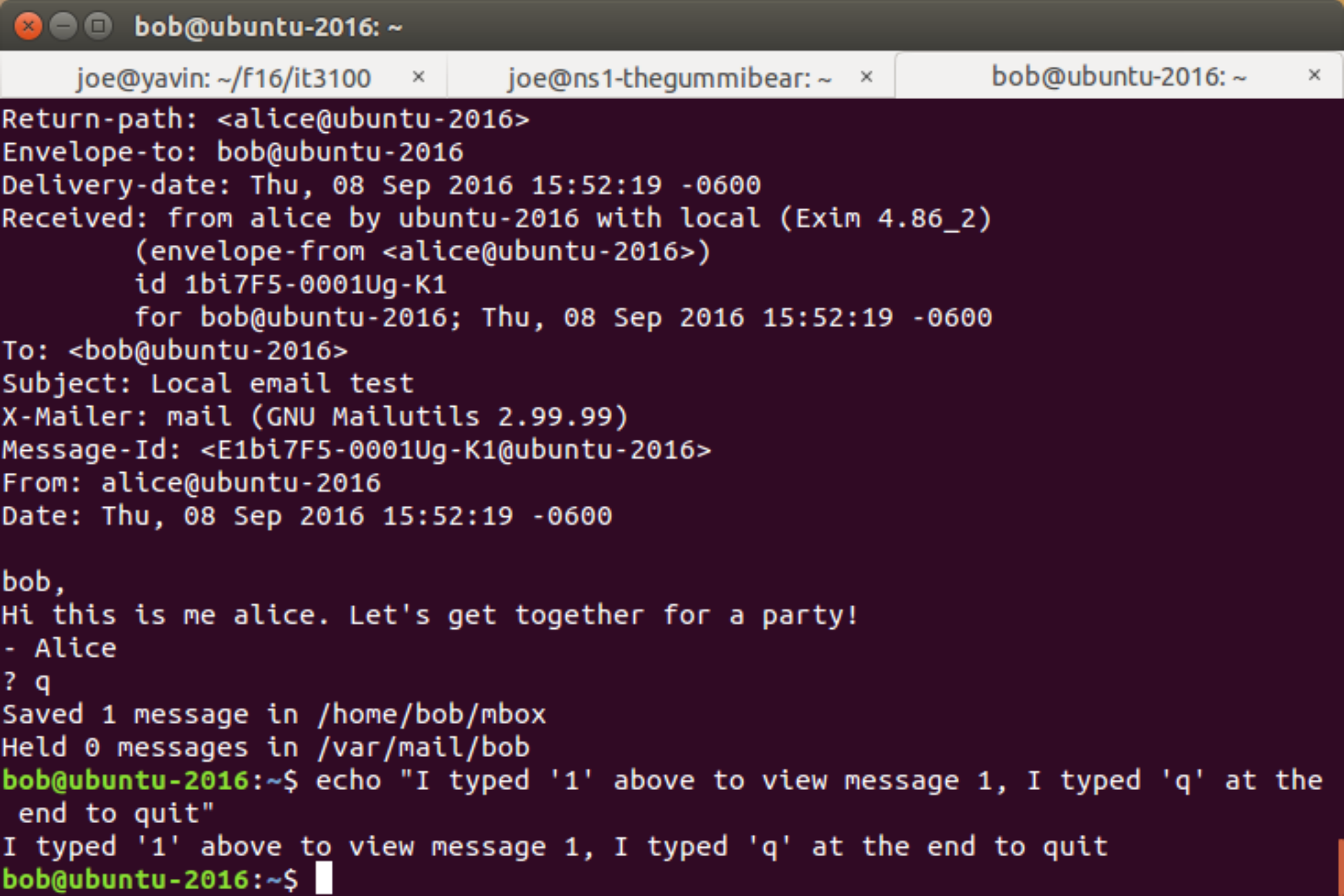

joe@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@ns1-thegummibear: ~
joe@ubuntu-2016: ~
joe@ubuntu-2016:~$ sudo adduser bob
Adding user `bob' ...
Adding new group `bob' (1003) ...
Adding new user `bob' (1003) with group `bob' ...
Creating home directory `/home/bob' ...
Copying files from `/etc/skel' ...
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
Changing the user information for bob
Enter the new value, or press ENTER for the default
Full Name []:
Room Number []:
Work Phone []:
Home Phone []:
Other []:
Is the information correct? [Y/n] Y
joe@ubuntu-2016:~$

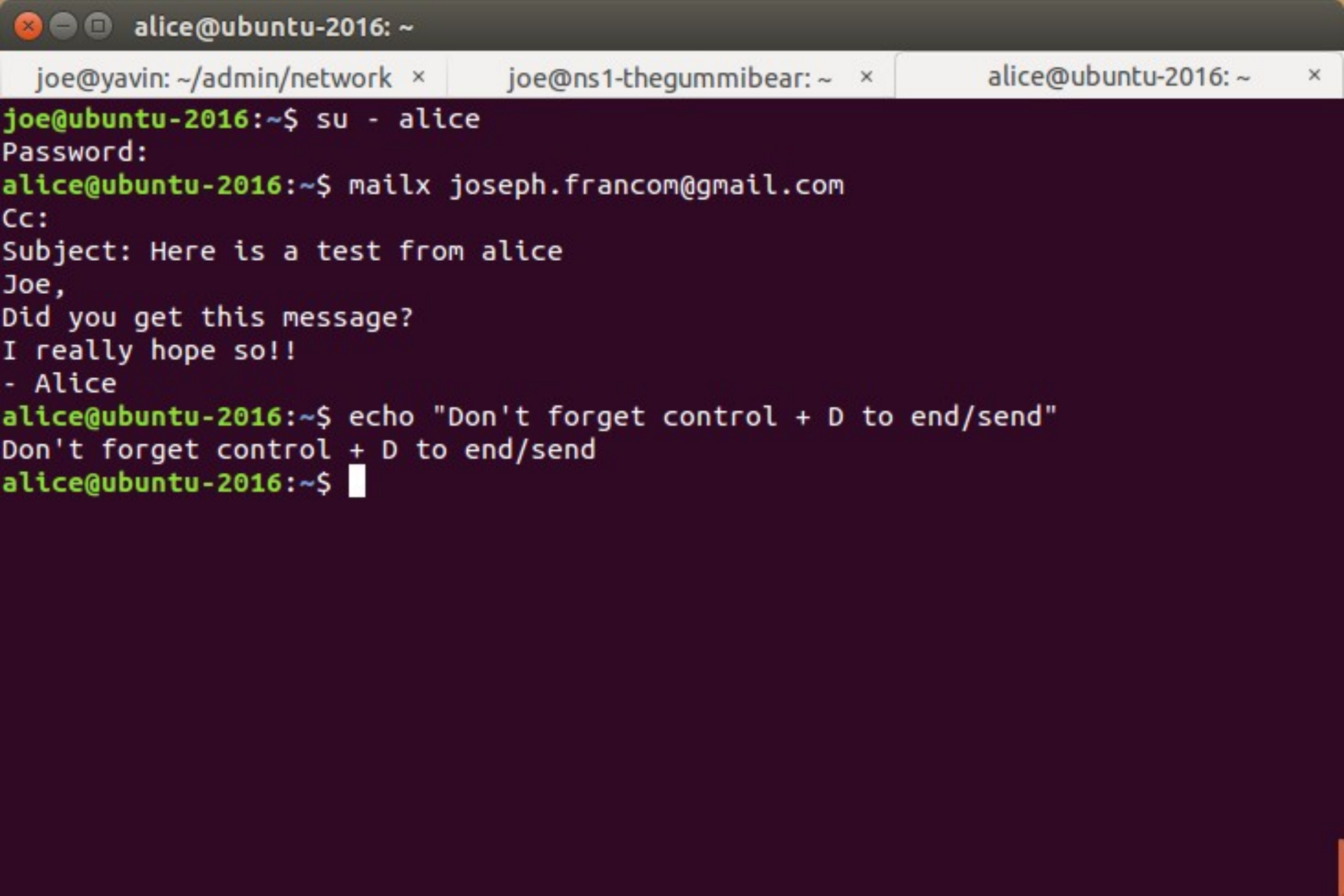

alice@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@ns1-thegummibear: ~
alice@ubuntu-2016: ~
joe@ubuntu-2016:~$ echo "alice will now send to bob on the local machine"
alice will now send to bob on the local machine
joe@ubuntu-2016:~$ su - alice
Password:
alice@ubuntu-2016:~$ mailx bob
Cc:
Subject: Local email test
bob,
Hi this is me alice. Let's get together for a party!
- Alice
alice@ubuntu-2016:~$ echo "message terminated with Ctrl-D"
message terminated with Ctrl-D
alice@ubuntu-2016:~$

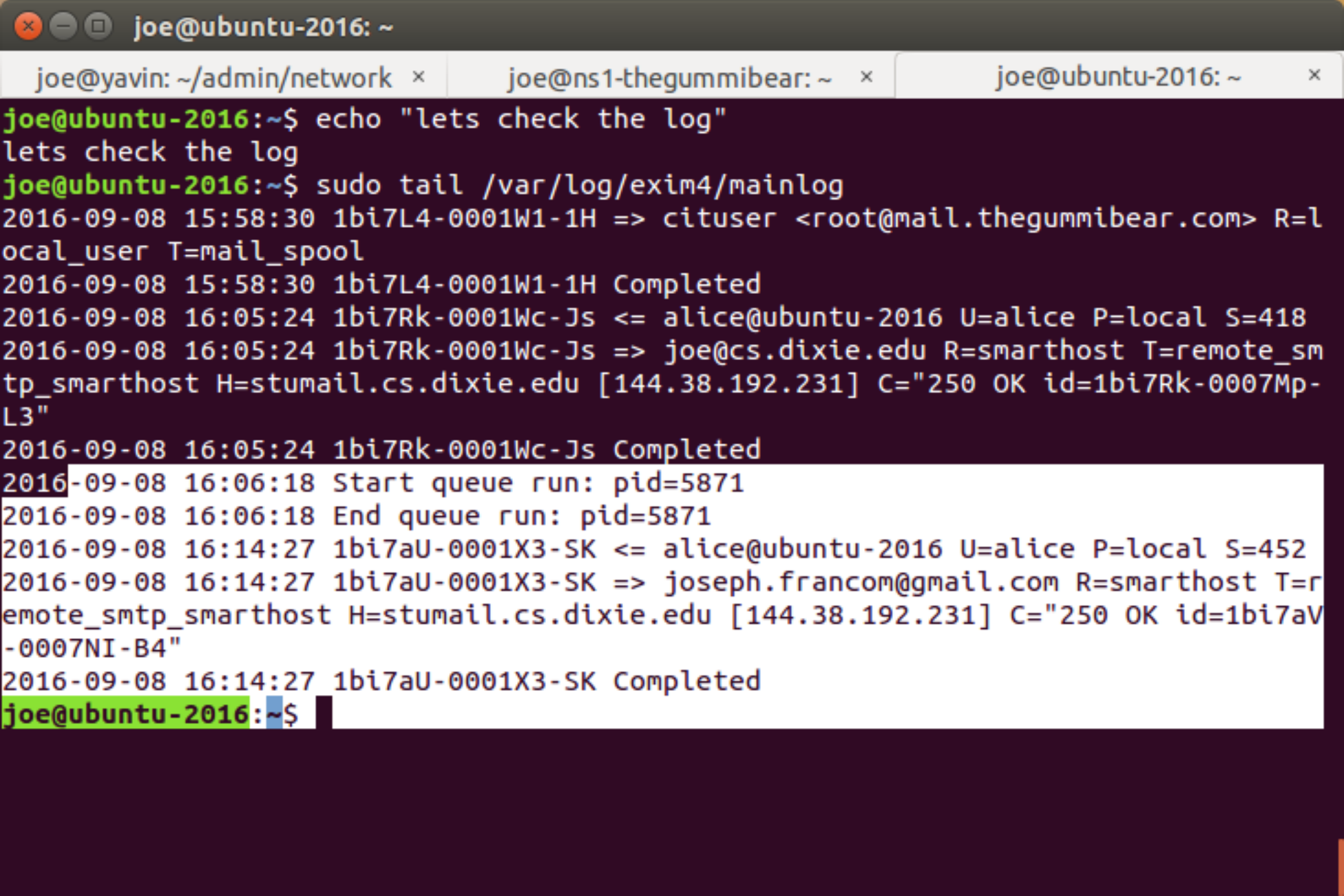

joe@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@ns1-thegummibear: ~
joe@ubuntu-2016: ~
joe@ubuntu-2016:~$ echo "lets go see if bob got it"
lets go see if bob got it
joe@ubuntu-2016:~$ echo "we should also see a record in mainlog"
we should also see a record in mainlog
joe@ubuntu-2016:~$ sudo tail /var/log/exim4/mainlog
2016-09-08 15:35:31 End queue run: pid=4777
2016-09-08 15:35:43 exim 4.86_2 daemon started: pid=5064, -q30m, listening for S
MTP on [127.0.0.1]:25 [::1]:25 [144.38.199.164]:25
2016-09-08 15:35:43 Start queue run: pid=5065
2016-09-08 15:35:43 End queue run: pid=5065
2016-09-08 15:36:18 exim 4.86_2 daemon started: pid=5358, -q30m, listening for S
MTP on [127.0.0.1]:25 [::1]:25 [144.38.199.164]:25
2016-09-08 15:36:18 Start queue run: pid=5359
2016-09-08 15:36:18 End queue run: pid=5359
2016-09-08 15:52:19 1bi7F5-0001Ug-K1 <= alice@ubuntu-2016 U=alice P=local S=433
2016-09-08 15:52:19 1bi7F5-0001Ug-K1 => bob <bob@ubuntu-2016> R=local_user T=mai
l_spool
2016-09-08 15:52:19 1bi7F5-0001Ug-K1 Completed
joe@ubuntu-2016:~$

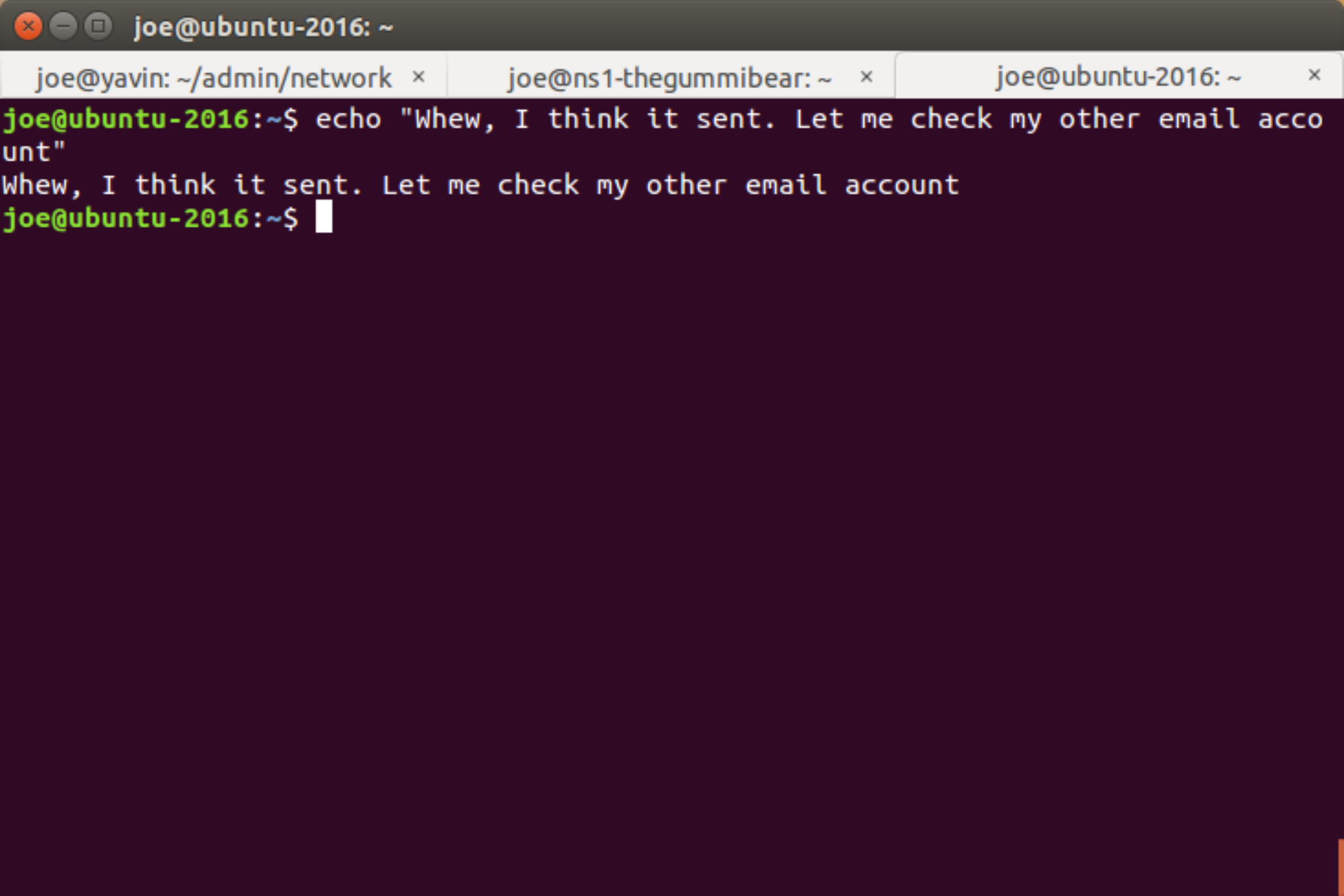

joe@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@ns1-thegummibear: ~
joe@ubuntu-2016: ~
joe@ubuntu-2016:~$ ls -l /var/spool/mail/
total 4
-rw-rw---- 1 bob mail 591 Sep 8 15:52 bob
joe@ubuntu-2016:~$ echo "The mail spool contains messages for all users... their mailbox?"
The mail spool contains messages for all users... their mailbox?
joe@ubuntu-2016:~$


bob@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@ns1-thegummibear: ~
bob@ubuntu-2016: ~
joe@ubuntu-2016:~$ su - bob
Password:
bob@ubuntu-2016:~$ mailx
"/var/mail/bob": 1 message 1 new
>N 1 alice@ubuntu-2016 Thu Sep 8 15:52 17/542 Local email test
? 1
Return-path: <alice@ubuntu-2016>
Envelope-to: bob@ubuntu-2016
Delivery-date: Thu, 08 Sep 2016 15:52:19 -0600
Received: from alice by ubuntu-2016 with local (Exim 4.86_2)
(envelope-from <alice@ubuntu-2016>)
id 1bi7F5-0001Ug-K1
for bob@ubuntu-2016; Thu, 08 Sep 2016 15:52:19 -0600
To: <bob@ubuntu-2016>
Subject: Local email test
X-Mailer: mail (GNU Mailutils 2.99.99)
Message-Id: <E1bi7F5-0001Ug-K1@ubuntu-2016>
From: alice@ubuntu-2016
Date: Thu, 08 Sep 2016 15:52:19 -0600
bob,
Hi this is me alice. Let's get together for a party!
- Alice
?


bob@ubuntu-2016: ~
joe@yavin: ~/f16/it3100
joe@ns1-thegummibear: ~
bob@ubuntu-2016: ~
Return-path: <alice@ubuntu-2016>
Envelope-to: bob@ubuntu-2016
Delivery-date: Thu, 08 Sep 2016 15:52:19 -0600
Received: from alice by ubuntu-2016 with local (Exim 4.86_2)
(envelope-from <alice@ubuntu-2016>)
id 1bi7F5-0001Ug-K1
for bob@ubuntu-2016; Thu, 08 Sep 2016 15:52:19 -0600
To: <bob@ubuntu-2016>
Subject: Local email test
X-Mailer: mail (GNU Mailutils 2.99.99)
Message-Id: <E1bi7F5-0001Ug-K1@ubuntu-2016>
From: alice@ubuntu-2016
Date: Thu, 08 Sep 2016 15:52:19 -0600
bob,
Hi this is me alice. Let's get together for a party!
- Alice
? q
Saved 1 message in /home/bob/mbox
Held 0 messages in /var/mail/bob
bob@ubuntu-2016:~$ echo "I typed '1' above to view message 1, I typed 'q' at the
end to quit"
I typed '1' above to view message 1, I typed 'q' at the end to quit
bob@ubuntu-2016:~$


alice@ubuntu-2016: ~
joe@yavin: ~/admin/network
joe@ns1-thegummibear: ~
alice@ubuntu-2016: ~
joe@ubuntu-2016:~$ su - alice
Password:
alice@ubuntu-2016:~$ mailx joseph.francom@gmail.com
Cc:
Subject: Here is a test from alice
Joe,
Did you get this message?
I really hope so!!
- Alice
alice@ubuntu-2016:~$ echo "Don't forget control + D to end/send"
Don't forget control + D to end/send
alice@ubuntu-2016:~$


joe@ubuntu-2016: ~
joe@yavin: ~/admin/network
joe@ns1-thegummibear: ~
joe@ubuntu-2016: ~
joe@ubuntu-2016:~$ echo "lets check the log"
lets check the log
joe@ubuntu-2016:~$ sudo tail /var/log/exim4/mainlog
2016-09-08 15:58:30 1bi7L4-0001W1-1H => cituser <root@mail.thegummibear.com> R=local_user T=mail_spool
2016-09-08 15:58:30 1bi7L4-0001W1-1H Completed
2016-09-08 16:05:24 1bi7Rk-0001Wc-Js <= alice@ubuntu-2016 U=alice P=local S=418
2016-09-08 16:05:24 1bi7Rk-0001Wc-Js => joe@cs.dixie.edu R=smarthost T=remote_smtp_smarthost H=stumail.cs.dixie.edu [144.38.192.231] C="250 OK id=1bi7Rk-0007Mp-L3"
2016-09-08 16:05:24 1bi7Rk-0001Wc-Js Completed
2016-09-08 16:06:18 Start queue run: pid=5871
2016-09-08 16:06:18 End queue run: pid=5871
2016-09-08 16:14:27 1bi7aU-0001X3-SK <= alice@ubuntu-2016 U=alice P=local S=452
2016-09-08 16:14:27 1bi7aU-0001X3-SK => joseph.francom@gmail.com R=smarthost T=remote_smtp_smarthost H=stumail.cs.dixie.edu [144.38.192.231] C="250 OK id=1bi7aV-0007NI-B4"
2016-09-08 16:14:27 1bi7aU-0001X3-SK Completed
joe@ubuntu-2016:~$


joe@ubuntu-2016: ~
joe@yavin: ~/admin/network
joe@ns1-thegummibear: ~
joe@ubuntu-2016: ~
joe@ubuntu-2016:~$ echo "Whew, I think it sent. Let me check my other email acco
unt"
Whew, I think it sent. Let me check my other email account
joe@ubuntu-2016:~$

Here is a test from alice - joseph.francom@gmail.com - Gmail - Chromium

Here is a test fr | Dixie State Univ | y15m09d11p04- | News | Joe

https://mail.google.com/mail/u/0/?zx=5l81kln84i30#inbox/

Apps | eportfolio | Log In to Canvas | dixie | Nginx HTTP Serve | vSphere Design E

Google

Gmail | More | 1 of 10

COMPOSE

Inbox
Important
Sent Mail
All Mail
Circles

Joe

Ben Francom

cheree francom

Emily Duersch

Jacob Francom

Here is a test from alice

Inbox x

alice@ubuntu-2016 4:14 PM (1 minute ago)

to me

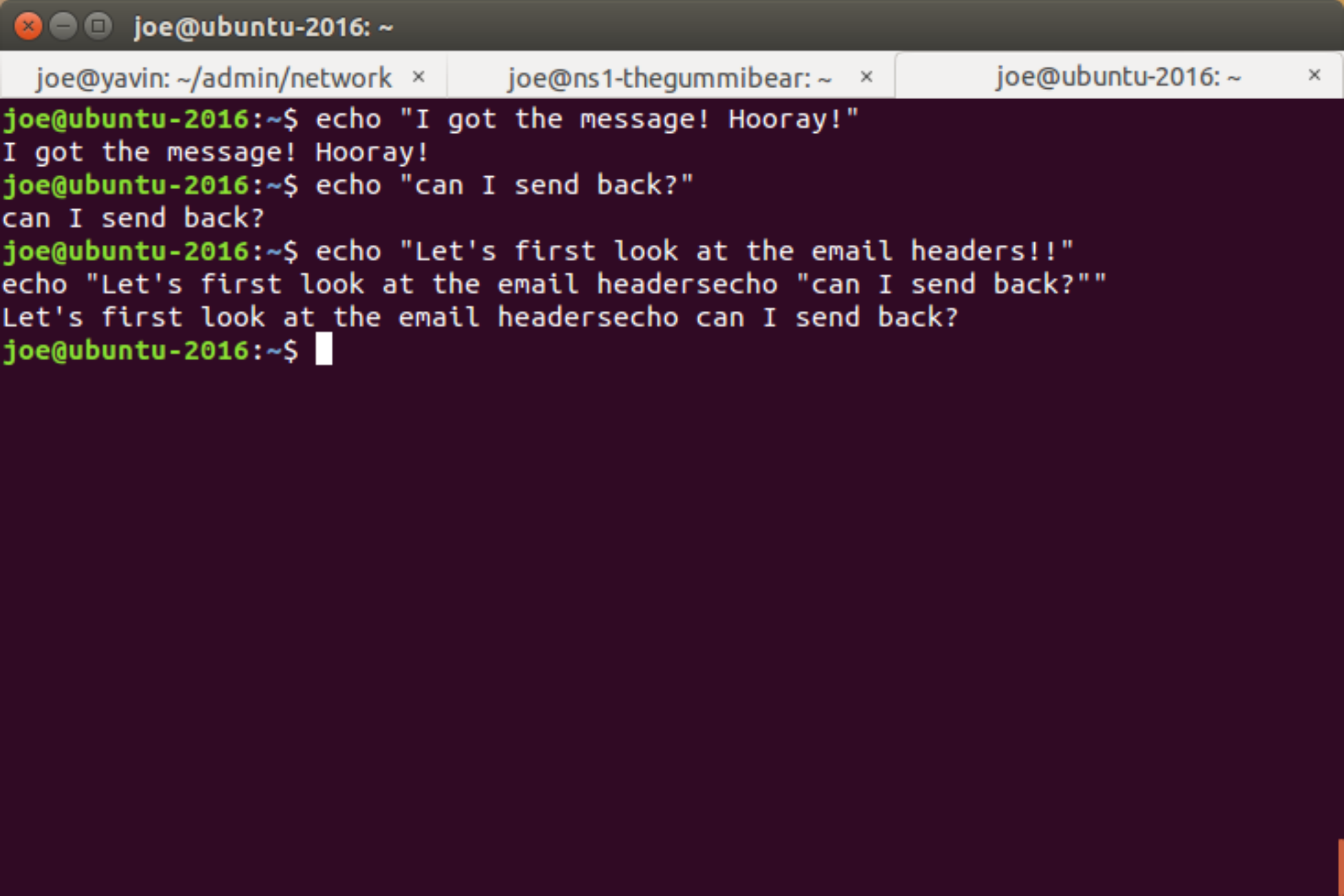
Joe,
Did you get this message?
I really hope so!!
- Alice

Click here to Reply or Forward

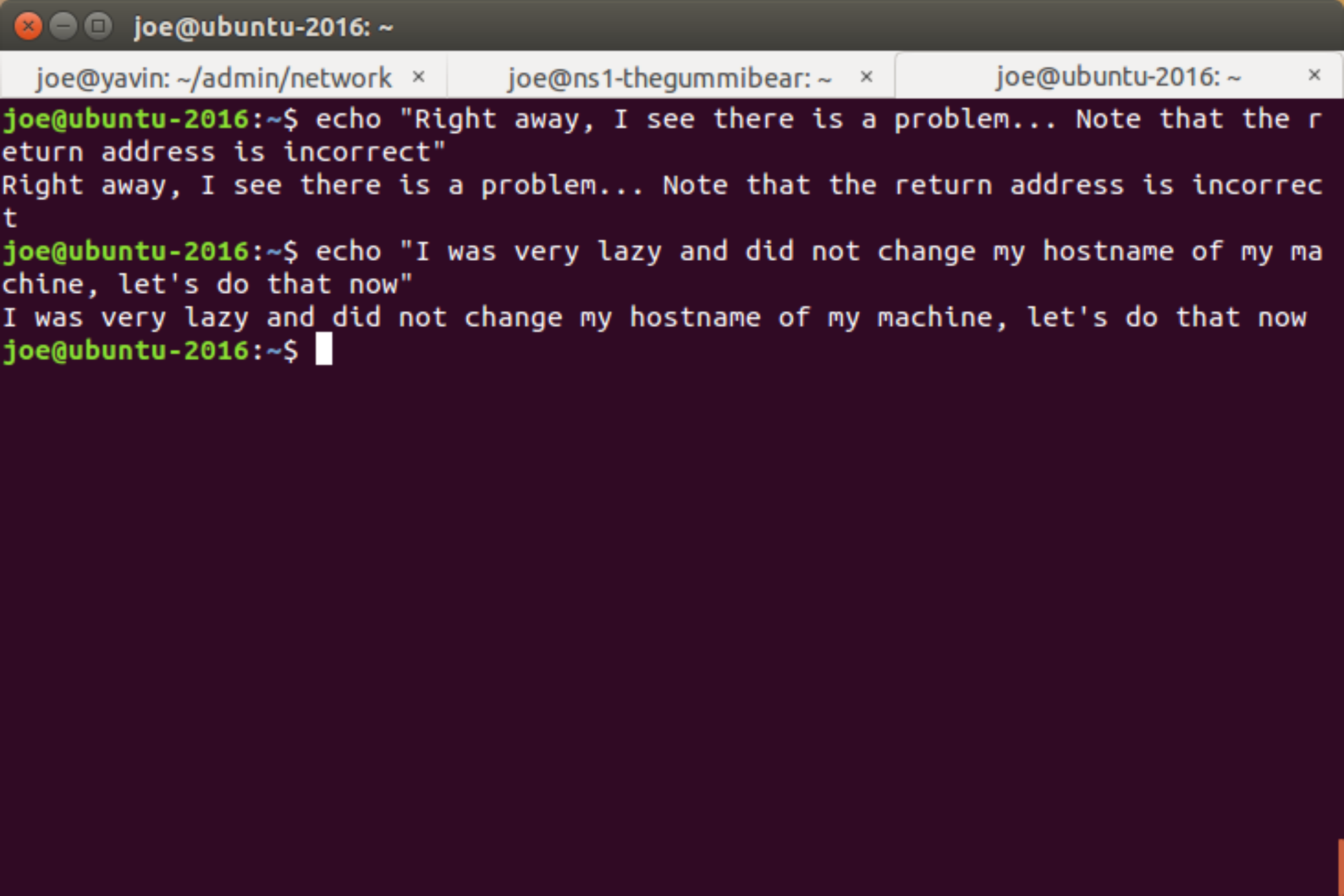
4.67 GB (31%) of 15 GB used
Manage

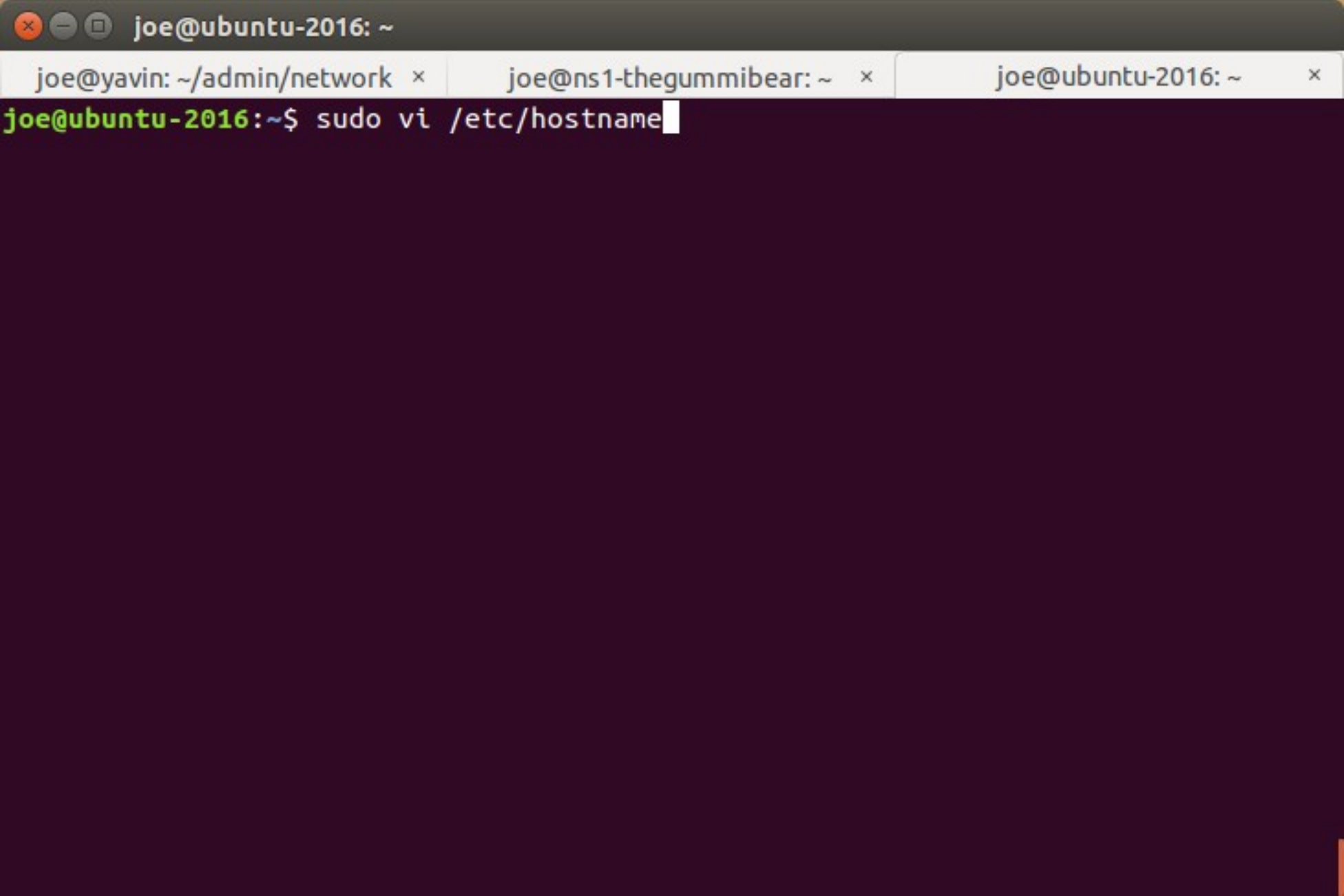
Terms - Privacy

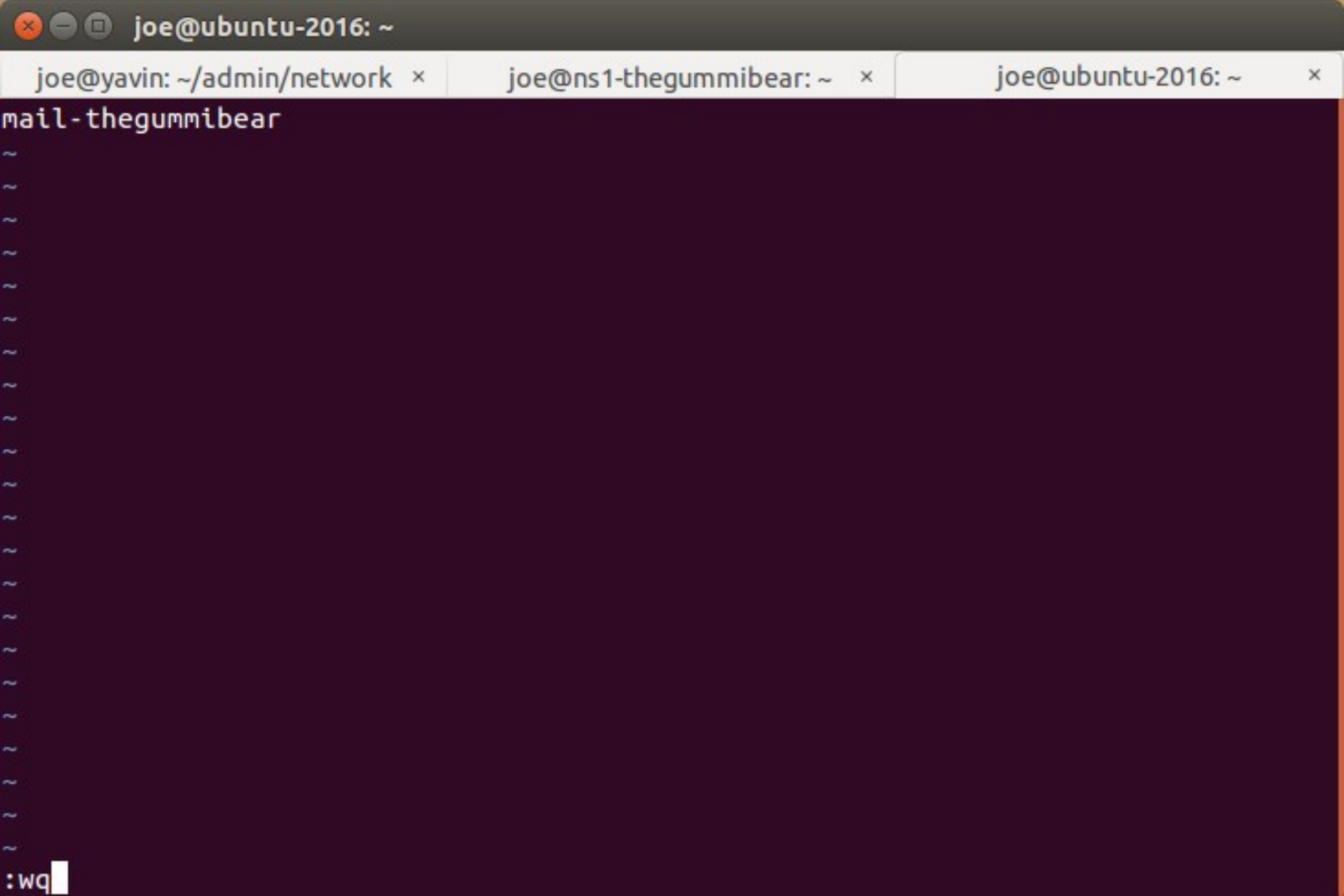
Last account activity: 0 minutes

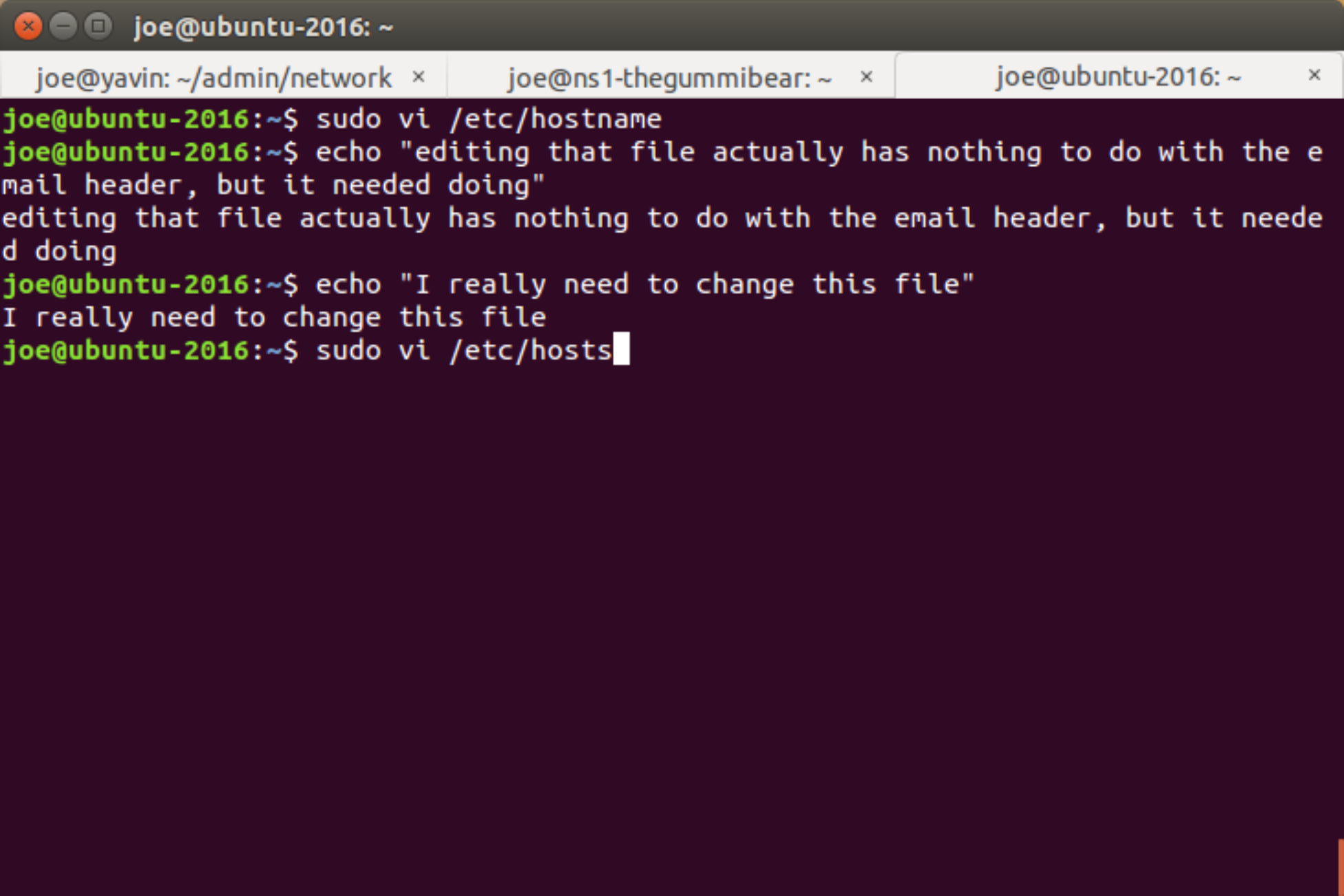

joe@ubuntu-2016: ~
joe@yavin: ~/admin/network
joe@ns1-thegummibear: ~
joe@ubuntu-2016: ~
joe@ubuntu-2016:~$ echo "I got the message! Hooray!"
I got the message! Hooray!
joe@ubuntu-2016:~$ echo "can I send back?"
can I send back?
joe@ubuntu-2016:~$ echo "Let's first look at the email headers!!"
echo "Let's first look at the email headersecho "can I send back?""
Let's first look at the email headersecho can I send back?
joe@ubuntu-2016:~$

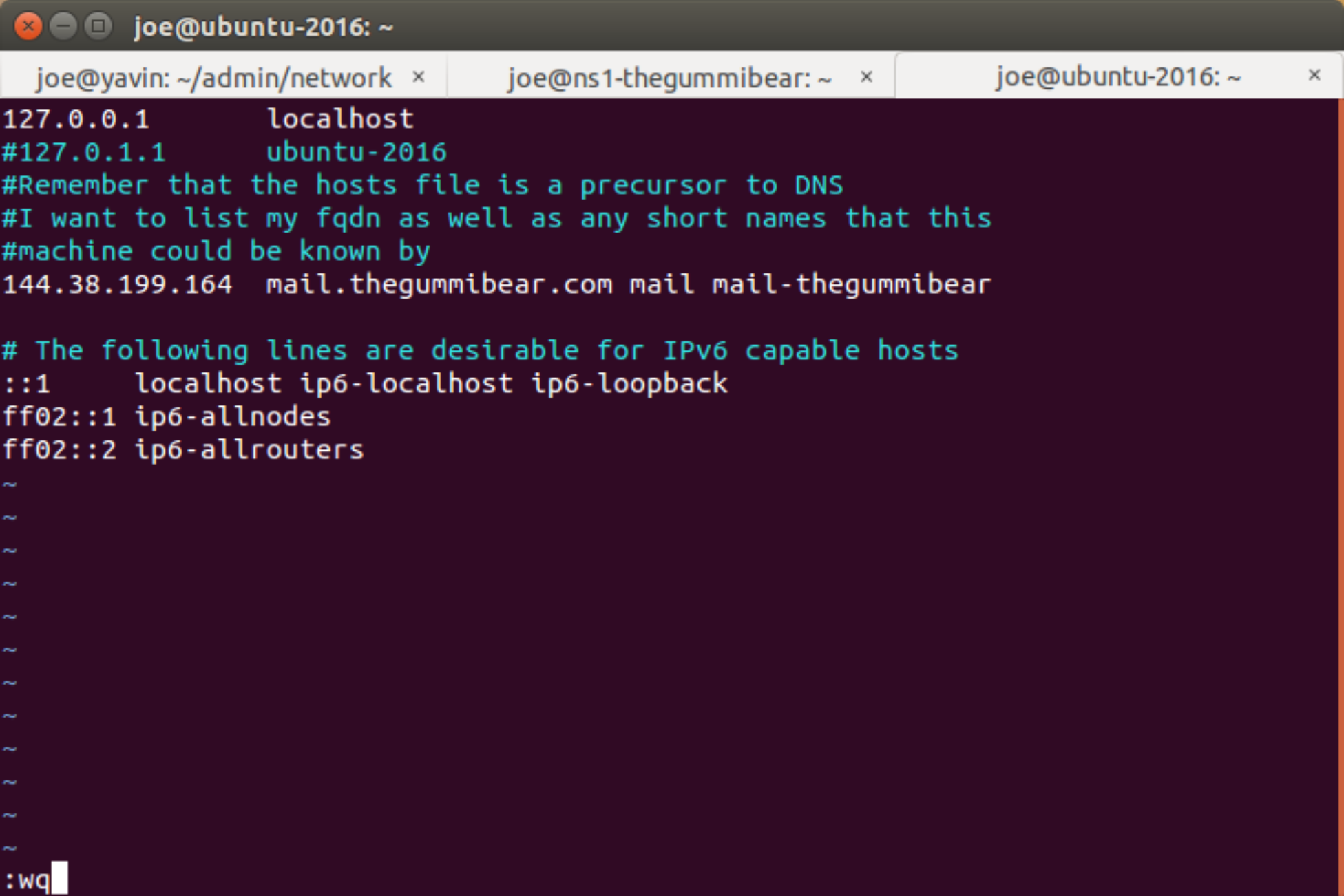
```
Delivered-To: joseph.francom@gmail.com
Received: by 10.36.60.12 with SMTP id m12csp54121ita;
        Thu, 8 Sep 2016 15:14:28 -0700 (PDT)
X-Received: by 10.66.146.201 with SMTP id te9mr509098pab.104.1473372868781;
        Thu, 08 Sep 2016 15:14:28 -0700 (PDT)
Return-Path: <alice@ubuntu-2016>
Received: from stumail-2016.cs.dixie.edu (stumail.cs.dixie.edu. [144.38.192.231])
        by mx.google.com with ESMTPS id ag10si244677pad.184.2016.09.08.15.14.28
        for <joseph.francom@gmail.com>
        (version=TLS1_2 cipher=ECDHE-RSA-AES128-GCM-SHA256 bits=128/128);
        Thu, 08 Sep 2016 15:14:28 -0700 (PDT)
Received-SPF: neutral (google.com: 144.38.192.231 is neither permitted nor denied by best guess
record for domain of alice@ubuntu-2016) client-ip=144.38.192.231;
Authentication-Results: mx.google.com;
       spf=neutral (google.com: 144.38.192.231 is neither permitted nor denied by best guess record
for domain of alice@ubuntu-2016) smtp.mailfrom=alice@ubuntu-2016
Received: from [144.38.199.164] (helo=ubuntu-2016)
        by stumail-2016.cs.dixie.edu with esmtp (Exim 4.86_2)
        (envelope-from <alice@ubuntu-2016>)
        id 1bi7aV-0007NI-B4
        for joseph.francom@gmail.com; Thu, 08 Sep 2016 16:14:27 -0600
Received: from alice by ubuntu-2016 with local (Exim 4.86_2)
        (envelope-from <alice@ubuntu-2016>)
        id 1bi7aU-0001X3-SK
        for joseph.francom@gmail.com; Thu, 08 Sep 2016 16:14:27 -0600
```

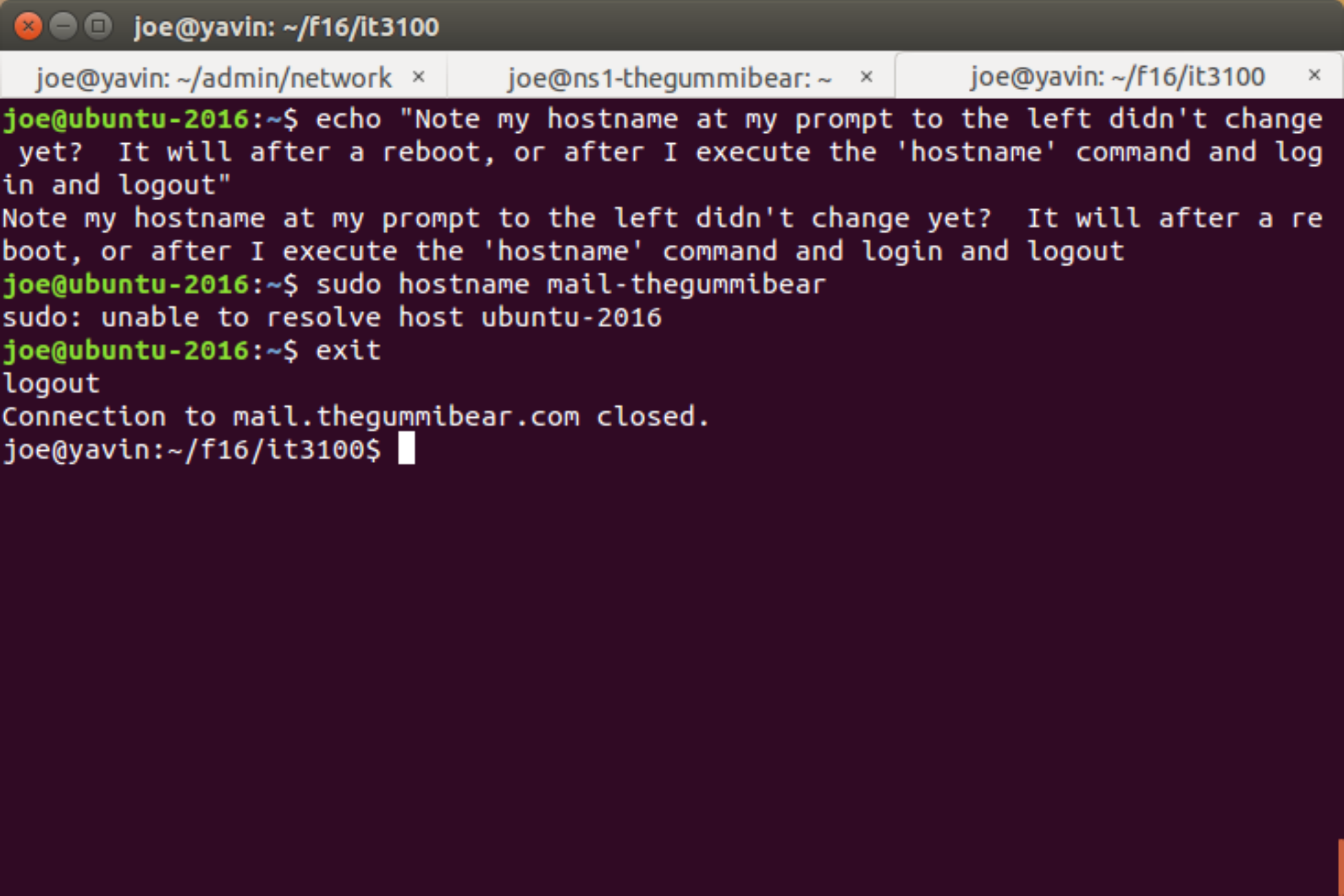

joe@ubuntu-2016: ~
joe@yavin: ~/admin/network
joe@ns1-thegummibear: ~
joe@ubuntu-2016: ~
joe@ubuntu-2016:~$ echo "Right away, I see there is a problem... Note that the return address is incorrect"
Right away, I see there is a problem... Note that the return address is incorrect
joe@ubuntu-2016:~$ echo "I was very lazy and did not change my hostname of my machine, let's do that now"
I was very lazy and did not change my hostname of my machine, let's do that now
joe@ubuntu-2016:~$

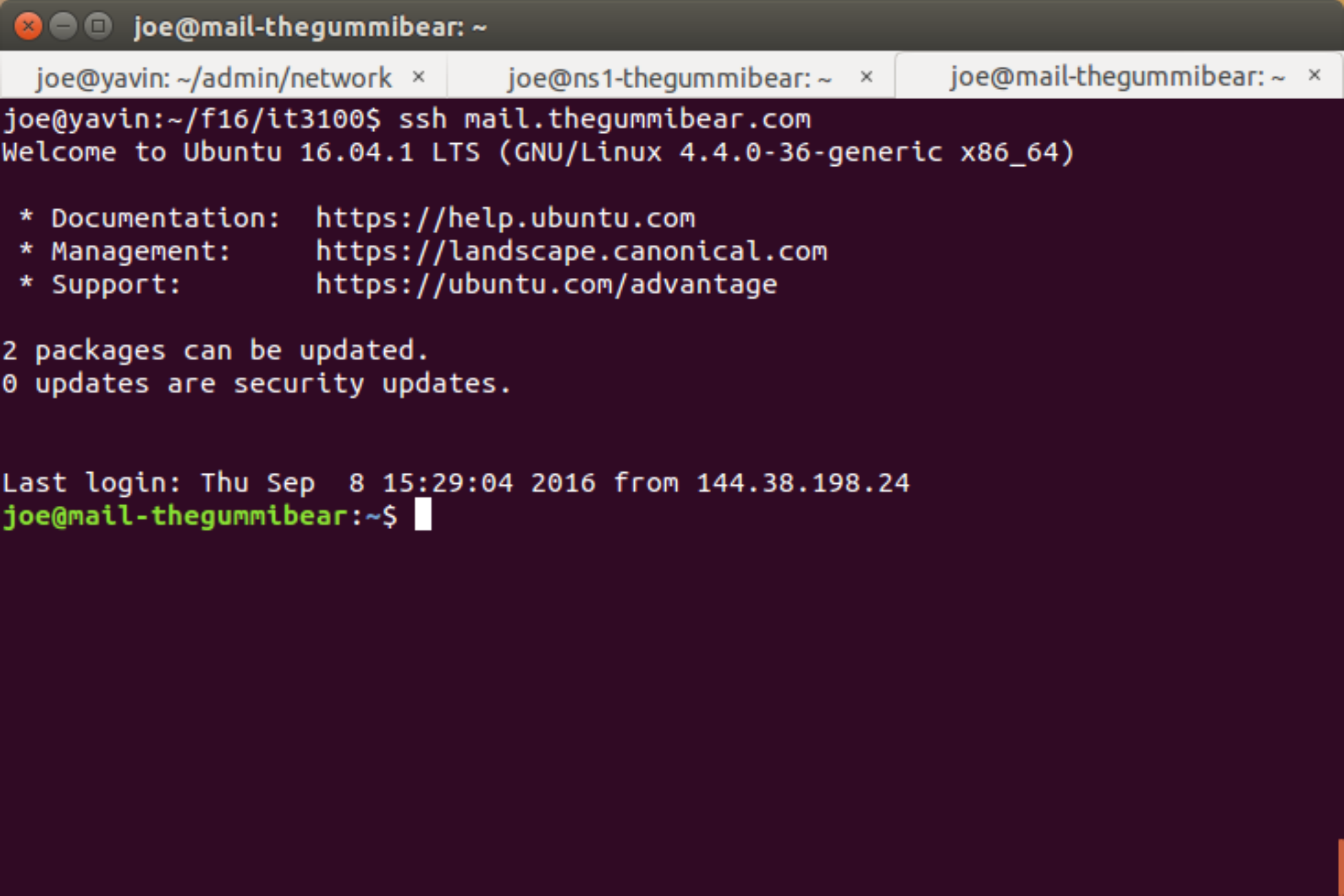

joe@ubuntu-2016: ~
joe@yavin: ~/admin/network
joe@ns1-thegummibear: ~
joe@ubuntu-2016: ~
joe@ubuntu-2016:~$ sudo vi /etc/hostname

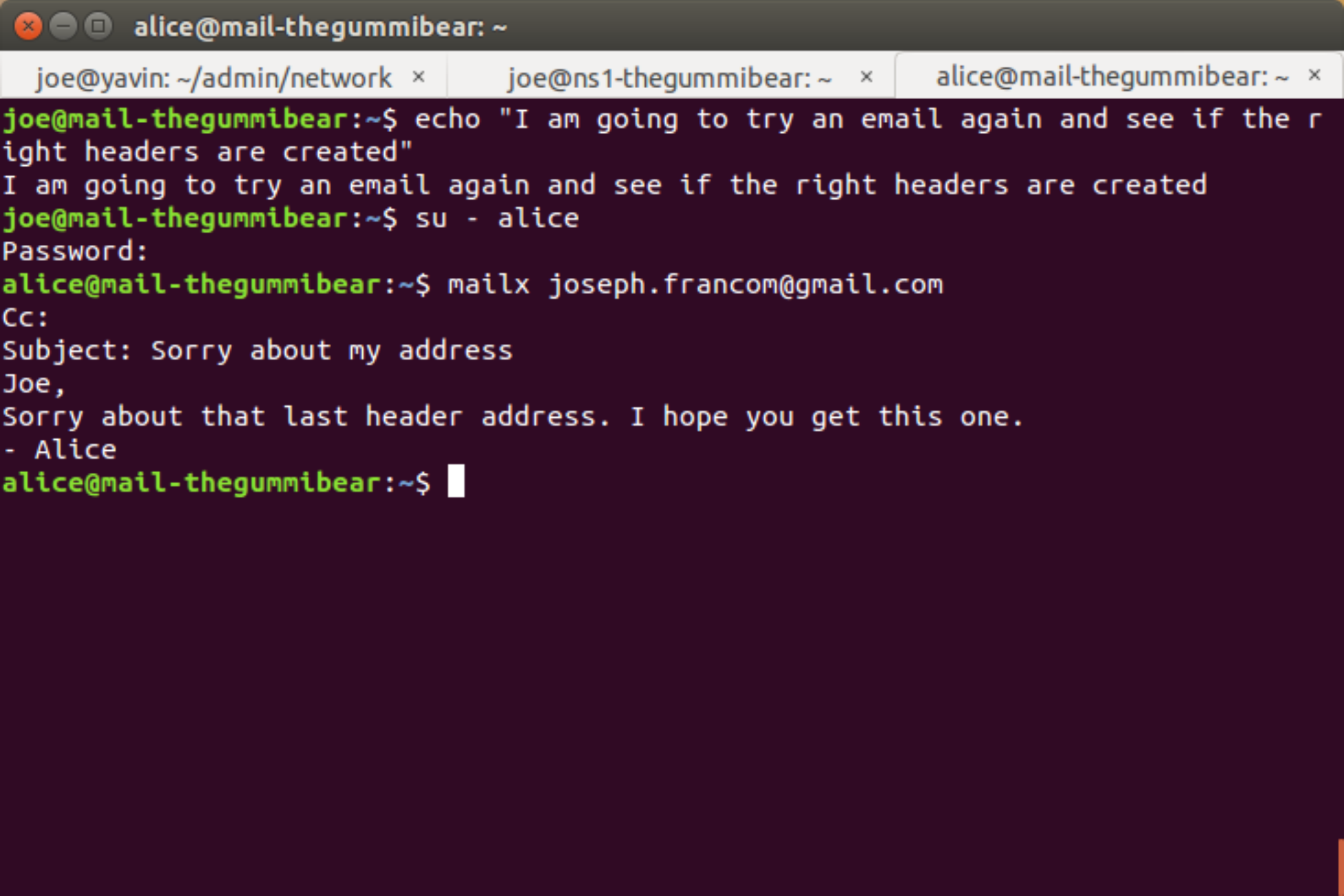

joe@ubuntu-2016: ~
joe@yavin: ~/admin/network
joe@ns1-thegummibear: ~
joe@ubuntu-2016: ~
mail-thegummibear
:wq

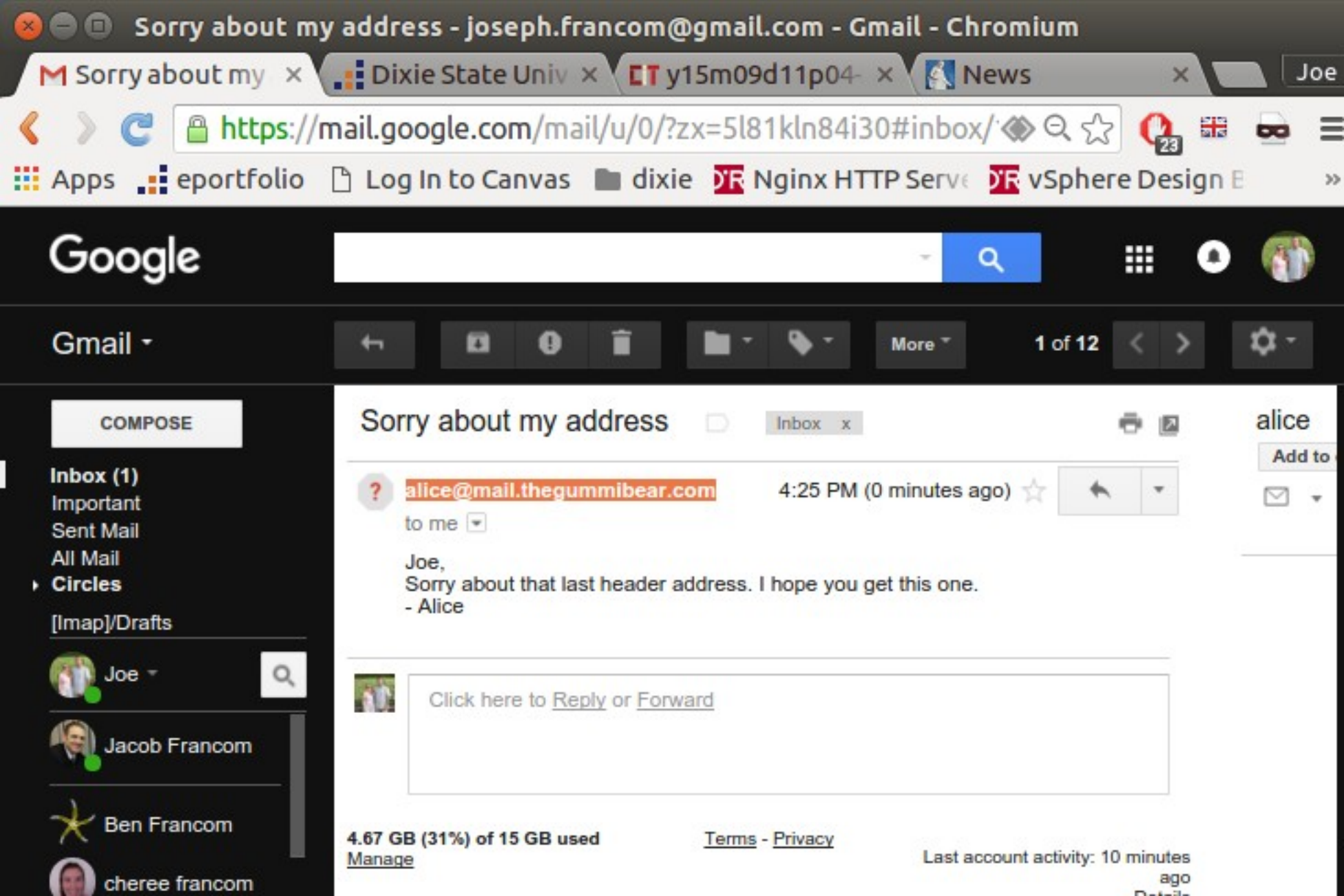

joe@ubuntu-2016: ~
joe@yavin: ~/admin/network
joe@ns1-thegummibear: ~
joe@ubuntu-2016: ~
joe@ubuntu-2016:~$ sudo vi /etc/hostname
joe@ubuntu-2016:~$ echo "editing that file actually has nothing to do with the e
mail header, but it needed doing"
editing that file actually has nothing to do with the email header, but it neede
d doing
joe@ubuntu-2016:~$ echo "I really need to change this file"
I really need to change this file
joe@ubuntu-2016:~$ sudo vi /etc/hosts

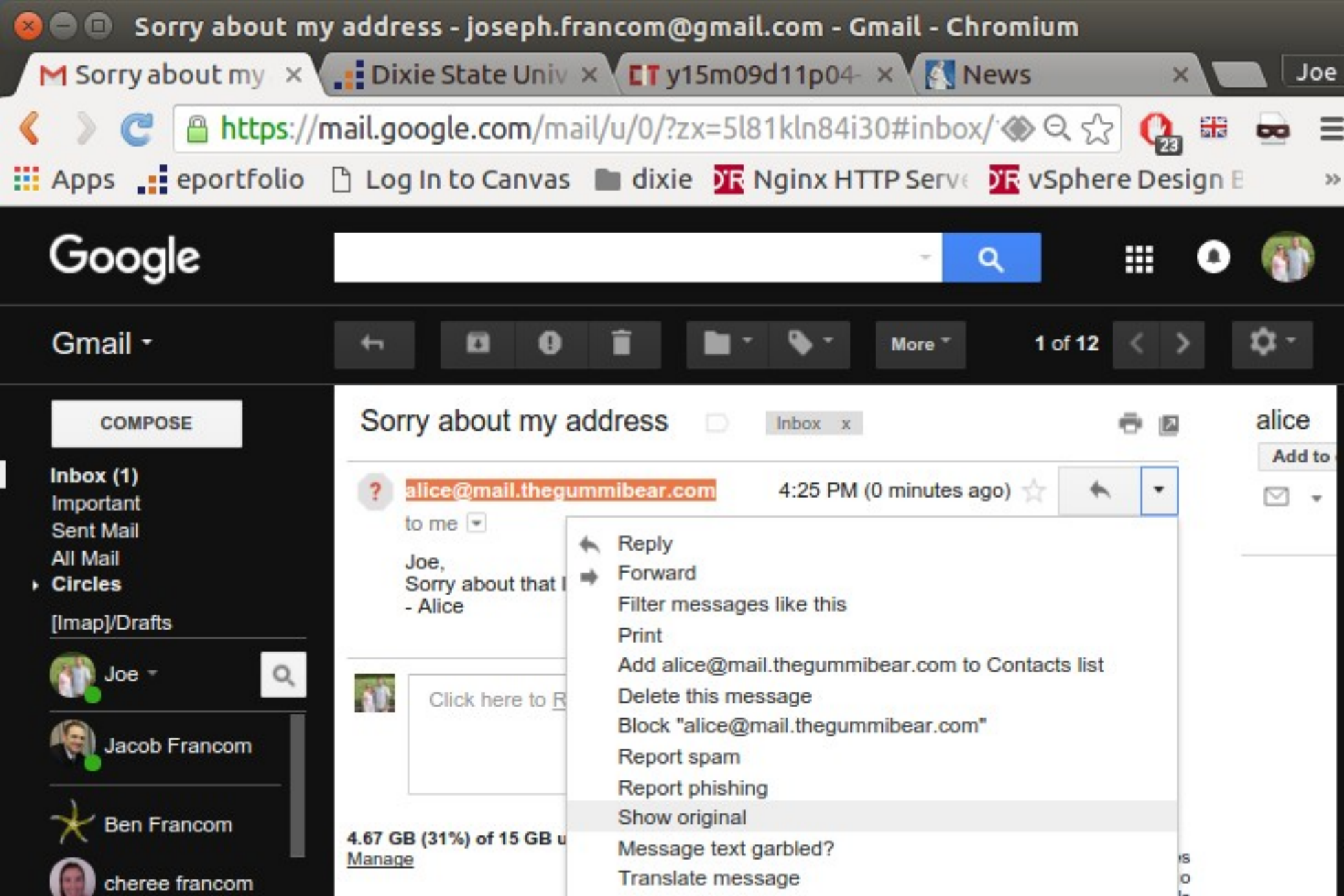

joe@ubuntu-2016: ~
joe@yavin: ~/admin/network
joe@ns1-thegummibear: ~
joe@ubuntu-2016: ~
127.0.0.1 localhost
#127.0.1.1 ubuntu-2016
#Remember that the hosts file is a precursor to DNS
#I want to list my fqdn as well as any short names that this
#machine could be known by
144.38.199.164 mail.thegummibear.com mail mail-thegummibear
The following lines are desirable for IPv6 capable hosts
::1 localhost ip6-localhost ip6-loopback
ff02::1 ip6-allnodes
ff02::2 ip6-allrouters
:wq


joe@yavin: ~/f16/it3100
joe@yavin: ~/admin/network
joe@ns1-thegummibear: ~
joe@yavin: ~/f16/it3100
joe@ubuntu-2016:~$ echo "Note my hostname at my prompt to the left didn't change yet? It will after a reboot, or after I execute the 'hostname' command and log in and logout"
Note my hostname at my prompt to the left didn't change yet? It will after a reboot, or after I execute the 'hostname' command and login and logout
joe@ubuntu-2016:~$ sudo hostname mail-thegummibear
sudo: unable to resolve host ubuntu-2016
joe@ubuntu-2016:~$ exit
logout
Connection to mail.thegummibear.com closed.
joe@yavin:~/f16/it3100$

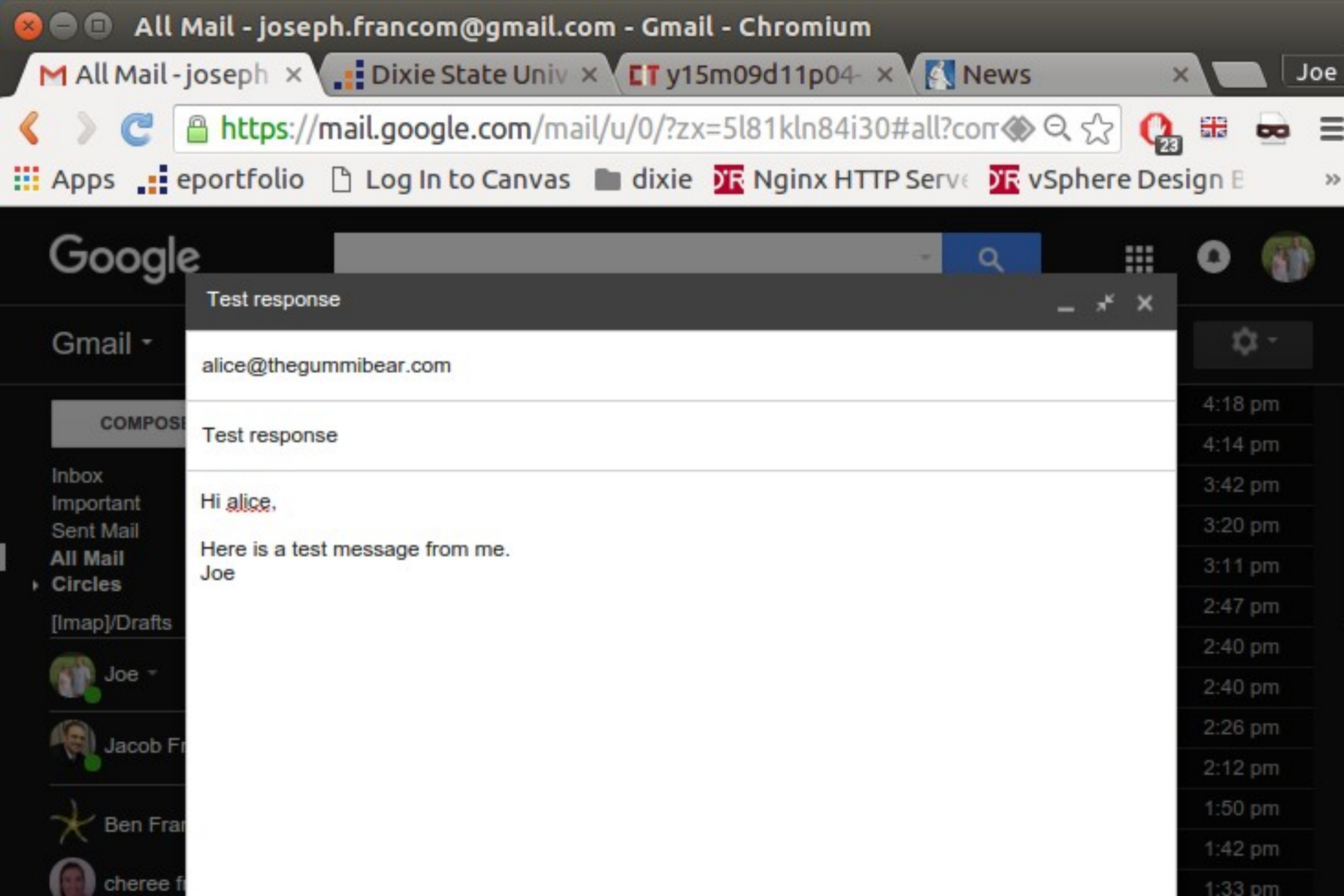

joe@mail-thegummibear: ~
joe@yavin: ~/admin/network
joe@ns1-thegummibear: ~
joe@mail-thegummibear: ~
joe@yavin:~/f16/it3100$ ssh mail.thegummibear.com
Welcome to Ubuntu 16.04.1 LTS (GNU/Linux 4.4.0-36-generic x86_64)
* Documentation: https://help.ubuntu.com
* Management: https://landscape.canonical.com
* Support: https://ubuntu.com/advantage
2 packages can be updated.
0 updates are security updates.
Last login: Thu Sep 8 15:29:04 2016 from 144.38.198.24
joe@mail-thegummibear:~$

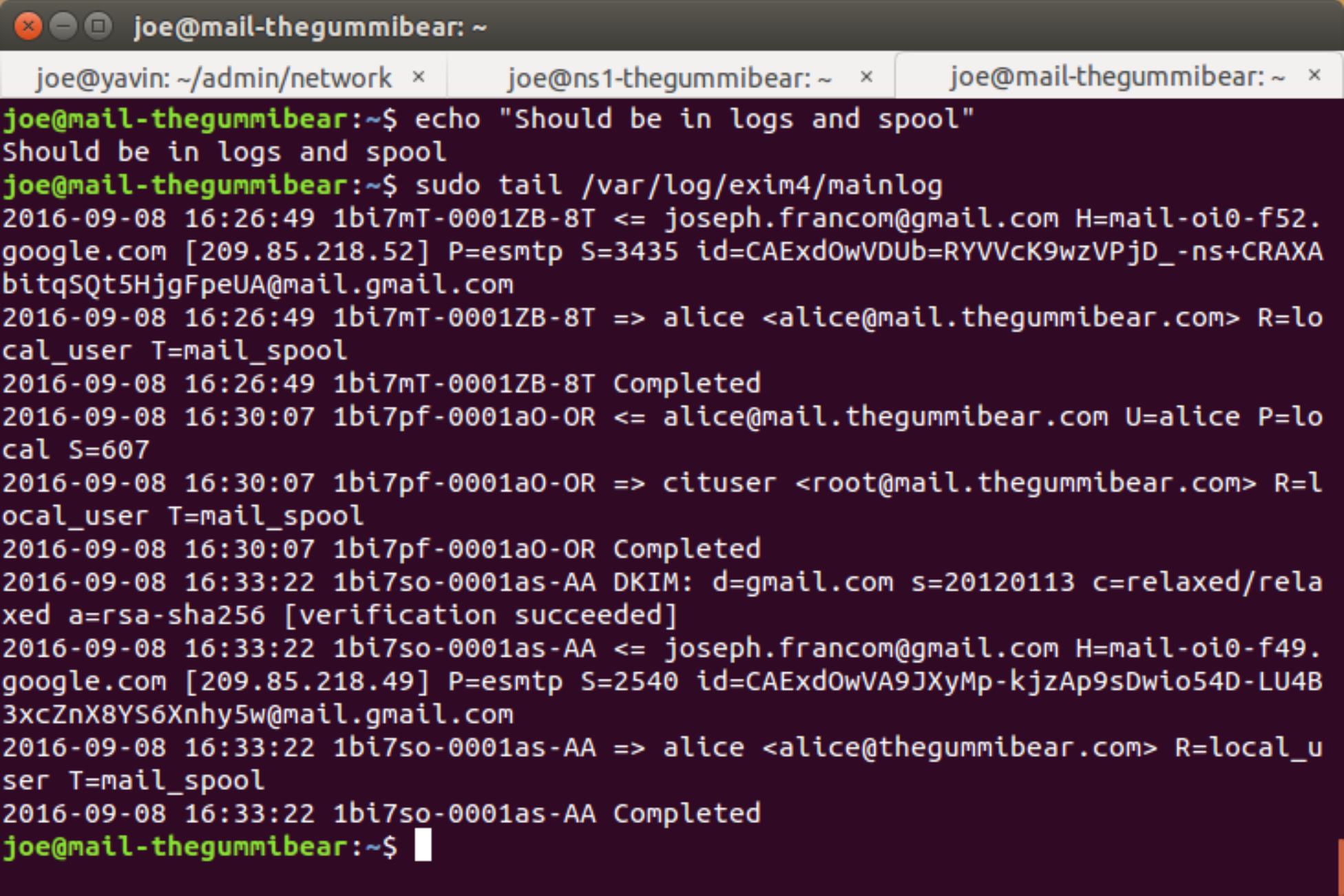

alice@mail-thegummibear: ~
joe@yavin: ~/admin/network
joe@ns1-thegummibear: ~
alice@mail-thegummibear: ~
joe@mail-thegummibear:~$ echo "I am going to try an email again and see if the r
ight headers are created"
I am going to try an email again and see if the right headers are created
joe@mail-thegummibear:~$ su - alice
Password:
alice@mail-thegummibear:~$ mailx joseph.francom@gmail.com
Cc:
Subject: Sorry about my address
Joe,
Sorry about that last header address. I hope you get this one.
- Alice
alice@mail-thegummibear:~$

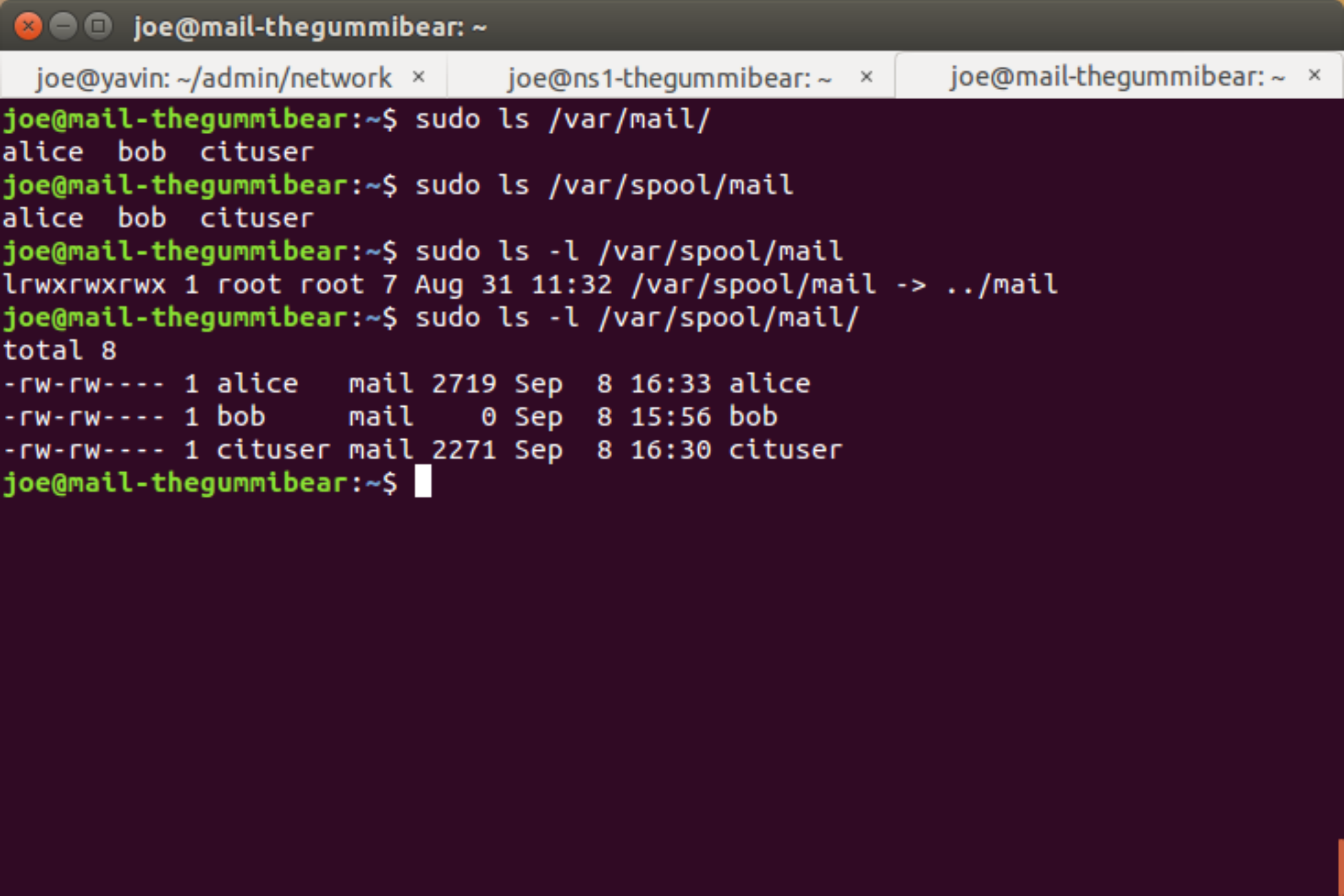

Sorry about my address - joseph.francom@gmail.com - Gmail - Chromium
Sorry about my
Dixie State Univ
y15m09d11p04-
News
Joe
https://mail.google.com/mail/u/0/?zx=5l81kln84i30#inbox/
Apps
eportfolio
Log In to Canvas
dixie
Nginx HTTP Serv
vSphere Design E
Google
Gmail
More
1 of 12
COMPOSE
Inbox (1)
Important
Sent Mail
All Mail
Circles
[Imap]/Drafts
Joe
Jacob Francom
Ben Francom
cheree francom
Sorry about my address
Inbox x
alice@mail.thegummibear.com
4:25 PM (0 minutes ago)
to me
Joe,
Sorry about that last header address. I hope you get this one.
- Alice
Click here to Reply or Forward
4.67 GB (31%) of 15 GB used
Manage
Terms - Privacy
Last account activity: 10 minutes ago
alice
Add to

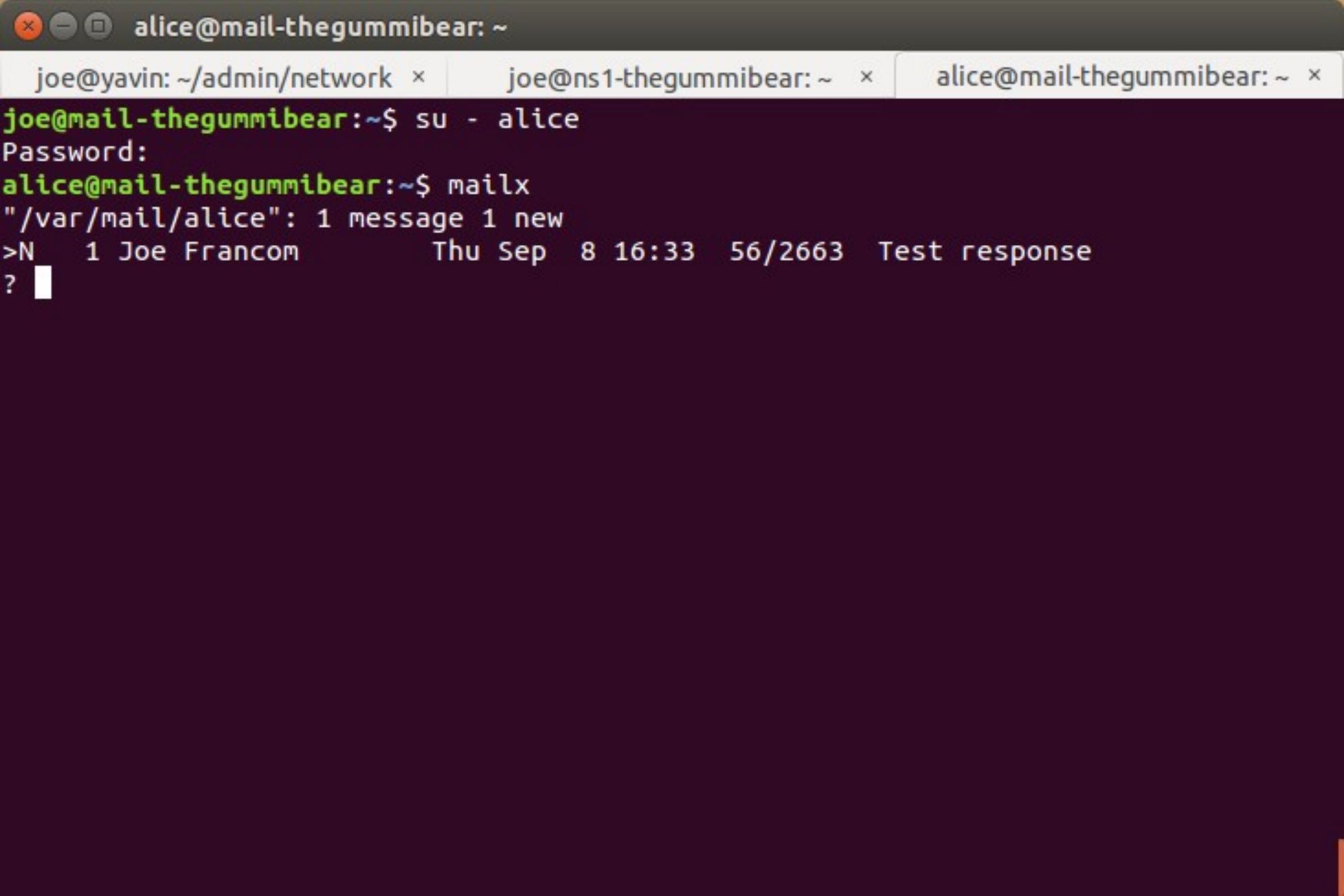

Sorry about my address - joseph.francom@gmail.com - Gmail - Chromium
Sorry about my
Dixie State Univ
y15m09d11p04-
News
Joe
https://mail.google.com/mail/u/0/?zx=5l81kln84i30#inbox/
Apps
eportfolio
Log In to Canvas
dixie
Nginx HTTP Serv
vSphere Design E
Google
Gmail
More
1 of 12
COMPOSE
Inbox (1)
Important
Sent Mail
All Mail
Circles
[Imap]/Drafts
Joe
Jacob Francom
Ben Francom
cheree francom
Sorry about my address
Inbox x
alice@mail.thegummibear.com
4:25 PM (0 minutes ago)
to me
Joe,
Sorry about that
- Alice
Reply
Forward
Filter messages like this
Print
Add alice@mail.thegummibear.com to Contacts list
Delete this message
Block "alice@mail.thegummibear.com"
Report spam
Report phishing
Show original
Message text garbled?
Translate message
Click here to R
4.67 GB (31%) of 15 GB u
Manage
alice
Add to

```
Delivered-To: joseph.francom@gmail.com
Received: by 10.36.60.12 with SMTP id m12csp58686ita;
        Thu, 8 Sep 2016 15:25:10 -0700 (PDT)
X-Received: by 10.98.74.134 with SMTP id c6mr522414pfj.77.1473373510476;
        Thu, 08 Sep 2016 15:25:10 -0700 (PDT)
Return-Path: <alice@mail.thegummibear.com>
Received: from stumail-2016.cs.dixie.edu (stumail.cs.dixie.edu. [144.38.192.231])
        by mx.google.com with ESMTPS id g63si271429pfj.289.2016.09.08.15.25.10
        for <joseph.francom@gmail.com>
        (version=TLS1_2 cipher=ECDHE-RSA-AES128-GCM-SHA256 bits=128/128);
        Thu, 08 Sep 2016 15:25:10 -0700 (PDT)
Received-SPF: neutral (google.com: 144.38.192.231 is neither permitted nor denied by best guess
record for domain of alice@mail.thegummibear.com) client-ip=144.38.192.231;
Authentication-Results: mx.google.com;
       spf=neutral (google.com: 144.38.192.231 is neither permitted nor denied by best guess record
for domain of alice@mail.thegummibear.com) smtp.mailfrom=alice@mail.thegummibear.com
Received: from [144.38.199.164] (helo=mail.thegummibear.com)
        by stumail-2016.cs.dixie.edu with esmtp (Exim 4.86_2)
        (envelope-from <alice@mail.thegummibear.com>)
        id 1bi7kq-0007Na-Vg
        for joseph.francom@gmail.com; Thu, 08 Sep 2016 16:25:08 -0600
Received: from alice by mail.thegummibear.com with local (Exim 4.86_2)
        (envelope-from <alice@mail.thegummibear.com>)
        id 1bi7kq-0001Z5-Ud
        for joseph.francom@gmail.com; Thu, 08 Sep 2016 16:25:08 -0600
```


All Mail - joseph.francom@gmail.com - Gmail - Chromium
All Mail - joseph
Dixie State Univ
y15m09d11p04-
News
Joe
https://mail.google.com/mail/u/0/?zx=5l81kln84i30#all?com
Apps
eportfolio
Log In to Canvas
dixie
Nginx HTTP Serve
vSphere Design E
Google
Gmail
COMPOSE
Inbox
Important
Sent Mail
All Mail
Circles
[Imap]/Drafts
Joe
Jacob Fr
Ben Fran
cheree f
4:18 pm
4:14 pm
3:42 pm
3:20 pm
3:11 pm
2:47 pm
2:40 pm
2:40 pm
2:26 pm
2:12 pm
1:50 pm
1:42 pm
1:33 pm
Test response
alice@thegummibear.com
Test response
Hi alice,
Here is a test message from me.
Joe


joe@mail-thegummibear: ~
joe@yavin: ~/admin/network
joe@ns1-thegummibear: ~
joe@mail-thegummibear: ~
joe@mail-thegummibear:~$ echo "Should be in logs and spool"
Should be in logs and spool
joe@mail-thegummibear:~$ sudo tail /var/log/exim4/mainlog
2016-09-08 16:26:49 1bi7mT-0001ZB-8T <= joseph.francom@gmail.com H=mail-oi0-f52.
google.com [209.85.218.52] P=esmtp S=3435 id=CAExdOwVDUb=RYVVcK9wzVPjD_-ns+CRAXA
bitqSQt5HjgFpeUA@mail.gmail.com
2016-09-08 16:26:49 1bi7mT-0001ZB-8T => alice <alice@mail.thegummibear.com> R=lo
cal_user T=mail_spool
2016-09-08 16:26:49 1bi7mT-0001ZB-8T Completed
2016-09-08 16:30:07 1bi7pf-0001aO-OR <= alice@mail.thegummibear.com U=alice P=lo
cal S=607
2016-09-08 16:30:07 1bi7pf-0001aO-OR => cituser <root@mail.thegummibear.com> R=l
ocal_user T=mail_spool
2016-09-08 16:30:07 1bi7pf-0001aO-OR Completed
2016-09-08 16:33:22 1bi7so-0001as-AA DKIM: d=gmail.com s=20120113 c=relaxed/rela
xed a=rsa-sha256 [verification succeeded]
2016-09-08 16:33:22 1bi7so-0001as-AA <= joseph.francom@gmail.com H=mail-oi0-f49.
google.com [209.85.218.49] P=esmtp S=2540 id=CAExdOwVA9JXyMp-kjzAp9sDwio54D-LU4B
3xcZnX8YS6Xnhy5w@mail.gmail.com
2016-09-08 16:33:22 1bi7so-0001as-AA => alice <alice@thegummibear.com> R=local_u
ser T=mail_spool
2016-09-08 16:33:22 1bi7so-0001as-AA Completed
joe@mail-thegummibear:~$


joe@mail-thegummibear: ~
joe@yavin: ~/admin/network
joe@ns1-thegummibear: ~
joe@mail-thegummibear: ~
joe@mail-thegummibear:~$ sudo ls /var/mail/
alice bob cituser
joe@mail-thegummibear:~$ sudo ls /var/spool/mail
alice bob cituser
joe@mail-thegummibear:~$ sudo ls -l /var/spool/mail
lrwxrwxrwx 1 root root 7 Aug 31 11:32 /var/spool/mail -> ../mail
joe@mail-thegummibear:~$ sudo ls -l /var/spool/mail/
total 8
-rw-rw---- 1 alice   mail 2719 Sep 8 16:33 alice
-rw-rw---- 1 bob   mail   0 Sep 8 15:56 bob
-rw-rw---- 1 cituser mail 2271 Sep 8 16:30 cituser
joe@mail-thegummibear:~$


alice@mail-thegummibear: ~
joe@yavin: ~/admin/network
joe@ns1-thegummibear: ~
alice@mail-thegummibear: ~
joe@mail-thegummibear:~$ su - alice
Password:
alice@mail-thegummibear:~$ mailx
"/var/mail/alice": 1 message 1 new
>N 1 Joe Francom Thu Sep 8 16:33 56/2663 Test response
?

alice@mail-thegummibear: ~

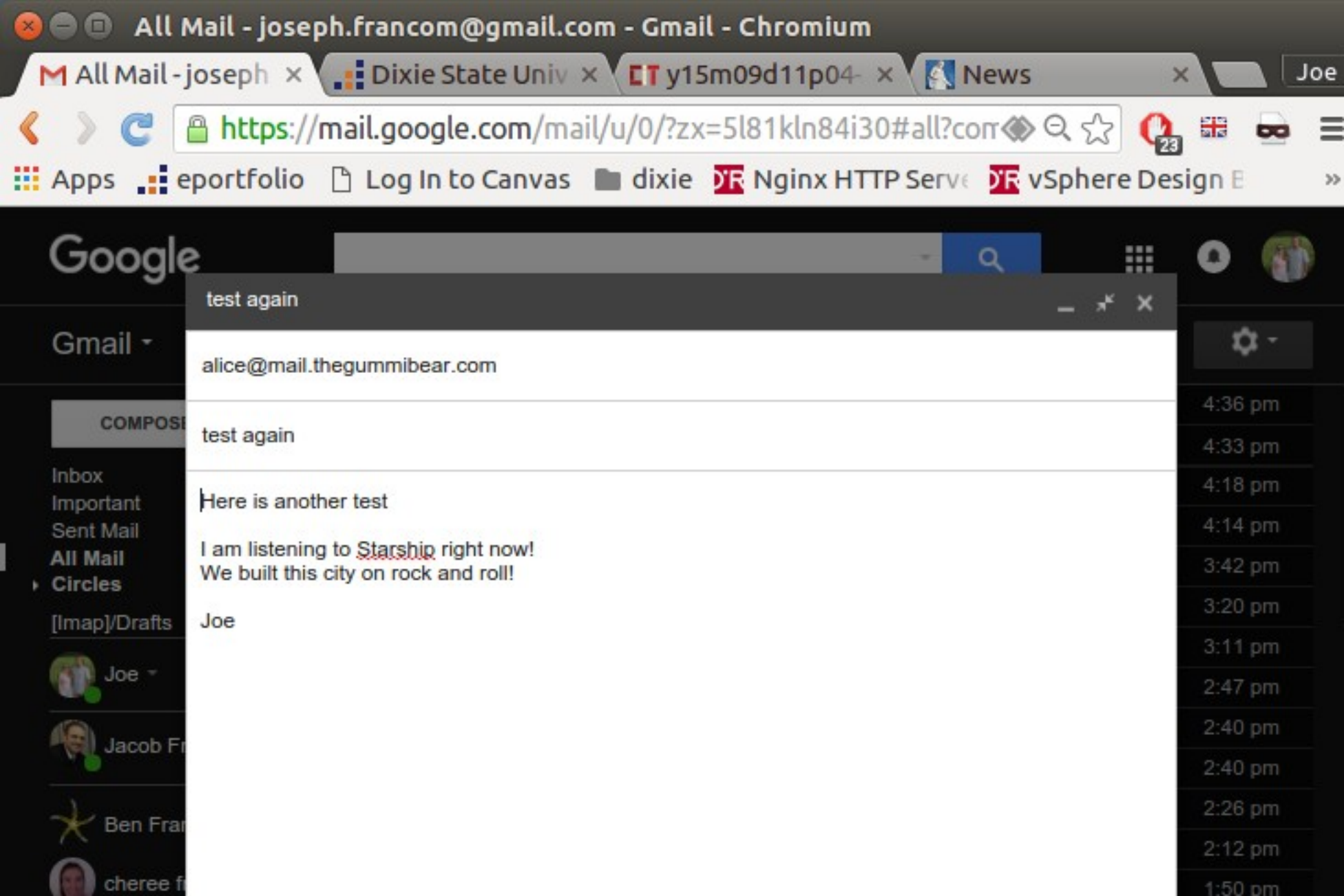
joe@yavin: ~/admin/network × | joe@ns1-thegummibear: ~ × | alice@mail-thegummibear: ~ ×

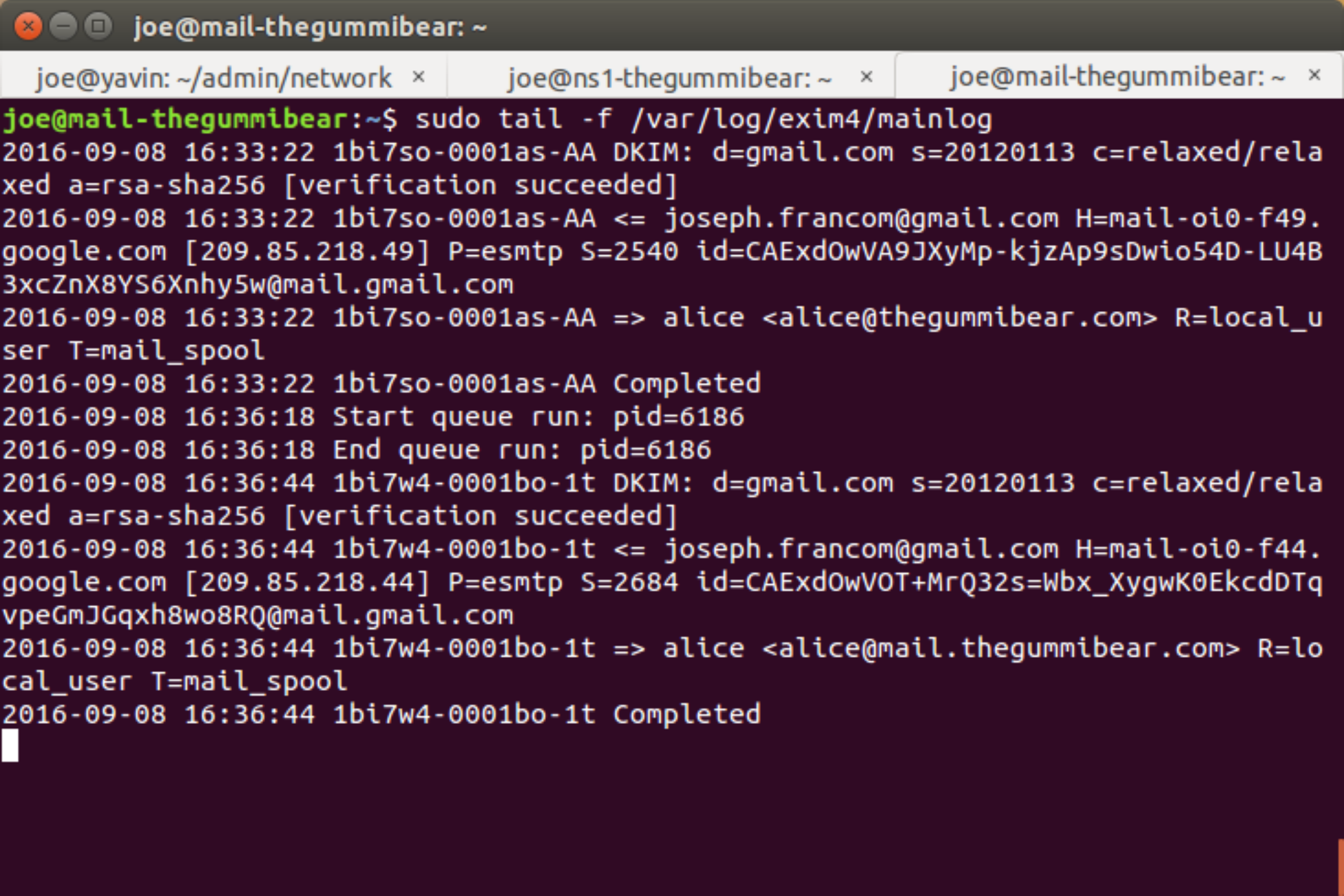
```
Return-path: <joseph.francom@gmail.com>
Envelope-to: alice@thegummibear.com
Delivery-date: Thu, 08 Sep 2016 16:33:22 -0600
Received: from mail-oi0-f49.google.com ([209.85.218.49])
        by ubuntu-2016 with esmtp (Exim 4.86_2)
        (envelope-from <joseph.francom@gmail.com>)
        id 1bi7so-0001as-AA
        for alice@thegummibear.com; Thu, 08 Sep 2016 16:33:22 -0600
Received: by mail-oi0-f49.google.com with SMTP id x125so42644951oia.3
        for <alice@thegummibear.com>; Thu, 08 Sep 2016 15:33:22 -0700 (PDT)
DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed;
        d=gmail.com; s=20120113;
        h=mime-version:from:date:message-id:subject:to;
        bh=uwvjxsgrLCVnhTk8Fu3ML4y1MrQK2y2rtOrdvnABc8I=;
        b=Os4oqFENy+bltA6mu8KUAekTFGgVbZoY9/NFXkH/LXIsELcoBAzeiDUr4hTzr07XU6
         8zsE3GBHGhc2GcR6lZGDPuEzJpGY4O2olC5n8n+8TzEMkJdUJFn9Jmf9uArwYvK+im30
         lUgdvqX42lp+2/RtsE0WVkkb9fNEPavTtUyS4OGToG7DE4UyXgkT8mQ5oNU1fT5w1z+e
         prsff6Chrky4mF9a7WIQBdqgNC3FEqIkt6vdRDRpQZSC7UAJmAiq77RRVoqKrEItwVS0
         49BoiQL8sTchbDlPSVQ5rnvRHebvICZUPOHNgFZ49mEl9iopQeRCBIdU1NWQ78OCL8JJ
         lQwg==
X-Google-DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed;
        d=1e100.net; s=20130820;
        h=x-gm-message-state:mime-version:from:date:message-id:subject:to;
--More--
```

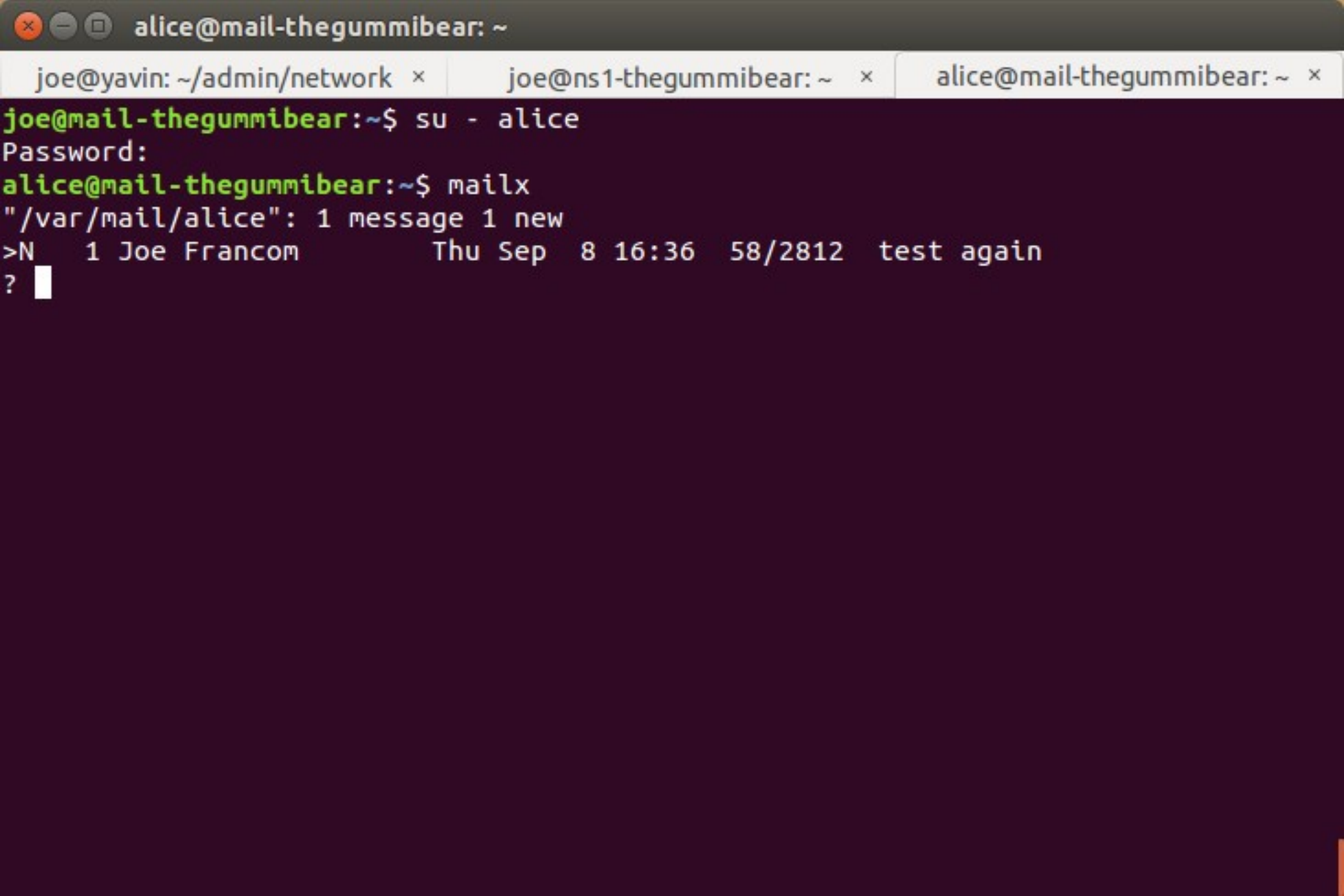
```
        bh=uwvjxsgrLCVnhTk8Fu3ML4y1MrQK2y2rtOrdvnABc8I=;
        b=R0j0VilwiEWYt7gOdFSo1uTqsVXCtnCB8Ds5JL078n3zRWgdRcULffe3quOFbMlGcK
         gmdC7oSrdLcPalj8jpgJXyWRWpYXiQIVsAZKwbWdvW10COH52Ou9evgGwFphP8Ny0fwt
         d4TyvUZk7koHcpbW3j2sH1HnhLZllZZMzzFdmScOVDJdZwcr8F+2uu84N1L8x0dmnWyG
         jCK4nPwWZoTvOf28rj06tH99tNAmo3iK1deBMbZyUdbu3JVw+0GTPe14DFss4UOyincs
         vuIVuRH4kUKeBgcqXdrhHQp5k7CQNuOiyK/O+dRkQ9PGRDD8a7dV3UzSvkwt+IfhOH6P
         2+4A==
X-Gm-Message-State: AE9vXwN0JUMxSvBbU7E3gzwanOUwyM8sDsJUUDZmjjA8XMVrvAdEbLqfVlqT
Izk5JB4GXs+l+M5E022e+k3OTg==
X-Received: by 10.157.35.201 with SMTP id t67mr393153otb.211.1473374001393;
 Thu, 08 Sep 2016 15:33:21 -0700 (PDT)
MIME-Version: 1.0
Received: by 10.36.64.149 with HTTP; Thu, 8 Sep 2016 15:33:21 -0700 (PDT)
From: Joe Francom <joseph.francom@gmail.com>
Date: Thu, 8 Sep 2016 16:33:21 -0600
Message-ID: <CAExdOwVA9JXyMp-kjzAp9sDwio54D-LU4B3xcZnX8YS6Xnhy5w@mail.gmail.com>
Subject: Test response
To: alice@thegummibear.com
Content-Type: multipart/alternative; boundary=001a11492d1af98d6a053c069d4b

--001a11492d1af98d6a053c069d4b
Content-Type: text/plain; charset=UTF-8

--More--
```

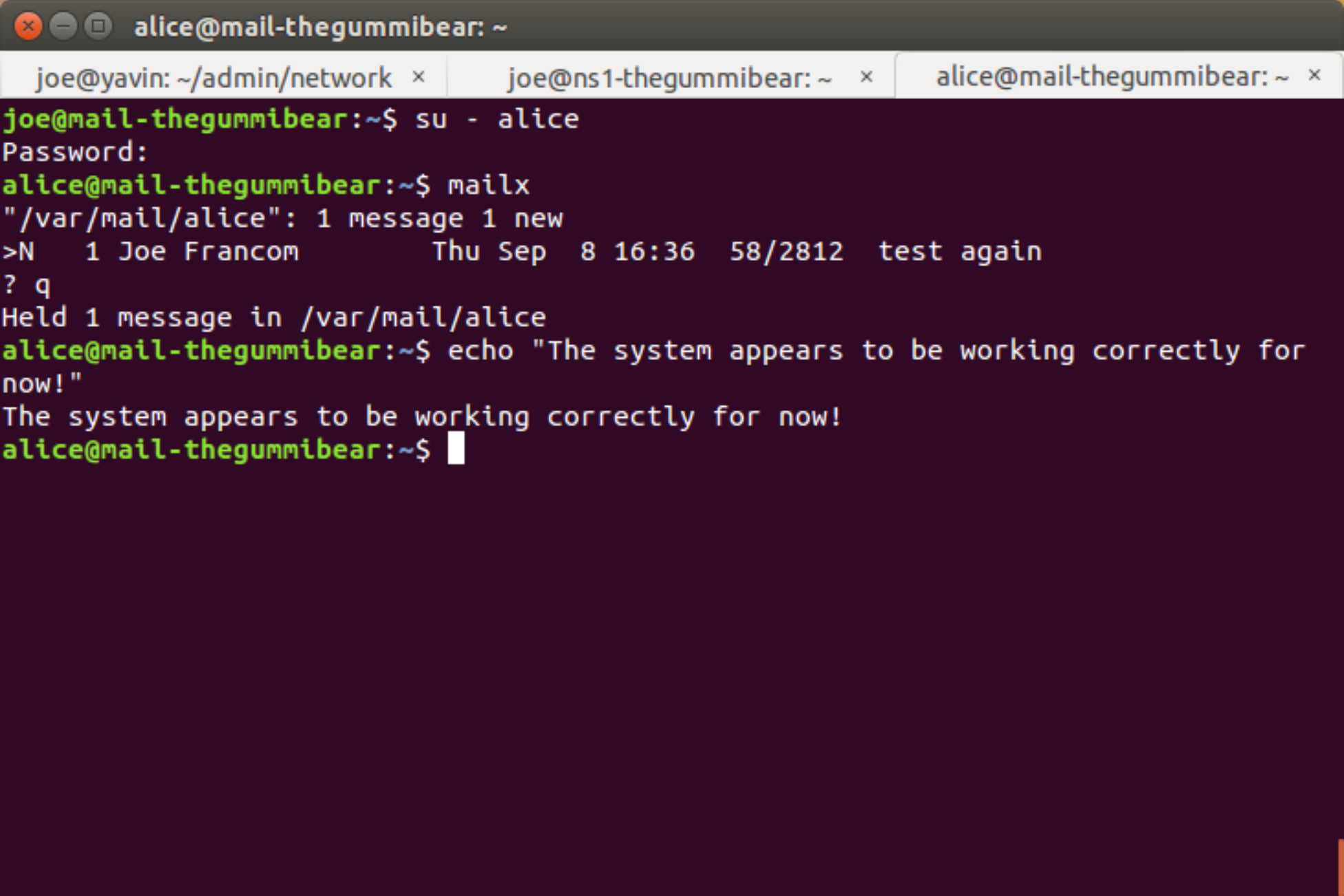
joe@yavin: ~/admin/network × | joe@ns1-thegummibear: ~ × | alice@mail-thegummibear: ~ ×

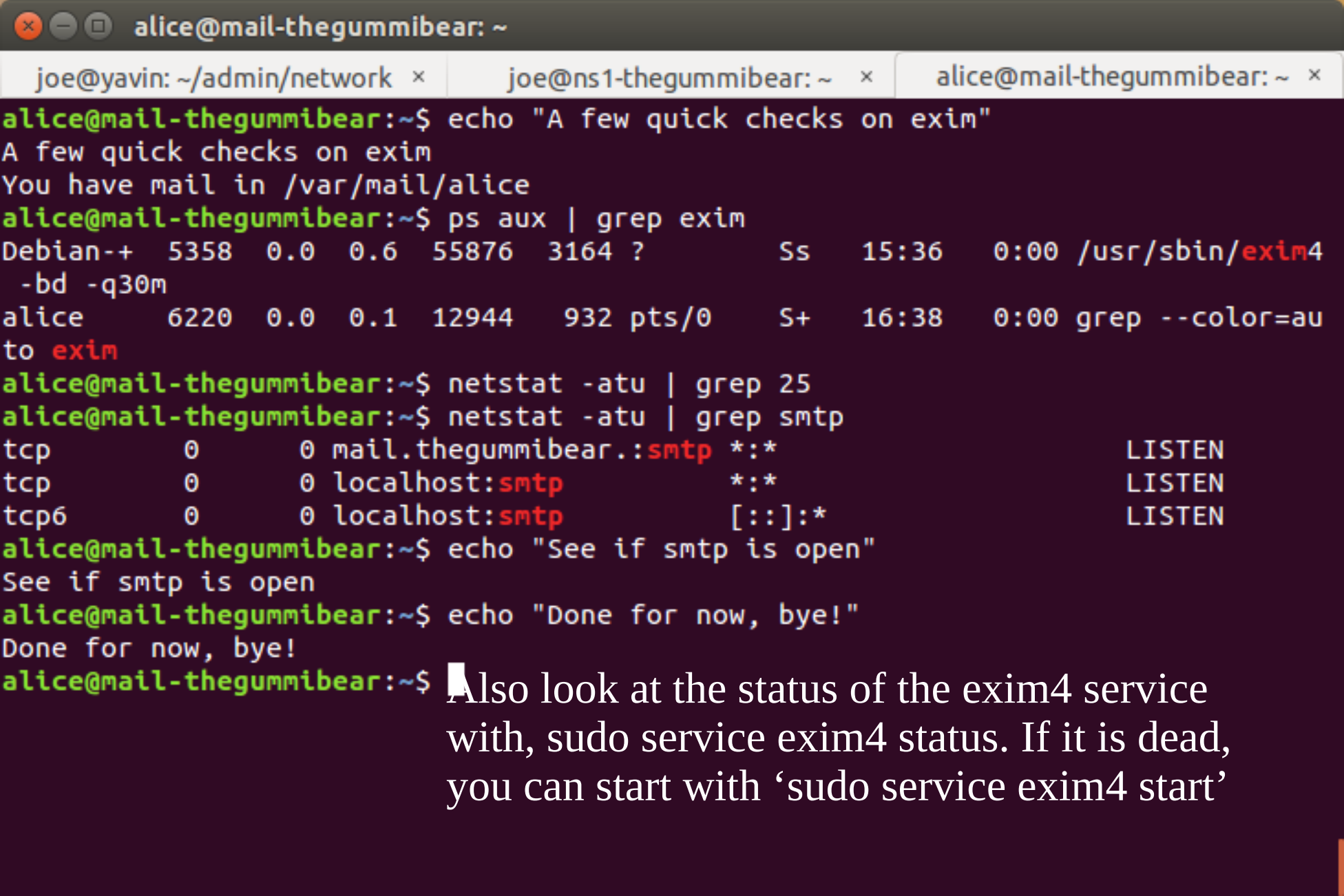
```
Received: by 10.36.64.149 with HTTP; Thu, 8 Sep 2016 15:33:21 -0700 (PDT)
From: Joe Francom <joseph.francom@gmail.com>
Date: Thu, 8 Sep 2016 16:33:21 -0600
Message-ID: <CAExdOwVA9JXyMp-kjzAp9sDwio54D-LU4B3xcZnX8YS6Xnhy5w@mail.gmail.com>
Subject: Test response
To: alice@thegummibear.com
Content-Type: multipart/alternative; boundary=001a11492d1af98d6a053c069d4b

--001a11492d1af98d6a053c069d4b
Content-Type: text/plain; charset=UTF-8

Hi alice,

Here is a test message from me.
Joe

--001a11492d1af98d6a053c069d4b
Content-Type: text/html; charset=UTF-8

<div dir="ltr">Hi alice,<div><br></div><div>Here is a test message from me.</div
><div>Joe</div></div>

--001a11492d1af98d6a053c069d4b--
?
```


All Mail - joseph.francom@gmail.com - Gmail - Chromium
All Mail - joseph
Dixie State Univ
y15m09d11p04-
News
Joe
https://mail.google.com/mail/u/0/?zx=5l81kln84i30#all?com
Apps
eportfolio
Log In to Canvas
dixie
Nginx HTTP Serve
vSphere Design E
Google
Gmail
COMPOSE
Inbox
Important
Sent Mail
All Mail
Circles
[Imap]/Drafts
Joe
Jacob Fr
Ben Fran
cheree f
4:36 pm
4:33 pm
4:18 pm
4:14 pm
3:42 pm
3:20 pm
3:11 pm
2:47 pm
2:40 pm
2:40 pm
2:26 pm
2:12 pm
1:50 pm
test again
alice@mail.thegummibear.com
test again
Here is another test
I am listening to Starship right now!
We built this city on rock and roll!
Joe


joe@mail-thegummibear: ~
joe@yavin: ~/admin/network
joe@ns1-thegummibear: ~
joe@mail-thegummibear: ~
joe@mail-thegummibear:~$ sudo tail -f /var/log/exim4/mainlog
2016-09-08 16:33:22 1bi7so-0001as-AA DKIM: d=gmail.com s=20120113 c=relaxed/relaxed a=rsa-sha256 [verification succeeded]
2016-09-08 16:33:22 1bi7so-0001as-AA <= joseph.francom@gmail.com H=mail-oi0-f49.google.com [209.85.218.49] P=esmtp S=2540 id=CAExdOwVA9JXyMp-kjzAp9sDwio54D-LU4B3xcZnX8YS6Xnhy5w@mail.gmail.com
2016-09-08 16:33:22 1bi7so-0001as-AA => alice <alice@thegummibear.com> R=local_user T=mail_spool
2016-09-08 16:33:22 1bi7so-0001as-AA Completed
2016-09-08 16:36:18 Start queue run: pid=6186
2016-09-08 16:36:18 End queue run: pid=6186
2016-09-08 16:36:44 1bi7w4-0001bo-1t DKIM: d=gmail.com s=20120113 c=relaxed/relaxed a=rsa-sha256 [verification succeeded]
2016-09-08 16:36:44 1bi7w4-0001bo-1t <= joseph.francom@gmail.com H=mail-oi0-f44.google.com [209.85.218.44] P=esmtp S=2684 id=CAExdOwVOT+MrQ32s=Wbx_XygwK0EkcdDTqvpeGmJGqxh8wo8RQ@mail.gmail.com
2016-09-08 16:36:44 1bi7w4-0001bo-1t => alice <alice@mail.thegummibear.com> R=local_user T=mail_spool
2016-09-08 16:36:44 1bi7w4-0001bo-1t Completed


alice@mail-thegummibear: ~
joe@yavin: ~/admin/network
joe@ns1-thegummibear: ~
alice@mail-thegummibear: ~
joe@mail-thegummibear:~$ su - alice
Password:
alice@mail-thegummibear:~$ mailx
"/var/mail/alice": 1 message 1 new
>N 1 Joe Francom Thu Sep 8 16:36 58/2812 test again
?


alice@mail-thegummibear: ~
joe@yavin: ~/admin/network
joe@ns1-thegummibear: ~
alice@mail-thegummibear: ~
joe@mail-thegummibear:~$ su - alice
Password:
alice@mail-thegummibear:~$ mailx
"/var/mail/alice": 1 message 1 new
>N 1 Joe Francom Thu Sep 8 16:36 58/2812 test again
? q
Held 1 message in /var/mail/alice
alice@mail-thegummibear:~$ echo "The system appears to be working correctly for now!"
The system appears to be working correctly for now!
alice@mail-thegummibear:~$


alice@mail-thegummibear: ~
joe@yavin: ~/admin/network
joe@ns1-thegummibear: ~
alice@mail-thegummibear: ~
alice@mail-thegummibear:~$ echo "A few quick checks on exim"
A few quick checks on exim
You have mail in /var/mail/alice
alice@mail-thegummibear:~$ ps aux | grep exim
Debian-+ 5358 0.0 0.6 55876 3164 ? Ss 15:36 0:00 /usr/sbin/exim4
-bd -q30m
alice 6220 0.0 0.1 12944 932 pts/0 S+ 16:38 0:00 grep --color=au
to exim
alice@mail-thegummibear:~$ netstat -atu | grep 25
alice@mail-thegummibear:~$ netstat -atu | grep smtp
tcp 0 0 mail.thegummibear.:smtp *:* LISTEN
tcp 0 0 localhost:smtp *:* LISTEN
tcp6 0 0 localhost:smtp [::]:* LISTEN
alice@mail-thegummibear:~$ echo "See if smtp is open"
See if smtp is open
alice@mail-thegummibear:~$ echo "Done for now, bye!"
Done for now, bye!
alice@mail-thegummibear:~$
Also look at the status of the exim4 service with, sudo service exim4 status. If it is dead, you can start with ‘sudo service exim4 start’